

Flight Plan

STS-129/ULF3

(L-35 FDO Trajectory)

**Mission Operations Directorate
Operations Division**

**Final
October 20, 2009**

**Launch Date: Thursday, November 12, 2009
Launch Time: 316/21:04:28 GMT
15:04:28 CST**

For the latest working copy of the Flight Plan, visit
http://modspops.jsc.nasa.gov/mod/DO/DO4/Joint/129_ULF3/default.aspx

National Aeronautics and
Space Administration

Lyndon B. Johnson Space Center
Houston, Texas



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Electronic copies of FDF books are available. URL: <http://mod.jsc.nasa.gov/do3/FDF/index.html>

MISSION OPERATIONS DIRECTORATE

**FLIGHT PLAN
STS-129**

FINAL
October 20, 2009

PREPARED BY:

Telisha Harris
Book Manager, Lead FAO

Crystal Hyde
Lead Timeliner

Stephen Rosenbaum
Lead Ops Planner

Melissa Dunivan
Lead RPE

Kyra Espinosa
Lead Pointer

APPROVED BY:

Douglas Bristol
Flight Planning Group

Scott A. Curtis
Chief, Flight Planning Branch

Peter J. Beauregard
Chief, Operations Division

Paul S. Hill
Director of Operations

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Book Manager/Lead FAO	DO4/T. Harris	281-244-1081
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Lead Pointer	DO4/K. Espinosa	281-483-1426
Lead Ops Planner	DO4/S. Rosenbaum	281-244-5786
Lead RPE	DO4/M. Dunivan	281-244-1114

FLIGHT PLAN
STS-129

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* – Omit from flight book

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INTRODUCTION

The STS-129 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-17462-129, STS-129 Flight Requirements Document
- NSTS-37326, Shuttle Crew Scheduling Constraints
- NSTS-21545, ISS-ULF3 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-129 Flight Plan is based on a launch date of November 12, 2009, at 21:04:28 GMT (03:04:28 PM CST). Orbiter inertial attitudes are expressed relative to a mean of 1950 (M50) reference frame.

The following SCSC Exceptions have been submitted in order to meet Category 1 objectives:
None

The Flight Plan and previously published, non-flown sections listed below are available on the following Space Shuttle Flight Planning web site:

http://modspops.isc.nasa.gov/mod/DO/DO4/Joint/129_ULF3/default.aspx

Non-flown sections that are no longer published:

- ISS Commanding Pages
- Attitude Timeline
- Ku-Band Antenna Masking Plan
- Flight Plan Notes
- Flight Plan Walkthrough

OVERVIEW TIMELINE

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STS-129/ULF3 Overview Timeline (11+1+2)

	GMT	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	317/0	1	2	3	4	5	6	7	8	9										
	MET													00/0	1	2	3	4	5	6	7	8	9	10	11	12										
FD 01	STS	11/12/09 Launch, GMTLO: 316/21:04:28												ASC	Post Insert	PTV 01 Setup	DOK	RMS C/O																		
	Orb Att													-ZLV -XVV														-ZLV -XVV								
^NC1 00/03:35																																				
FD 02	STS																																			
	Orb Att	-ZLV -XVV		Survey (Inertial)										-ZLV -XVV														-ZLV -XVV								
^NC2 00/16:12 ^Grapple ^NC3 01/03:21																																				
FD 03	STS																																			
	Orb Att	-ZLV -XVV		Dump	RNDZ		DOCK		Hatch Open	ELC 1 Install & EVA 1 Prep	EVA Proc Rvw	D	Campout													Bias -XLV -ZVV										
^Dump ^NH ^NC4 ^Ti ^Dock 1/21:30 ^N2 Transfer Init																																				
FD 04	STS																																			
	Orb Att	Campout EVA Prep												EVA 1 (SASA Transfer from PLB SWC - z1)		Post EVA													Bias -XLV -ZVV							
WS4/MBS PDGF1 SSRMS Support SSRMS N2 GRPL																																				
FD 05	STS																																			
	Orb Att	-ZLV -XVV		DPC	DOUG	OBSS Unberth, H/O	Meal	EVA 2 Prep	GRPL PDGF1	OBSS H/O, Berth, ELC 2 Grapple	EVA Proc Rvw	DPC	Campout													Bias -XLV -ZVV										
WS4/Node 2 PDGF SSRMS RLS N2, MT XLT WS2, Walkoff to PDGF2																																				
FD 06	STS																																			
	Orb Att	Campout EVA Prep												EVA 2 (GATOR Instl, Relocate FPMU/VSSA to CP6)		Post EVA w/H2O, Metox													Bias -XLV -ZVV							
WS2/MBS PDGF2 WS2/MBS PDGF1 WS3/MBS PDGF1																																				
FD 07	STS																																			
	Orb Att	-ZLV -XVV		DPC	Off Duty (4hrs)		Meal	EVA 3 Prep/Transfer	EVA Proc Rvw	DPC	Campout													Bias -XLV -ZVV												
WS3/MBS PDGF1																																				
FD 08	STS																																			
	Orb Att	Campout EVA Prep												EVA 3 (HPGT Xfer to ISS A/L, MISSE 2 Install)		Post EVA w/H2O, Metox													Bias -XLV -ZVV							
WS3/MBS PDGF1 WS4/MBS PDGF1																																				
FD 09	STS																																			
	Orb Att	-ZLV -ZVV		DPC	Reboost	O2 Equip T/D	Xfr	Crew Conf & Photo	Meal	Off-Duty (2hrs)	Hatch Close	RNDZ Tools c/o	DPC													Bias -XLV -ZVV										
WS4/MBS PDGF1																																				
FD 10	STS																																			
	Orb Att	-ZLV -ZVV		D	Un-dock	Flyaround and Sep	Meal	OBSS	Late Inspection	OBSS													-ZLV -XVV													
WS4/MBS PDGF1																																				
FD 11	STS																																			
	Orb Att	-ZLV -XVV		SDBI 1900	FCS C/O & RCS Hot Fire	Pilot Ops	PAO	Brief	Meal	Cabin Stow	KU Rvw													-ZLV -XVV												
^Water Dump																																				
FD 12	STS																																			
	Orb Att	-XVV		IMU Align & Verif	Deorbit Prep	Entry													Entry																	
^Water Dump																																				

*KSC Tigs: 10/18:24
*KSC Landing: 10/19:27

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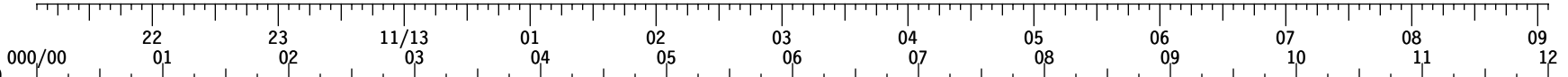
SUMMARY TIMELINE

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FD01

GMT 11/12/09 (316)

MET Day 000

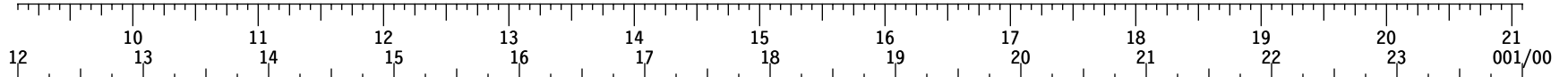


STS 129	LAUNCH	OMS 2	CDR HOBAUGH	POST INSERTION	LOA ADS AFT C/O ELEVON	NC1A OMS BURN	M-NZ LVLV GPRB IWDN	PRE SLEEP	APC U@A/G	PRE SLEEP	WATCH	SLEEP	MNVR
			PLT WILMORE	POST INSERTION	P/TV01 VIDEO SETUP	OMS BURN	BLEED GPRB IWDN	PRE SLEEP	UMB WELL D/L	PRE SLEEP	WATCH	SLEEP	
			MS1 MELVIN	POST INSERTION	RMS* RMS* RUP	PGSC SETUP (PART I)	RMS C/O	PRE SLEEP	PRE SLEEP	WATCH	SLEEP		
			MS2 BRESNIK	POST INSERTION	RMS* RMS* RUP	OS CE ATT CU P	RMS C/O	PRE SLEEP	PRE SLEEP	WATCH	SLEEP		
			MS3 FOREMAN	POST INSERTION	P/TV01 VIDEO SETUP	GIRA INSTALL	SEE SETUP	PRE SLEEP	WATCH	SLEEP			
			MS4 SATCHER	POST INSERTION	PGSC SETUP (PART I)	WLES ACT	TEP CON	UN STO W%	PRE SLEEP	WATCH	SLEEP		
DAY/NIGHT ORBIT													
TDRS WEZ													
ATTITUDE			<p>OMS2 -ZLV -XVV NC1 @RECONFIG %SALIVA KIT -ZLV -XVV</p>										
NOTES													

FD02

GMT 11/13/09 (317)

MET Day 000

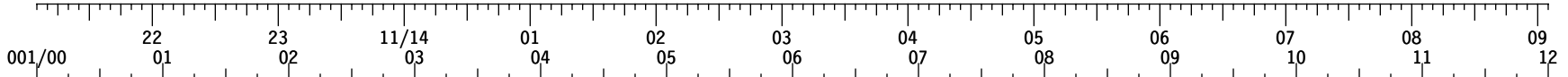


STS 129	CDR HOBAUGH	SLEEP	LOG	POST SLEEP	NC2 OMS BURN	M-NZ N-VL R-V	POST SLEEP	M-S D-B H-T R	STBD WING SURVEY	M-N N-O V-R E	MEAL	H2O CWC S/U	M-P N-O V-R T	F-C P-R G-#	CRYO 02 SNSR CK	FILTER CLEANING	COND CWC S/U	M-NZ N-VL R-V
	PLT WILMORE	SLEEP		POST SLEEP	OMS BURN	PST SLP	OBSS UNBERTH		STBD WING SURVEY		MEAL	NOSE CAP SURVEY		PORT WING SURVEY		OBSS BERTH		
	MS1 MELVIN	SLEEP	LOG	POST SLEEP		M-C I-U	OBSS UNBERTH		STBD WING SURVEY		MEAL	NOSE CAP SURVEY		PORT WING SURVEY		OBSS BERTH		
	MS2 BRESNIK	SLEEP	DRY S-L V-A	POST SLEEP	M-D I-N I-C A-M		POST SLEEP		EMU C/O		MEAL	NOSE CAP SURVEY		PORT WING SURVEY		O-2 I-N I-T		O-2 I-T E-R M
	MS3 FOREMAN	SLEEP		POST SLEEP		K-C X-D M	ERG SETUP	EMU C/O PREP	EMU C/O		MEAL	EMU PREP/ ISS XFER		EXERCISE		M-D K X-F E-R P-R E-P		
	MS4 SATCER	SLEEP	DRY S-L V-A	POST SLEEP			ERG SETUP	EMU C/O PREP	EMU C/O		MEAL	EMU PREP/ ISS XFER		EXERCISE				
DAY/NIGHT	[Timeline with day/night indicators]																	
ORBIT	[Timeline with orbit parameters]																	
TDRS	[Timeline with TDRS activity]																	
ATTITUDE	-ZLV -XVV NC2 -ZLV -XVV BIAS +YSI BIAS +XSI BIAS -YSI																	
NOTES	*HTR RCNFG #MANUAL																	

FD02

GMT 11/13/09 (317)

MET Day 001

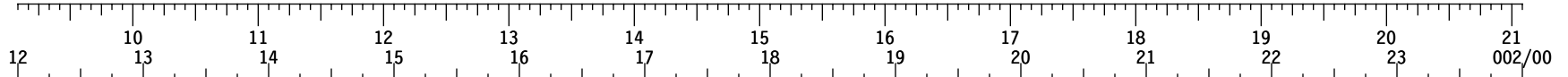


STS 129	CDR HOBAUGH		C/L CMR INSTL	EXERCISE	PRE SLEEP	NC3	RCS BURN	M - N Z L R V M P M C V L R V M A / G	PRE SLEEP	SLEEP	
	PLT WILMORE	OBSRSTH	C/L CMR INSTL	FCMS OPS	EXERCISE	PRE SLEEP	RCS BURN		PRE SLEEP	SLEEP	
	MS1 MELVIN	OBSRSTH	REMLSC1 RGRPL	ODS RING	RNDZ TOOLS C/O				PRE SLEEP	SLEEP	
	MS2 BRESNIK	REMLSC1 RGRPL	OMS POD SRVY	ODS RING	RNDZ TOOLS C/O				PRE SLEEP	SLEEP	
	MS3 FOREMAN	MDDK XFER PREP		LDRI DOWNLINK					PRE SLEEP	SLEEP	
	MS4 SATCHER			NLP CELL ACT1	NLP VAC				PRE SLEEP	SLEEP	
DAY/NIGHT ORBIT		<p>Visual representation of day/night cycles and orbital parameters across the timeline from 17 to 25.</p>									
TDRS W E Z		<p>Visual representation of TDRS (Tracking and Data Relay Satellite) coverage windows across the timeline from 17 to 25.</p>									
ATTITUDE		<p>-ZLV -XVV NC3 -ZLV -XVV</p>									
NOTES		<p>*OMS/RCS AC Motor Valve</p>									

FD03

GMT 11/14/09 (318)

MET Day 001

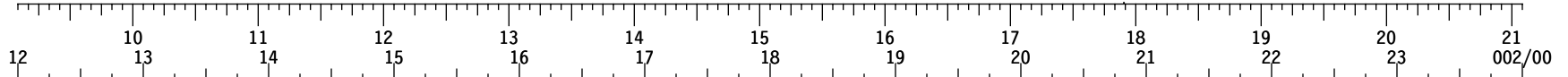


STS-129	CDR HOBAUGH	SLEEP	POST SLEEP	ISS RNDZ OPS	APPROACH T/L	MNVRTA	HATCH OPEN	HELLO	SFTY BRIEF	
	PLT WILMORE	SLEEP	POST SLEEP	ISS RNDZ OPS	APPROACH T/L				SFTY BRIEF	
	MS1 MELVIN	SLEEP	POST SLEEP	ISS RNDZ OPS	APPROACH T/L				SFTY BRIEF	
	MS2 BRESNIK	SLEEP	POST SLEEP	POST SLEEP	EXERCISE	ISS RNDZ OPS	APPROACH T/L		SFTY BRIEF	
	MS3 FOREMAN	SLEEP	POST SLEEP	XFER UPDATE	EMU RMVL	EXERCISE	PTV02 S/U	P/TV02 DOCK		SFTY BRIEF
	MS4 SATCHER	SLEEP	POST SLEEP		EMU RMVL	EMU DRINK BAG FILL	EXERCISE	APPROACH T/L		SFTY BRIEF
DAY/NIGHT ORBIT										
TDRS W E Z										
ORB ATT										
MT/SSRMS POS										
NOTES		<p style="text-align: center;">*DECNFG</p> <p style="text-align: right;">*DOCKING 1/21:30</p>								

FD03

GMT 11/14/09 (318)

MET Day 001



ISS	Activity	12	13	14	15	16	17	18	19	20	21
ISS	ISS CDR DE WINNE	SLEEP	POST SLEEP	PREP WORK	DPC	ARED	CEVIS	MEAL	POST ARVL CNFG	HATCH LEAK CK ISS	SFTY BRIEF
	FE-1 SURAEV	SLEEP	POST SLEEP	PREP WORK	DPC	VELO	TVIS	TVIS HYG	MEAL	MRM2 XFER	SFTY BRIEF
DN	FE-2 STOTT	SLEEP	POST SLEEP	PREP WORK	DPC	TVIS2	P/TV RPM VRFY S/U	ARED	MEAL	HATCH LEAK CK ISS	SFTY BRIEF
ISS	FE-3 ROMANENKO	SLEEP	POST SLEEP	PREP WORK	DPC	TVIS	VELO	TVIS HYG	MEAL	MRM2 XFER	SFTY BRIEF
	FE-4 THIRSK	SLEEP	POST SLEEP	PREP WORK	DPC	TVIS2	CEVIS	MEAL	P/TV DOC	EVA CAMERA CNFG	SFTY BRIEF
	FE-5 WILLIAMS	SLEEP	POST SLEEP	PREP WORK	DPC	CEVIS	P/TV RPM VRFY S/U	TVIS2	MEAL	HATCH OPEN	SFTY BRIEF
DAY/NIGHT		14		15		16		1		2	
DAILY ORBIT		2961		2962		2963		2964		2965	
ORBIT		2961		2962		2963		2964		2965	
TDRS AVAIL		2961		2962		2963		2964		2965	
NOTES		<p>*MSS-RWS CABLE-CNCT *INIT</p> <p>©C&T-DK SM PA 3-CNFG</p> <p>♦EHS-GC/DMS-START</p> <p style="text-align: right;">*DOCKING 1/21:30</p>									

NO EXERCISE
[Until @ Hover Posn]

NO EXERCISE
[Both Arms Grappled]

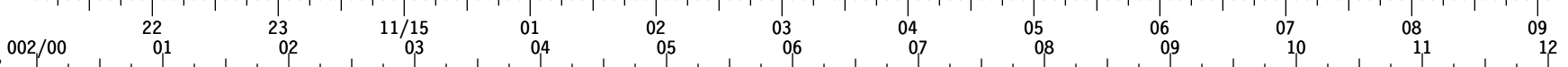
NO EXERCISE
[While at ELC1 Install Posn]

NO UNISOLATED EXERCISE
[MT Translate]

FD03

GMT 11/14/09 (318)

MET Day 002



STS - 129	CDR HOBAUGH	EMU XFER TO ISS	N2 XFER INIT	STS 02 P/B CONFIG	C I W N C I T # 1	EVA PROC REVIEW	PRE SLEEP	C W C T E R M	C W C X F E R	PRE SLEEP	PMC A/G	PRE SLEEP	SLEEP		
	M1 PLT WILMORE	P S T E V T O U P 5 P	SSRMS GRPL ELC1	SSRMS MNVR INSTL	ELC1 INSTALL	D A P U I D	EXERCISE	PRE SLEEP	SLEEP						
	R1 MS1 MELVIN	ELC1 UNBRTH	U N G R P L	S O D F X F E R	X F E R O P S	EVA PROC REVIEW	M D P R I S T E	X F E R	X F A G U R P	X B F R I E E F	PRE SLEEP	SLEEP			
	R2 MS2 BRESNIK	ELC1 UNBRTH	U N G R P L	T C O O N L F I G	EVA PROC REVIEW	PRE SLEEP	SLEEP								
	MS3 FOREMAN	TOOL CONFIG	E P R T E K	EVA PROC REVIEW	PRE SLEEP	MASK PB/TOOL CONFIG	PRE SLEEP	SLEEP							
	MS4 SATCHER	TOOL CONFIG	E P R T E K	EVA PROC REVIEW	PRE SLEEP	MASK PB/TOOL CONFIG	PRE SLEEP	SLEEP							
DAY/NIGHT ORBIT		33	34	35	36	37	38	39	40	41					
TDRS	W	[Timeline bars for W]													
	E	[Timeline bars for E]													
	Z	[Timeline bars for Z]													
ORB ATT	BIAS -XLV -ZVV														
MT/SSRMS POS	WS7/PDGF1													MT XLATE TO WS4	
NOTES	*BRIEF														

NO EXERCISE
[Until @ Hover Posn]

NO EXERCISE
[Both Arms Grappled]

NO EXERCISE
[While at ELC1 Install Posn]

NO UNISOLATED EXERCISE
[MT Translate]

FD03

GMT 11/14/09 (318)

MET Day 002

002/00

22 01

23 02

11/15 03

01 04

02 05

03 06

04 07

05 08

06 09

07 10

08 11

09 12

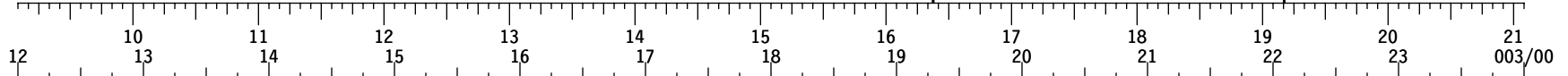
ISS	ISS CDR DE WINNE	EMU XFER TO ISS	STS 02 P/B CONFIG	EVA PROC REVIEW	PREP WORK	DPC	PRE SLEEP	SLEEP											
	FE-1 SURAEV	MRM2 XFER		EVA PROC REVIEW	PREP WORK	DPC	PRE SLEEP	SLEEP											
	FE-2 STOTT	REBA C/O	E-LK PREP	ELC1 INSTALL	PREP WORK	DPC	PRE SLEEP	SLEEP											
ISS	FE-3 ROMANENKO	COX	MRM2 XFER	EVA PROC REVIEW	PREP WORK	DPC	PRE SLEEP	SLEEP											
	FE-4 THIRSK			EVA PROC REVIEW	P WORK	DPC	PRE SLEEP	SLEEP											
	M2 FE-5 WILLIAMS	SSRMS GRPL ELC1	SSRMS MNVR INSTL	EVA PROC REVIEW	PREP WORK	DPC	PRE SLEEP	SLEEP											
DAY/NIGHT		6		7		8		9		10		11		12		13		14	
DAILY ORBIT		2969		2970		2971		2972		2973		2974		2975		2976			
TDRS AVAIL		[Color-coded availability bars]																	
NOTES		*BRIEF *EHS-GC/DMS-STOP																	

NO UNISOLATED EXERCISE
[During SASA Install]

FD04

GMT 11/15/09 (319)

MET Day 002



STS-129	CDR HOBAUGH	SLEEP	LOG	POST SLEEP	PMC A/G	POST SLEEP	IPNAHDI B	EXERCISE	PEV/TAS/UV07	CWICIT #2	P/TV07 EVA	CWCTERM	MEAL	P/TV07 EVA	CWICIT #3	P/TV07 EVA	CWCTERM	
	M2 PLT WILMORE	SLEEP		POST SLEEP		HYG BRK/HATCH CLS		CAMPOUT EVA PREP	EMURGE	EMU PREBREATHE	C LK DPRS		SSRMS SASA XFR/LEE					
	M1 MS1 MELVIN	SLEEP	LOG			POST SLEEP			MDCIKUC	XUFPDRA TE	XFER OPS	EXERCISE		SSRMS SASA XFR/LEE				
	IV MS2 BRESNIK	SLEEP	LOG			POST SLEEP				EXERCISE	IVA SUPPORT PREP		EVA IVA SUPPORT					
													EVA 1 (6:30)					
	EV1 MS3 FOREMAN	SLEEP		POST SLEEP		HYG BRK/PREBREATHE		CAMPOUT EVA PREP	EMURGE	EMU PREBREATHE	C LK DPRS	ESGRTU S S /		SPARE SASA INSTL		ROUTE SGANT CABLE	NH3 BRKT INSTL	NFSIGHBI/EMLMDOD
EV2 MS4 SATCHER	SLEEP		POST SLEEP		HYG BRK/PREBREATHE		CAMPOUT EVA PREP	EMURGE	EMU PREBREATHE	C LK DPRS	ESGRTU S S /		SPARE SASA INSTL		POA LUBE	JEM RMS EE LUBE		

DAY/NIGHT																		
ORBIT	41	42	43	44	45	46	47	48										
TDRS	W																	
ORB ATT	E																	
MT/SSRMS POS	Z																	
					BIAS -XLV -ZVV													
					WS4/PDGF1													

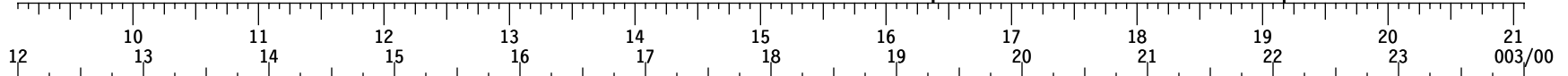
NOTES

NO UNISOLATED EXERCISE
[During SASA Install]

FD04

GMT 11/15/09 (319)

MET Day 002



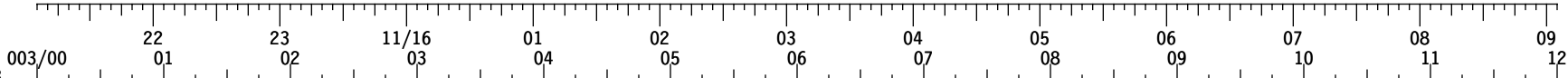
ISS	ISS CDR DE WINNE	SLEEP	POST SLEEP	DPC	PREP WORK	TVIS2		ARED	JDE E M A R C T M T S	MEAL	3DS-ISS CDR-PLC		J A C R M T S F I N	J E M R M S E E M A N L O P /	
	FE-1 SURAEV	SLEEP	POST SLEEP	DPC	PREP WORK	MRM2 DSMBLE	MRM2 XFER			MEAL	MRM2 ODF	TVIS	ARED		
DN	FE-2 STOTT	SLEEP	POST SLEEP	HYG BRK/HATCH CLS	CAMPOUT EVA PREP		EMURGE	EMU PREBREATHE	C_LK DPRS	ARED	MEAL	NOD1 PORT MID IMV		TVIS2	
ISS	FE-3 ROMANENKO	SLEEP	POST SLEEP	DPC	PREP WORK	MRM2 DSMBLE	MRM2 XFER			MEAL	TVIS				
	FE-4 THIRSK	SLEEP	POST SLEEP	TEST	DPC	PREP WORK	ARED	TVIS2	DCB APXC UNPK	3DS-FE4-PLC	MEAL	CSA-CP ACO	IMAK UNPACK	M R E S P L Y C F W I C L L 1	C W C I *
	FE-5 WILLIAMS	SLEEP	POST SLEEP	DPC	PREP WORK	CSI03 INSTL ACT	ARED	CERISE SAMPLE PREP	C E R I S E C A E R T I 2	MEAL	ARED STW	NOD1 PORT MID IMV		ARED DDPY	
DAY/NIGHT		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]	
DAILY ORBIT		14	15	1	2	3	4	5	6	7					
ORBIT		2977	2978	2979	2980	2981	2982	2983	2984						
TDRS AVAIL		[Green/Orange bars]													

NOTES

*FILL-PT2

FD04

GMT 11/15/09 (319)



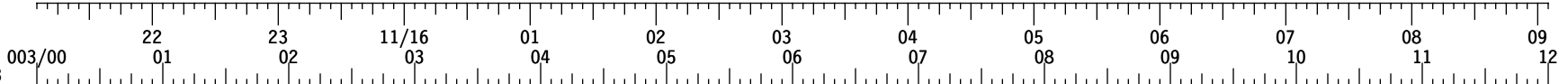
MET Day 003

STS-129	CDR HOBAUGH	CWC XFER (2)	SSRMS N2 PDGF WLKOFF	COND CWC C/O	XFER OPS	PRE SLEEP	PMC A/G	PRE SLEEP	SLEEP										
	M2 PLT WILMORE	SSRMS SASA XFR/LEE		PCRRPKS	POST EVA W/H2O			PRE SLEEP	SLEEP										
	M1 MS1 MELVIN	SSRMS SASA XFR/LEE	SSRMS N2 PDGF WLKOFF	XFER OPS	NLP TRM 1	NLP CELL TERM	MDDKCK	XFAEGURP	XBRIF	PRE SLEEP	SLEEP								
	IV MS2 BRESNIK	EVA IVA SUPPORT		LIQH SWAP	PRE SLEEP		BSA INIT			PRE SLEEP	SLEEP								
	EV1 MS3 FOREMAN	NFS 1GH BIE /MLMD O D	SO 1/4 CABLE	CLNUP & INGRS	PCRRPKS	POST EVA W/H2O		PSRL EEP	PCO SNTF EVA	PRE SLEEP	SLEEP								
	EV2 MS4 SATCHER	JEM RMS EE LUBE		CLNUP & INGRS	PCRRPKS	POST EVA W/H2O				PRE SLEEP	SLEEP								
DAY/NIGHT ORBIT		49		50		51		52		53		54		55		56			
TDRS W E Z		[Timeline bars for TDRS W E Z]																	
ORB ATT		[Timeline bars for ORB ATT]																	
MT/SSRMS POS		W/O TO N2		BIAS -XLV -ZVV														WS4/NODE2	
NOTES																			

FD04

GMT 11/15/09 (319)

MET Day 003



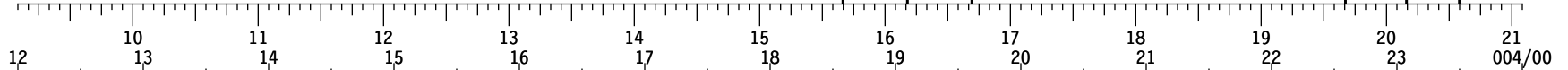
ISS	ISS CDR DE WINNE				PREP WORK	DPC	PRE SLEEP	SLEEP									
	FE-1 SURAEV	ARED	TVIS HYG	COX	PREP WORK	DPC	PRE SLEEP	SLEEP									
DN	FE-2 STOTT	TVIS2	PREP WORK	P C R P R S	POST EVA W/H2O		PRE SLEEP	SLEEP									
ISS	FE-3 ROMANENKO	TVIS	ARED	TVIS HYG	IMS	PW	DPC	PRE SLEEP	SLEEP								
	FE-4 THIRSK	C W I I *	CEVIS	G L D /	PREP WORK	DPC	PRE SLEEP	SLEEP									
	FE-5 WILLIAMS		TVIS2	E X D L	PREP WORK	DPC	PRE SLEEP	R E A C T	SLEEP								
DAY/NIGHT		7		8		9		10		11		12		13		14	
DAILY ORBIT		2985		2986		2987		2988		2989		2990		2991		2992	
TDRS AVAIL																	
NOTES		*FILL-PT2															

FD05
 GMT 11/16/09 (320)
 MET Day 003

NO EXERCISE
 [Both Arms Grappled]

NO EXERCISE
 [LCS IMAGING]

NO EXERCISE
 [Both Arms Grappled]



STS - 1 2 9	M2/R3 CDR HOBGAUGH	SLEEP	LOG	POST SLEEP	PEAVONT SPINAL	POST SLEEP	FI DOUG REVIEW	OBSS GRPL	OBSS MNVR H/O	OUNSGRPL	SMV SNR RMRW SFI	FOCUSSED INSPECTION			OBSS PRE GRPL	GRPL	OBSS BERTH		
	R2 PLT WILMORE	SLEEP	LOG	POST SLEEP	PEAVONT SPINAL	POST SLEEP	FI DOUG REVIEW	GRRA PPLE	MRL RLS	CIN CIT #4	ROBSS GRPL	CLEAR	CWC TERM	FOCUSSED INSPECTION			OBSS*	RUN GRPL	EX ERCISE
	R1 MS1 MELVIN	SLEEP	LOG	POST SLEEP	SPINAL	POST SLEEP	FR DIE G	GRRA PPLE	FC /O STER	ABRS XFER	ROBSS GRPL	CLEAR	FOCUSSED INSPECTION			OBSS*	RUN GRPL	SC PLI NTAL	
	MS2 BRESNIK	SLEEP	LOG	POST SLEEP	SPINAL	POST SLEEP	EXERCISE	BSA - INIT	BSA INIT	EMU SWAP	BMI AEN TTS TOT /XL	MEAL	E_LK PREP	EVA TOOL CONFIG	CIN CIT #5	SC PLI NTAL	XFER OPS	CWC TERM	
	MS3 FOREMAN	SLEEP	LOG	POST SLEEP	SPINAL	POST SLEEP	SH PT I A N A D L I N G	X F E D R A T E	SPINAL H/W SETUP	EMU SWAP	BMI AEN TTS TOT /XL	MEAL	E_LK PREP	EVA TOOL CONFIG	SC PLI NTAL	SPINAL OPERATOR			
	M1 MS4 SATCER	SLEEP	LOG	POST SLEEP	SPINAL	POST SLEEP	OBSS GRPL	OBSS MNVR H/O	OUNSGRPL	SMV SNR RMRW SFI	MEAL	XFER OPS	EVA TOOL CONFIG	OBSS PRE GRPL	GRPL	OBSS BERTH			

DAY/NIGHT	DAY		NIGHT		DAY		NIGHT		DAY		NIGHT		DAY		NIGHT	
ORBIT	57		58		59		60		61		62		63		64	
TDRS	W		E		Z		W		E		Z		W		E	
ORB ATT	BIAS -XLV -ZVV															
MT/SSRMS POS	WS4/NODE2															
NOTES	*RPRS INIT *RPRS TERM *MNVR-H/O															

FD05

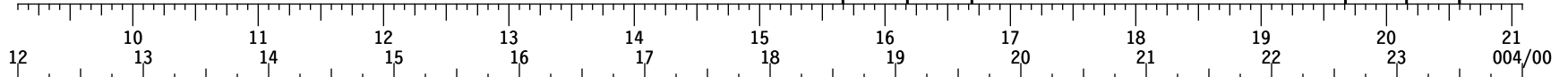
GMT 11/16/09 (320)

MET Day 003

NO EXERCISE
[Dual Arm Ops]

NO EXERCISE
[LCS IMAGING]

NO EXERCISE
[Dual Arm Ops]



ISS	ISS CDR DE WINNE	SLEEP	POST SLEEP	DPC PW	ARED			MEAL	ND1 PM CABLE	C/O	ND1 NM CABLE	
	FE-1 SURAEV	SLEEP	POST SLEEP	DPC PW	VELO	Φ-CB-MNT		MEAL	MO1	5P9 UY-3 YC17 SW/O	TVIS	
	FE-2 STOTT	SLEEP	POST SLEEP	DPC PW	TVIS2	ARED	ND1 PM IMV	MEAL	ND1 PM CABLE	SOP PIE R A A L T O R	ND1 NM CABLE	
ISS	FE-3 ROMANENKO	SLEEP	POST SLEEP	DPC PW	VELO	TVIS	TVIS HYG	MEAL	MO1	CB-C-MNT	C O K	
	FE-4 THIRSK	SLEEP	POST SLEEP	DPC PW	TVIS2	ABRS XFER	ABRS S A C H	MEAL	D D K C C	D2XS CAMR	CF W I C L I 1	CF W I C L I 2
	FE-5 WILLIAMS	SLEEP	POST SLEEP	DPC PW	CEVIS	ARED S T W	ND1 PM IMV	MEAL	XFER OPS	CERISE INST&ACT	S C P L I C A L	TVIS2
DAY/NIGHT		■		■		■		■		■		
DAILY ORBIT		15	16	1	2	3	4	5	6			
ORBIT		2993	2994	2995	2996	2997	2998	2999	3000			
TDRS AVAIL		■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■										

*JPM-SHUTTER-CL

NOTES

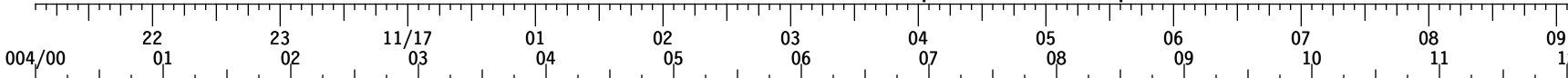
NO UNISOLATED EXERCISE

[MT Translate]

FD05

GMT 11/16/09 (320)

MET Day 004



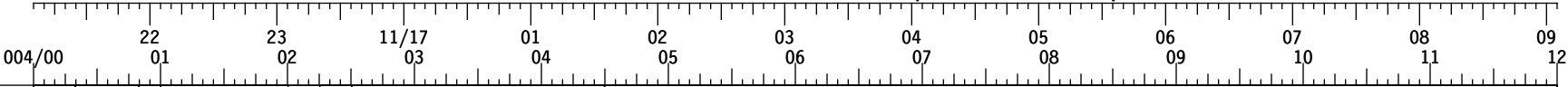
STS - 129	M2/R3 CDR HOBAUGH	OB BE SR TH	SSRMS GRPL PDGF1	RE ML SC 2 GR PL	SC PL IC NT AL	PS LE EP	PE AV O NT	PRE SLEEP	PMC A/G	PRE SLEEP	SLEEP					
	R2 PLT WILMORE	EX ER CI SE		EVA PROC REVIEW	SC PL IC NT AL	PE AV O NT		PRE SLEEP			SLEEP					
	R1 MS1 MELVIN	MR L	SSRMS GRPL PDGF1	RE ML SC 2 GR PL	SC PL IC NT AL	XT FA EG RU P	PE AV O NT	XB FR E IR E F	PRE SLEEP		SLEEP					
	MS2 BRESNIK	C W C T E R M	CWC XFER (2)	EVA PROC REVIEW					PRE SLEEP	MASK PB/TOOL CONFIG	PRE SLEEP	SLEEP				
	MS3 FOREMAN		EXERCISE	EVA PROC REVIEW					PRE SLEEP	MASK PB/TOOL CONFIG	PRE SLEEP	SLEEP				
	M1 MS4 SATCHER	OB BE SR TH	SC PL IC NT AL	EVA PROC REVIEW		PS LE EP	PE AV O NT		PRE SLEEP			SLEEP				
DAY/NIGHT																
ORBIT																
TDRS																
ORB ATT																
MT/SSRMS POS		WS4/NODE2			BIAS -XLV -ZVV			W/O TO PDGF1			XLATE AND W/O			WS2/PDGF2		
NOTES																

NO UNISOLATED EXERCISE
[MT Translate]

FD05

GMT 11/16/09 (320)

MET Day 004



ISS	ISS CDR DE WINNE	NC DA BL NE	C/O	ARE DD PY	TVIS2	DPC	PRE SLEEP	SLEEP										
	FE-1 SURAEV	TVIS	TVIS HYG	IMS	PREP WORK	DPC	PRE SLEEP	SLEEP										
DN	FE-2 STOTT	NC DA BL NE	SOP PIE NR AA LT OR	EVA PROC REVIEW	SOP PIE NR AA LT OR	SPINAL H/W STOW	PRE SLEEP	MA SK P B PRE SLEEP	SLEEP									
ISS	FE-3 ROMANENKO	COX	EDB	PREP WORK	DPC	PRE SLEEP	SLEEP											
	FE-4 THIRSK	PREP WORK	ARED	DPC	PRE SLEEP	SLEEP												
	FE-5 WILLIAMS	TVIS2	EVA PROC REVIEW	EX DL	DPC	PRE SLEEP	REA CT	SLEEP										
DAY/NIGHT		7		8		9		10		11		12		13		14		
DAILY ORBIT		6	7		8		9		10		11		12		13		14	
ORBIT		3001		3002		3003		3004		3005		3006		3007		3008		
TDRS AVAIL		[Color-coded availability bars]																
NOTES		[Empty space for notes]																

NO EXERCISE
[Until @ Hover Posn]
NO EXERCISE
[Both Arms Grappled]

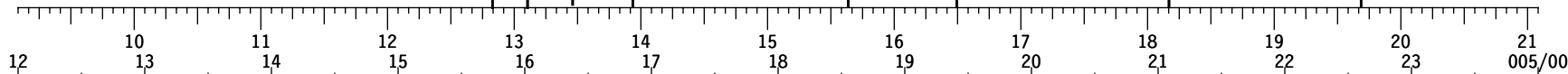
NO EXERCISE
[While at ELC2
Install Posn]

NO UNISOLATED EXERCISE
[During PAS Deploy]

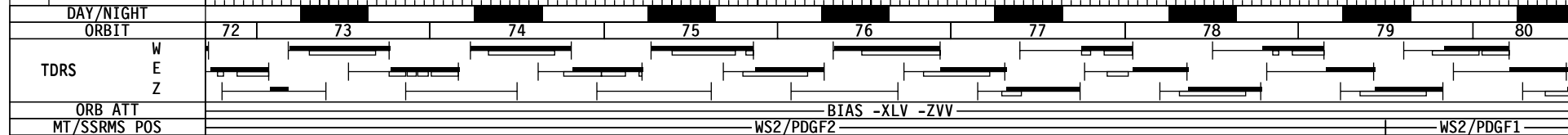
FD06

GMT 11/17/09 (321)

MET Day 004



STS-129	R2 CDR HOBAUGH	SLEEP	LOG	POST SLEEP	PMC A/G	POST SLEEP	IP MHD UIB	ELC2 UNBRTH	RMS RLS	RM NSVR*	PE VTS/U	CIN CIT #6	P/TV07 EVA	CWC TERM	DAP U/D	P/TV07 EVA	MEAL	FILTER INSPECT	CIN CIT #7	P/TV07 EVA	CWC TERM	CWC XFER (2)	
	M2 PLT WILMORE	SLEEP	LOG	POST SLEEP		HYG BRK/ HATCH CLS	CAMPOUT EVA PREP	EMU PREBREATHE	EMU PREBREATHE	C_LK DPRS	P-D DPS		XFER OPS	SSRMS GRPL MBS1	EXERCISE	MEAL	XFER OPS					SSRMS RLS MBS2	
	R1/M1 MS1 MELVIN	SLEEP	LOG	POST SLEEP			ELC2 UNBRTH	RMS RLS	SO CRAMS	RM NSVR*		SSRMS MNVR INSTL	ELC2 INSTALL	SSRMS GRPL MBS1	XFER OPS	MEAL	EXERCISE					SSRMS RLS MBS2	
	EV3 MS2 BRESNIK	SLEEP	LOG	POST SLEEP	HYG BRK/PREBREATHE		CAMPOUT EVA PREP	EMU PREBREATHE	EMU PREBREATHE	C_LK DPRS	P-D DPS	ES GRT SUP /	GATOR INSTALL	FPMU RELOCATE	EVA 2 (6:30)		S3 NADIR PAS DEPLOY	CP1 WETA INSTL	GET AHEADS *				
	EV1 MS3 FOREMAN	SLEEP	LOG	POST SLEEP	HYG BRK/PREBREATHE	14.7 RPRS	CAMPOUT EVA PREP	EMU PREBREATHE	EMU PREBREATHE	C_LK DPRS	P-D DPS	ES GRT SUP /	GATOR INSTALL	FPMU RELOCATE	S3 NADIR PAS DEPLOY	CP1 WETA INSTL	GET AHEADS ⊕						
	IV MS4 SATCER	SLEEP	LOG	POST SLEEP					IVA SUPPORT PREP						EVA IVA SUPPORT								



BIAS -XLV -ZVV
WS2/PDGF2 *TO VIEWING POSITION WS2/PDGF1

NOTES

*CLNUP & I
⊕CLNUP & I

NO EXERCISE
[Until @ Hover Posn]

NO EXERCISE
[Both Arms Grappled]

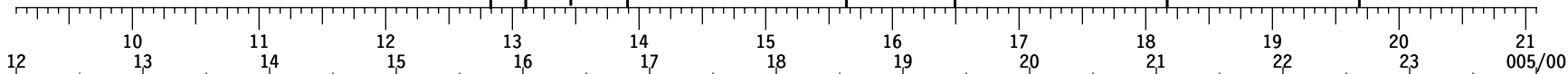
NO EXERCISE
[While at ELC2
Install Posn]

NO UNISOLATED EXERCISE
[During PAS Deploy]

FD06

GMT 11/17/09 (321)

MET Day 004



ISS	ISS CDR DE WINNE	SLEEP	POST SLEEP	PREP WORK	DPC	ARED STW	ND1 A IMV	GERL PCL2		ND1 A IMV	MEAL	ND1 A IMV	ARED DDPY	CEVIS	ARED			
	FE-1 SURAEV	SLEEP	POST SLEEP	PREP WORK	DPC		MRM2 TCS				MEAL			TVIS	VELO			
DN	FE-2 STOTT	SLEEP	POST SLEEP	HYG BRK/HATCH CLS		CAMPOUT EVA PREP	EMU PREBREATHE	C_LK DPRS	P-DPPS	ELC2 INSTALL	MEAL	MDS	MDS FEVS	PW	ARED			
	FE-3 ROMANENKO	SLEEP	POST SLEEP	PREP WORK	DPC		MRM2 TCS				MEAL		IMS	COX	VELO	TVIS		
ISS	FE-4 THIRSK	SLEEP	POST SLEEP	PREP WORK	DPC	WIDMVA S/US/U	PHOTO	TAGES HARVEST	CAMBIUM LOOP/PLANT	AWRBAEFTSEIRL	⊕	XFER OPS	MEAL	PDAISINHTW	DHOS-IPNASTS	XFER OPS	⬥	PREP WORK
	FE-5 WILLIAMS	SLEEP	POST SLEEP	PREP WORK	DPC	ND1 A IMV	GERL PCL2	SO SCRAMS	SSRMS MNVR INSTL	ND1 A IMV	MEAL	ND1 A IMV		PREP WORK	TVIS2			

DAY/NIGHT	[Day/Night Cycle]																	
DAILY ORBIT	14	15	1	2	3	4	5	6	7	3008	3009	3010	3011	3012	3013	3014	3015	3016
TDRS AVAIL	[TDRS Availability Bar]																	

NOTES

⊕EHS-GC/DMS-START

♣P33-MO-9-PREP-FE1

⬥EHS-GC/DMS-STOP

NO UNISOLATED EXERCISE

[MT Translate]

FD06

GMT 11/17/09 (321)

MET Day 005

005/00

22 01 23 02 11/18 03 01 04 02 05 03 06 04 07 05 08 06 09 07 10 08 11 09 12

STS - 129	<p>R2 CDR HOBAUGH</p>	<p>DUMP EQUIP GTHR</p>	<p>PRE SLEEP</p>	<p>ARED EXERCISE</p>	<p>PRE SLEEP</p>	<p>PMC OCA</p>	<p>PRE SLEEP</p>	<p>SLEEP</p>	
	<p>M2 PLT WILMORE</p>	<p>SRL SLS RSM MMS BBS SS2</p>	<p>POST EVA W/H20</p>	<p>PRE SLEEP</p>	<p>SLEEP</p>	<p>ISS EXTERNAL SURVEYS</p>			
	<p>R1/M1 MS1 MELVIN</p>	<p>SRL SLS RSM MMS BBS SS2</p>	<p>PRE SLEEP</p>	<p>PRE SLEEP</p>	<p>SLEEP</p>				
	<p>EV3 MS2 BRESNIK</p>	<p>CIL LNG URR PSS &</p>	<p>POST EVA W/H20</p>	<p>PRE SLEEP</p>	<p>SLEEP</p>				
	<p>EV1 MS3 FOREMAN</p>	<p>CIL LNG URR PSS &</p>	<p>POST EVA W/H20</p>	<p>PRE SLEEP</p>	<p>SLEEP</p>				
	<p>IV MS4 SATCER</p>	<p>ESV UAP IORT</p>	<p>EXERCISE</p>	<p>PRE SLEEP</p>	<p>BSA INIT</p>	<p>PRE SLEEP</p>	<p>SLEEP</p>		
DAY/NIGHT									
ORBIT									
TDRS									
ORB ATT									
MT/SSRMS POS	<p>WS2/PDGF1 BIAS -XLV -ZVV XLATE WS3 WS3/PDGF1</p>								
NOTES									

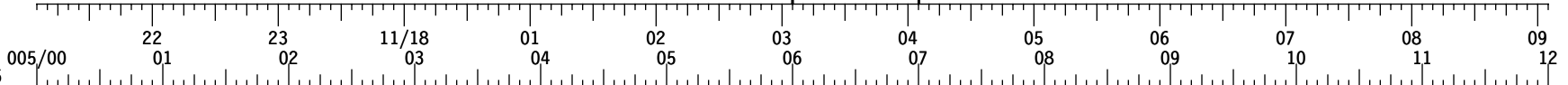
NO UNISOLATED EXERCISE

[MT Translate]

FD06

GMT 11/17/09 (321)

MET Day 005

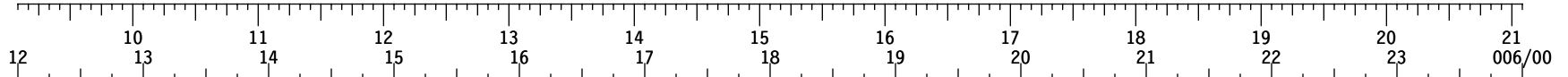


ISS	ISS CDR DE WINNE	ARED	PW	DPC	PRE SLEEP		SLEEP												
	FE-1 SURAEV	VELO	TVIS HYG	PREP WORK	DPC	PMC	PRE SLEEP		SLEEP										
DN	FE-2 STOTT	PC R P L R S K S	POST EVA W/H2O		TVIS2		PRE SLEEP	SLEEP											
			FE-3 ROMANENKO	TVIS	TVIS HYG	PREP WORK	DPC	PS R L E E P	PMC	PRE SLEEP		SLEEP							
ISS	FE-4 THIRSK	PREP WORK	D / L	TVIS2	DPC	ARED	PRE SLEEP	SLEEP											
	FE-5 WILLIAMS	TVIS2	CEVIS	EX D L	DPC	PRE SLEEP		RE A C T	SLEEP										
	DAY/NIGHT	7		8		9		10		11		12		13		14		15	
DAILY ORBIT	3016		3017		3018		3019		3020		3021		3022		3023		3024		
TDRS AVAIL	[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		
NOTES																			

FD07

GMT 11/18/09 (322)

MET Day 005

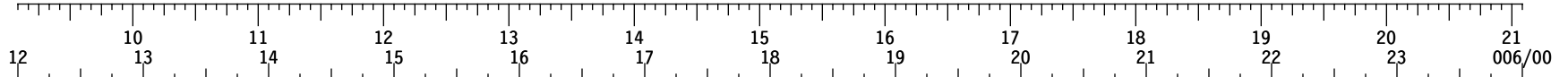


STS-129	CDR HOBAUGH	SLEEP	LOG	POST SLEEP	ILLI-OUCO	OFF DUTY	MEAL	H/O	MNDUMR	COND-I	COND-2*	PAVENT	COND-T	PWR DUMP	MNVRT EA	COND-2*	DAPUD	H/O	OLMM	
	PLT WILMORE	SLEEP	LOG	POST SLEEP	OFF DUTY	PFC OCA	OFF DUTY	MEAL	CINWCT #8	CWCTERM	CINWCT #9	PAVENT	XFER OPS	CWCTERM	CWC XFER (2)	COND CWC/O	PAVENT	PROCRVW		
	MS1 MELVIN	SLEEP	LOG	POST SLEEP	GLWRCINR	OFF DUTY	PFC OCA	OFF DUTY	MEAL	XUFEDRAT	XFER OPS	PAVENT	EXERCISE	CINWCTERM	XFER OPS	PAVENT	PROCRVW			
	MS2 BRESNIK	SLEEP	LOG	POST SLEEP	OFF DUTY	PFC OCA	OFF DUTY	EXERCISE	MEAL	E_LK PREP	EVA TOOL CONFIG	PROCRVW								
	MS3 FOREMAN	SLEEP	LOG	POST SLEEP	OFF DUTY	PFC OCA	OFF DUTY	EMU SWAP	MEAL	BATT/METOX INSTL	E_LK PREP	EXERCISE	EVA TOOL CONFIG	PROCRVW						
	MS4 SATCHER	SLEEP	LOG	POST SLEEP	OFF DUTY	PFC OCA	OFF DUTY	EMU SWAP	EXERCISE	MEAL	EVA TOOL CONFIG	PAVENT	PROCRVW							
DAY/NIGHT ORBIT		88	89	90	91	92	93	94	95	96										
TDRS W E Z		[Timeline bars for TDRS W E Z]																		
ORB ATT MT/SSRMS POS		BIAS -XLV -ZVV WS3/PDGF1 DUMP																		
NOTES		*RPRS INIT *RPRS TERM																		

FD07

GMT 11/18/09 (322)

MET Day 005



ISS	12	13	14	15	16	17	18	19	20	21	22	23	21								
ISS	ISS CDR DE WINNE	SLEEP	POST SLEEP	PREP WORK	DPC		ARED	TVIS2		PREP	MEAL	OBT MRM2	PAO	CFWICL1	CFWICL2	PMC	XFER OPS				
	FE-1 SURAEV	SLEEP	PSM09 POST SLEEP	PREP WORK	DPC	M09 STOW	TVIS		CB-B3-MNT		MEAL	OBT MRM2	COFC ANLZ		VELO	IMS	COX				
DN	FE-2 STOTT	SLEEP	SALHVA POST SLEEP	PREP WORK	DPC	PLCK		ARED		PREP	MEAL	OBT MRM2	PAO	PMC		TVIS2	PAO				
	FE-3 ROMANENKO	SLEEP	POST SLEEP	PREP WORK	DPC			TVIS			MEAL	OBT MRM2					VELO				
ISS	FE-4 THIRSK	SLEEP	POST SLEEP	PREP WORK	DPC	DZXS	TVIS2	TOCA ANLYZ	MELFI^		ARED	DZXS PREP	MEAL	OBT MRM2	PAO	TOCARCD	PMC	DZXS CAMR	CINCSUTALL	XFER OPS	
	FE-5 WILLIAMS	SLEEP	REACT M09 POST SLEEP		DPC		ARED	TVIS2			MEAL	OBT MRM2		ARYELNDR	INSPCT		PMC				
DAY/NIGHT		■		■		■		■		■		■		■		■		■		■	
DAILY ORBIT		15		16		1		2		3		4		5		6		7			
ORBIT		3024		3025		3026		3027		3028		3029		3030		3031		3032			
TDRS AVAIL		■		■		■		■		■		■		■		■		■		■	

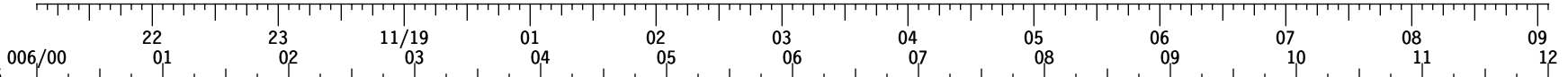
NOTES

*CMS-T2-CLEANING
^APXC INS

FD07

GMT 11/18/09 (322)

MET Day 006

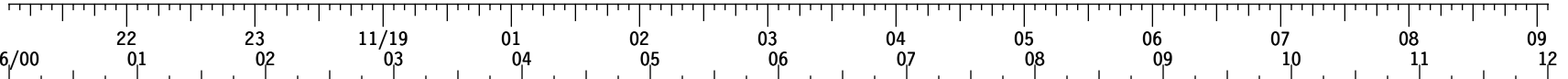


STS - 129	CDR HOBAUGH	PROC RVW	PRE SLEEP	ARED EXERCISE	PS RL EE EP	PMC A/G	PRE SLEEP	SLEEP						
								ISS EXTERNAL SURVEYS						
	PLT WILMORE	PROC RVW	ARED EXERCISE		ILLI ON	PRE SLEEP		SLEEP						
	MS1 MELVIN	PROC RVW	M D D K K K	PS RL EE EP	XT FA ER UP	XB FR E IF	PRE SLEEP		SLEEP					
	MS2 BRESNIK	PROC RVW	PRE SLEEP		MASK PB/TOOL CONFIG		PRE SLEEP	SLEEP						
								10.2 DPRS						
MS3 FOREMAN	PROC RVW	POST EVA CONF	PRE SLEEP				SLEEP							
MS4 SATCHER	PROC RVW	PRE SLEEP		MASK PB/TOOL CONFIG		PRE SLEEP	SLEEP							
							10.2 DPRS							
DAY/NIGHT														
ORBIT														
TDRS														
ORB ATT														
MT/SSRMS POS														
BIAS -XLV -ZVV														
WS3/PDGF1														
NOTES														

FD07

GMT 11/18/09 (322)

MET Day 006



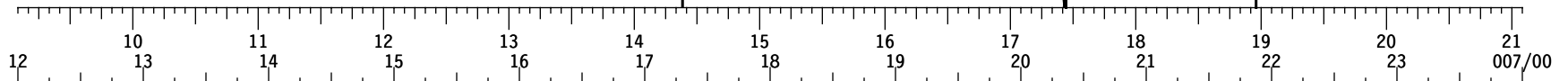
I S S	ISS CDR DE WINNE	PROC RVW	PW	DPC	PRE SLEEP						SLEEP								
	FE-1 SURAEV	PROC RVW	PW	DPC	PRE SLEEP						SLEEP								
D N	FE-2 STOTT	PROC RVW	PW	DPC	PRE SLEEP	M A S K P B	PRE SLEEP						SLEEP						
I S S	FE-3 ROMANENKO	PROC RVW	PW	DPC	PRE SLEEP						SLEEP								
	FE-4 THIRSK	PROC RVW	PW	DPC	PRE SLEEP						SLEEP								
	FE-5 WILLIAMS	PROC RVW	PW	DPC	PRE SLEEP	R E E P H C H						SLEEP							
DAY/NIGHT		7		8		9		10		11		12		13		14		15	
DAILY ORBIT		3032		3033		3034		3035		3036		3037		3038		3039		3040	
TDRS AVAIL		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]	
NOTES																			

NO UNISOLATED EXERCISE [During HPGT Install] NO UNISOLATED EXERCISE [During PAS Deploy]

FD08

GMT 11/19/09 (323)

MET Day 006

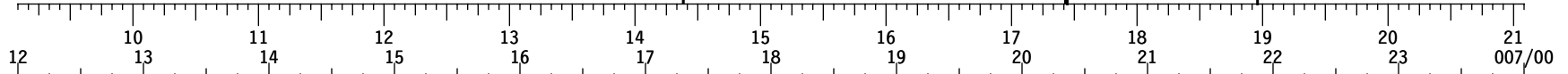


S T S - 1 2 9	CDR HOBAUGH	LOG POST SLEEP	PMC A/G	POST SLEEP	ILLI CLIO UFF	PA HD IB	WC S* 10	CI WN IT #10	XF ER OP S	PE V/ T V 0 7	C W C T E R M	P/ T V 0 7 E V A	P W R F I L L #1	P W R F I L L #2	P W R F I L L #3	CI WN IT #11	MEAL	C W C T E R M	C W C X F E R (2)	PE S / X / T T V 0 8 / U R V	P/ T V 0 8 E X T S R V Y	N2 E Q U I P T /D	ILLI ON	PRE S L E E P			
	M2 PLT WILMORE	LOG POST SLEEP	HYG BRK/ HATCH CLS	CAMP O U T E V A P R E P	EP M U R G E	EM U P R E B R E A T H E	C_L K D P R S	P D P S	SS R M S E V A 3 S P T	MEAL	X F E R O P S	E X E R C I S E	P R P S	CR P T R S	POST E V A W/ H2O												
	M1 MS1 MELVIN	LOG POST SLEEP	POST SLEEP	POST SLEEP	EP M U R G E	GL C R C K	X F E R O P S	XF E R O P S	E X E R C I S E	SS R M S E V A 3 S P T	MEAL	X F E R O P S															
	EV3 MS2 BRESNIK	LOG POST SLEEP	14.7 R P R S	10.2 D P R S	EP M U R G E	EM U P R E B R E A T H E	C_L K D P R S	P D P S	E S G E R T E U P S /	E V A 3 (6:30)	HP G T X F E R & M I S S E 7	S3 Z E N I T H P A S D P L Y	A S / H I E L M D O S	GET A H E A D S	CL N U P & I N G R S	P R P S	CR P T R S	POST E V A W/ H2O									
	IV MS3 FOREMAN	POST SLEEP	POST SLEEP	EXERCISE	IVA S U P P O R T P R E P	E V A I V A S U P P O R T																					
	EV2 MS4 SATCHER	LOG POST SLEEP	14.7 R P R S	10.2 D P R S	EP M U R G E	EM U P R E B R E A T H E	C_L K D P R S	P D P S	E S G E R T E U P S /	HP G T X F E R & M I S S E 7	S3 Z E N I T H P A S D P L Y	GET A H E A D S	CL N U P & I N G R S	P R P S	CR P T R S	POST E V A W/ H2O											
DAY/NIGHT	ORBIT		104	105	106	107	108	109	110	111																	
TDRS	W	[Timeline bars]														Z											
ORB ATT	BIAS -XLV -ZVV																										
MT/SSRMS POS	WS3/PDGF1																										
NOTES	*COMPACT *RPRS INIT *RPRS TERM																										

NO UNISOLATED EXERCISE
[During HPGT Install]

NO UNISOLATED EXERCISE
[During PAS Deploy]

GMT 11/19/09 (323)
MET Day 006



ISS	ISS CDR DE WINNE	POST SLEEP	DPC	PREP WORK	RSILK	RSILK	RPN	IN	GLACIER	RSILK	RSILK	⊕	ARED	ARED	STW	NOD1 RAD CABLE	MEAL	NOD1 RAD CABLE	XFER OPS	N2 EQUIP T/D	TVIS2											
	FE-1 SURAEV	POST SLEEP	DPC	PREP WORK	VELO	МБИ-20 FE1 EXE			M2-CTC CY-95 OUTFIT			MEAL	COX	♦	IMS	TVIS	TVIS HYG	PW	RO	ER	PK											
DN	FE-2 STOTT	POST SLEEP	HYG BRK/HATCH CLS	CAMPOUT EVA PREP			EMURGE	EMU	PREBREATHE	C_LK	DPRS	P	DPS	⊗	MDS WATER RFFILL	MEAL	♥	ARED			P	CR	PKS	POST EVA W/H2O								
ISS	FE-3 ROMANENKO	POST SLEEP	DPC	PREP WORK	TVIS	TVIS HYG	Δ	MEAL			VELO																					
	FE-4 THIRSK	POST SLEEP	TEST	SOLESTEP	DPC	PREP WORK	WITHNA DM	♦	ARED			CF	W	CL	1	CF	W	CL	2	G	L	O	V	E	MEAL	XFER OPS	TVIS2	PREP WORK				
	FE-5 WILLIAMS	POST SLEEP	DPC	PREP WORK	TVIS2	MSCOPE	•	DETACH	CERISE	CLCT1	AL	T	A	C	H	CERISE	CB	OBS1	M	E	L	F	I	NOD1 RAD CABLE	MEAL	NOD1 RAD CABLE	N1 RAD ALCV CLSOUT	ARED	D	P	Y	POST EVA RCNFG XFR
DAY/NIGHT		15		1		2		3		4		5		6		7		8														
DAILY ORBIT		3040		3041		3042		3043		3044		3045		3046		3047																
TDRS AVAIL		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]														

NOTES

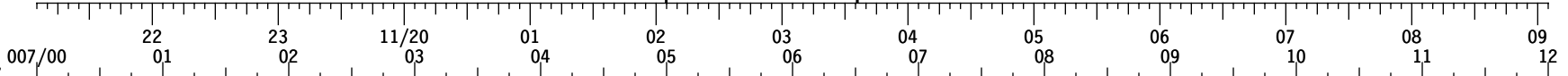
*RSILK-ULF3-MELF INS @IV-HPGT-CONFIG PT1 ♦МБИ-12-EXP-INIT
 ▲EHS-GC/DMS-START ⊕RSILK-ULF3-MELF RLCT ⊕EHS-GC/DMS-STOP ♥IV-HPGT-CONFIG PT2
 •CERISE DET1 ΔМБИ-20-FE3-HELP

NO UNISOLATED EXERCISE
[MT Translate]

FD08

GMT 11/19/09 (323)

MET Day 007



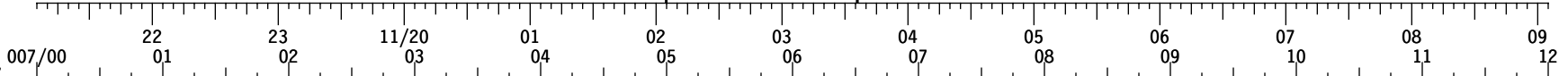
STS - 129	CDR HOBAUGH	PRE SLEEP	ARED EXERCISE	PMC A/G	PRE SLEEP	ISS EXTERNAL SURVEYS				SLEEP	FD09	LOG POST SLEEP					
	PLT WILMORE	POST EVA W/H20	PRE SLEEP			SLEEP				POST SLEEP							
	MS1 MELVIN	XFER OPS	MDD KCK XT FA EG RUP	XB FR EI RF	PRE SLEEP			SLEEP		LOG POST SLEEP							
	MS2 BRESNIK	POST EVA W/H20	PRE SLEEP			SLEEP				ASB POST SLEEP							
	MS3 FOREMAN		PRE SLEEP			SLEEP				POST SLEEP							
	MS4 SATCHER	POST EVA W/H20	PRE SLEEP			SLEEP				LOG POST SLEEP							
DAY/NIGHT ORBIT		112		113		114		115		116		117		118		119	
TDRS W E Z		[TDRS activity bars]															
ORB ATT		[ORB ATT activity bars]															
MT/SSRMS POS		WS3/PDGF1				BIAS -XLV -ZVV				XLATE WS4				WS4/PDGF1			
NOTES																	

NO UNISOLATED EXERCISE
[MT Translate]

FD08

GMT 11/19/09 (323)

MET Day 007



ISS	ISS CDR DE WINNE	TVIS2	PW	DPC	PRE SLEEP	SLEEP	POST SLEEP										
	FE-1 SURAEV	PREP WORK		DPC	PRE SLEEP	SLEEP	POST SLEEP										
	FE-2 STOTT	POST EVA W/H2O	TVIS2		PRE SLEEP	SLEEP	POST SLEEP										
ISS	FE-3 ROMANENKO	EXDL	PW	DPC	PRE SLEEP	SLEEP	POST SLEEP										
	FE-4 THIRSK	PREP WORK	EVA*	DPC	PRE SLEEP	SLEEP	POST SLEEP										
	FE-5 WILLIAMS	ARED		DPC	PRE SLEEP	SLEEP	POST SLEEP										
DAY/NIGHT		8		9		10		11		12		13		14		15	
DAILY ORBIT		3048		3049		3050		3051		3052		3053		3054		3055	
TDRS AVAIL																	
NOTES		*D/L															

FD09

POST SLEEP

POST SLEEP

POST SLEEP

POST SLEEP

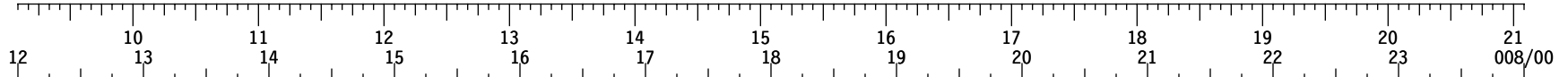
POST SLEEP

POST SLEEP

FD09

GMT 11/20/09 (324)

MET Day 007



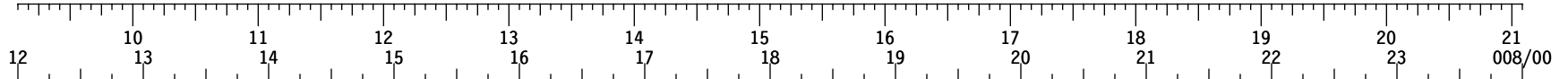
STS-129	CDR HOBAUGH	POST SLEEP	REBOOST	EXERCISE	02 P/B TEARDOWN	MEAL	OFF DUTY	FWARL	HATCH CLOSE	C/L CAM INSTL	PCSACT	
	PLT WILMORE	POST SLEEP	POST SLEEP	XFER OPS	XFER OPS	MEAL	OFF DUTY	PTEVACT	FWARL	GLACTRO	RNDZ TOOLS C/O	EXESRE
	MS1 MELVIN	POST SLEEP	XFER OPS	MDS XFER	XFER OPS	MEAL	OFF DUTY	FWARL	NOM H20 CNFG	MDKCK	C/L CAM INSTL	EXER CISE
	MS2 BRESNIK	POST SLEEP	POST EVA RCNFIG/XFR	EVA XFER TO STS	XFER OPS	EXERCISE	MEAL	OFF DUTY	FWARL	HATCH CLOSE	ODS LEAK CHECK	
	MS3 FOREMAN	POST SLEEP	POST EVA RCNFIG/XFR	EVA XFER TO STS	XFER OPS	EXERCISE	MEAL	OFF DUTY	PTEVACT	FWARL	P/TV03 UNDOCK SETUP	ODS LEAK CHECK
	MS4 SATCHER	POST SLEEP	POST EVA RCNFIG/XFR	PCS DEACT & XFR	EXERCISE	JRMMS STOW	MEAL	OFF DUTY	FWARL	NLP ACT2	RNDZ TOOLS C/O	

DAY/NIGHT	ORBIT	120	121	122	123	124	125	126	127	
TDRS	WEZ	[Timeline bars for TDRS WEZ]								
ORB ATT	MT/SSRMS POS	BIAS -XLV -ZVV REBOOST WS4/PDGF1 BIAS -XLV -ZVV								
NOTES		*REBOOST *TERM *RESET								

FD09

GMT 11/20/09 (324)

MET Day 007



ISS	ISS CDR DE WINNE	POST SLEEP	DPC	PREP WORK	ARED	PCS DEACT & XFR	02 P/B TEARDOWN	CREW CONF	CPHREO W T O	MEAL	TVIS2	FWAREL E L	HATCH CLOSE		
	FE-1 SURAEV	POST SLEEP	DPC	PREP WORK	* TVIS	ARED	CREW CONF	CPHREO W T O	MEAL	COX	Φ CB BT7 MNT	FWAREL E L	M5I 12 IMS CB Φ MNT		
DN	FE-2 STOTT	POST SLEEP	DPC	M V D I S D S / H S / U I S U D	MDS-FAC-DECONFIGURE	MDS XFER	S L V S T O W	CREW CONF	CPHREO W T O	MEAL	DCB RVW	DCB PACK	ARED	FWAREL E L	
ISS	FE-3 ROMANENKO	POST SLEEP	DPC	PREP WORK	* ARED	19S PACK STW	CREW CONF	CPHREO W T O	MEAL	19S PACK STW	TVIS	FWAREL E L	⊕		
	FE-4 THIRSK	POST SLEEP	DPC	ARED	WRS-RFTA-R&R	BCM-R&R	BCM-BATT-C/O	CREW CONF	CPHREO W T O	MEAL	DCB RVW	DCB PACK	DCB XFR	FWAREL E L	TVIS2
	FE-5 WILLIAMS	POST SLEEP	DPC	PREP WORK	TVIS2	M S L M F P / X G F L R C	CSA C P Z C A L	BCM-R&R	BCM-BATT-C/O	CREW CONF	CPHREO W T O	MEAL	CEVIS	FWAREL E L	ARED

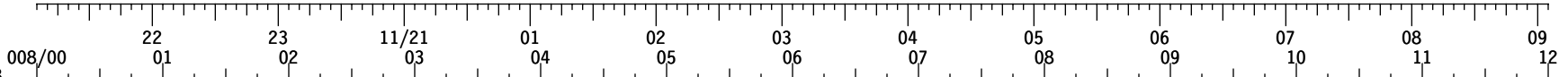
DAY/NIGHT	16	1	2	3	4	5	6	7
DAILY ORBIT	3056	3057	3058	3059	3060	3061	3062	3063
TDRS AVAIL	[Color-coded bars indicating availability]							

NOTES *CTC-M5C-M2-TST ©C3M-M0-21M-PREP

FD09

GMT 11/20/09 (324)

MET Day 008

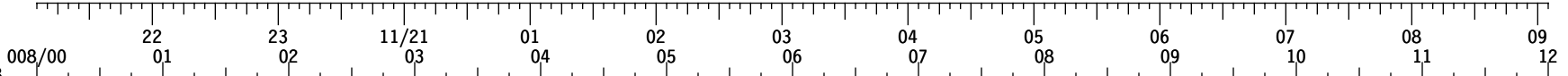


STS - 129	CDR HOBAUGH	PRE SLEEP	PMC A/G	PRE SLEEP	SLEEP					FD10	POST SLEEP
	PLT WILMORE	EXERCISE		PRE SLEEP	SLEEP					LOG	POST SLEEP
	MS1 MELVIN	EXERCISE		PRE SLEEP	SLEEP					LOG	POST SLEEP
	MS2 BRESNIK			PRE SLEEP	SLEEP					LOG	POST SLEEP
	MS3 FOREMAN			PRE SLEEP	SLEEP						POST SLEEP
	MS4 SATCHER			PRE SLEEP	SLEEP					LOG	POST SLEEP
	MS5 STOTT			PRE SLEEP	SLEEP					LOG	POST SLEEP
DAY/NIGHT											
ORBIT											
TDRS											
ATTITUDE		BIAS -XLV -ZVV									
NOTES											

FD10

GMT 11/20/09 (324)

MET Day 008

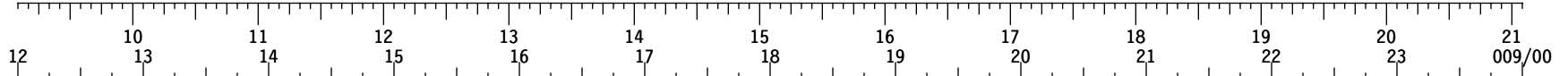


ISS	ISS CDR DE WINNE	PREP WORK	DPC	PRE SLEEP	SLEEP						
	FE-1 SURAEV	PREP WORK	DPC	PRE SLEEP	SLEEP						
	FE-3 ROMANENKO	PREP WORK	DPC	PRE SLEEP	SLEEP						
	FE-4 THIRSK	PREP WORK	DPC	PRE SLEEP	SLEEP						
	FE-5 WILLIAMS	PREP WORK	DPC	PRE SLEEP	SLEEP						
DAY/NIGHT											
DAILY ORBIT		7	8	9	10	11	12	13	14	15	
ORBIT			3064	3065	3066	3067	3068	3069	3070	3071	
NOTES											

FD10

GMT 11/21/09 (325)

MET Day 008

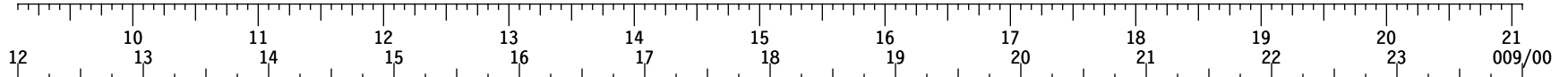


STS - 129	CDR HOBAUGH	POST SLEEP	GP RWH PR/UP	MNVR UNDOCK	UNDOCK	OPS	FLYAROUND	SEP	MEAL	WTAEI/CTO/ND	MSNTVBD	EXERCISE	MNOVSE	MPNOVRT	M-NZLV	PSRLLEEP	
	PLT WILMORE	POST SLEEP			UNDOCK	OPS	FLYAROUND	SEP	MEAL	OBSS UNBERTH	STBD WING SURVEY	NOSE CAP SURVEY	PORT WING SURVEY	OBSS BERTH			
	MS1 MELVIN	POST SLEEP			UNDOCK	OPS	FLYAROUND	SEP	MEAL	OBSS UNBERTH	STBD WING SURVEY	NOSE CAP SURVEY	PORT WING SURVEY	OBSS BERTH			
	MS2 BRESNIK	POST SLEEP	GP RWH PR/UP	POST SLEEP	UNDOCK	OPS	FLYAROUND	SEP	MEAL		STBD WING SURVEY	NOSE CAP SURVEY	PORT WING SURVEY	EXERCISE			
	MS3 FOREMAN	POST SLEEP			UNDOCK	OPS	FLYAROUND	SEP	MEAL	EVA UNPACK & STOW	PST ISS EVA ENT PREP		EXERCISE				
	MS4 SATCHER	POST SLEEP			UNDOCK	OPS	FLYAROUND	SEP	MEAL	EVA UNPACK & STOW	PST ISS EVA ENT PREP		EXERCISE		LDR1 DNK		
	MS5 STOTT	POST SLEEP			UNDOCK	OPS	FLYAROUND	SEP	MEAL			EXERCISE				MDS CK	
DAY/NIGHT		[Timeline bar with day/night indicators]															
ORBIT		[Timeline bar with orbit parameters]															
TDRS		[Timeline bar with TDRS events]															
ATTITUDE		[Timeline bar with attitude parameters]															
NOTES		*UNDOCK 08/14:32 #DEACT															

FD10

GMT 11/21/09 (325)

MET Day 008



ISS	ISS CDR DE WINNE	POST SLEEP	PMA2 DPRS S/U	PREP WORK	DPC	PMA2 PT1	AUDIO	PMA2 PT2	TVIS2	PMA2 PT3	MEAL	BST SOWU	ARED	♣					
	FE-1 SURAEV	POST SLEEP		PREP WORK	DPC			TVIS	VELO	TVIS HYG	MEAL			IMS					
	FE-3 ROMANENKO	POST SLEEP		PREP WORK	DPC		FLYAROUND				MEAL		VELO	TVIS	TVIS HYG				
	FE-4 THIRSK	POST SLEEP	⊕	PREP WORK	PDC MEOPN 2AFRTG*		FLYAROUND	SODF DPLY			ARED	MEAL	♦	⊗	CWC	TVIS2	♥	EXDL	
	FE-5 WILLIAMS	POST SLEEP		PREP WORK	DPC		UVNDDKEO		UVNDDKEO		TVIS2	MEAL	WRS-RFTA-R&R		ARED				
DAY/NIGHT		15		1		2		3		4		5		6		7		8	
DAILY ORBIT		3072		3073		3074		3075		3076		3077		3078		3079			

NOTES

⊕JPM-SHUTTER-CL

♦MDS-HISD VID-S/U

⊗MDS-PGB-DISASSEM/VID

♣PBA-RELOCATE

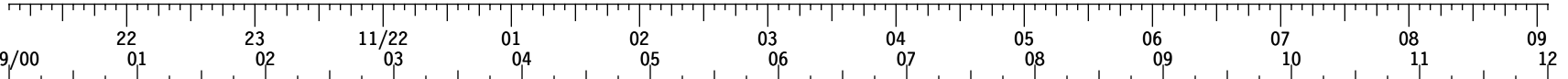
♥P/TV-EVA CAMR-RCNFG

***UNDOCK 08/14:32**

FD10

GMT 11/21/09 (325)

MET Day 009

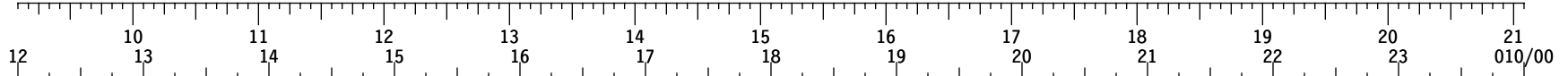


STS - 129	CDR HOBAUGH	PRE SLEEP	PMC A/G	PRE SLEEP						SLEEP	FD11	POST SLEEP
	PLT WILMORE	* R P M W S R D N		PRE SLEEP						SLEEP		POST SLEEP
	MS1 MELVIN	⊕ R P M W S R D N		PRE SLEEP						SLEEP		POST SLEEP
	MS2 BRESNIK	♦		PRE SLEEP						SLEEP	DL SS LL VV AA	POST SLEEP
	MS3 FOREMAN			PRE SLEEP						SLEEP		POST SLEEP
	MS4 SATCHER	PRE SLEEP	RCOG	PRE SLEEP						SLEEP	DL SS LL VV AA	POST SLEEP
	MS5 STOTT			PRE SLEEP						SLEEP	DL SS LL VV AA	POST SLEEP
DAY/NIGHT		[Timeline with day/night indicators]										
ORBIT		143 144 145 146 147 148 149 150 151										
TDRS		[Timeline with E Z W indicators]										
ATTITUDE		-ZLV -XVV										
NOTES		*OBSS BERTH ⊕OBSS BERTH ♦EXERCISE *RATE RCNFG										

FD11

GMT 11/22/09 (326)

MET Day 009



STS 129	CDR HOBAUGH	POST SLEEP	EXERCISE	FCS C/O	RFI SRE HOT	PILOT OPS	D/O BRIEF	PEAVO ENT	MEAL	MSI NIMRO	SIMO INIT	CABIN STOW	SIMO TERM	COND-I	CABIN STOW	COND-T	MZLV	CABIN STOW	MEALS
	PLT WILMORE	POST SLEEP	WASH HUT	FILTER CLEANING	FCS C/O	RFI SRE HOT	PILOT OPS	D/O BRIEF	PEAVO ENT	MEAL	EVS NTD T REUP	CABIN STOW	EXERCISE	CABIN STOW					
	MS1 MELVIN	POST SLEEP	BSLE OUP	BLOOD COLL OPR	STOW	FCS C/O	RFI SRE HOT	PILOT OPS	D/O BRIEF	PEAVO ENT	MEAL	CABIN STOW	L-1 COMM CHK	EXERCISE	L-1 COMM CHK	CABIN STOW			
	MS2 BRESNIK	POST SLEEP	BCS LOU B O L J	PS O L J	FCS C/O P/TV	CABIN STOW	COMM 2	CABIN STOW	DES SLV IA	D/O BRIEF	PEAVO ENT	MEAL	EXERCISE	CABIN STOW	DES SLV IA	CABIN STOW			
	MS3 FOREMAN	POST SLEEP	KS XDD	SD SE VACT	EXERCISE	CABIN STOW	PAO S/U	D/O BRIEF	PEAVO ENT	MEAL	CABIN STOW				ERG STOW	RCMBNT SEAT S/U	LAUNCH ENTRY SUIT CK		
	MS4 SATCHER	POST SLEEP	BCS LOU B O L J	POST SLEEP	CABIN STOW	WASH HUT	CABIN STOW	DES SLV IA	D/O BRIEF	PEAVO ENT	MEAL	CABIN STOW	DES SLV IA	CABIN STOW	EXERCISE	NLP TRM	NTPRM 2	CABIN STOW	WDL EACT
	MS5 STOTT	POST SLEEP	BCS LOU B O L J	CABIN STOW	EXERCISE	DES SLV IA	D/O BRIEF	PEAVO ENT	MEAL	CABIN STOW	DES SLV IA	CABIN STOW	MDS CK	ERG STOW	RCMBNT SEAT S/U	LAUNCH ENTRY SUIT CK			

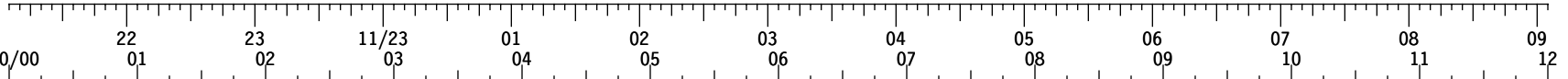
DAY/NIGHT	[Timeline bars for day/night cycle]																			
ORBIT	151	152	153	154	155	156	157	158	159											
TDRS	E	W	Z	[Timeline bars for TDRS events]																
GND	-MLA -MLA -DFR -MLA -DFR																			
ATTITUDE	-ZLV -XVV			FCS C/O			-ZLV -XVV			-XLV +YVV			-ZLV -XVV							
NOTES	*DECNFG																			

*COOLING CNFG

FD11

GMT 11/22/09 (326)

MET Day 010

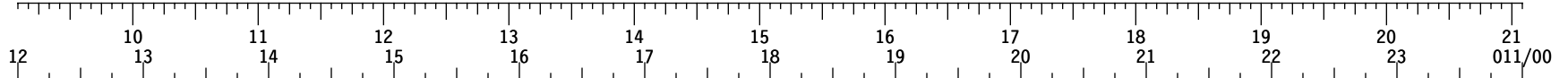


STS 129	CDR HOBAUGH	PRE SLEEP	PMC A/G	PRE SLEEP												FD12	POST SLEEP	
	PLT WILMORE				PRE SLEEP													POST SLEEP
	MS1 MELVIN	KU STOW	PGSC STOW PART I	PRE SLEEP													POST SLEEP	
	MS2 BRESNIK	KU STOW		PRE SLEEP	DISLVA													POST SLEEP
	MS3 FOREMAN	LAUNCH ENTRY SUIT CK		PRE SLEEP													POST SLEEP	
	MS4 SATCHER			PRE SLEEP	DISLVA													POST SLEEP
	MS5 STOTT	LAUNCH ENTRY SUIT CK		PRE SLEEP	DISLVA													POST SLEEP
DAY/NIGHT		[Timeline with shaded day/night segments]																
ORBIT		[Timeline with orbit parameters 159-167]																
TDRS		[Timeline with TDRS events E, W, Z]																
GND		[Timeline with ground events -DFR, -MLA]																
ATTITUDE		[Timeline with attitude events -ZLV, -XVV]																
NOTES																		

FD12

GMT 11/23/09 (327)

MET Day 010



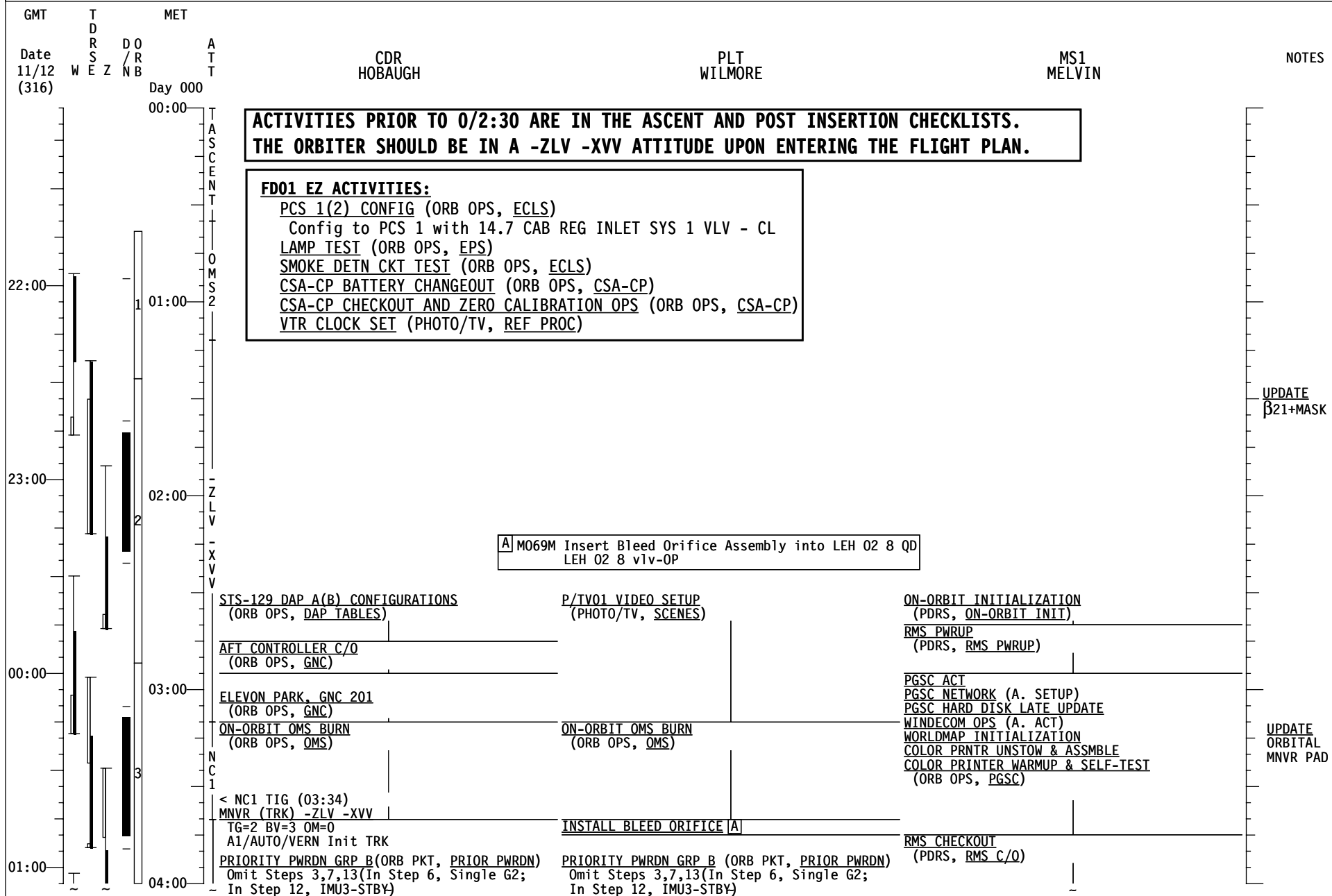
STS 129	CDR HOBAUGH	POST SLEEP	PMCA/G	PSOL	SMAR	GPTR	WRUP	IMU ALIGN & VERIF	T-RX KSI	DEORBIT PREP		
	PLT WILMORE	POST SLEEP							WATCH	DEORBIT PREP	D E O R B I T * L A N D I N G *	
	MS1 MELVIN	POST SLEEP							WATCH	DEORBIT PREP		
	MS2 BRESNIK	POST SLEEP							WATCH	DEORBIT PREP		
	MS3 FOREMAN	POST SLEEP							WATCH	DEORBIT PREP		
	MS4 SATCHER	POST SLEEP							WATCH	DEORBIT PREP		
	MS5 STOTT	POST SLEEP							WATCH	DEORBIT PREP		
DAY/NIGHT	[Timeline with shaded night periods]											
ORBIT	[Timeline with numerical markers 167-175]											
TDRS	[Timeline with E, W, Z markers and horizontal bars]											
GND	[Timeline with -MLA, -DFR, -MLA, -DFR markers]											
ATTITUDE	[Timeline with -ZLV, -XV, IMU, -XSI, COMM, ENTRY markers]											
NOTES	*SALIVA KIT DEORBIT TIG 10/18:24* *KSC LANDING 10/19:27											

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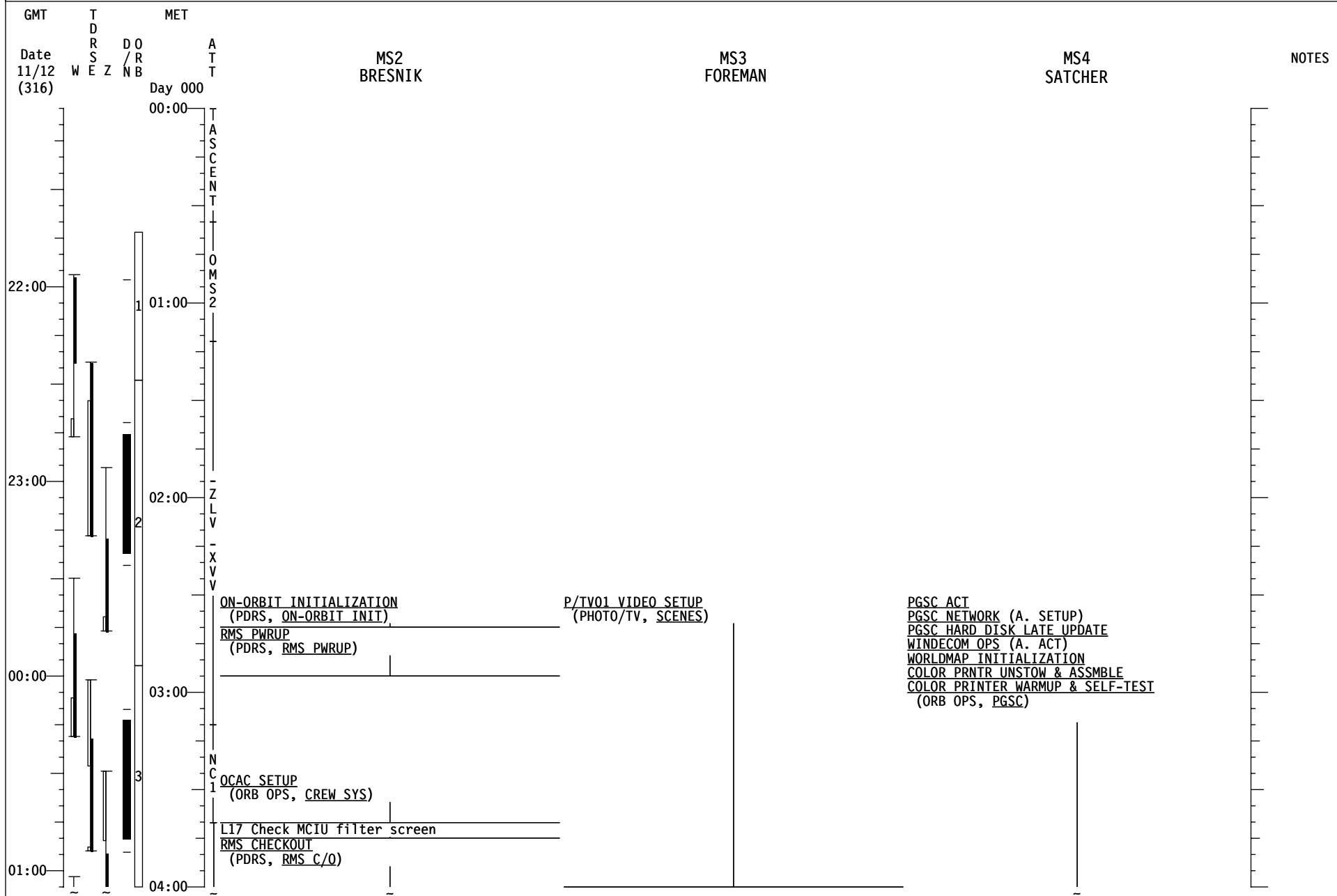
DETAILED TIMELINE

DETAILED
TIMELINE

STS-129/ULF3 FD01



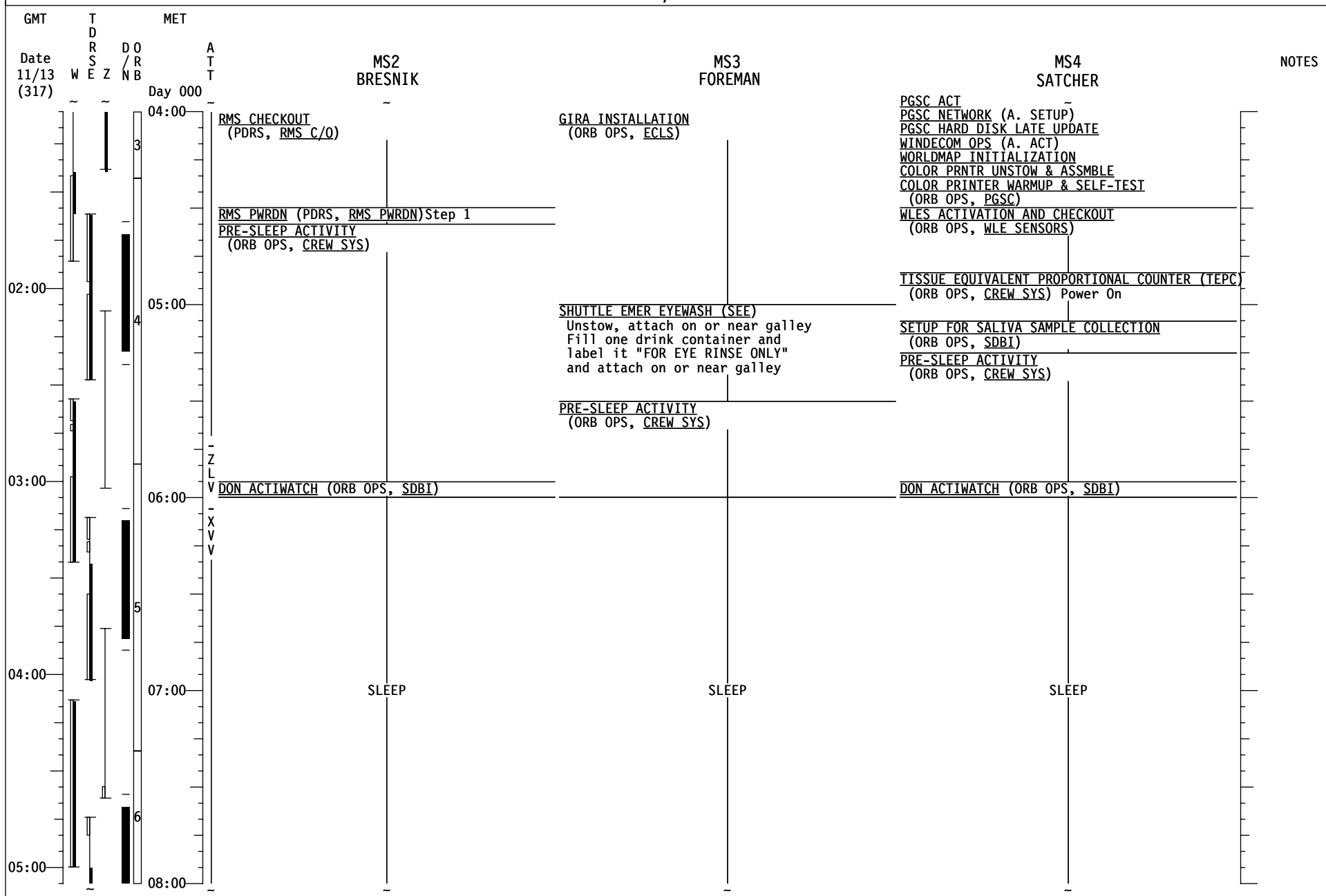
STS-129/ULF3 FD01



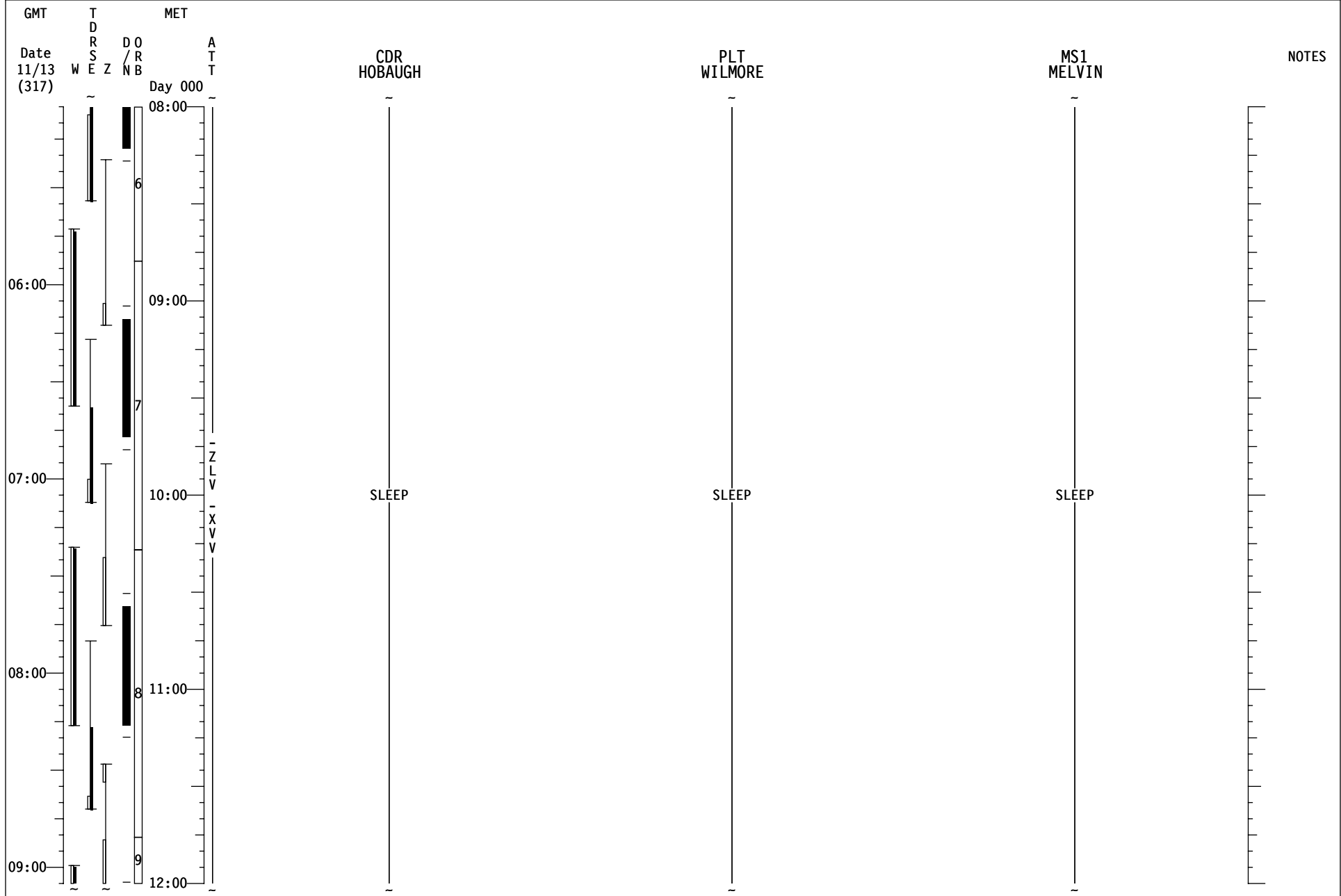
STS-129/ULF3 FD01

GMT	TDRS W E Z	MET DO R / N B	A T T Day 000	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
11/13 (317)			04:00	<p><u>PRIORITY PWRDN GRP B (ORB PKT, PRIOR PWRDN)</u> Omit Steps 3,7,13(In Step 6, Single G2; In Step 12, IMU3-STBY)</p> <p><u>IMU STAR OF OPPTY ALIGN (ORB OPS, GNC)</u></p> <p><u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)</p>	<p><u>PRIORITY PWRDN GRP B (ORB PKT, PRIOR PWRDN)</u> Omit Steps 3,7,13(In Step 6, Single G2; In Step 12, IMU3-STBY)</p> <p><u>DATE/TIME SET (PHOTO/TV, REF PROC)</u> <u>HD DIGITAL VIA CC</u> (CUE CARD, <u>DIGITAL PLAYBACK</u>) ET HANDHELD VIDEO D/L KU TDRE: 04:32 - 04:52</p>	<p><u>RMS CHECKOUT</u> (PDRS, RMS C/O)</p>	
02:00			05:00	<p><u>APU FD1 RECONFIGS [B]</u></p> <p><u>PRIVATE MEDICAL CONFERENCE</u> L9 PAYLOAD STATION A/G(two) - OFF Perform via A/G 2</p> <p><u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS) Perform Air Quality Report to MCC</p>	<p><u>UMBILICAL WELL TPS CAMERA</u> <u>IMAGERY DOWNLOADING</u> (ORB OPS, PGSC)</p> <p><u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)</p>	<p><u>RMS PWRDN (PDRS, RMS PWRDN) Step 1</u> <u>CGBA and ABRS STATUS CK (Cue Card) CGBA, ABRS</u> <u>DCS FILE TRANSFER (PHOTO/TV, D2XS)</u> ET HANDHELD PHOTO</p> <p><u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)</p>	
03:00			06:00	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;"> <p>[B] R2 BLR PWR(three)-OFF A12 APU HTR GG/FU PMP(three)-A AUTO</p> </div> <p><u>DON ACTIWATCH (ORB OPS, SDBI)</u></p>	<p><u>DON ACTIWATCH (ORB OPS, SDBI)</u></p>	<p><u>DON ACTIWATCH (ORB OPS, SDBI)</u></p>	
04:00			07:00	SLEEP	SLEEP	SLEEP	
05:00			08:00				

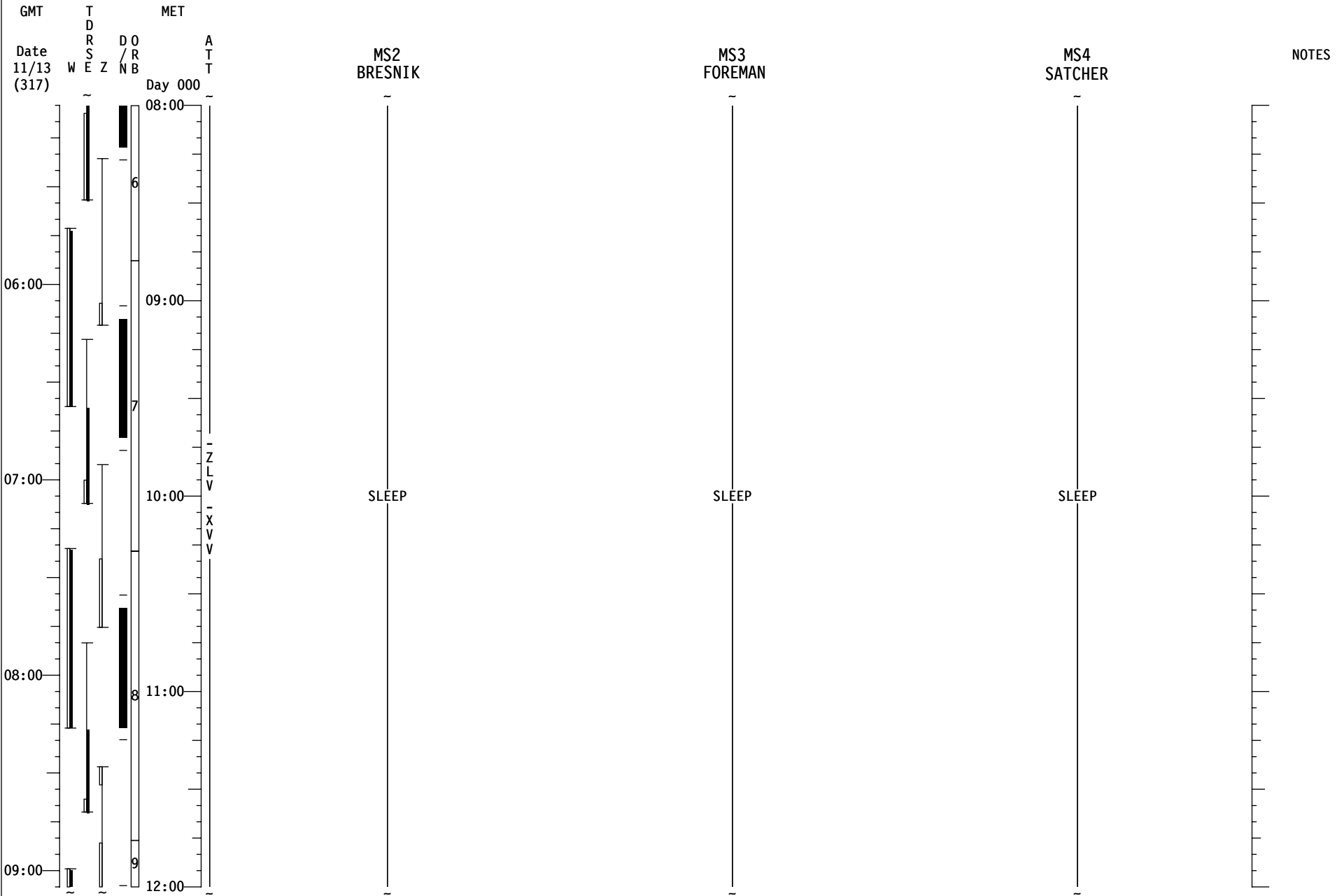
STS-129/ULF3 FD01



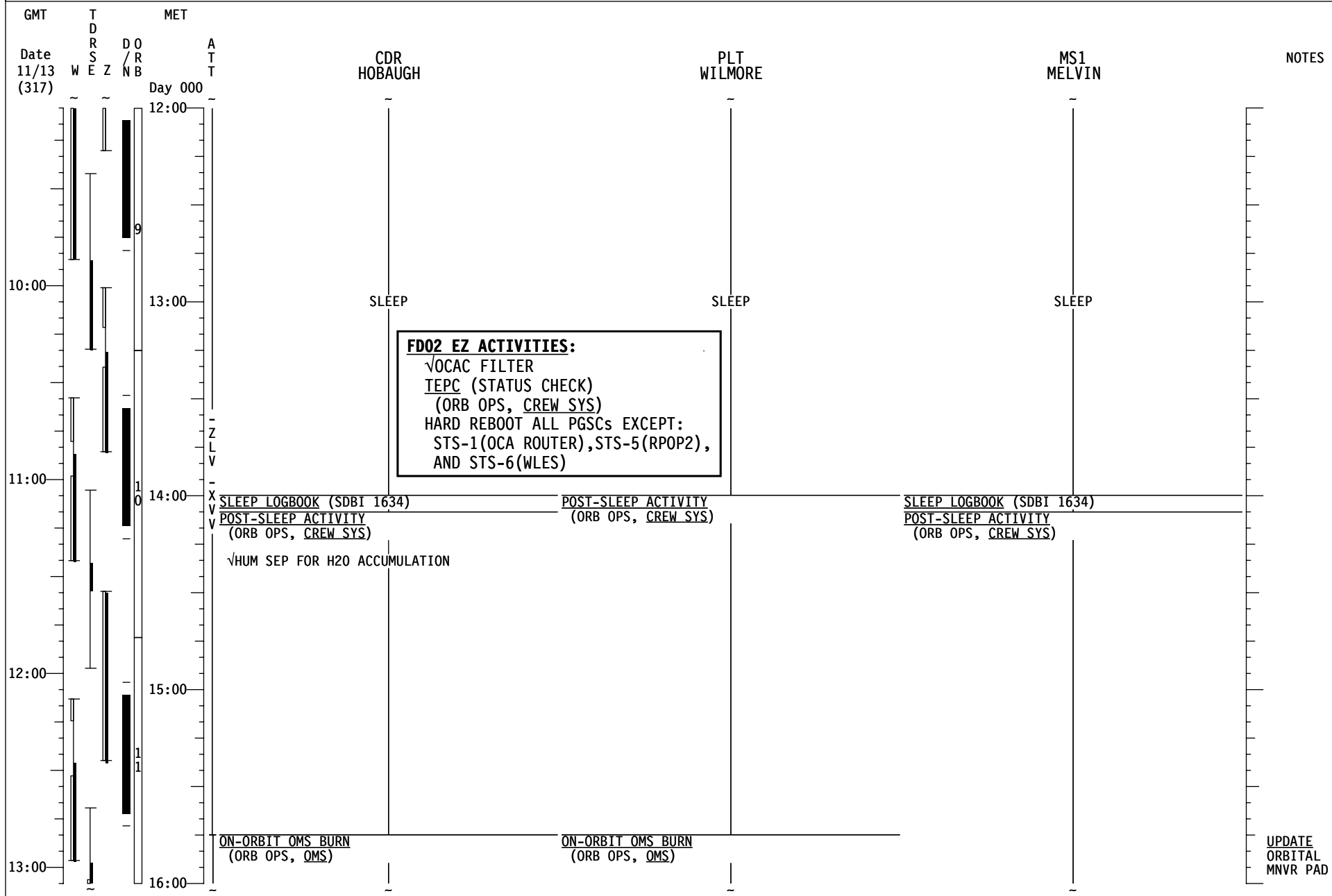
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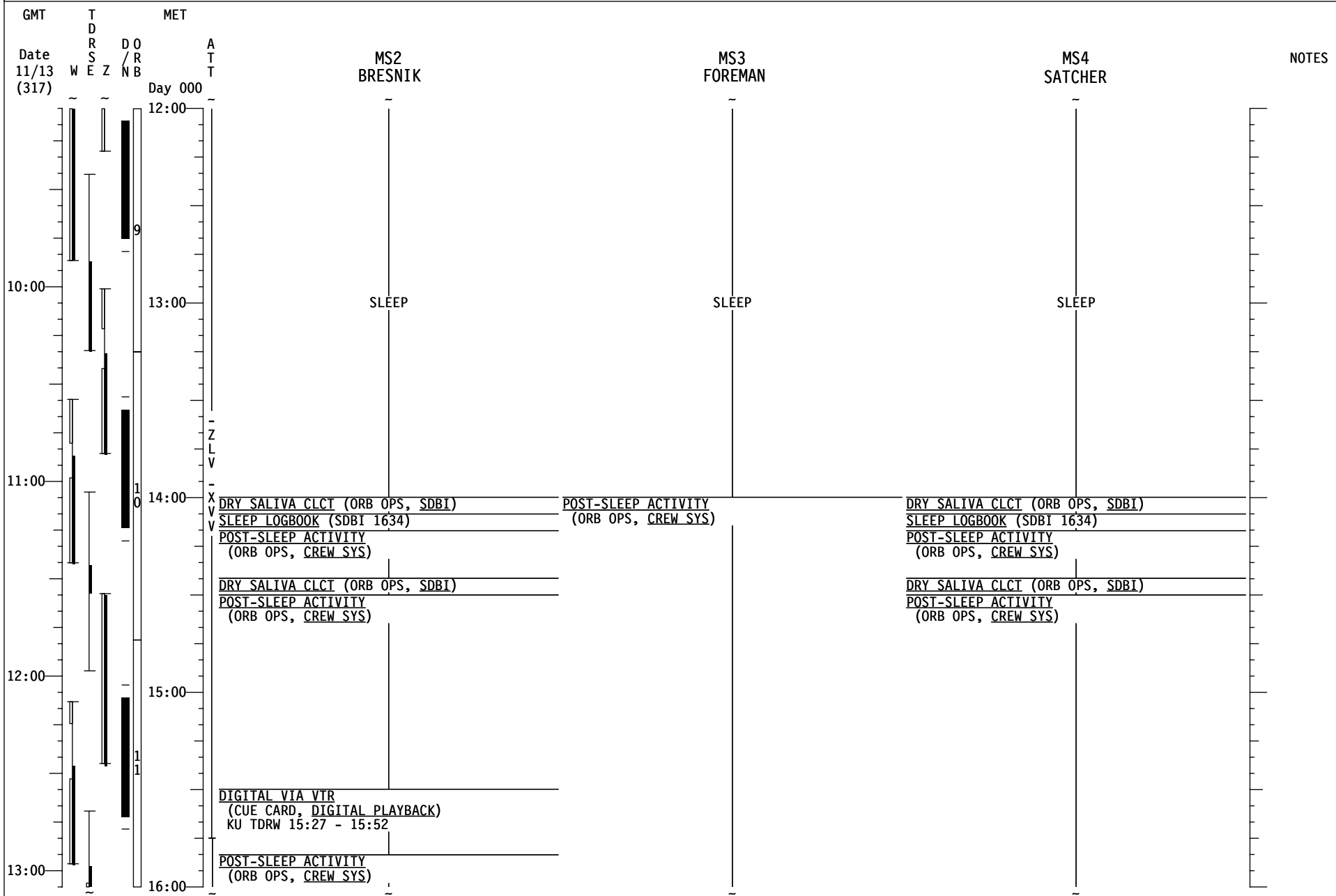
STS-129/ULF3 FD01



STS-129/ULF3 FD02



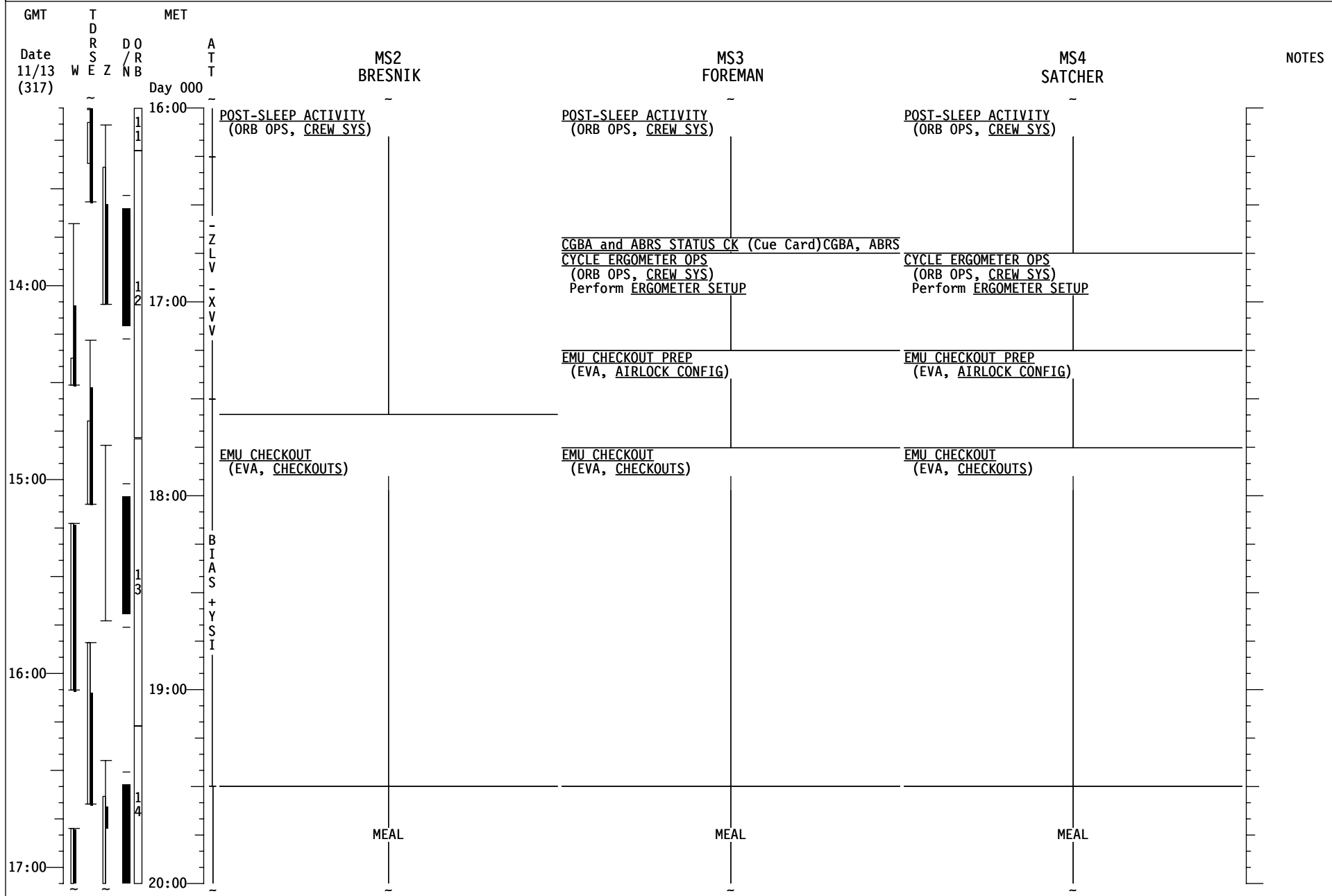
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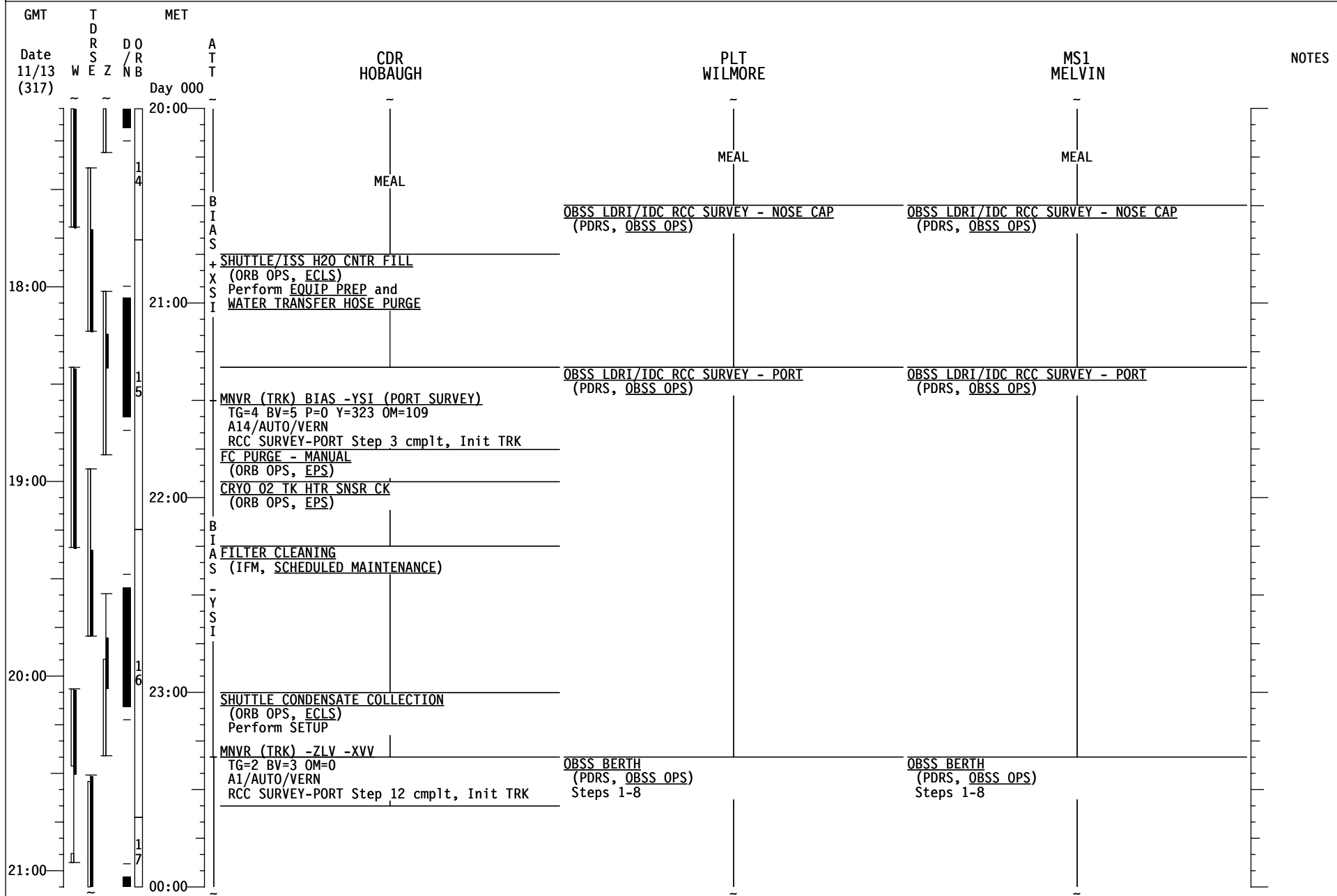
STS-129/ULF3 FD02

GMT	T D R S E Z	MET	A T T	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
Date 11/13 (317)	W E Z	DO /R NB	Day 000				
16:00	11			ON-ORBIT OMS BURN (ORB OPS, OMS) < NC2 TIG (16:12)	ON-ORBIT OMS BURN (ORB OPS, OMS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	UPDATE ORBITAL MNVR PAD
				MNVR (TRK) -ZLV -XVV TG=2 BV=3 OM=0 A1/AUTO/VERN Init TRK	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	L17 Check MCIU filter screen	
				IMU STAR OF OPPTY ALIGN (ORB OPS, GNC)	OBSS UNBERTH (PDRS, OBSS OPS)	OBSS UNBERTH (PDRS, OBSS OPS)	
14:00	12			POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)			
				A A14 RCS/OMS HTR L POD - A OFF - B AUTO R POD - A OFF - B AUTO			
				RCS/OMS POD HTR RECONFIG A			
				R2 BLR CNTLR/HTR (three)-B			
				MNVR (TRK) BIAS +YSI (STBD SURVEY) TG=4 BV=5 P=0 Y=40 OM=295 A14/AUTO/VERN OBSS UNBERTH cplmt, Init TRK			
15:00				OBSS LDRI/IDC RCC SURVEY - STBD (PDRS, OBSS OPS)	OBSS LDRI/IDC RCC SURVEY - STBD (PDRS, OBSS OPS)	OBSS LDRI/IDC RCC SURVEY - STBD (PDRS, OBSS OPS)	
18:00	13						
16:00							
19:00							
17:00	14			MNVR (TRK) BIAS +XSI (NOSE CAP) TG=4 BV=5 P=330 Y=0 OM=345 A14/AUTO/VERN RCC SURVEY-STBD cplmt, Init TRK	MEAL	MEAL	
20:00				MEAL			

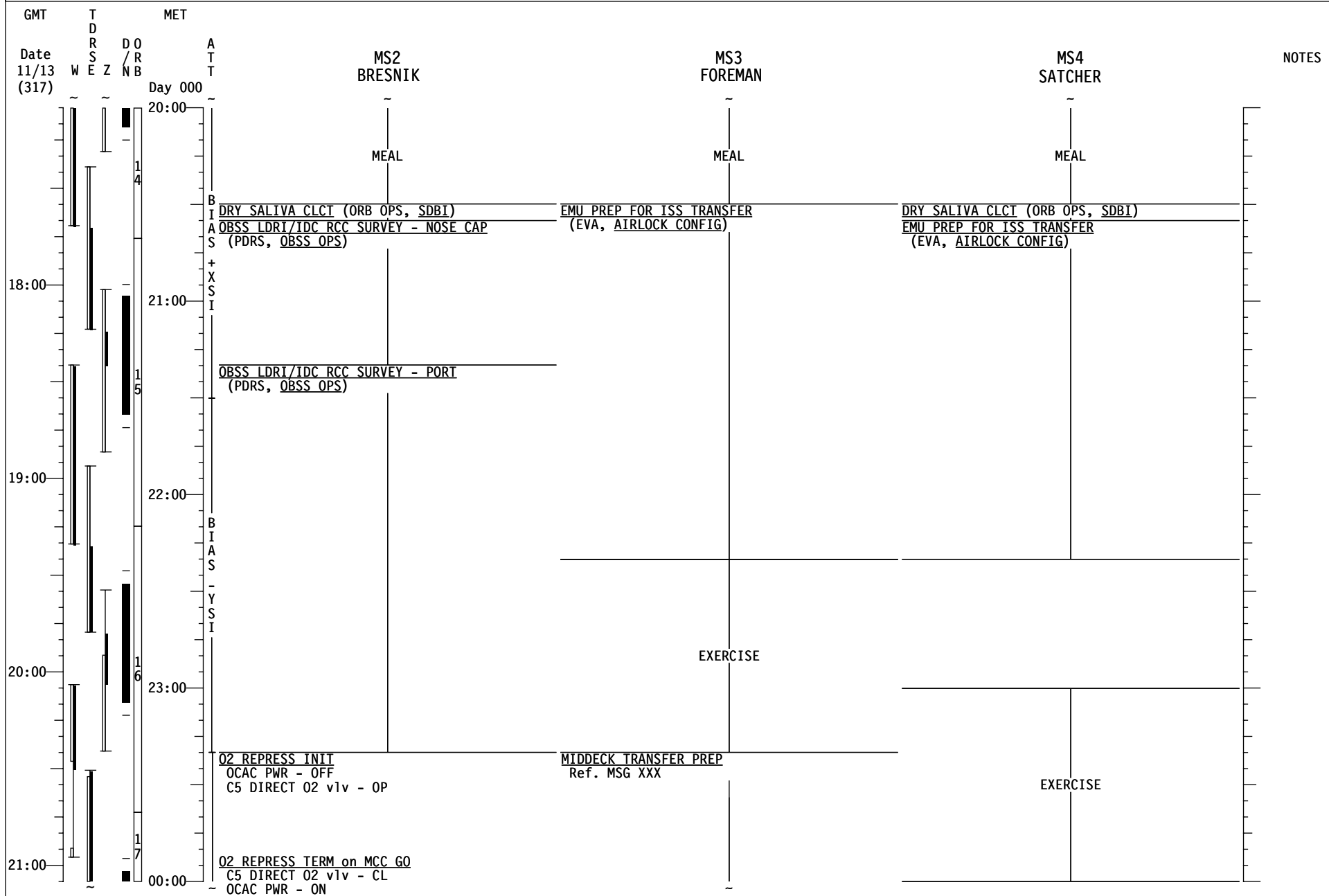
STS-129/ULF3 FD02



STS-129/ULF3 FD02



STS-129/ULF3 FD02



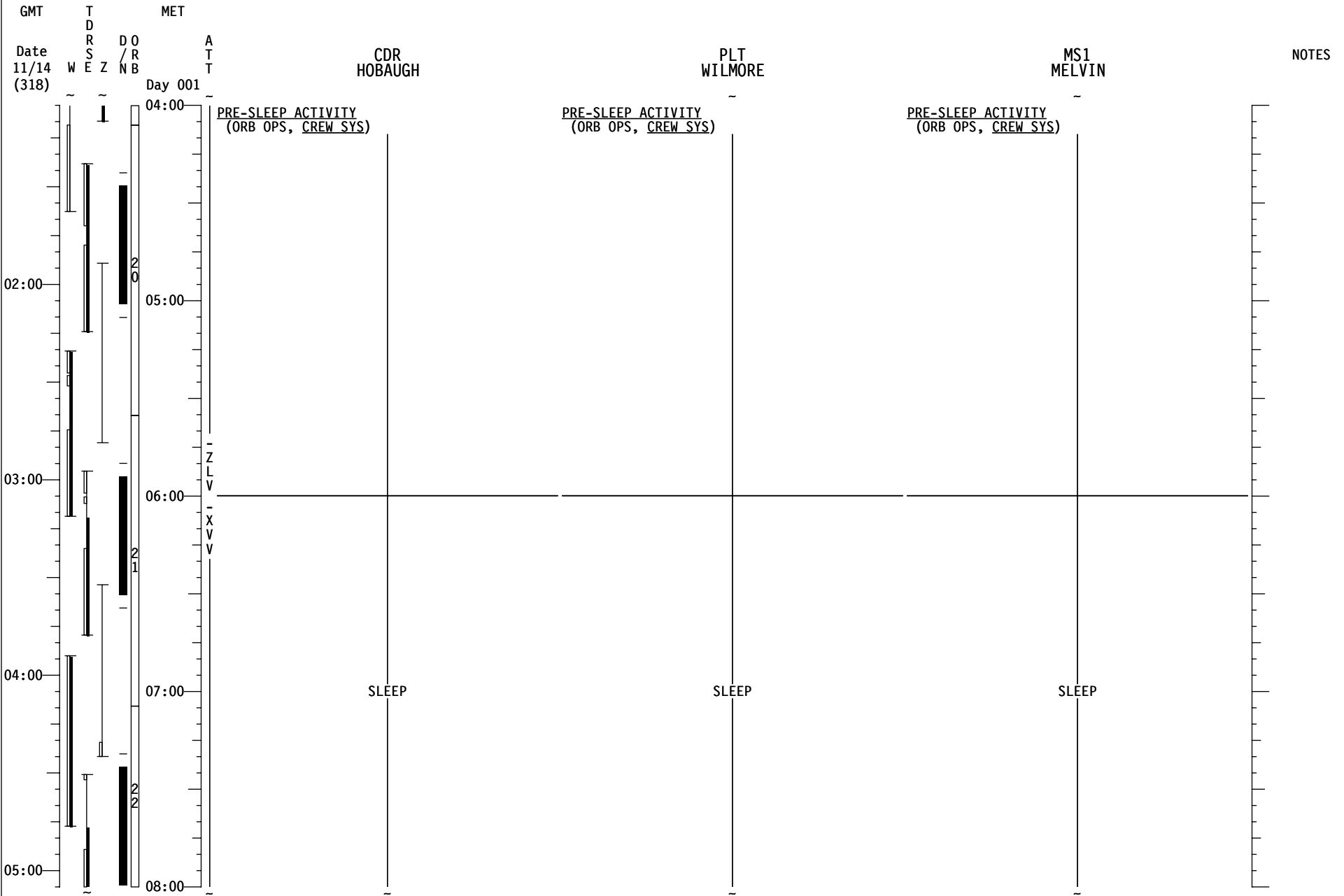
STS-129/ULF3 FD02

GMT	T D R S W E Z	MET D O / R N B Day 001	A T T	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
00:00							
					OBSS BERTH (PDRS, OBSS OPS) Steps 1-8	OBSS BERTH (PDRS, OBSS OPS) Steps 1-8	
						ELC 1 GRAPPLE (PDRS, ELC NOM OPS)	
22:00				C/L CAMR INSTALL (PHOTO/TV, REF PROC) Setup & Align C/L Camera	C/L CAMR INSTALL (PHOTO/TV, REF PROC) Setup & Align C/L Camera		
					FCMS OPS (ORB OPS, EPS)	DOCKING MECH INITIALIZATION DOCKING MECH POWERUP DOCKING RING EXTENSION DOCKING MECH POWERDOWN (RNDZ, APDS)	
				EXERCISE		RNDZ TOOLS CHECKOUT (RNDZ, RNDZ TOOLS)	UPDATE TFL 192
23:00					EXERCISE	B DAP: FREE L,R RCS TK ISOL (six)-CL(tb-CL) XFEED (four)-OP(tb-OP) L OMS XFEED B-OP(tb-OP) B-CL(tb-CL) R OMS XFEED B-OP(tb-OP) B-CL(tb-CL) L,R RCS XFEED (four)-CL(tb-CL) TK ISOL (six)-OP(tb-op) DAP: AUTO	
				O/S/RCS VALVE TEST IB			
				PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS) Perform Air Quality Report to MCC			
					PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)		UPDATE TFL 188
00:00				ON-ORBIT +X RCS BURN (ORB OPS, RCS)	ON-ORBIT +X RCS BURN (ORB OPS, RCS)	CGBA and ABRs STATUS CK (Cue Card)CGBA, ABRs	UPDATE ORBITAL MNVr PAD
						PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
				< NC3 TIG (03:22)			
				MNVr (TRK) -ZLV -XVV TG=2 BV=3 OM=0 A1/AUTO/VERN Init TRK	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)		
				FUTURE LOADED MNVR (TRK) -ZLV +YVV (DUMP) C	C FUTURE LOADED MNVR (TRK) -ZLV +YVV (DUMP) TG=2 BV=3 OM=270 A1/AUTO/VERN (1/14:10) Init TRK		
01:00				PRIVATE MEDICAL CONFERENCE L9 PAYLOAD STATION A/G(two) - OFF Perform via A/G 2			
04:00							

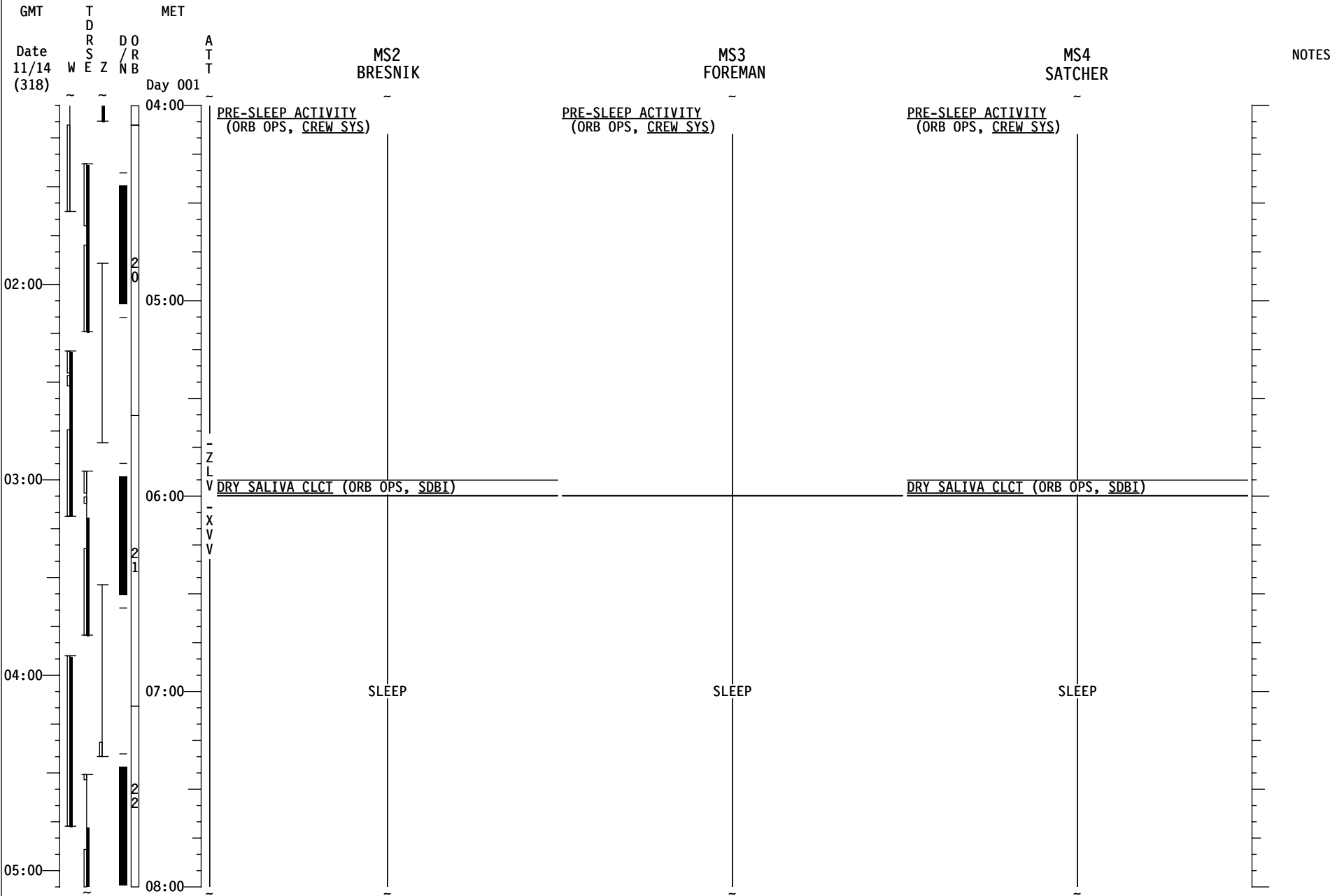
STS-129/ULF3 FD02

GMT	TDRS W E Z	MET Day 001	MS2 BRESNIK	MS3 FOREMAN	MS4 SATCHER	NOTES
11/13 (317)						
00:00			DRY SALIVA CLCT (ORB OPS, SDBI)	MIDDECK TRANSFER PREP Ref. MSG XXX	DRY SALIVA CLCT (ORB OPS, SDBI)	
			ELC 1 GRAPPLE (PDRS, ELC NOM OPS)			
22:00			P/TV08 EXTERNAL SURVEY (PHOTO/TV, SCENES) OMS POD SURVEY Setup, Step 1; OPS, Item 1 Best Lighting : 00:38 - 01:16			
			DOCKING MECH INITIALIZATION DOCKING MECH POWERUP DOCKING RING EXTENSION DOCKING MECH POWERDOWN (RNDZ, APDS)	DIGITAL VIA VTR (CUE CARD, DIGITAL PLAYBACK) LDRI SURVEYS KU TDRE 1:03 - 1:57		
23:00			X RNDZ TOOLS CHECKOUT (RNDZ, RNDZ TOOLS)		NLP ACTIVATION (ASSY OPS, PAYLOADS) Activate GAPS 1-8 (Cells 2)	
					NLP ACTIVATION (ASSY OPS, PAYLOADS) Activate GAPS A-F (Vaccine 6) Steps 2,6,11	
00:00			PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	RECONFIGURE OCA DOWNLINK RATE <input checked="" type="checkbox"/>	
					<div style="border: 1px solid black; padding: 5px; width: fit-content;"> <input checked="" type="checkbox"/> After LDRI Playback complete, RECONFIGURE OCA D/L RATE (PL Max) (ORB OPS, PGSC) Part C, omit Step 4 </div>	

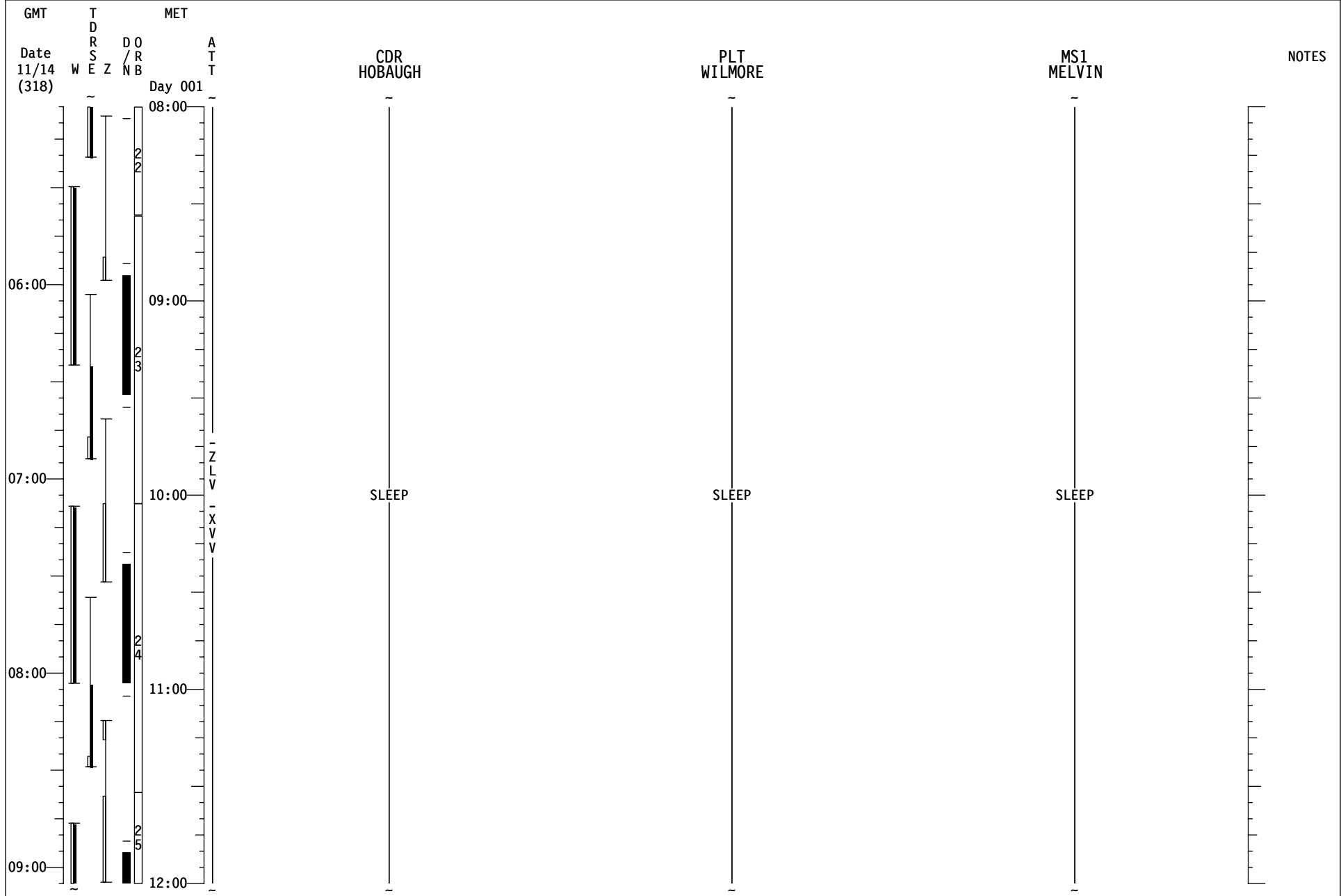
STS-129/ULF3 FD02



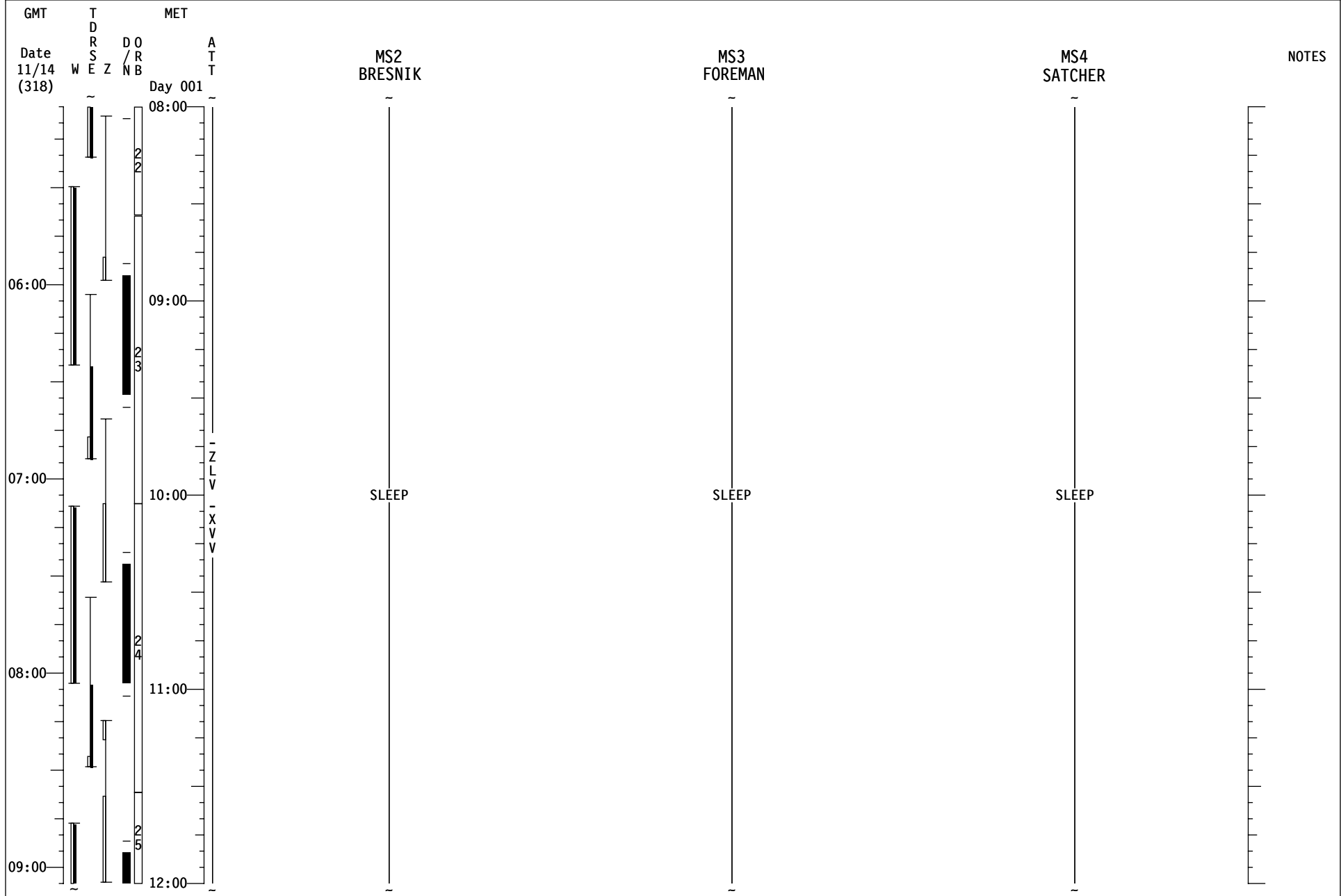
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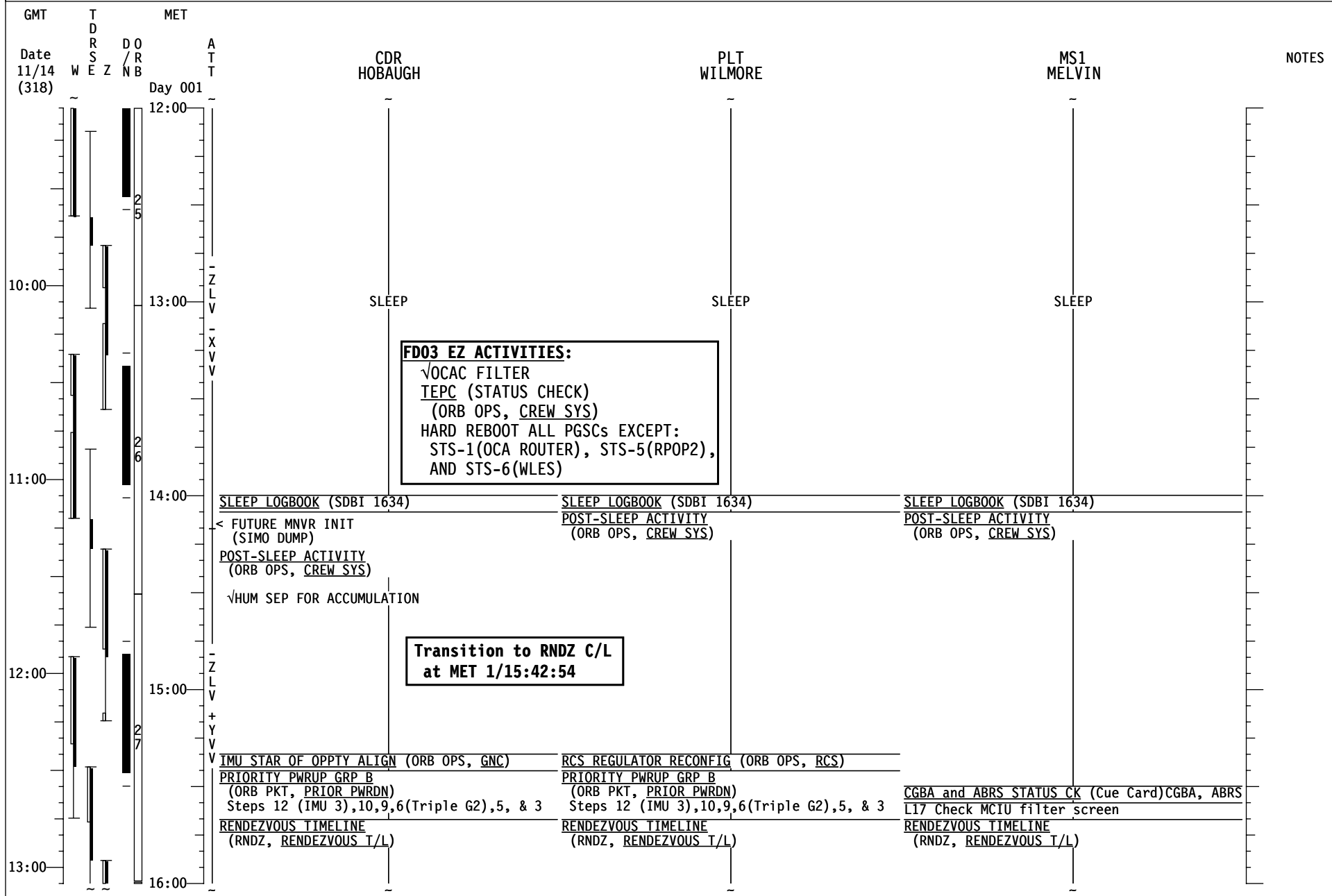
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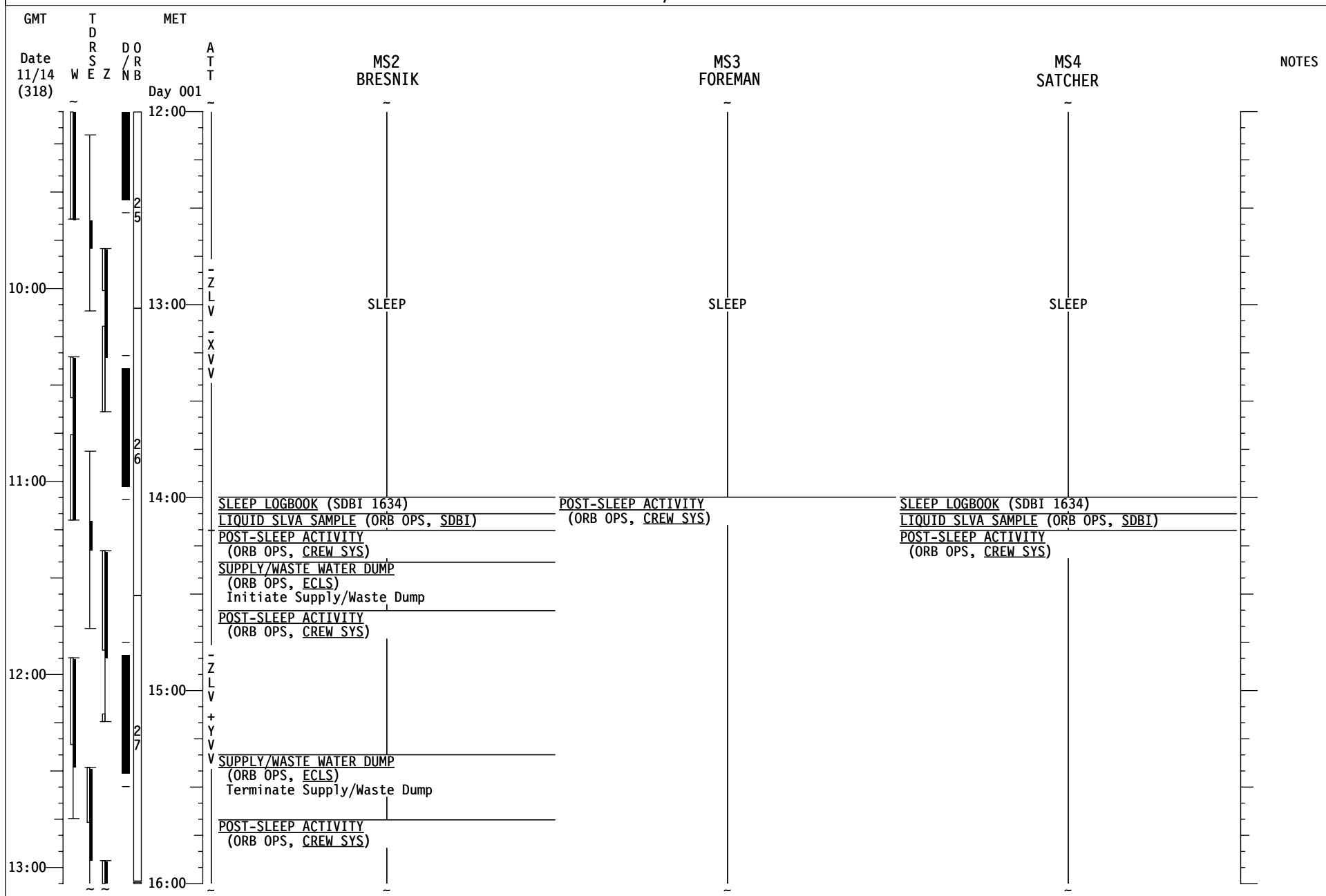
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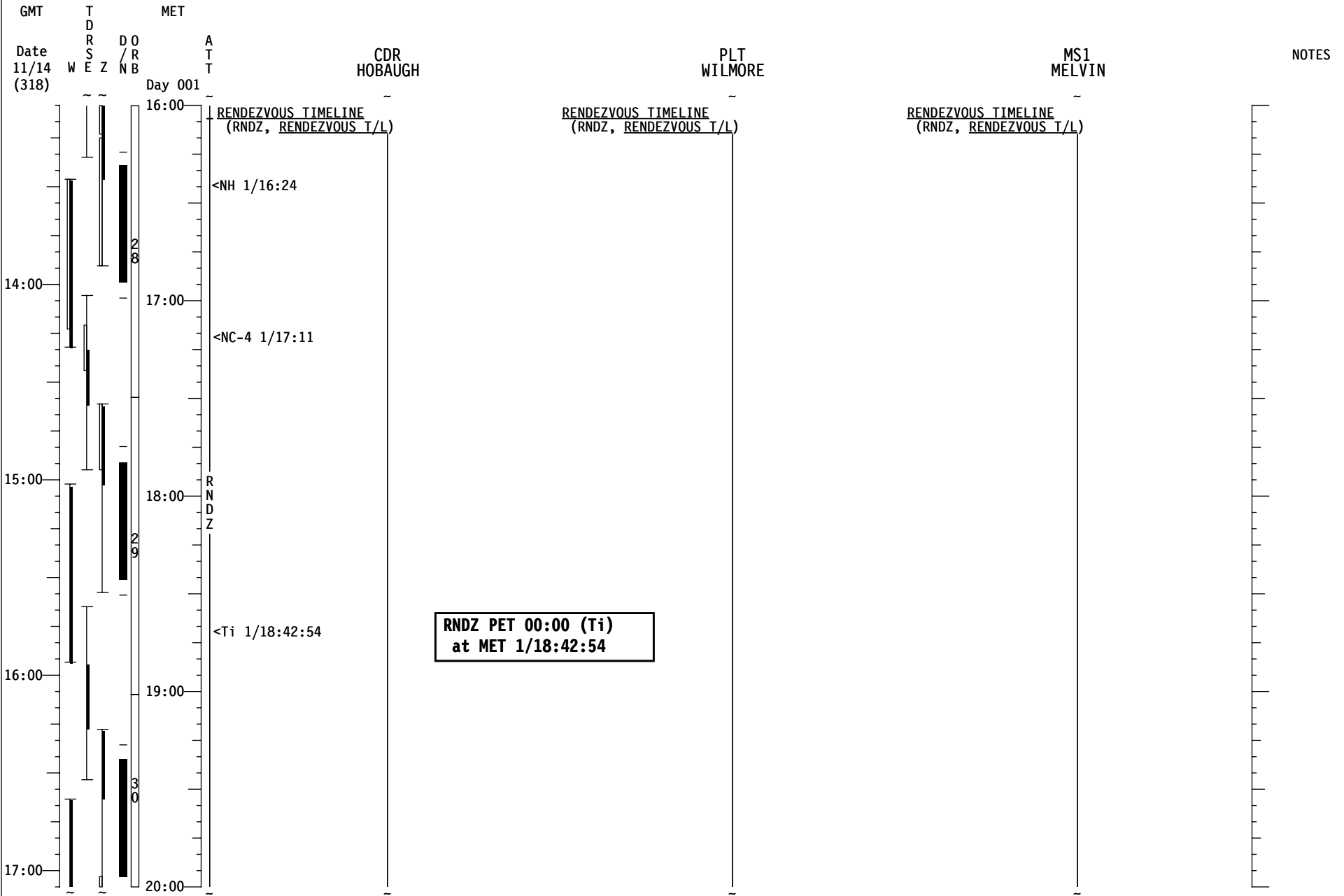
STS-129/ULF3 FD03



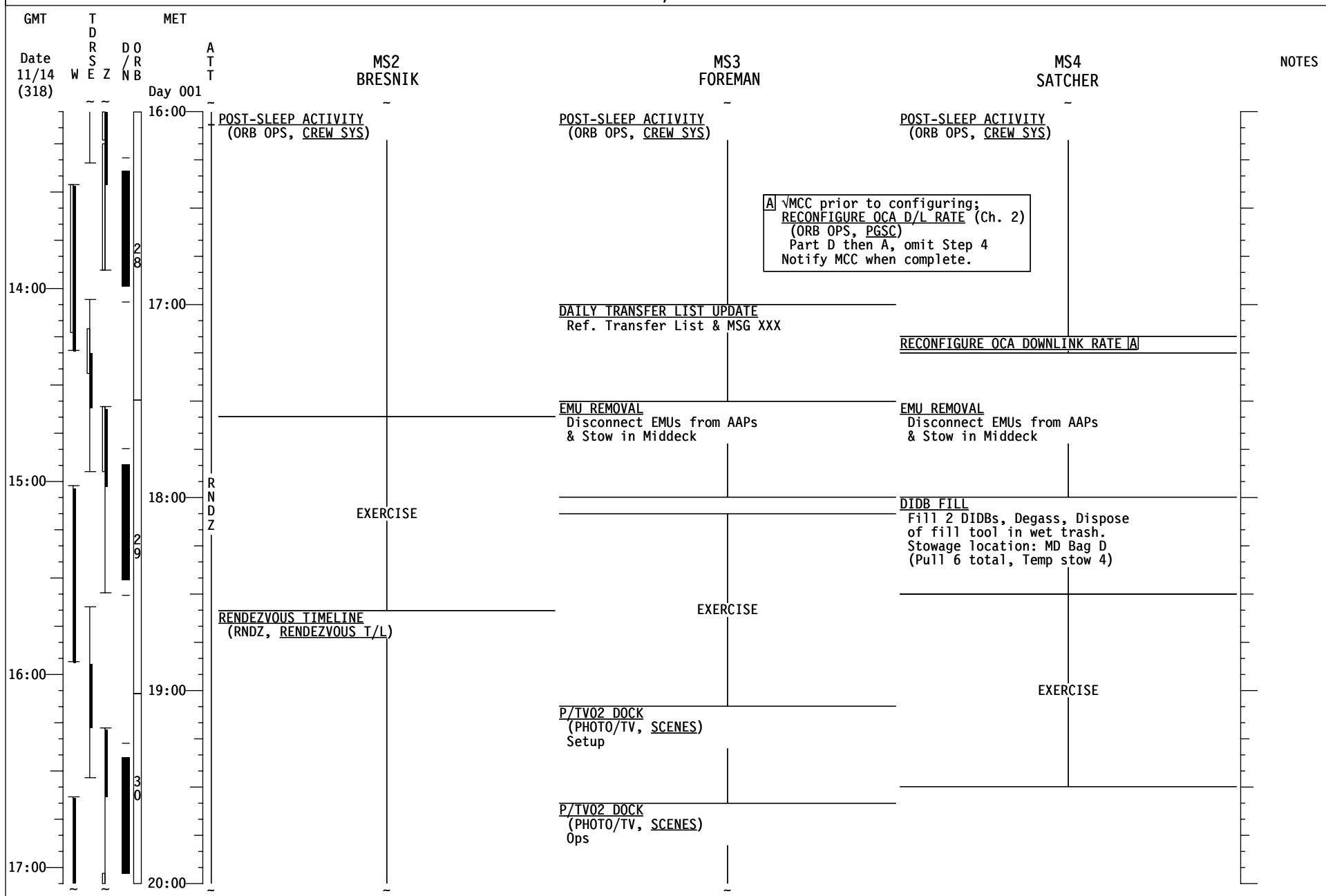
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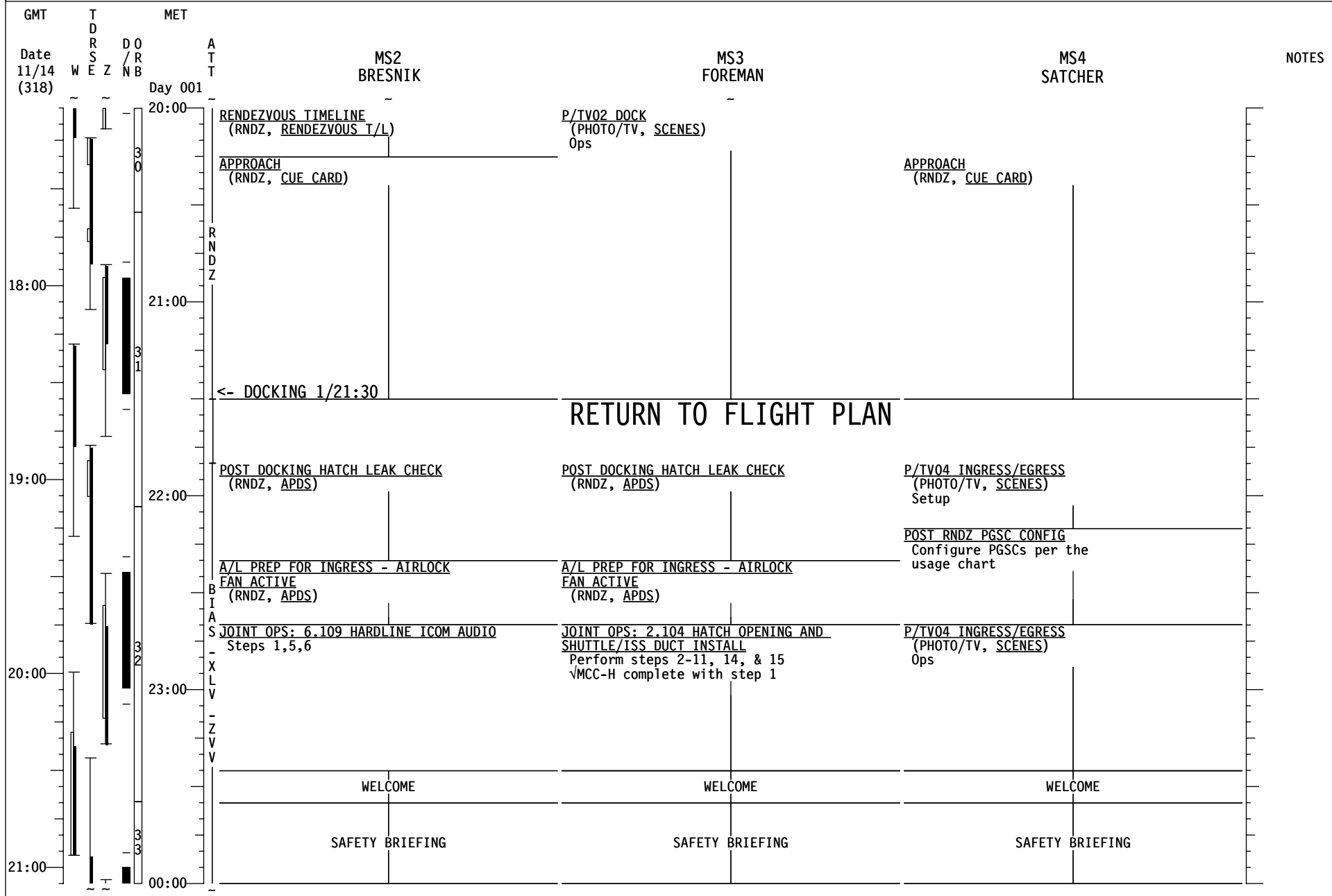
STS-129/ULF3 FD03



STS-129/ULF3 FD03



STS-129/ULF3 FD03



STS-129/ULF3 FD03

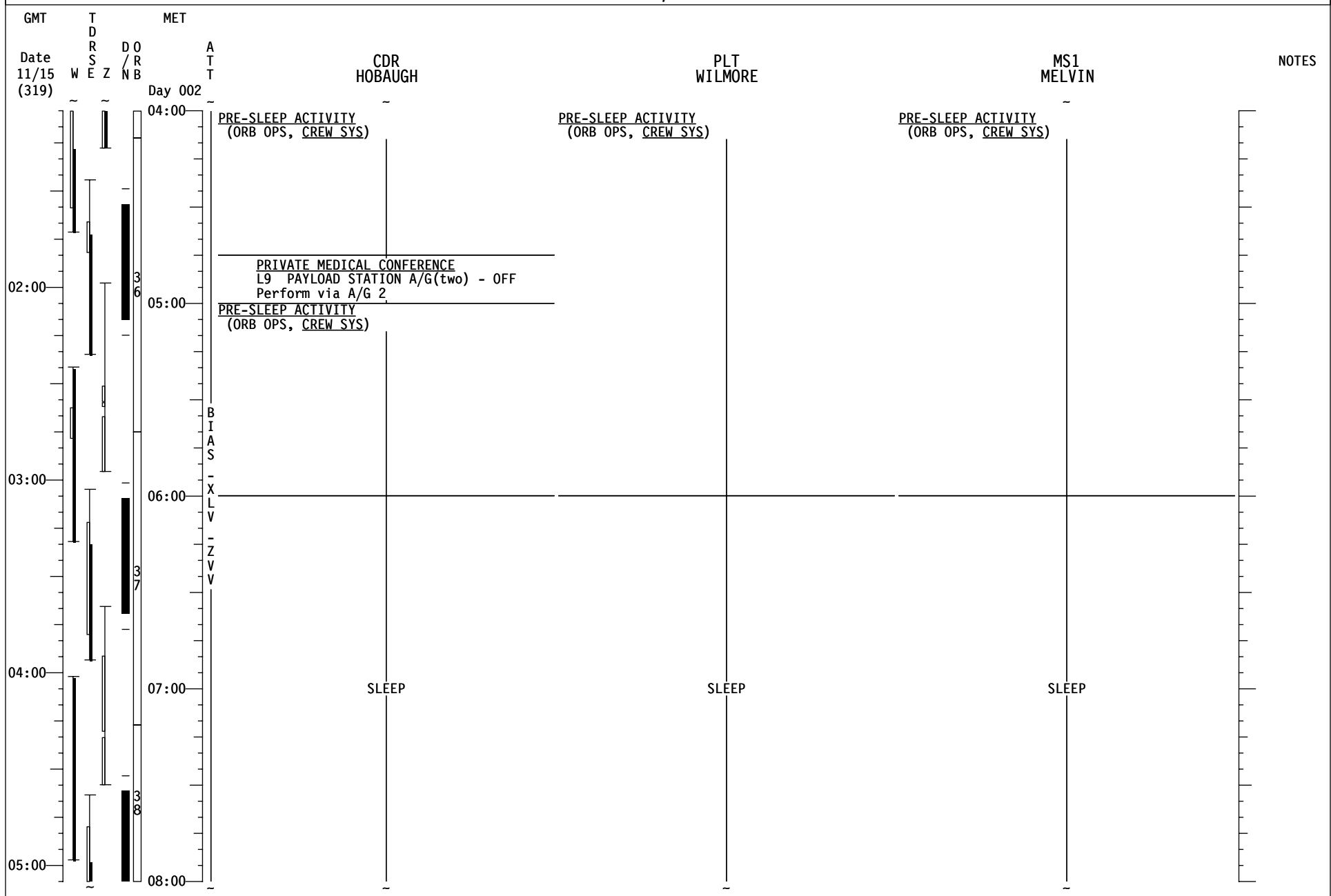
GMT	TDRS W E Z	MET DO R Z N B	A T T Day 002	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
00:00				SAFETY BRIEFING POST DOCKING EVA TRANSFER & RECONFIG (EVA, AIRLOCK CONFIG)	SAFETY BRIEFING P/TV05 ISS INTERNAL OPS (HC) (PHOTO/TV, SCENES) Setup	SAFETY BRIEFING ELC 1 UNBERTH (PDRS, ELC NOMINAL) EXERCISE CONSTRAINT	NO EXERCISE UNTIL @ HOVER POSITION
22:00					ROBOTICS: 1.110 ELC1 HANDOFF AND INSTALL Steps 1-3 EXERCISE CONSTRAINT	NO EXERCISE WHILE ELC 1 GRAPPLLED BY RMS & SSRMS	
01:00				JOINT OPS: 3.102 NITROGEN TRANSFER INITIATION Setup and Initiate Verify MCC-H complete with Step 2, Then perform 3-4.3			ELC 1 UNGRAPPLE (PDRS, ELC NOMINAL) EXERCISE CONSTRAINT
23:00				JOINT OPS: 3.120 PREBREATHE USING SHUTTLE O2 SETUP Steps 4-6; Ground will perform 6.14	ROBOTICS: 1.110 ELC1 HANDOFF AND INSTALL Steps 4-8 EXERCISE CONSTRAINT	SODF TRANSFER Ref. Transfer List & MSG XXX	NO EXERCISE WHILE AT ELC 1 INSTALL POSITION
02:00				SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) INIT FILL #1 Ref. MSG XXX	S&M: 1.902 UCCAS NORMAL MATE Steps 6-17 EXERCISE CONSTRAINT	TRANSFER OPS XFR CTB prior to CERISE XFR Ref. Transfer List & MSG XXX	
00:00				EVA PROCEDURE REVIEW Ref. EVA 1 BRIEFING CARD (EVA, TIMELINES)		EVA PROCEDURE REVIEW Ref. EVA 1 BRIEFING CARD (EVA, TIMELINES)	NO EXERCISE WHILE AT ELC 1 INSTALL POSITION
03:00				PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS) Perform Air Quality Report to MCC	After ELC1 Install [C]	CGBA and ABRS STATUS CK (Cue Card)CGBA, ABRS CERISE TRANSFER Ref. Transfer List & MSG XXX	
01:00				SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Perform FILL TERMINATION	EXERCISE	TRANSFER TAGUP Coordinate with transfer counterparts	NO EXERCISE WHILE AT ELC 1 INSTALL POSITION
04:00				CWC TRANSFER Transfer # CWCs to ISS		TRANSFER BRIEF Call down status to MCC	
				PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)		PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	

C | √ A/FREE/VERN
PERMANENT DAP EDIT: A11: CA=6
A12: CA=6
B12: CA=6
B13: CA=6

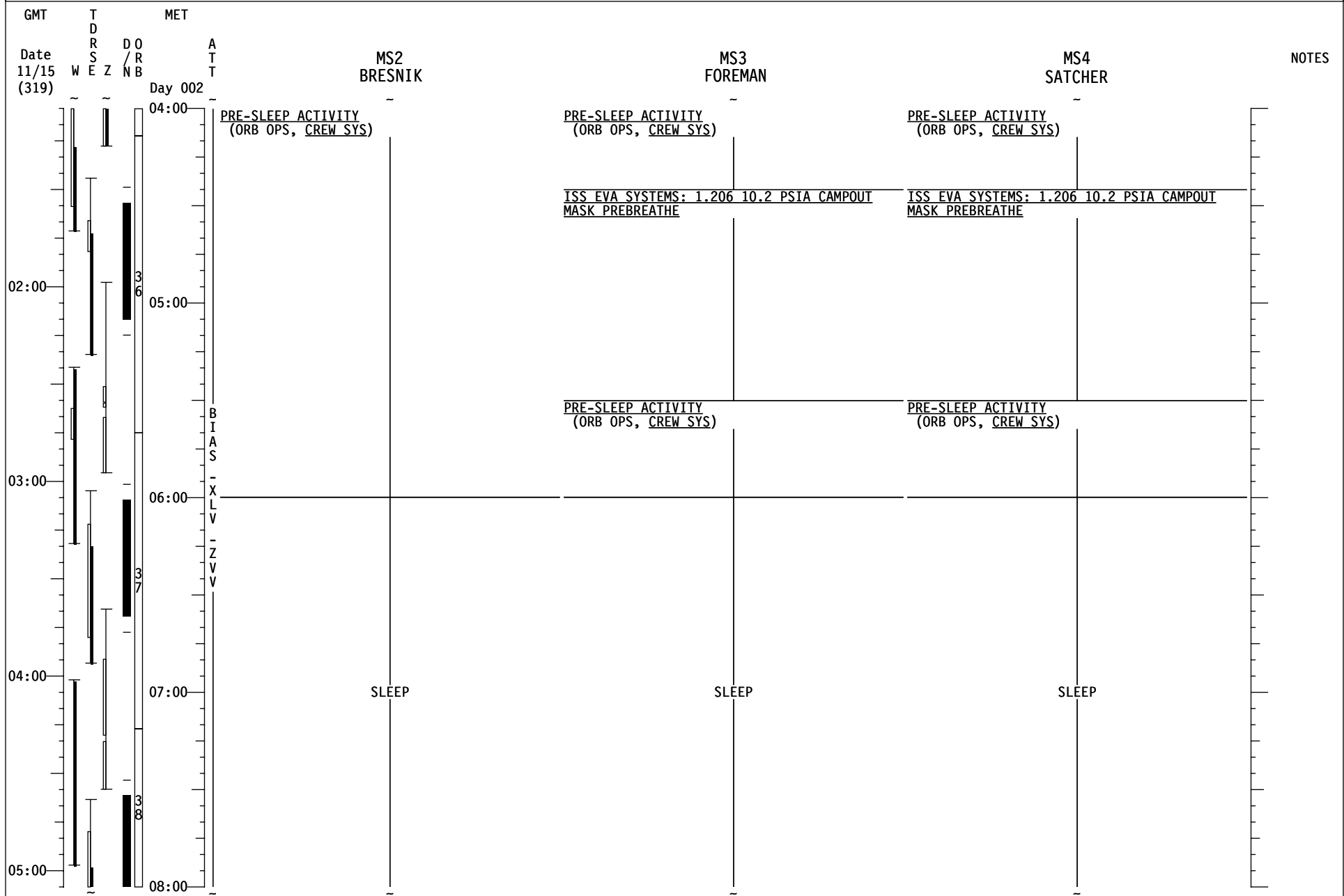
STS-129/ULF3 FD03

GMT	T D R S W E Z	MET D O R / N B Day 002	A T T	MS2 BRESNIK	MS3 FOREMAN	MS4 SATCER	NOTES
00:00				SAFETY BRIEFING ELC 1 UNBERTH (PDRS, ELC NOMINAL) EXERCISE CONSTRAINT	SAFETY BRIEFING EVA 1 TOOL CONFIG (EVA, TIMELINES)	SAFETY BRIEFING EVA 1 TOOL CONFIG (EVA, TIMELINES)	NO EXERCISE UNTIL @ HOVER POSITION
22:00				ELC 1 UNGRAPPLE (PDRS, ELC NOMINAL) EXERCISE CONSTRAINT EVA 1 TOOL CONFIG (EVA, TIMELINES)			NO EXERCISE WHILE ELC 1 GRAPPLED BY RMS & SSRMS
23:00					ISS EVA SYS: 1.305 EQUIPMENT LOCK PREP Review emergency equipment locations	ISS EVA SYS: 1.305 EQUIPMENT LOCK PREP Review emergency equipment locations	
00:00				EVA PROCEDURE REVIEW Ref. EVA 1 BRIEFING CARD (EVA, TIMELINES)	EVA PROCEDURE REVIEW Ref. EVA 1 BRIEFING CARD (EVA, TIMELINES)	EVA PROCEDURE REVIEW Ref. EVA 1 BRIEFING CARD (EVA, TIMELINES)	NO EXERCISE WHILE AT ELC 1 INSTALL POSITION
01:00				PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	

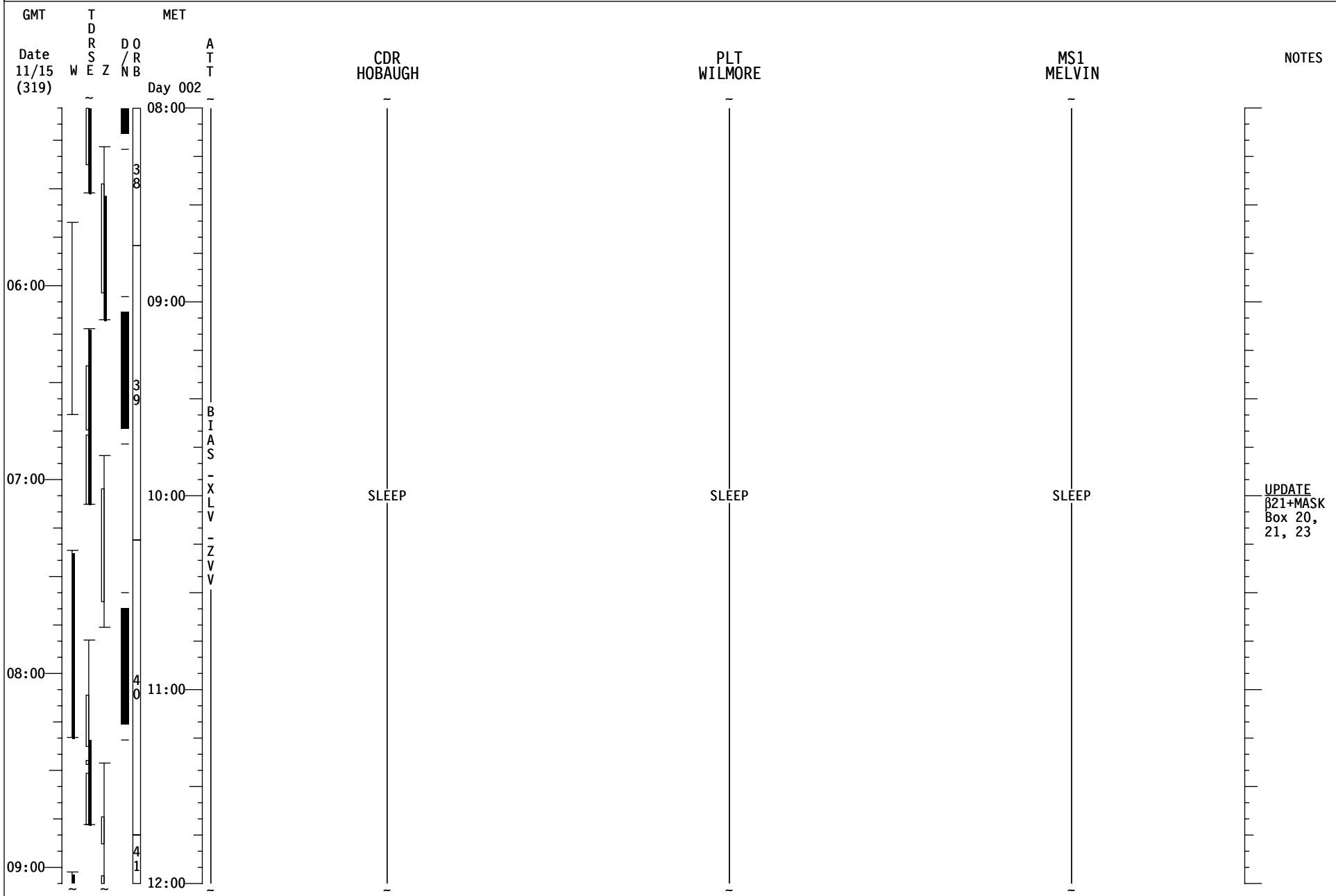
STS-129/ULF3 FD03



STS-129/ULF3 FD03

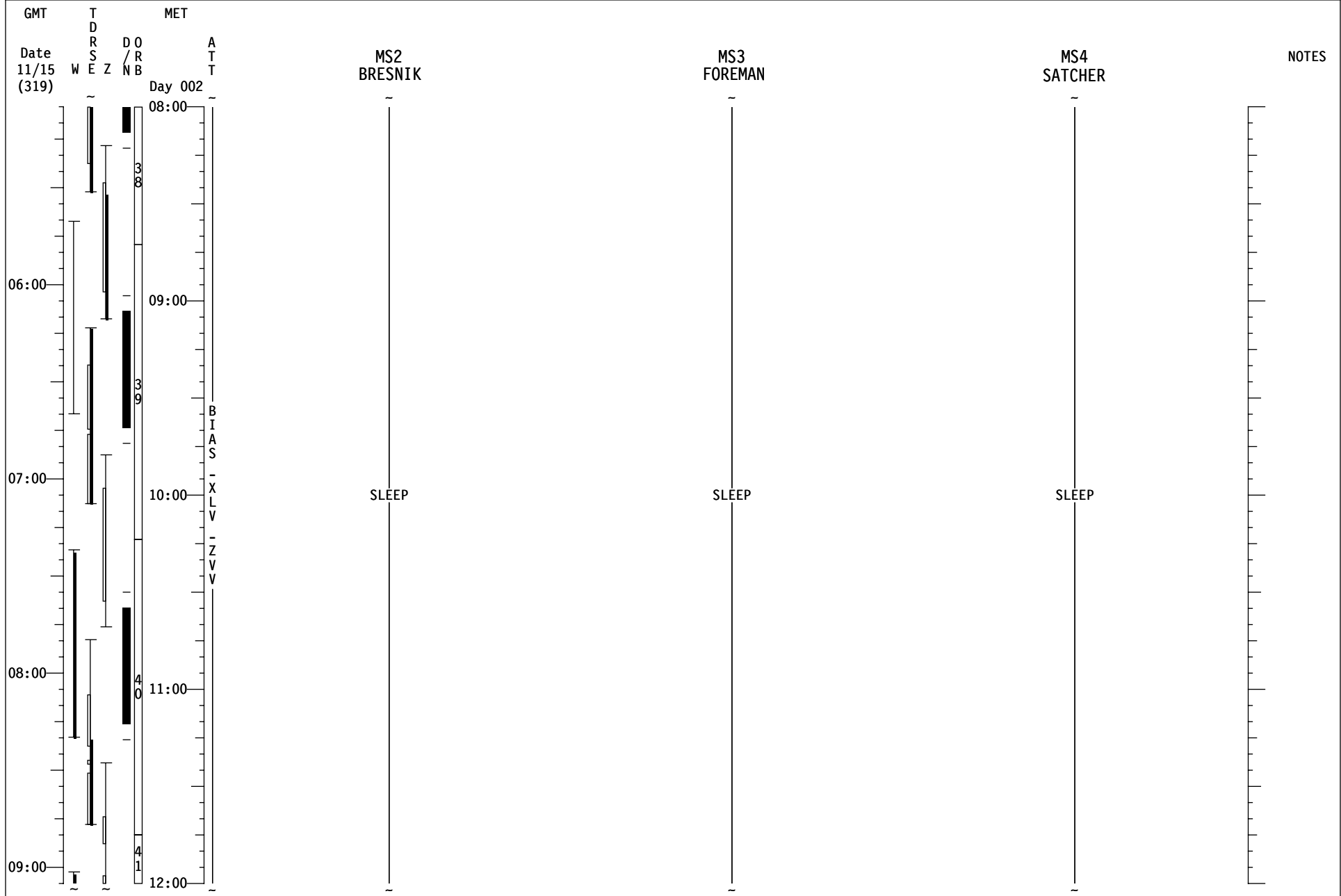


STS-129/ULF3 FD03

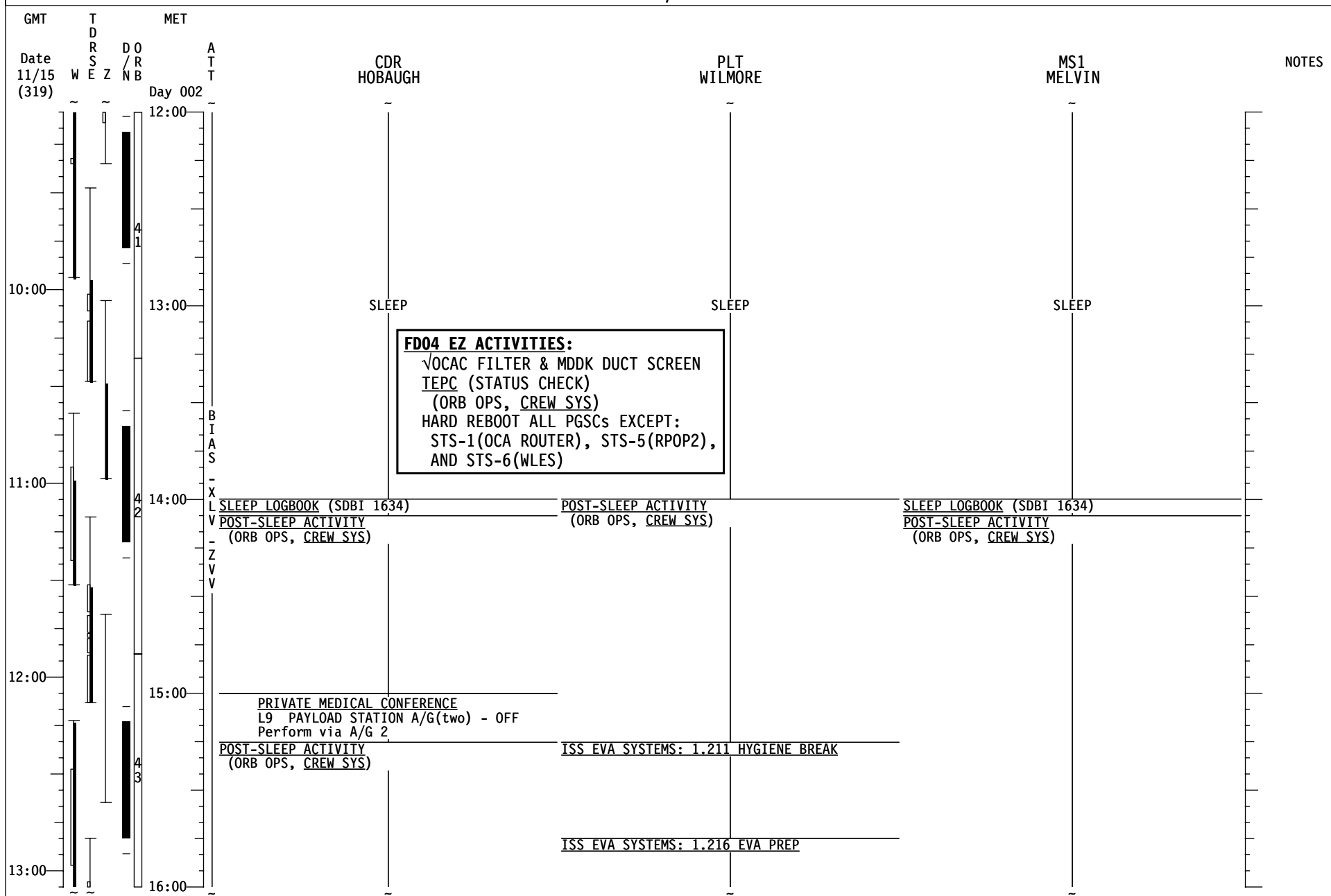


UPDATE
821+MASK
Box 20,
21, 23

STS-129/ULF3 FD03

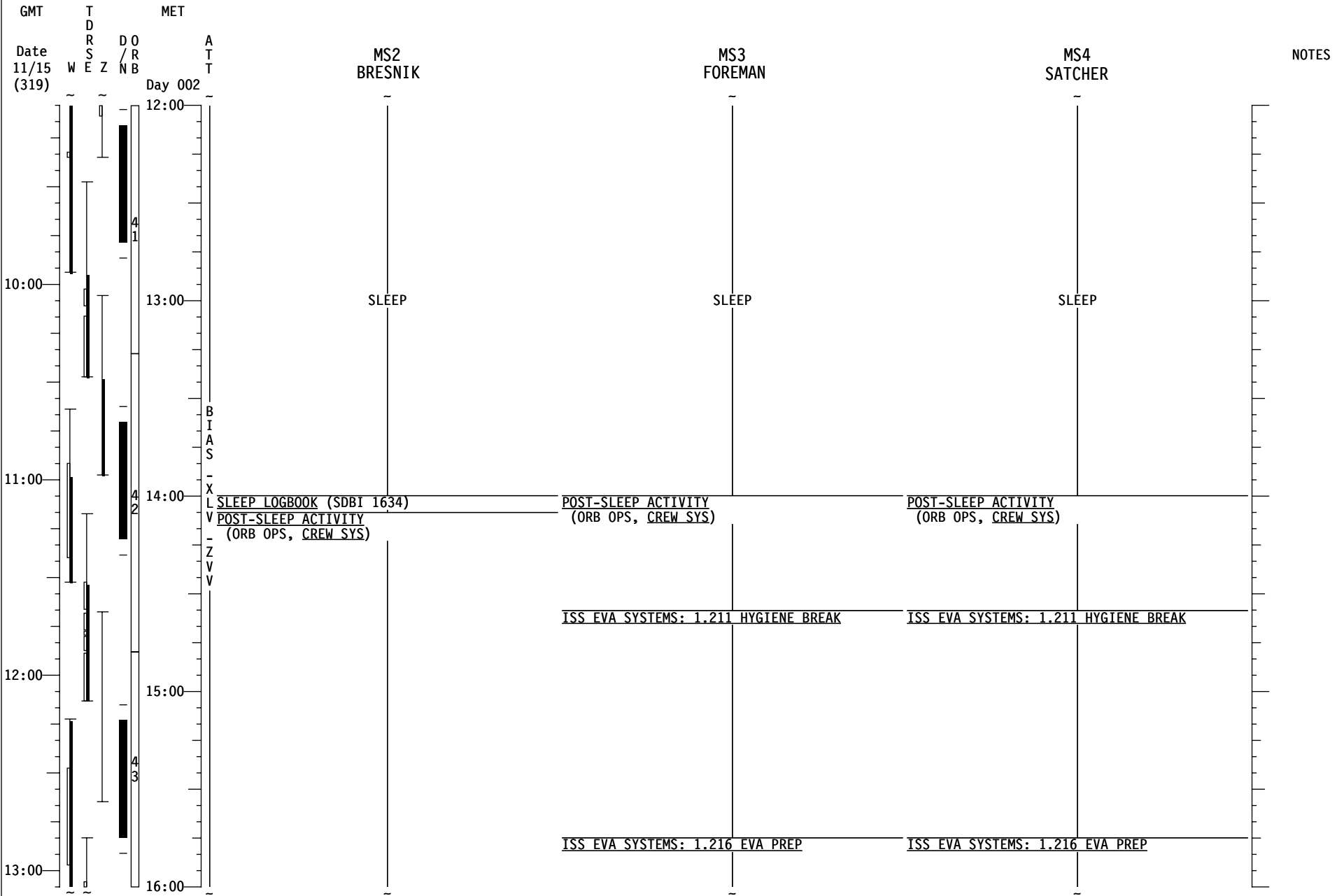


STS-129/ULF3 FD04



FD04 EZ ACTIVITIES:
 ✓VOCAC FILTER & MDDK DUCT SCREEN
 ✓TEPC (STATUS CHECK)
 (ORB OPS, CREW SYS)
 HARD REBOOT ALL PGSCs EXCEPT:
 STS-1(OCA ROUTER), STS-5(RPOP2),
 AND STS-6(WLES)

STS-129/ULF3 FD04



STS-129/ULF3 FD04

GMT	TDRS W E Z	MET Day 002	A T T	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
16:00				POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	ISS EVA SYSTEMS: 1.216 EVA PREP	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
14:00				IMU STAR OF OPPTY ALIGN (ORB OPS, GNC) EVA 1 INHIBIT PAD (EVA, TIMELINES)	ISS EVA SYSTEMS: 1.220 EMU PURGE	CGBA and ABRS STATUS CK (Cue Card)CGBA, ABRS LI7 Check MCIU filter screen DAILY TRANSFER LIST UPDATE Ref. Transfer List & MSG XXX	
15:00				EXERCISE	ISS EVA SYSTEMS: 1.225 EMU PREBREATHE		
18:00					ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CUE CARD	EXERCISE	
16:00				P/TV07 EVA (PHOTO/TV, SCENES) Setup			
19:00				SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS)INIT FILL #2 Ref. MSG XXX	ISS EVA SYSTEMS: CREWLOCK POST DEPRESS (CC) ROBOTICS: 1.210 EVA1- SASA TRANSFER AND LEE LUBE OPS	ROBOTICS: 1.210 EVA1- SASA TRANSFER AND LEE LUBE OPS	
17:00				P/TV07 EVA (PHOTO/TV, SCENES) Ops			
20:00							NO UNISOLATED EXERCISE DURING SASA INSTALL

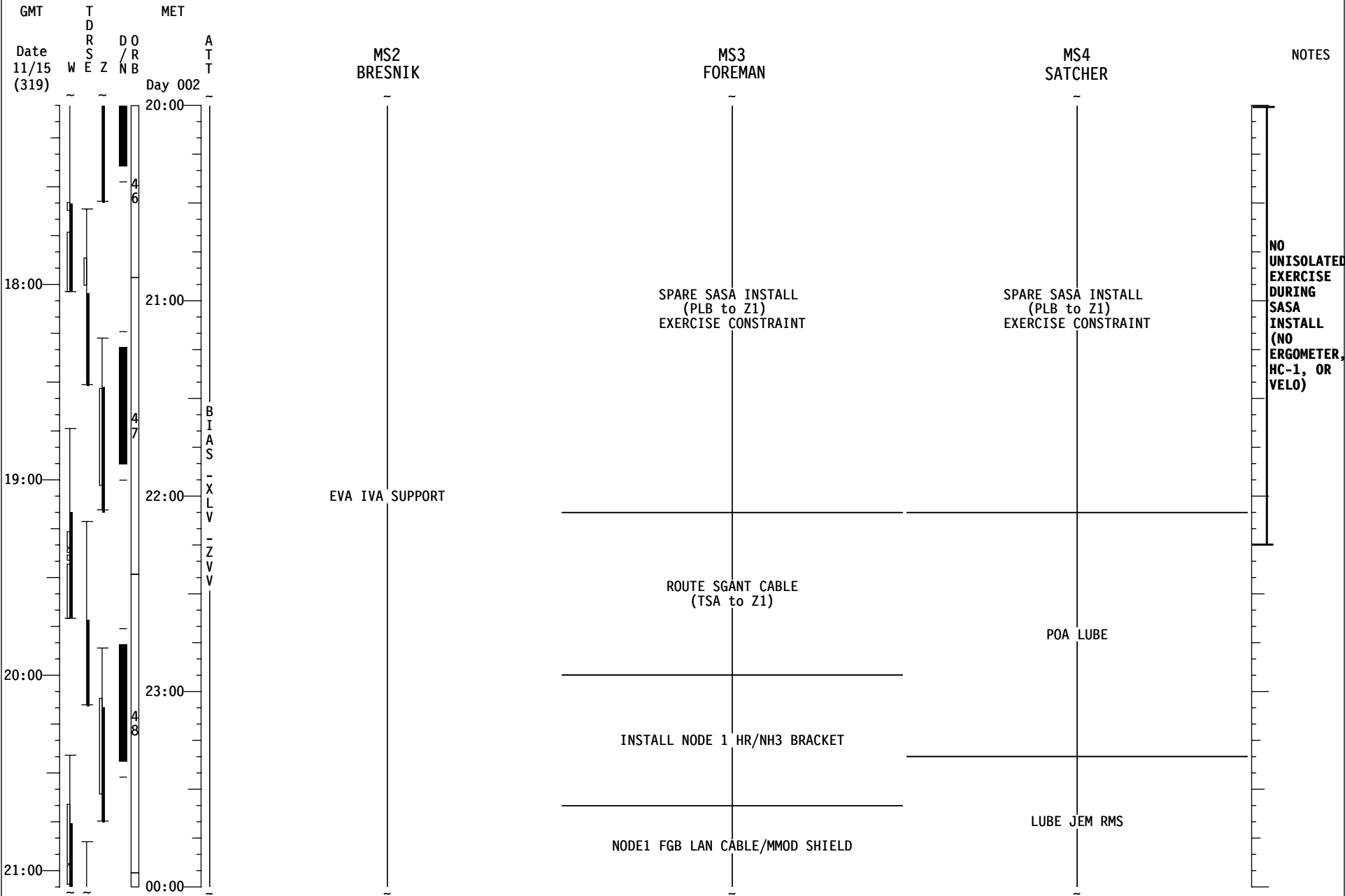
STS-129/ULF3 FD04

GMT	T D R S W E Z	MET	A T T	MS2 BRESNIK	MS3 FOREMAN	MS4 SATCER	NOTES
Date 11/15 (319)	W E Z	Day 002					
16:00				POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	ISS EVA SYSTEMS: 1.216 EVA PREP	ISS EVA SYSTEMS: 1.216 EVA PREP	
14:00				EXERCISE	ISS EVA SYSTEMS: 1.220 EMU PURGE	ISS EVA SYSTEMS: 1.220 EMU PURGE	
15:00					ISS EVA SYSTEMS: 1.225 EMU PREBREATHE	ISS EVA SYSTEMS: 1.225 EMU PREBREATHE	
16:00				IVA SUPPORT PREP	ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CUE CARD	ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CUE CARD	
17:00				EVA IVA SUPPORT	ISS EVA SYSTEMS: CREWLOCK POST DEPRESS (CC)	ISS EVA SYSTEMS: CREWLOCK POST DEPRESS (CC)	
18:00					EGRESS/SETUP	EGRESS/SETUP	
19:00					SPARE SASA INSTALL (PLB to Z1) EXERCISE CONSTRAINT	SPARE SASA INSTALL (PLB to Z1) EXERCISE CONSTRAINT	
20:00							NO UNISOLATED EXERCISE DURING SASA INSTALL

STS-129/ULF3 FD04

GMT	TDRS W E Z	MET Day 002	A T T CDR HOBAUGH	P L T WILMORE	M S 1 MELVIN	NOTES
18:00			<p>P/TV07 EVA (PHOTO/TV, SCENES) Ops SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Perform FILL TERMINATION</p>	<p>ROBOTICS: 1.210 EVA1- SASA TRANSFER AND LEE LUBE OPS</p>	<p>ROBOTICS: 1.210 EVA1- SASA TRANSFER AND LEE LUBE OPS</p>	<p>NO UNISOLATED EXERCISE DURING SASA INSTALL (NO ERGOMETER, HC-1, OR VELO)</p>
19:00			<p>MEAL</p>			
20:00			<p>P/TV07 EVA (PHOTO/TV, SCENES) Ops</p>			
21:00			<p>SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) INIT FILL #3 Ref. MSG XXX</p>			
22:00			<p>P/TV07 EVA (PHOTO/TV, SCENES) Ops</p>			
23:00			<p>SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Perform FILL TERMINATION</p>			
00:00						

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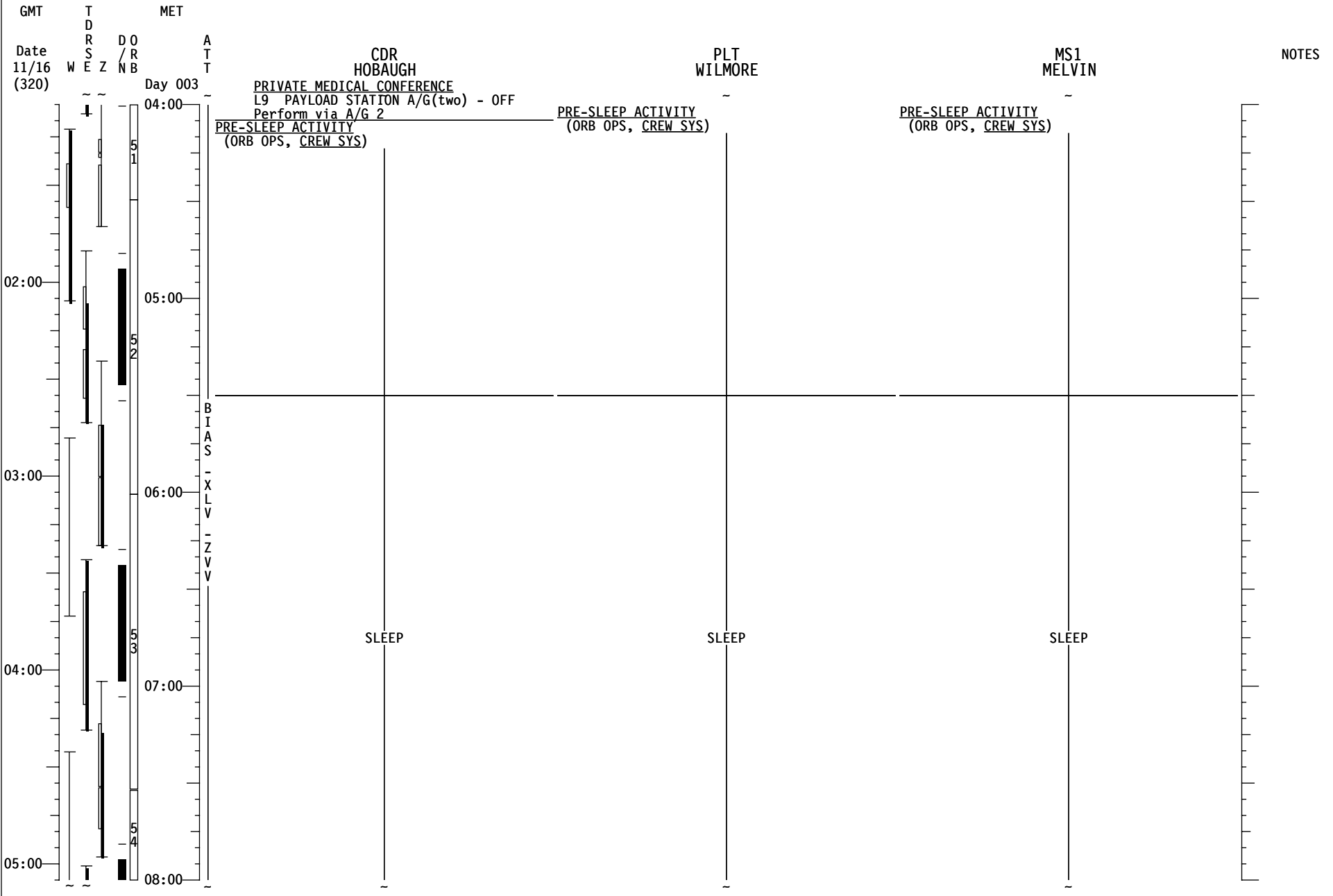
STS-129/ULF3 FD04

GMT	TDRS W E Z	MET Day 003	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
11/15 (319)						
00:00			<u>CWC TRANSFER</u> Transfer 2 CWCs to ISS	<u>ROBOTICS: 1.210 EVA1- SASA TRANSFER AND LEE LUBE OPS</u>	<u>ROBOTICS: 1.210 EVA1- SASA TRANSFER AND LEE LUBE OPS</u>	
22:00			<u>ROBOTICS: 2.110 WALKOFF TO NODE 2 PDGF (WS4)</u>		<u>ROBOTICS: 2.110 WALKOFF TO NODE 2 PDGF (WS4)</u>	UPDATE B21+MASK Box 20, 21, 24
01:00			<u>SHUTTLE CONDENSATE COLLECTION</u> (ORB OPS, ECLS) Perform <u>CHANGEOUT</u> Use CWC S/N XXX	<u>ISS EVA SYSTEMS: PRE REPRESS (CC)</u> <u>ISS EVA SYSTEMS: CREWLOCK</u> <u>DEPRESS/REPRESS CUE CARD</u>	<u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX	
23:00			<u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX	<u>EVA SYSTEMS: 1.240 POST EVA</u> With H2O Ref: <u>STS-129 CONSUMABLES TRACKING CC (EVA)</u>		
02:00					<u>NLP TERMINATION (ASSY OPS, PAYLOADS)</u> Terminate GAPS A-F (Vaccine 6) Steps 2, 6, 11	UPDATE B21+MASK Box 20,21
					<u>NLP TERMINATION (ASSY OPS, PAYLOADS)</u> Terminate GAPS 1-8 (Cells 2)	
00:00			<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS) Perform Air Quality Report to MCC		<u>CGBA and ABRS STATUS CK (Cue Card)</u> CGBA, ABRS <u>TRANSFER TAGUP</u> Coordinate with transfer counterparts	
03:00				<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	<u>TRANSFER BRIEF</u> Call down status to MCC	
01:00			<u>PRIVATE MEDICAL CONFERENCE</u> L9 PAYLOAD STATION A/G(two) - OFF Perform via A/G 2		<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	
04:00						

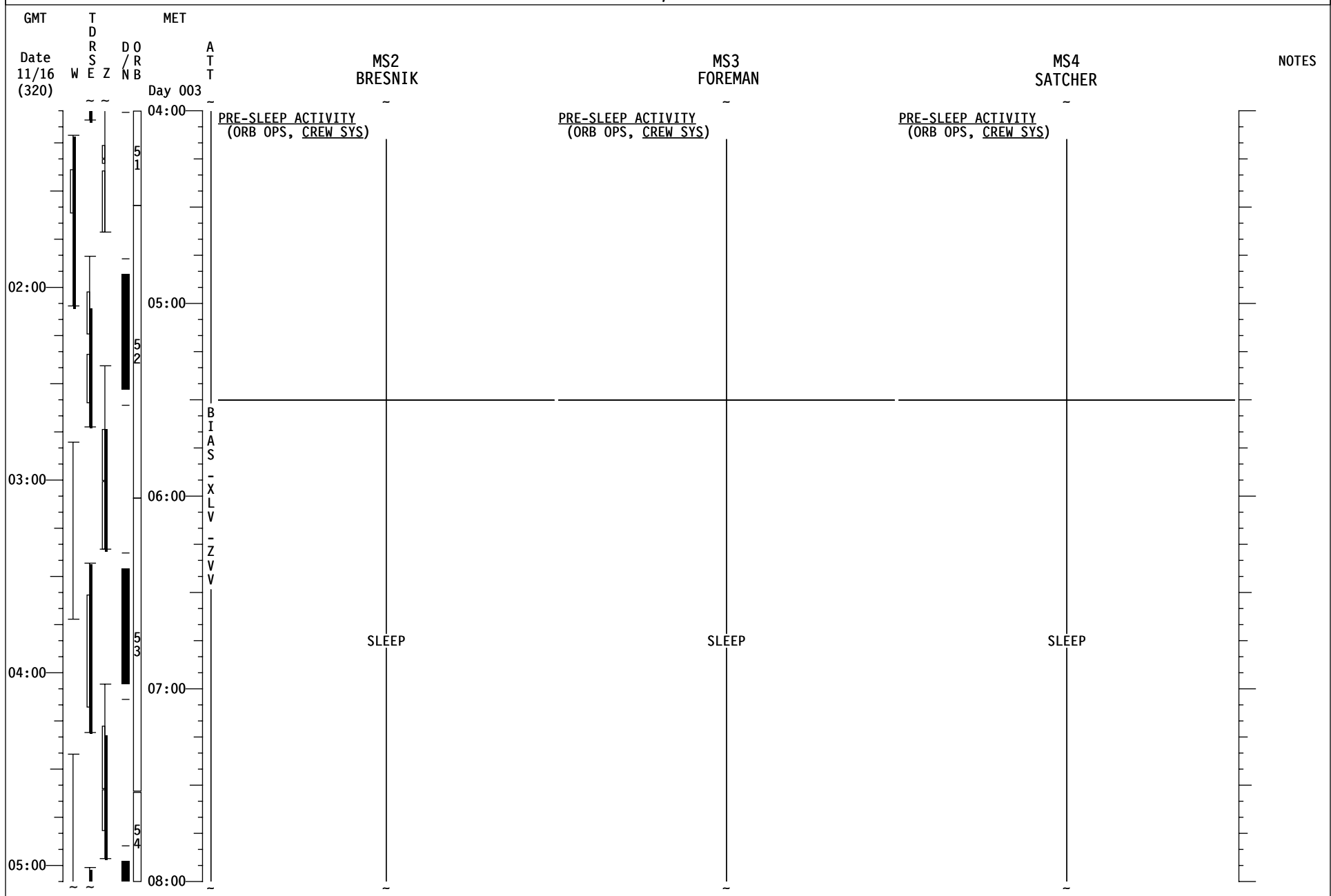
STS-129/ULF3 FD04

GMT	TDRS W E Z	MET Day 003	A T T	MS2 BRESNIK	MS3 FOREMAN	MS4 SATCER	NOTES
00:00					NODE1 FGB LAN CABLE/MMOD SHIELD	LUBE JEM RMS	
22:00				EVA IVA SUPPORT	SO 1/4 AVIONICS CABLE TROUBLESHOOT	EVA CLEANUP & INGRESS	
					EVA CLEANUP & INGRESS		
				<u>LiOH SWAP</u> Ref. MSG. XXX	<u>ISS EVA SYSTEMS: PRE REPRESS (CC)</u> <u>ISS EVA SYSTEMS: CREWLOCK</u> <u>DEPRESS/REPRESS CUE CARD</u>	<u>ISS EVA SYSTEMS: PRE REPRESS (CC)</u> <u>ISS EVA SYSTEMS: CREWLOCK</u> <u>DEPRESS/REPRESS CUE CARD</u>	
23:00					<u>EVA SYSTEMS: 1.240 POST EVA</u> With H2O Ref: <u>STS-129 CONSUMABLES</u> <u>TRACKING CC (EVA)</u>	<u>EVA SYSTEMS: 1.240 POST EVA</u> With H2O Ref: <u>STS-129 CONSUMABLES</u> <u>TRACKING CC (EVA)</u>	
				<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)			
00:00				<u>ISS EVA SYSTEMS: 1.605 BSA BATTERY RECHARGE</u> (INIT) Ref: <u>SIS-129 BATTERY RECHARGE CC</u>	<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	
				<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	<u>POST EVA CONFERENCE</u> Media Format: Crew Preference Discuss EVA and Future Impacts		
					<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)		
01:00							
04:00							

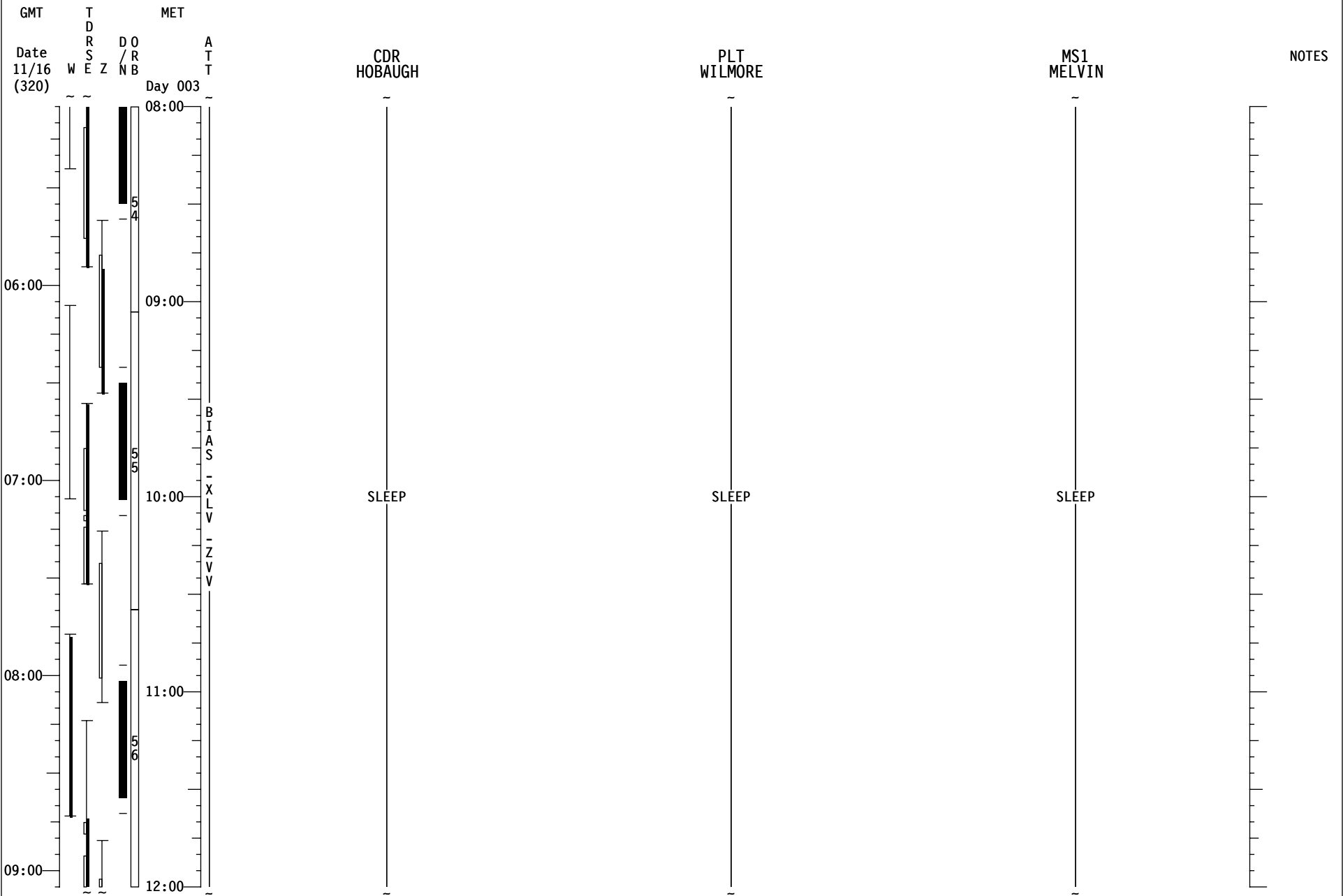
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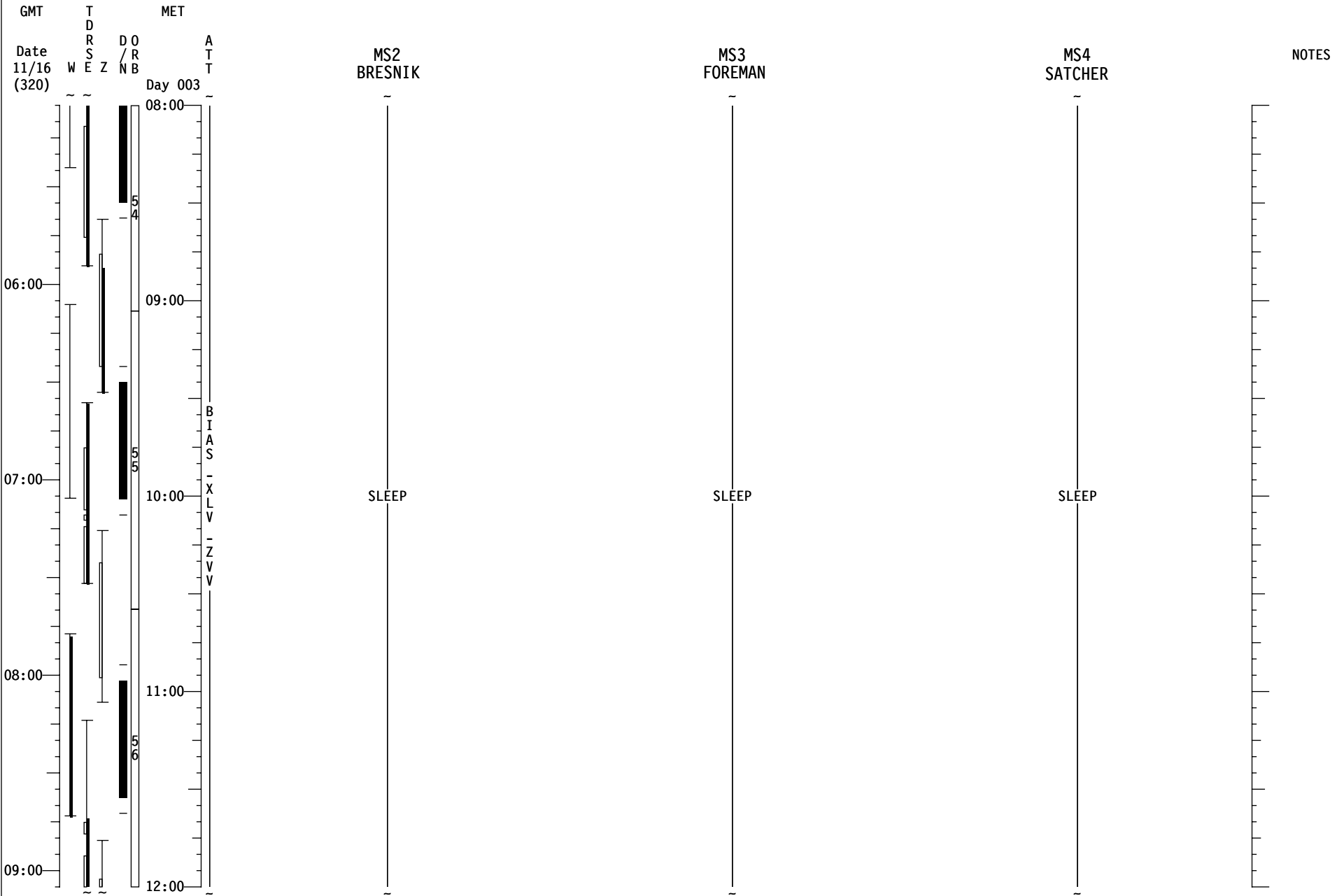
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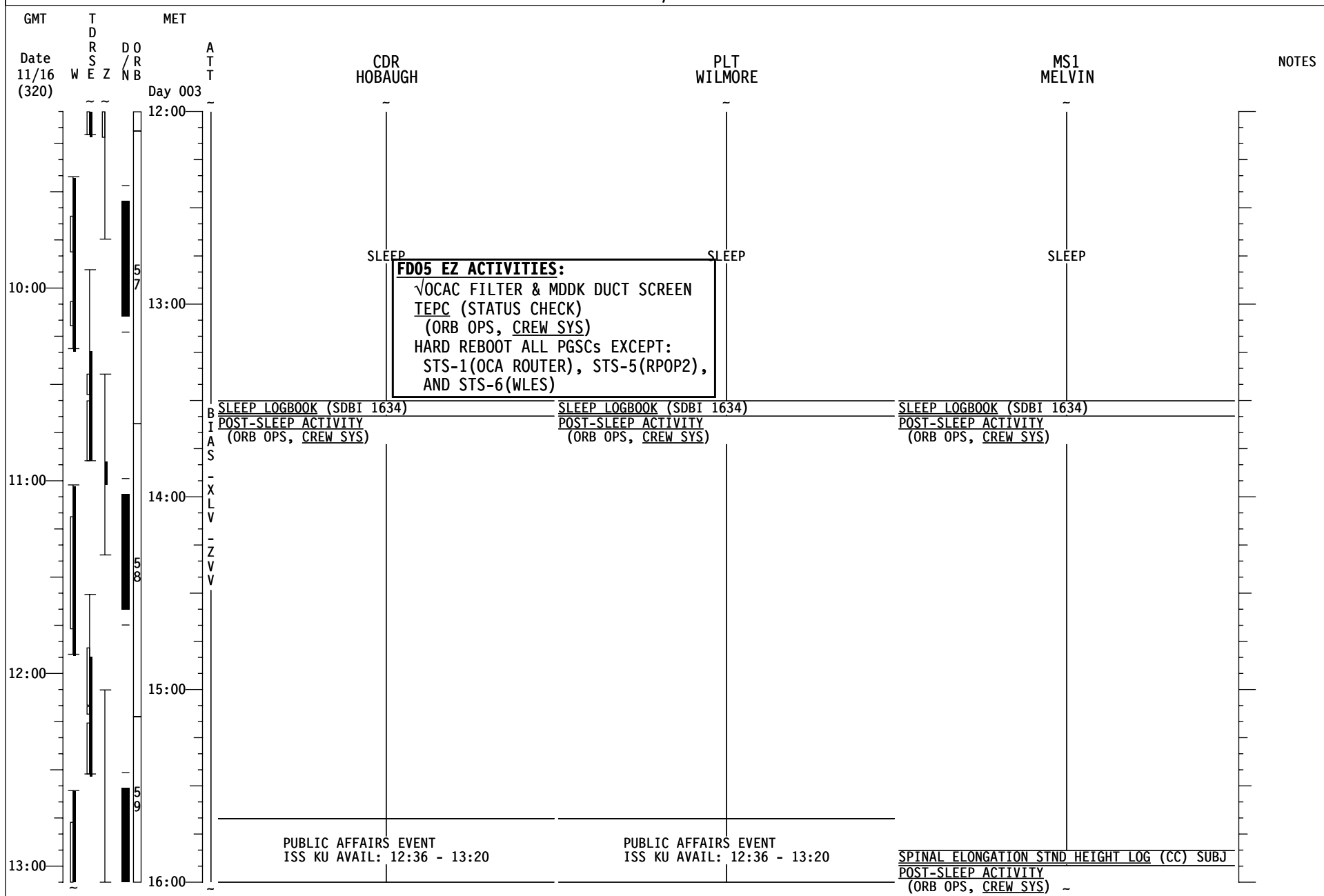
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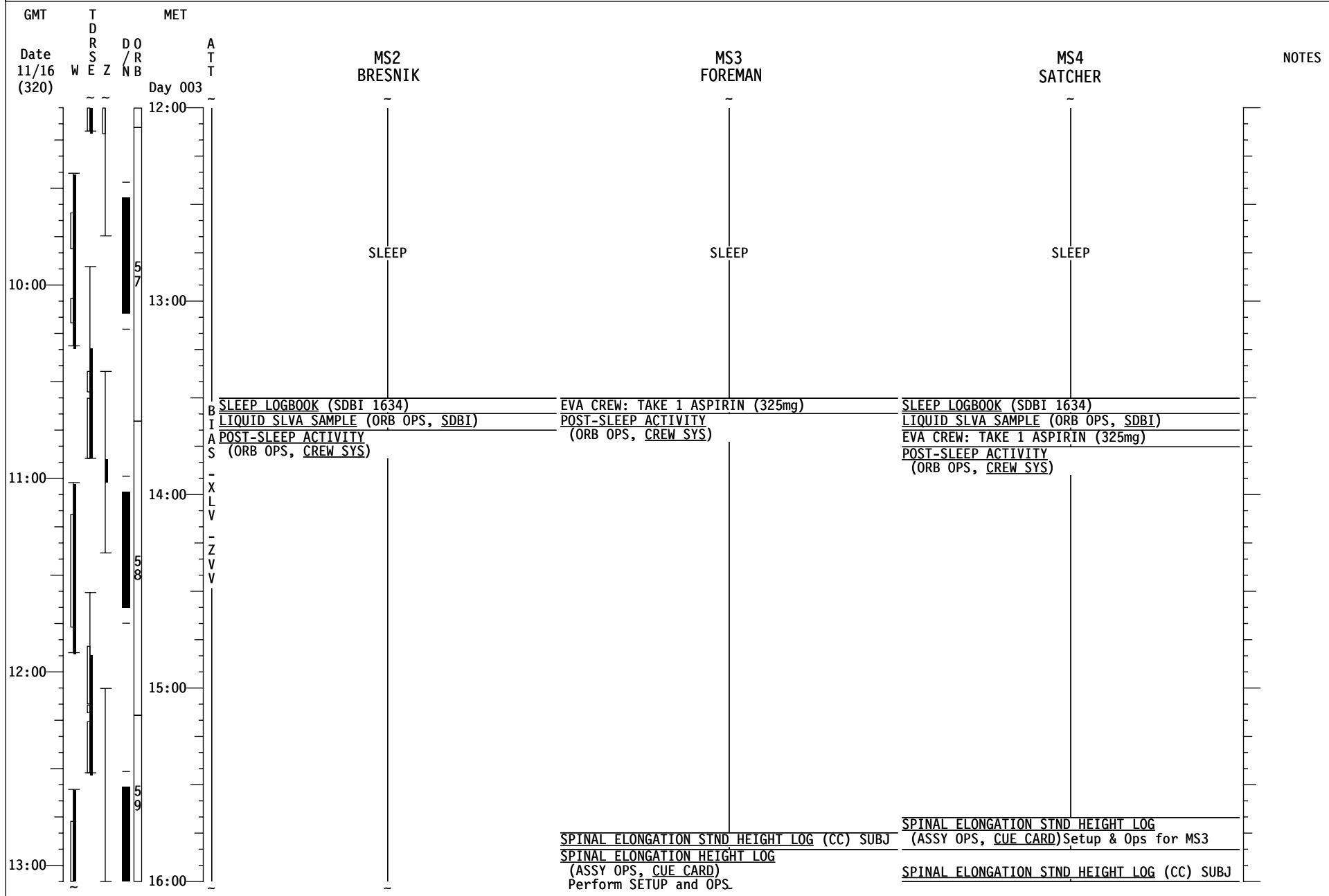
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STS-129/ULF3 FD05



STS-129/ULF3 FD05



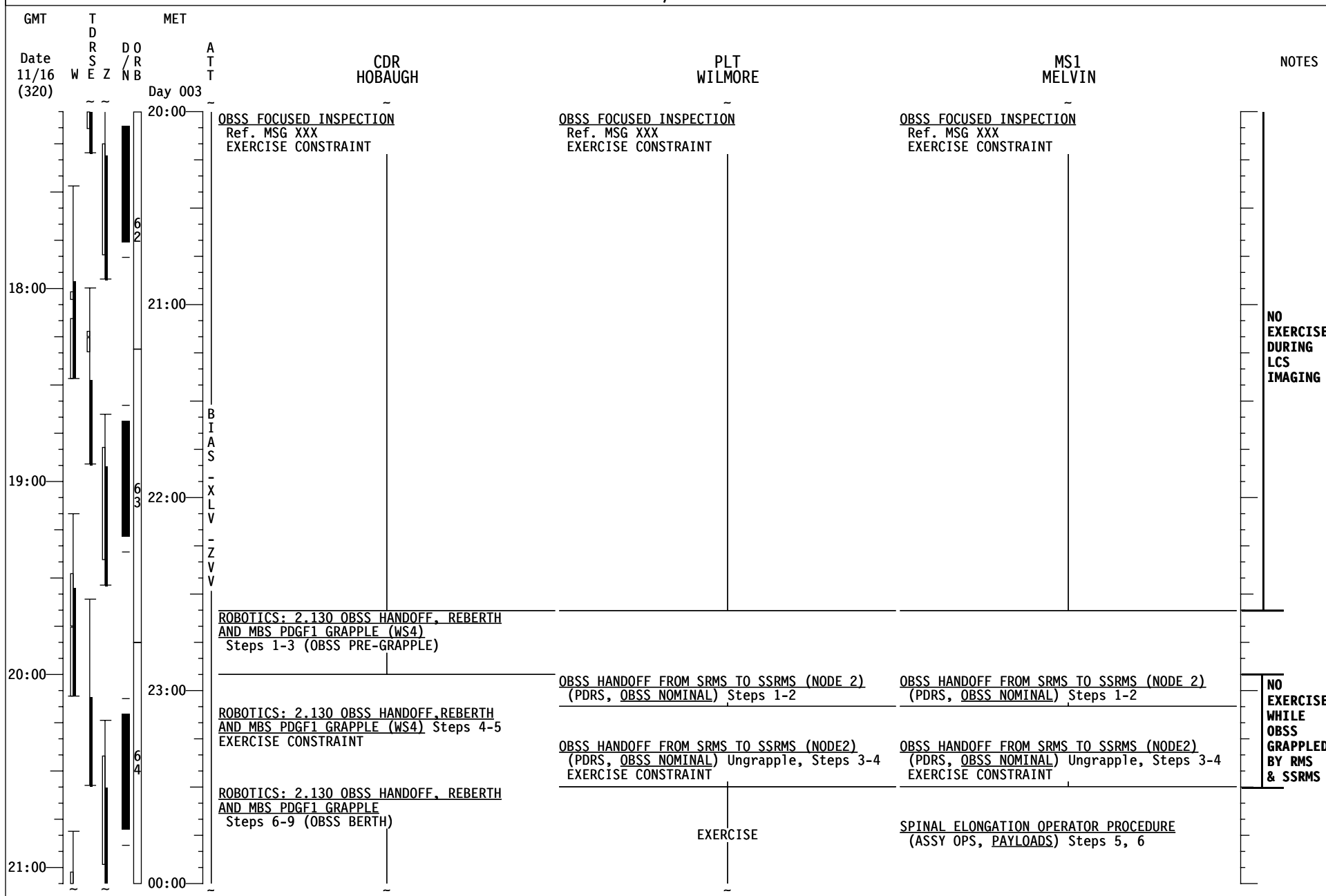
STS-129/ULF3 FD05

GMT	TDRS W E Z	MET DO R / N B	A T T Day 003	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
16:00				SPINAL ELONGATION HEIGHT LOG (ASSY OPS, CUE CARD) SUBJ POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS) SPINAL ELONGATION STND HEIGHT LOG (CC) SUBJ POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
				FOCUSSED INSPECTION DOUG REVIEW Ref. MSG XXX	FOCUSSED INSPECTION DOUG REVIEW Ref. MSG XXX	CGBA and ABRS STATUS CK (Cue Card) CGBA, ABRS FOCUSSED INSPECTION DOUG REVIEW Ref. MSG XXX	
14:00				N2 REPRESS USING PAYLOAD N2 VLVS [A]	OBSS HANDOFF FROM SSRMS (NODE 2) TO SRMS (PDRS, OBSS NOMINAL) Pre-Grapple MNVR, Steps 1-2	L17 Check MCIU filter screen OBSS HANDOFF FROM SSRMS (NODE 2) TO SRMS (PDRS, OBSS NOMINAL) Pre-Grapple MNVR, Steps 1-2	
				ROBOTICS: 2.120 OBSS UNBERTH AND HANDOFF Steps 1-4 (OBSS GRAPPLE)	[A] N2 REPRESS USING PAYLOAD N2 VALVES (ORB OPS, ECLS) Perform REPRESS SETUP AND INIT Steps 1-7 MCC will TMBU S/W FDA	ABRS ASCENT FILTER CHANGEOUT (ASSY OPS, PAYLOADS)	
				ROBOTICS: 2.120 OBSS UNBERTH AND HANDOFF Steps 5-7 (MNVR TO HANDOFF)	OBSS HANDOFF FROM SSRMS (NODE 2) TO SRMS (PDRS, OBSS NOMINAL) MRL Release, Steps 3-5	ABRS TRANSFER MDDK TO ISS (ASSY OPS, PAYLOADS)	
15:00					SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) INIT FILL #4 Ref. MSG XXX	[B] N2 REPRESS USING PAYLOAD N2 VALVES (ORB OPS, ECLS) Perform REPRESS TERM AND RECONFIG Steps 8-14 MCC will TMBU S/W FDA	
				ROBOTICS: 2.120 OBSS UNBERTH AND HANDOFF Step 8 (OBSS UNGRAPPLE) EXERCISE CONSTRAINT	OBSS HANDOFF FROM SSRMS (NODE 2) TO SRMS (PDRS, OBSS NOMINAL) Grapple, Steps 6-7 EXERCISE CONSTRAINT	OBSS HANDOFF FROM SSRMS (NODE 2) TO SRMS (PDRS, OBSS NOMINAL) Grapple, Steps 6-7 EXERCISE CONSTRAINT	NO EXERCISE WHILE OBSS GRAPPLED BY RMS & SSRMS
16:00				ROBOTICS: 2.120 OBSS UNBERTH AND HANDOFF Steps 9-11 (MNVR to FI View)	OBSS MANEUVER TO OBSS CLEARANCE POSN (PDRS, OBSS NOMINAL)	OBSS MANEUVER TO OBSS CLEARANCE POSN (PDRS, OBSS NOMINAL)	
				OBSS FOCUSED INSPECTION Ref. MSG XXX EXERCISE CONSTRAINT	N2 REPRESS USING PAYLOAD N2 VLVS [B] SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Perform FILL TERMINATION	OBSS FOCUSED INSPECTION Ref. MSG XXX EXERCISE CONSTRAINT	NO EXERCISE DURING LCS IMAGING
17:00					OBSS FOCUSED INSPECTION Ref. MSG XXX EXERCISE CONSTRAINT	OBSS FOCUSED INSPECTION Ref. MSG XXX EXERCISE CONSTRAINT	

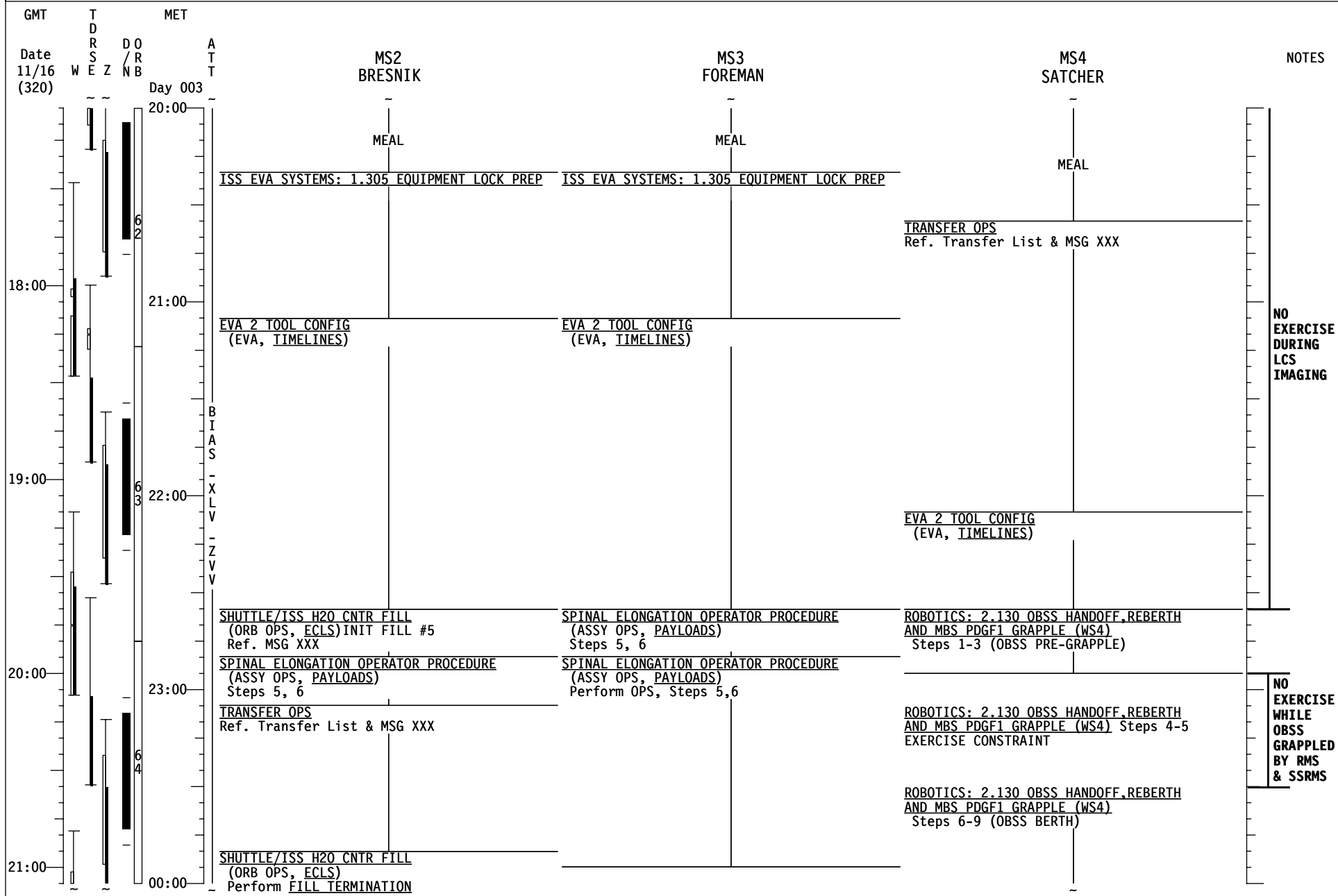
STS-129/ULF3 FD05

GMT	TDRS W E Z	MET DO R S E Z N B	A T T Day 003	MS2 BRESNIK	MS3 FOREMAN	MS4 SATCER	NOTES
16:00				POST-SLEEP ACTIVITY (ORB OPS, CREW SYS) SPINAL ELONGATION STND HEIGHT LOG (CC) SUBJ POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	SPINAL ELONGATION HEIGHT LOG (ASSY OPS, CUE CARD) Perform SETUP and OPS POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
14:00				EXERCISE	DAILY TRANSFER LIST UPDATE Ref. Transfer List & MSG XXX SPINAL ELONGATION OPERATOR PROCEDURE (ASSY OPS, PAYLOADS) Perform Setup, Steps 1-4	ROBOTICS: 2.120 OBSS UNBERTH AND HANDOFF Steps 1-4 (OBSS GRAPPLE)	
15:00				ISS EVA SYSTEMS: 1.605 BSA BATTERY RECHARGE (TERM) Ref: STS-129 BATTERY RECHARGE CC X ISS EVA SYSTEMS: 1.605 BSA BATTERY RECHARGE L (INIT) Ref: STS-129 BATTERY RECHARGE CC		ROBOTICS: 2.120 OBSS UNBERTH AND HANDOFF StepS 5-7 (MNVR TO HANDOFF)	
16:00				Z EMU SWAP FOR EVA 2 (EVA, AIRLOCK CONFIG)	EMU SWAP FOR EVA 2 (EVA, AIRLOCK CONFIG)		
17:00				ISS EVA SYSTEMS: 1.515 EMU METOX/LIOH/BATTERY REPLACEMENT Ref: STS-129 CONSUMABLES TRACKING CC (EVA)	ISS EVA SYSTEMS: 1.515 EMU METOX/LIOH/BATTERY REPLACEMENT Ref: STS-129 CONSUMABLES TRACKING CC (EVA)	ROBOTICS: 2.120 OBSS UNBERTH AND HANDOFF Step 8 (OBSS UNGRAPPLE) EXERCISE CONSTRAINT	NO EXERCISE WHILE OBSS GRAPPLED BY RMS & SSRMS
17:00				MEAL	MEAL	ROBOTICS: 2.120 OBSS UNBERTH AND HANDOFF Steps 9-11 (MNVR to FI View)	
17:00						MEAL	NO EXERCISE DURING LCS IMAGING

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STS-129/ULF3 FD05



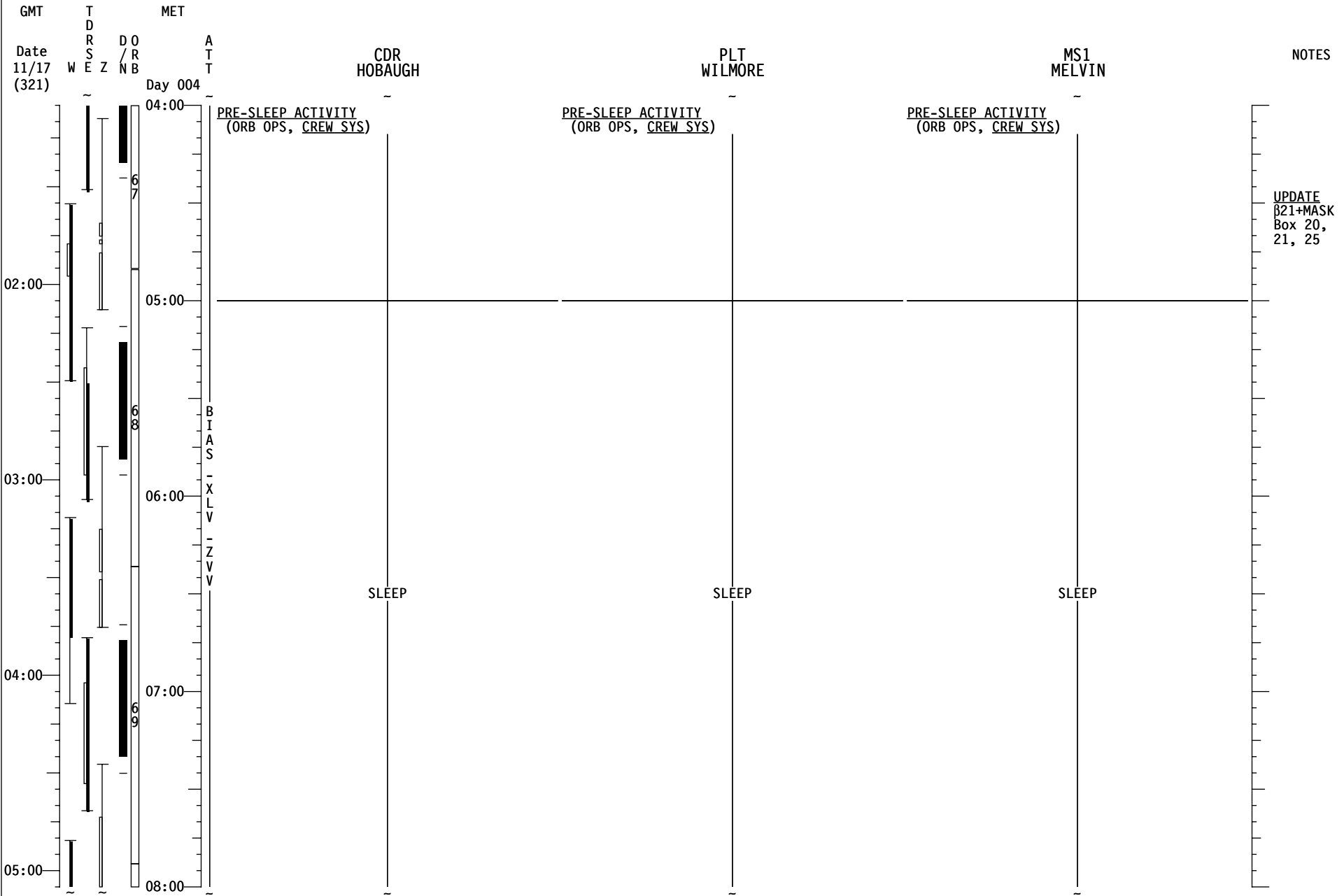
STS-129/ULF3 FD05

GMT	TDRS W E Z	MET Day 004	A T	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
11/16 (320)	4	00:00		ROBOTICS: 2.130 OBSS HANDOFF, REBERTH AND MBS PDGF1 GRAPPLE Steps 6-9 (OBSS BERTH)	EXERCISE	OBSS HANDOFF FROM SRMS TO SSRMS (NODE2) (PDRS, OBSS HANDOFF) (MRL LATCH) Step 5-8	
		01:00		ROBOTICS: 2.130 OBSS HANDOFF, REBERTH AND MBS PDGF1 GRAPPLE (WS4) Steps 10-14 (PDGF1 GRAPPLE)		ROBOTICS: 2.130 OBSS HANDOFF, REBERTH AND MBS PDGF1 GRAPPLE (WS4) Steps 10-14 (PDGF1 GRAPPLE)	
22:00				EVA PROCEDURE REVIEW Ref. EVA 2 BRIEFING CARD (EVA, TIMELINES)			
				ELC 2 GRAPPLE (PDRS, ELC NOMINAL OPS)		ELC 2 GRAPPLE (PDRS, ELC NOMINAL OPS)	
				SPINAL ELONGATION OPERATOR PROCEDURE (ASSY OPS, PAYLOADS) Steps 5, 6		CGBA and ABRS STATUS CK (Cue Card) CGBA only	
23:00		02:00		PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS) Perform Air Quality Report to MCC	SPINAL ELONGATION OPERATOR PROCEDURE (ASSY OPS, PAYLOADS) Steps 5, 6	TRANSFER TAGUP Coordinate with transfer counterparts	
				PUBLIC AFFAIRS EVENT ISS KU AVAIL: 23:22 - 23:58	PUBLIC AFFAIRS EVENT ISS KU AVAIL: 23:22 - 23:58	PUBLIC AFFAIRS EVENT ISS KU AVAIL: 23:22 - 23:58	
				PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	TRANSFER BRIEF Call down status to MCC	
00:00		03:00		PRIVATE MEDICAL CONFERENCE L9 PAYLOAD STATION A/G(two) - OFF Perform via A/G 2		PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
01:00		04:00		PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)			

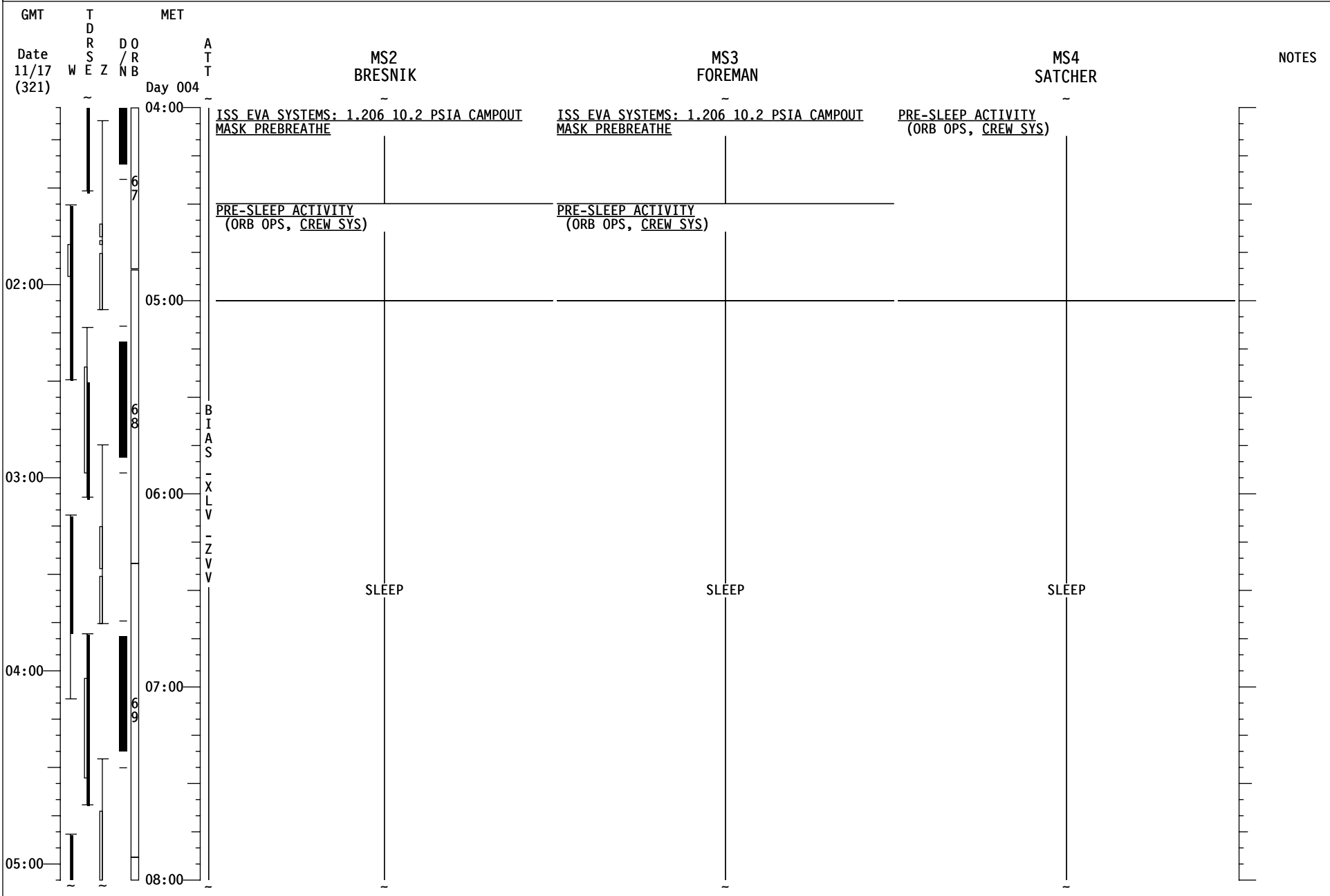
STS-129/ULF3 FD05

GMT	T D R S E Z	MET	MS2 BRESNIK	MS3 FOREMAN	MS4 SATCHER	NOTES
Date 11/16 (320)	W E Z	Day 004				
		00:00	<u>SHUTTLE/ISS H2O CNTR FILL</u> (ORB OPS, ECLS) Perform <u>FILL TERMINATION</u> <u>CWC TRANSFER</u> Transfer 2 CWCs to ISS		<u>ROBOTICS: 2.130 OBSS HANDOFF, REBERTH AND MBS PDGF1 GRAPPLE (WS4)</u> Steps 6-9 (OBSS BERTH)	
				EXERCISE		
22:00		01:00	<u>EVA PROCEDURE REVIEW</u> Ref. <u>EVA 2 BRIEFING CARD</u> (EVA, <u>TIMELINES</u>)	<u>EVA PROCEDURE REVIEW</u> Ref. <u>EVA 2 BRIEFING CARD</u> (EVA, <u>TIMELINES</u>)	<u>EVA PROCEDURE REVIEW</u> Ref. <u>EVA 2 BRIEFING CARD</u> (EVA, <u>TIMELINES</u>)	
						<u>SPINAL ELONGATION OPERATOR PROCEDURE</u> (ASSY OPS, <u>PAYLOADS</u>) Steps 5, 6
23:00		02:00	<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, <u>CREW SYS</u>)	<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, <u>CREW SYS</u>)	<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, <u>CREW SYS</u>)	
						PUBLIC AFFAIRS EVENT ISS KU AVAIL: 23:22 - 23:58
00:00		03:00	<u>ISS EVA SYSTEMS: 1.206 10.2 PSIA CAMPOUT</u> <u>MASK PREBREATHE</u>	<u>ISS EVA SYSTEMS: 1.206 10.2 PSIA CAMPOUT</u> <u>MASK PREBREATHE</u>	<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, <u>CREW SYS</u>)	
01:00		04:00				

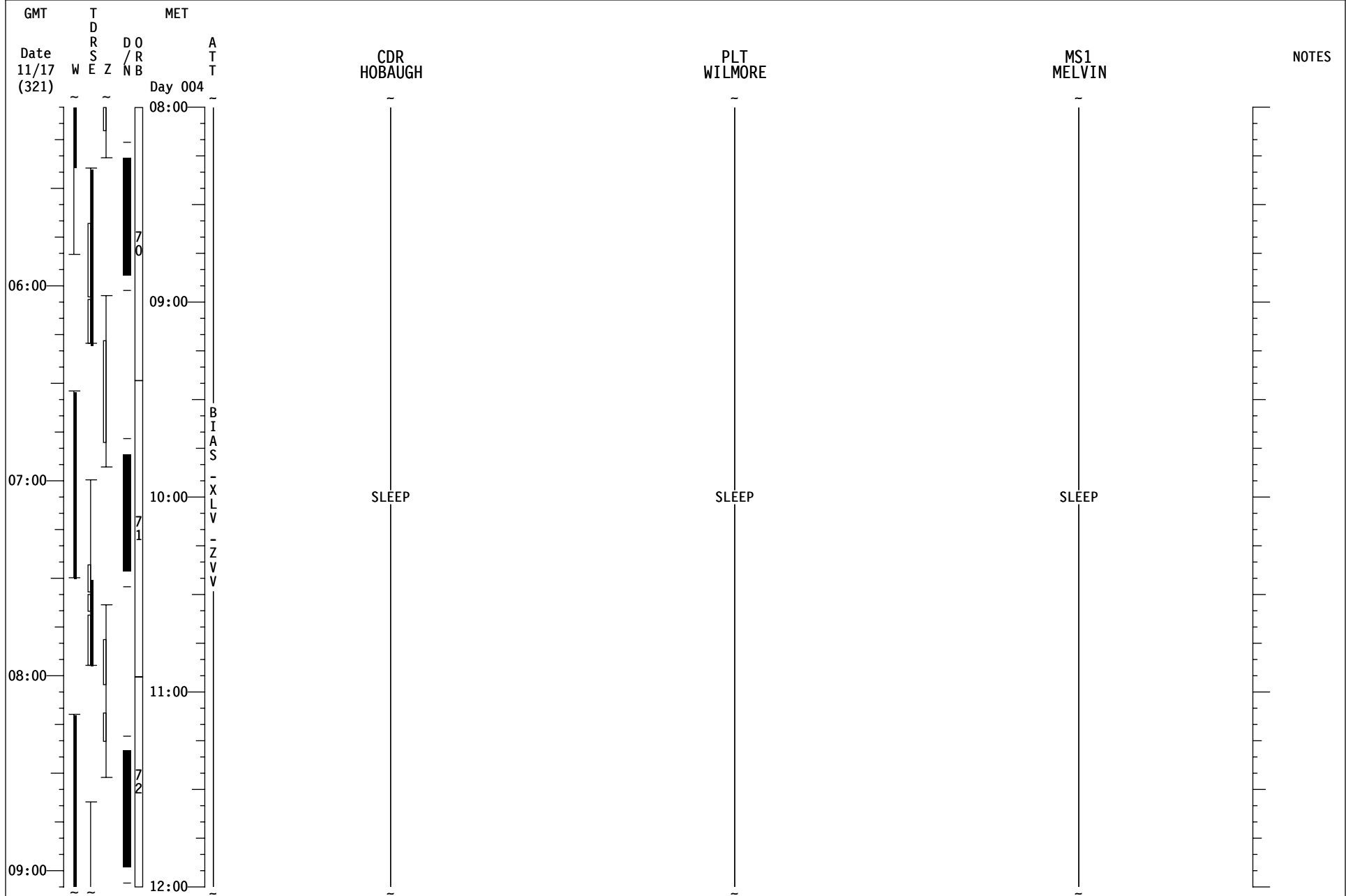
STS-129/ULF3 FD05



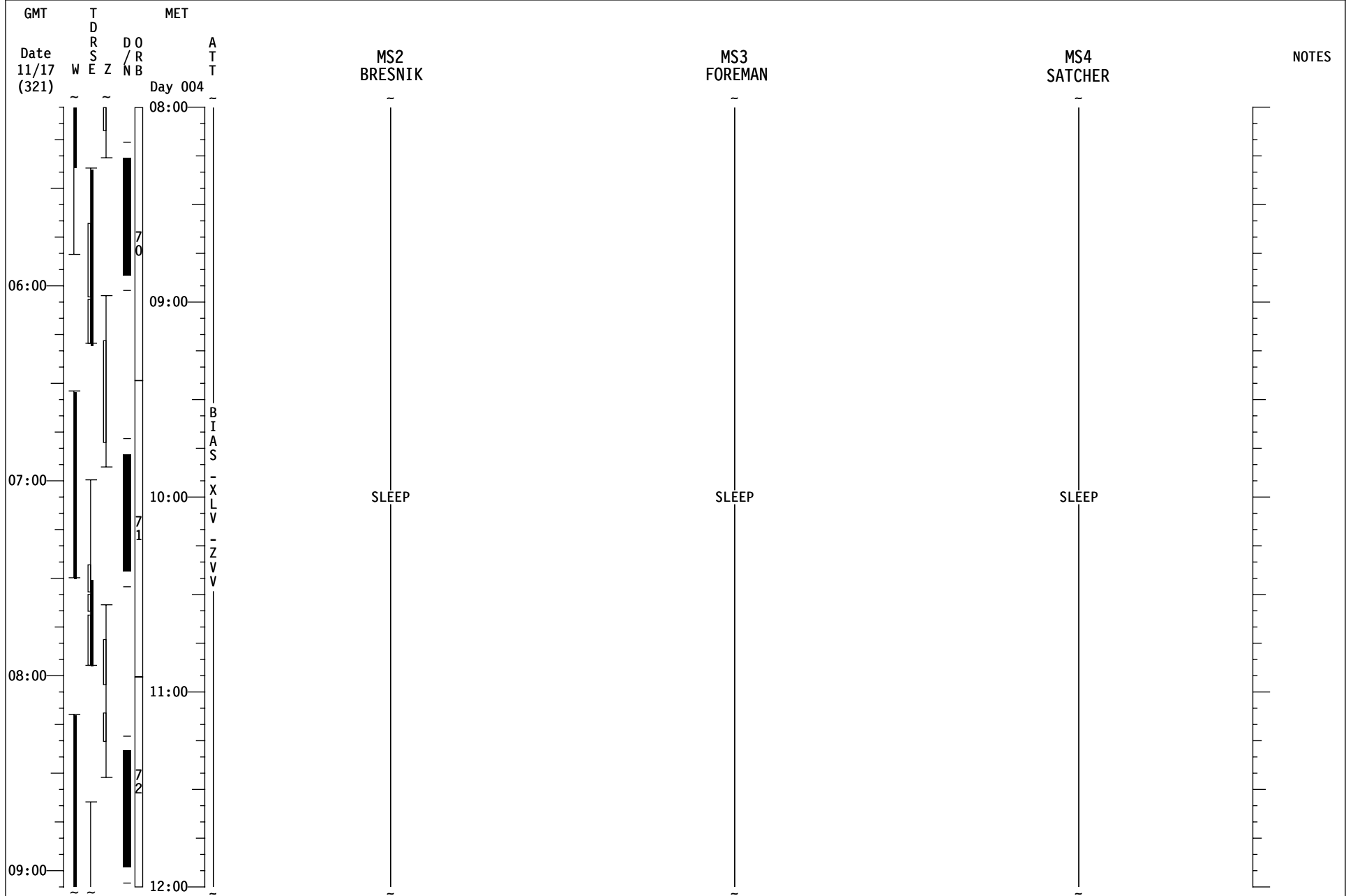
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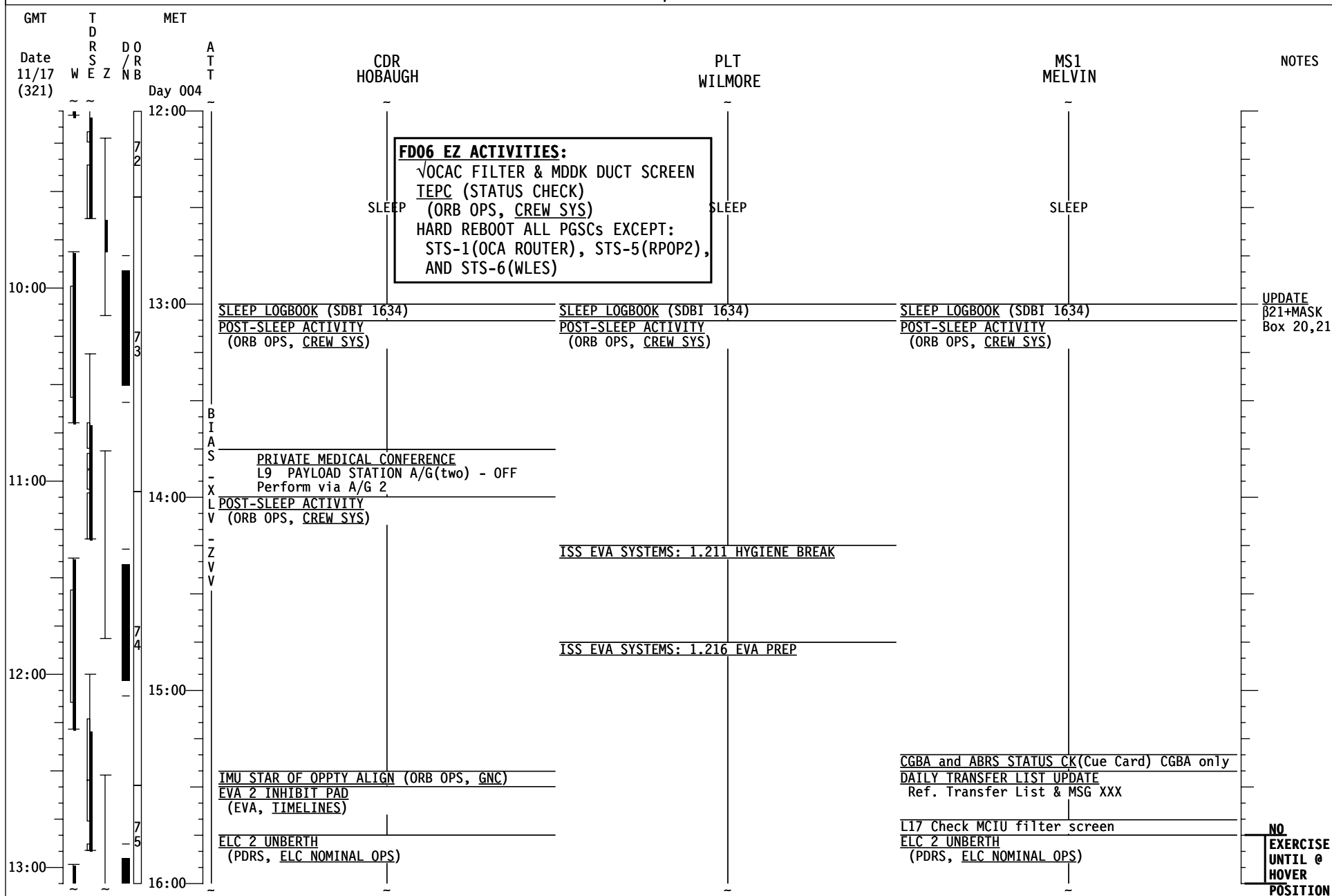
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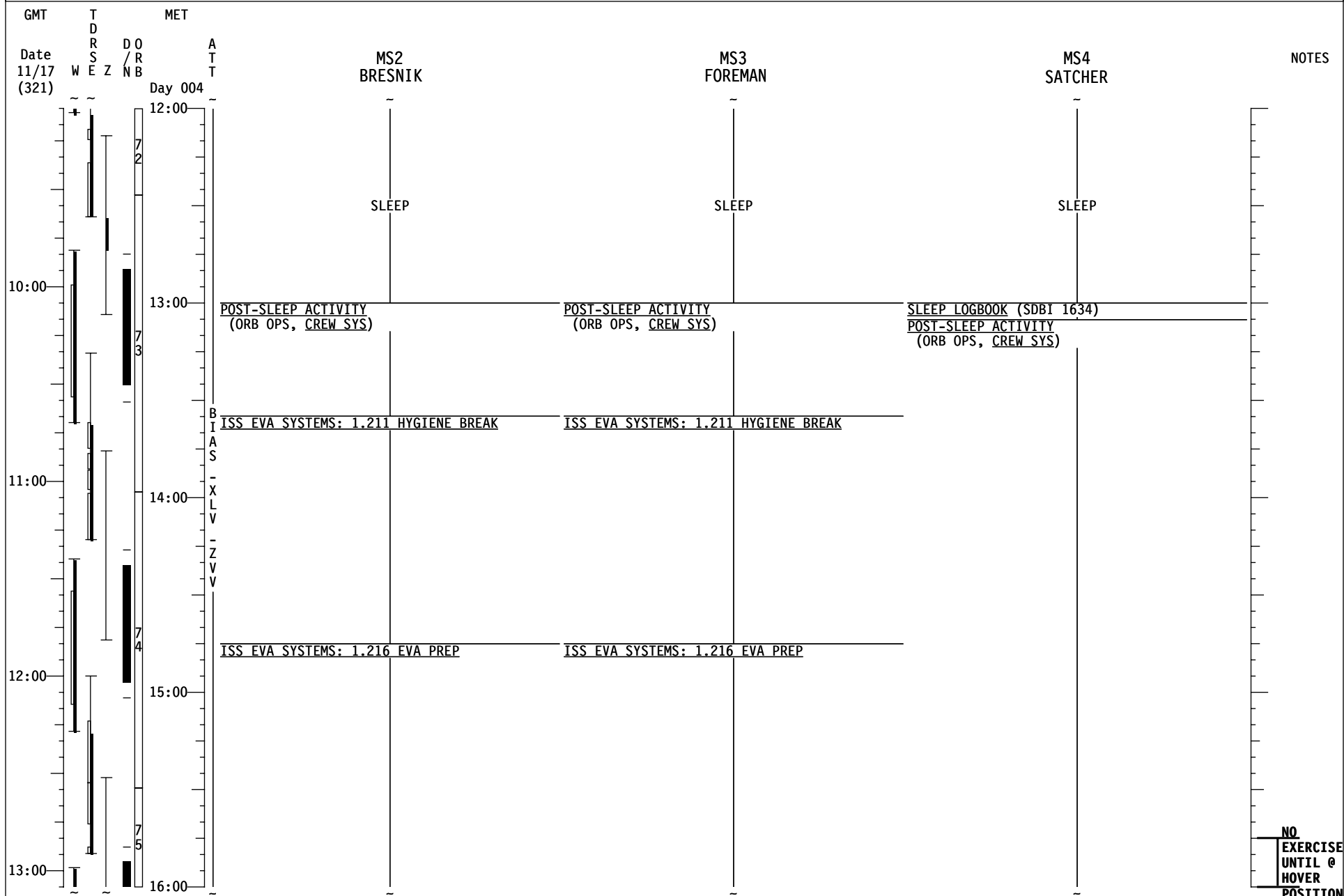
STS-129/ULF3 FD05



STS-129/ULF3 FD06



STS-129/ULF3 FD06



NO EXERCISE UNTIL @ HOVER POSITION

STS-129/ULF3 FD06

GMT	TDRSZ	MET	ATT	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
Date 11/17 (321)	W E Z	DO/R/NB	Day 004				
16:00				ELC 2 UNBERTH (PDRS, ELC NOMINAL OPS)	ISS EVA SYSTEMS: 1.216 EVA PREP	ELC 2 UNBERTH (PDRS, ELC NOMINAL OPS)	
					ISS EVA SYSTEMS: 1.220 EMU PURGE		
					ISS EVA SYSTEMS: 1.225 EMU PREBREATHE		
14:00				ELC 2 UNGRAPPLE (PDRS, ELC NOMINAL OPS) Steps 1-3; EXERCISE CONSTRAINT		ELC 2 UNGRAPPLE (PDRS, ELC NOMINAL OPS) Steps 1-3; EXERCISE CONSTRAINT	NO EXERCISE WHILE ELC 2 GRAPPLED BY SRMS & SSRMS
						ROBOTICS: 1.310 ELC2 HANDOFF AND INSTALL Steps 3, 4	
				ELC2 UNGRAPPLE (PDRS, ELC NOMINAL OPS) Step 4 (MNVR ELC2 VIEWING POS)	ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CUE CARD	ELC2 UNGRAPPLE (PDRS, ELC NOMINAL OPS) Step 4 (MNVR ELC2 VIEWING POS)	
				P/TV07 EVA (PHOTO/TV, SCENES) Setup		ROBOTICS: 1.310 ELC2 HANDOFF AND INSTALL Steps 5-7	
15:00				SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) INIT FILL #6 Ref. MSG XXX	ISS EVA SYSTEMS: CREWLOCK POST DEPRESS (CC) TRANSFER OPS Ref. Transfer List & MSG XXX	EXERCISE CONSTRAINT	
				P/TV07 EVA (PHOTO/TV, SCENES) Ops			
				A √ A/FREE/VERN PERMANENT DAP EDIT: A11: CA=7 A12: CA=7 B12: CA=7 B13: CA=7			
16:00						S&M: 1.911 PAS NORMAL MATE Steps 6-17	NO EXERCISE WHILE AT ELC 2 INSTALL POSITION
						EXERCISE CONSTRAINT	
				SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Perform FILL TERMINATION			
				After ELC2 Install [A] P/TV07 EVA (PHOTO/TV, SCENES) Ops	ROBOTICS: 1.320 ELC2 RELEASE, WALKOFF TO MBS PDGF1 AND MNVR TO MT TRANSLATION CONFIG Steps 1-4	ROBOTICS: 1.320 ELC2 RELEASE, WALKOFF TO MBS PDGF1 AND MNVR TO MT TRANSLATION CONFIG Steps 1-4	
17:00							
20:00							

STS-129/ULF3 FD06

GMT	TDRS W E Z	MET Day 004	A T T	MS2 BRESNIK	MS3 FOREMAN	MS4 SATCHER	NOTES
16:00				ISS EVA SYSTEMS: 1.216 EVA PREP	ISS EVA SYSTEMS: 1.216 EVA PREP	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
				ISS EVA SYSTEMS: 1.220 EMU PURGE	ISS EVA SYSTEMS: 1.220 EMU PURGE		
				ISS EVA SYSTEMS: 1.225 EMU PREBREATHE	ISS EVA SYSTEMS: 1.225 EMU PREBREATHE		
14:00							
				ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CUE CARD	ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CUE CARD	IVA SUPPORT PREP	
				ISS EVA SYSTEMS: CREWLOCK POST DEPRESS (CC)	ISS EVA SYSTEMS: CREWLOCK POST DEPRESS (CC)		
15:00							
				EGRESS/SETUP	EGRESS/SETUP		
16:00				GATOR INSTALL	GATOR INSTALL	EVA IVA SUPPORT	
17:00				FPMU RELOCATE	FPMU RELOCATE		
20:00							

NO
EXERCISE
WHILE
ELC 2
GRAPPLD
BY SRMS
& SSRMS

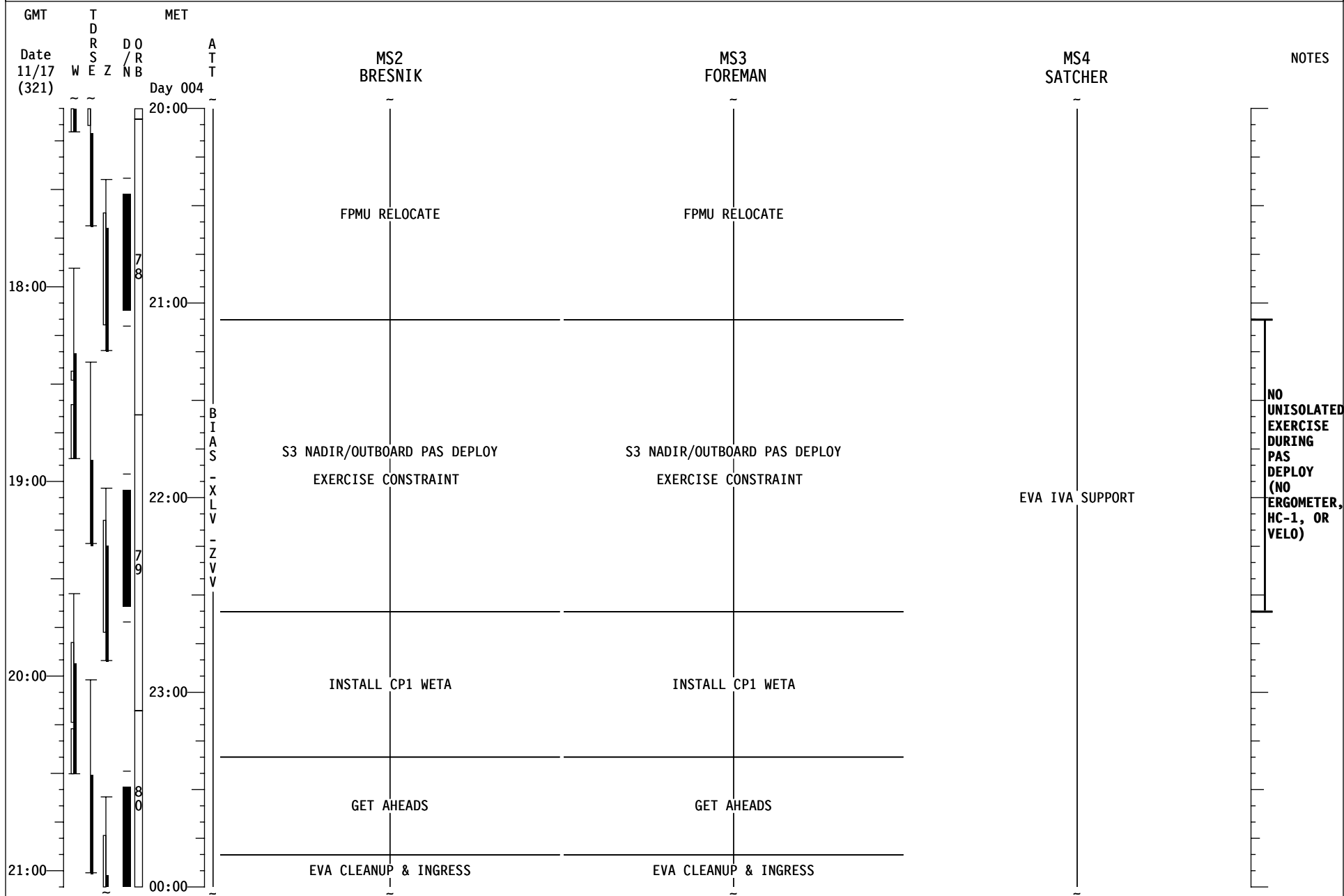
NO
EXERCISE
WHILE AT
ELC 2
INSTALL
POSITION

STS-129/ULF3 FD06

GMT	TDRS W E Z	MET Day 004	A T T	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
11/17 (321)							
18:00							
				P/TV07 EVA (PHOTO/TV, SCENES) Ops	ROBOTICS: 1.320 ELC2 RELEASE, WALKOFF TO MBS PDGF1 AND MNVR TO MT TRANSLATION CONFIG Steps 1-4	ROBOTICS: 1.320 ELC2 RELEASE, WALKOFF TO MBS PDGF1 AND MNVR TO MT TRANSLATION CONFIG Steps 1-4 TRANSFER OPS Ref. Transfer List & MSG XXX	
				MEAL	EXERCISE		
19:00							
				FILTER CLEANING (IFM, SCHEDULED MAINTENANCE) Inspect filters and clean as necessary.			
					MEAL		
20:00							
				L SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) INIT FILL #7 Ref. MSG XXX	TRANSFER OPS Ref. Transfer List & MSG XXX	MEAL	
				Z P/TV07 EVA (PHOTO/TV, SCENES) Ops			
21:00							
				SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Perform FILL TERMINATION			
				CWC TRANSFER Transfer 2 CWCs to ISS	ROBOTICS: 1.320 ELC2 RELEASE, WALKOFF TO MBS PDGF1 AND MNVR TO MT TRANSLATION CONFIG Steps 5-8	ROBOTICS: 1.320 ELC2 RELEASE, WALKOFF TO MBS PDGF1 AND MNVR TO MT TRANSLATION CONFIG Steps 5-8	
23:00						EXERCISE	
00:00							

NO UNISOLATED EXERCISE DURING PAS DEPLOY (NO ERGOMETER, HC-1, OR VELO)

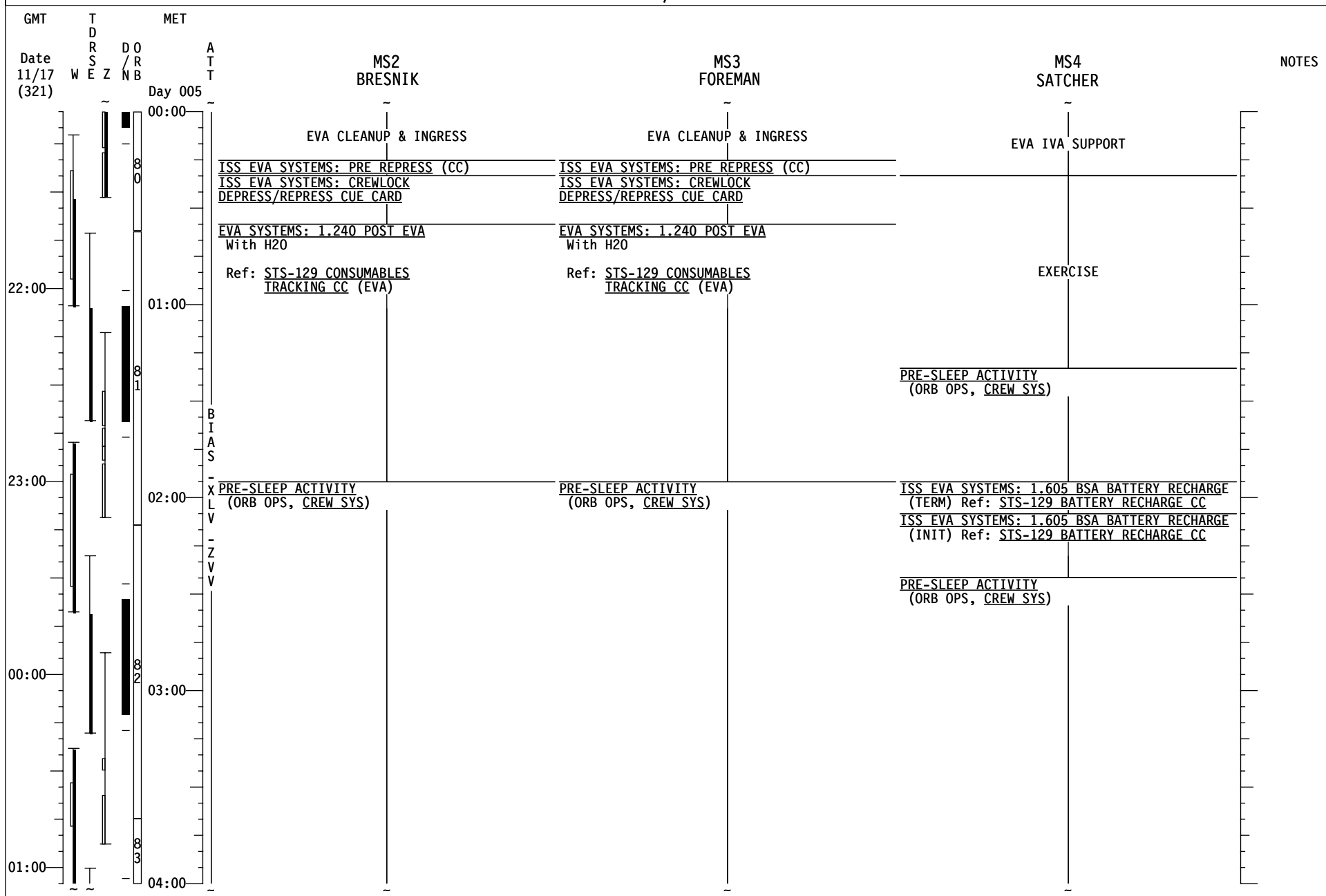
STS-129/ULF3 FD06



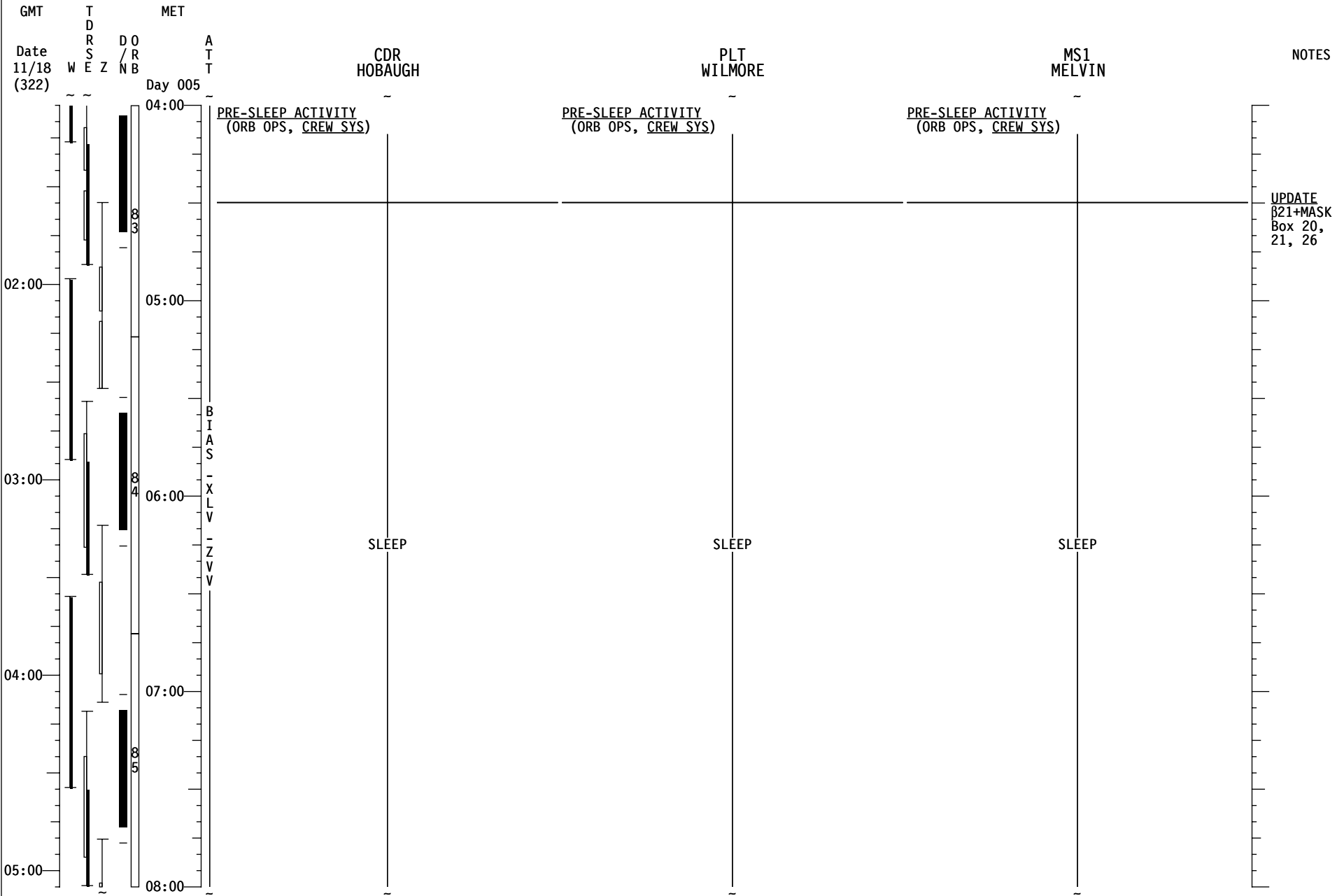
STS-129/ULF3 FD06

GMT	TDRS W E Z	MET DO R Z N B	A T T	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
Date 11/17 (321)		Day 005					
			00:00	<u>PRE GATHER DUMP EQUIPMENT</u> Ref. MSG XXX	<u>ROBOTICS: 1.320 ELC2 RELEASE, WALKOFF TO</u> <u>MBS_PDGF1 AND MNVR TO MT TRANSLATION CONFIG</u> Steps 5-8	<u>ROBOTICS: 1.320 ELC2 RELEASE, WALKOFF TO</u> <u>MBS_PDGF1 AND MNVR TO MT TRANSLATION CONFIG</u> Steps 5-8	
					<u>ISS EVA SYSTEMS: PRE REPRESS (CC)</u> <u>ISS EVA SYSTEMS: CREWLOCK</u> <u>DEPRESS/REPRESS CUE CARD</u>		
				<u>ELC 2 UNGRAPPLE (PDRS, ELC NOMINAL OPS)</u> Step 5 (PRECRADLE)		<u>ELC 2 UNGRAPPLE (PDRS, ELC NOMINAL OPS)</u> Step 5 (PRECRADLE)	
				<u>WCS FILTER CHECK [B]</u>	<u>EVA SYSTEMS: 1.240 POST EVA</u> With H2O	<u>PRLA CLOSE</u> (ORB OPS, PRLA)	
				<u>TV (ILL OPS) (P/TV, CC) ILL ON - A,D</u>			
				<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS) Perform Air Quality Report to MCC	Ref: <u>STS-129 CONSUMABLES</u> <u>TRACKING CC (EVA)</u>		
22:00			01:00	[B] <u>WCS CRADLE - AUTO INHIBIT</u> Inspect hose block filter, change if req'd <u>WCS CRADLE - AUTO</u>		<u>CGBA and ABRSTATUS CK (Cue Card) CGBA only</u> <u>TRANSFER TAGUP</u> Coordinate with transfer counterparts	
						<u>TRANSFER BRIEF</u> Call down status to MCC	
						<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	
23:00			02:00	<u>EXERCISE</u> ARED is available	<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)		
				<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)			
00:00			03:00	<u>NETMEETING VIDEO CONFERENCING</u> (ORB OPS, PGSC) Private Medical Conference KU TDRW: 3:29 - 3:42			
				<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)			
01:00			04:00				

STS-129/ULF3 FD06

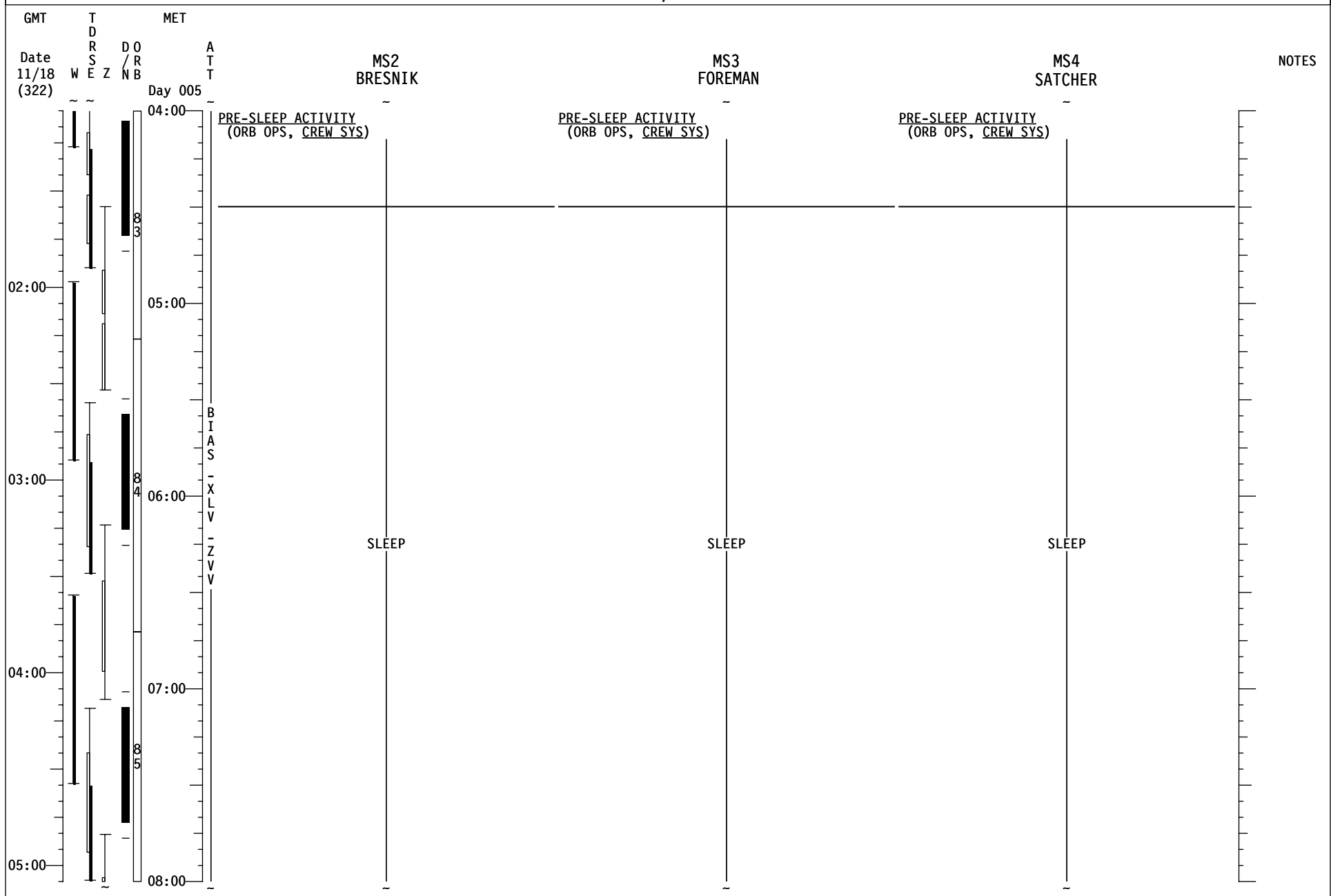


STS-129/ULF3 FD06

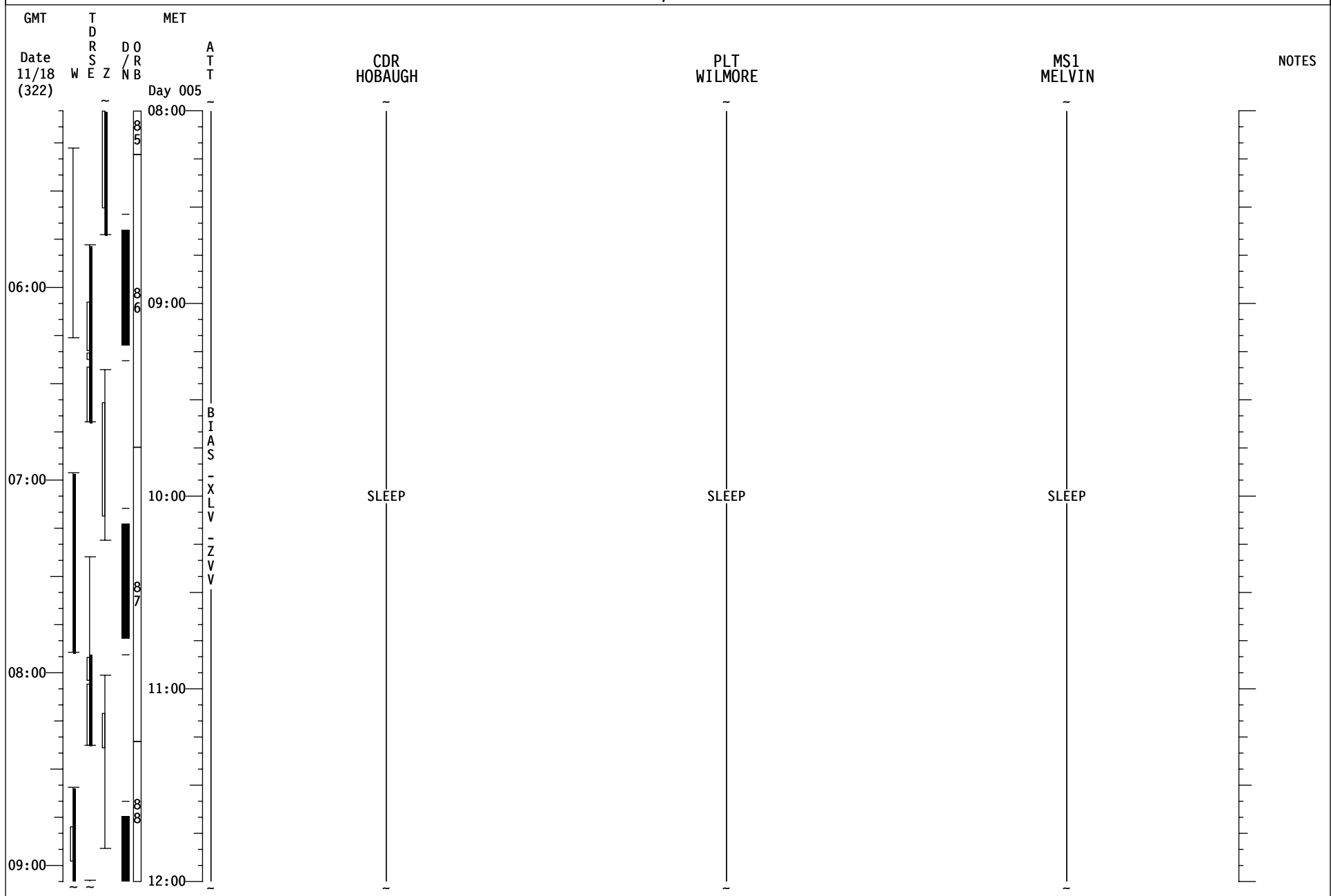


UPDATE
β21+MASK
Box 20,
21, 26

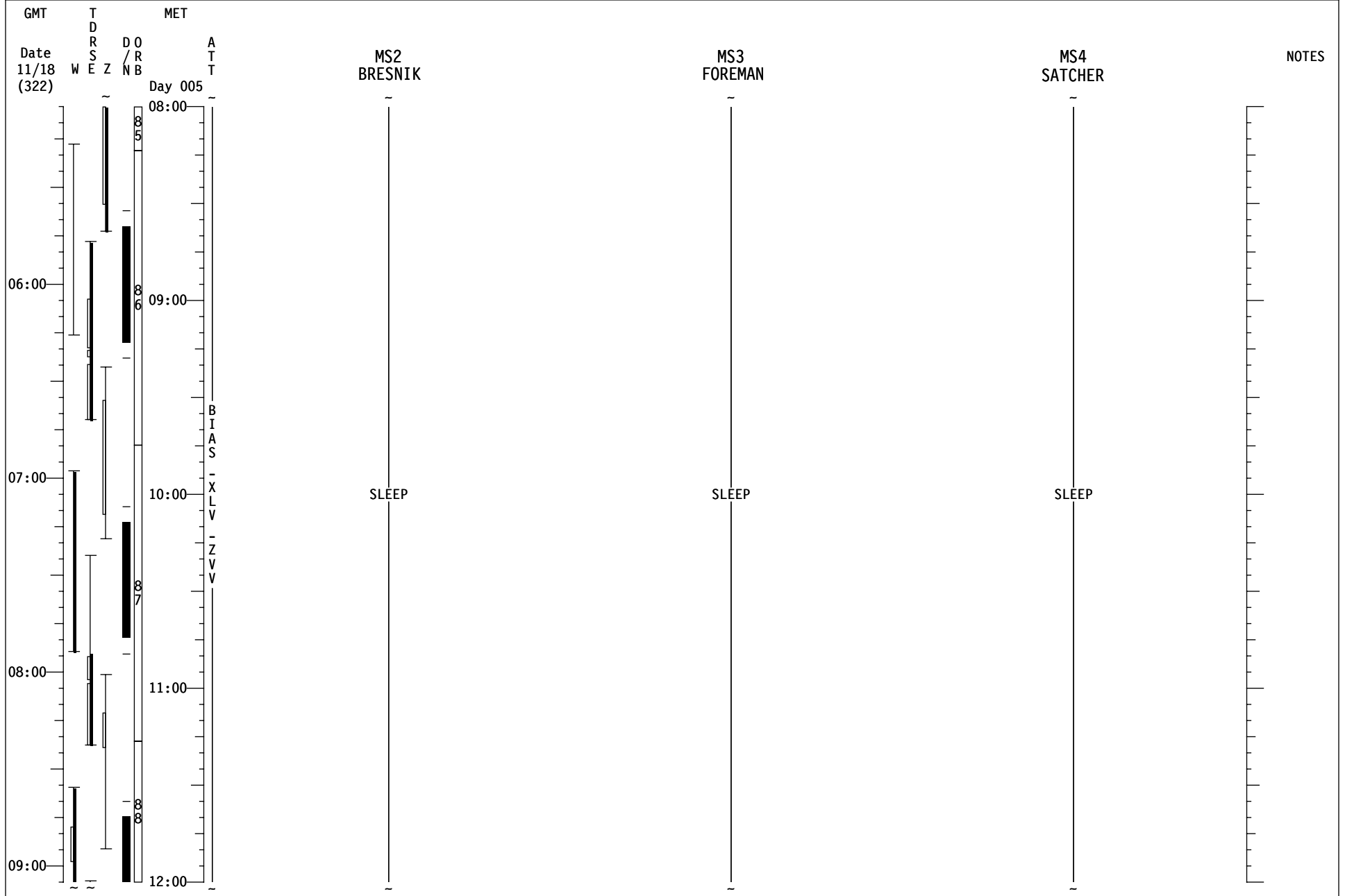
STS-129/ULF3 FD06



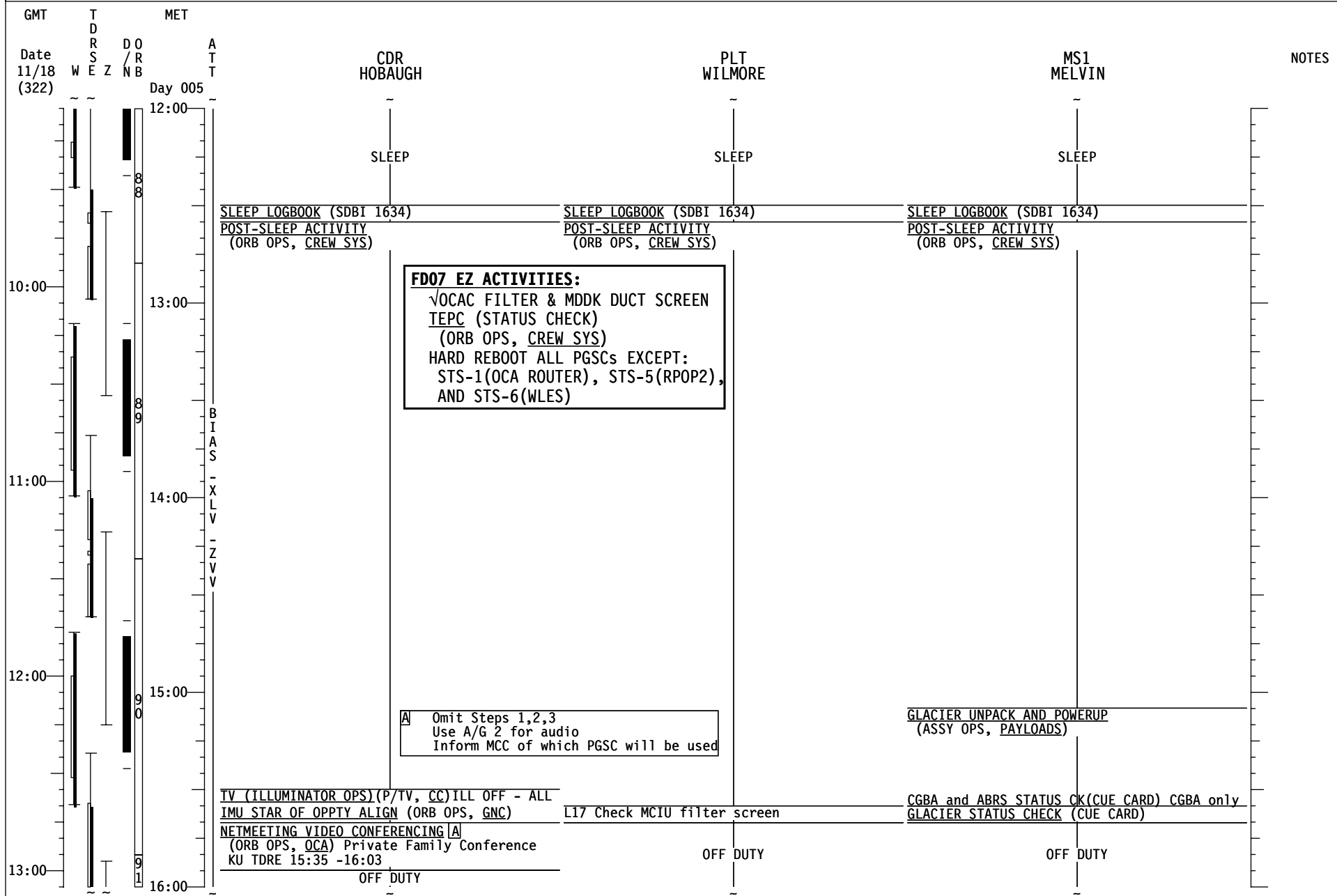
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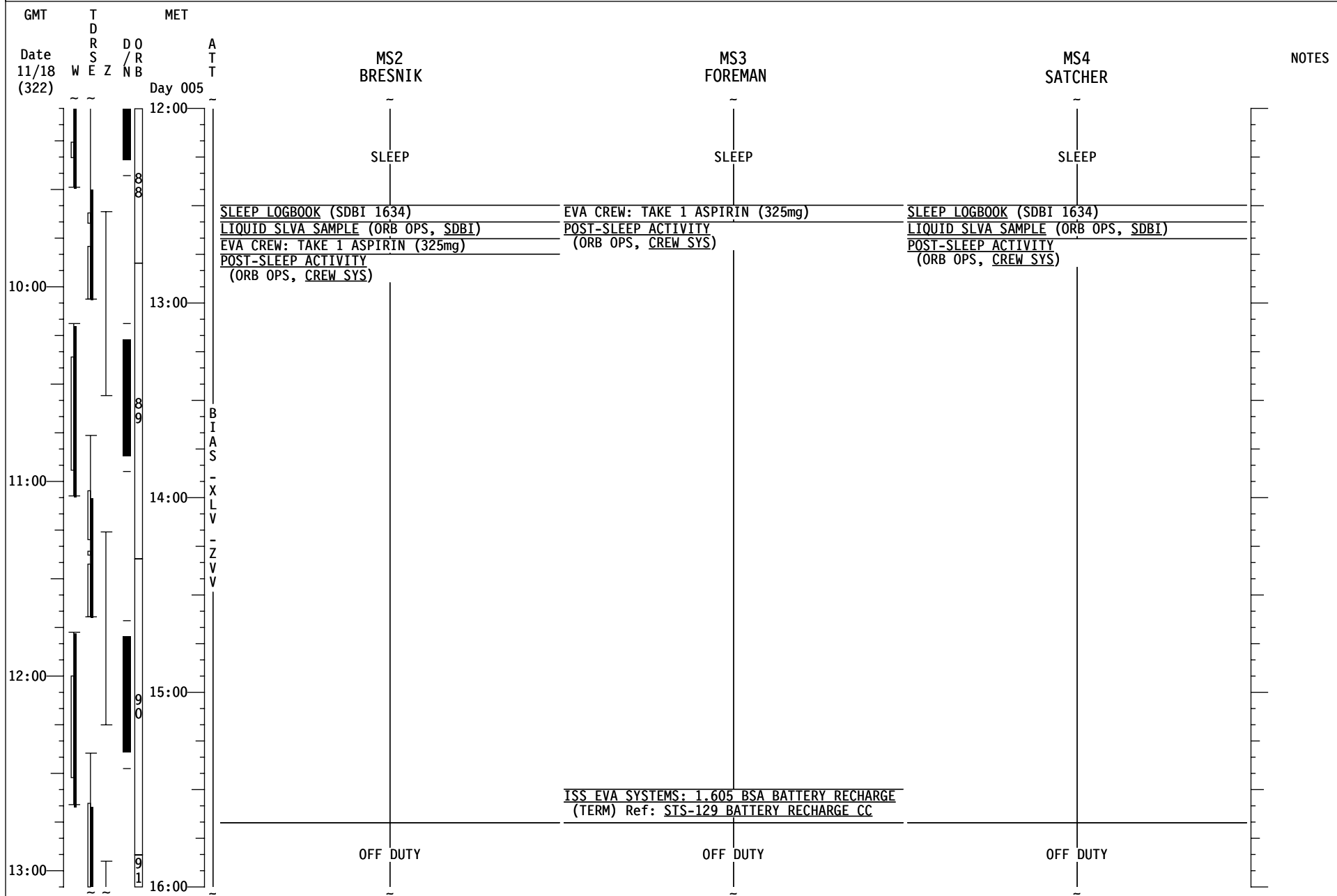
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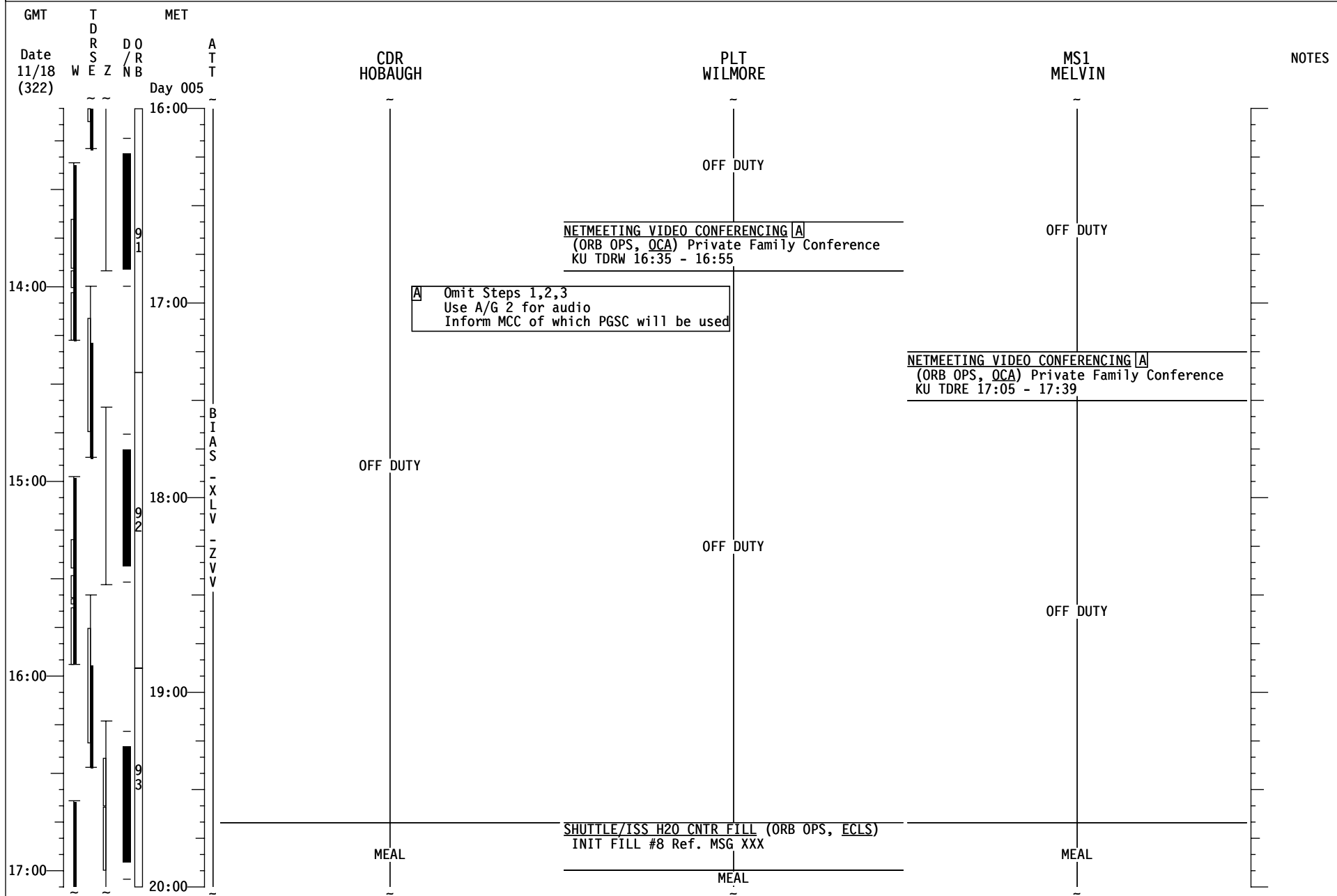
STS-129/ULF3 FD07



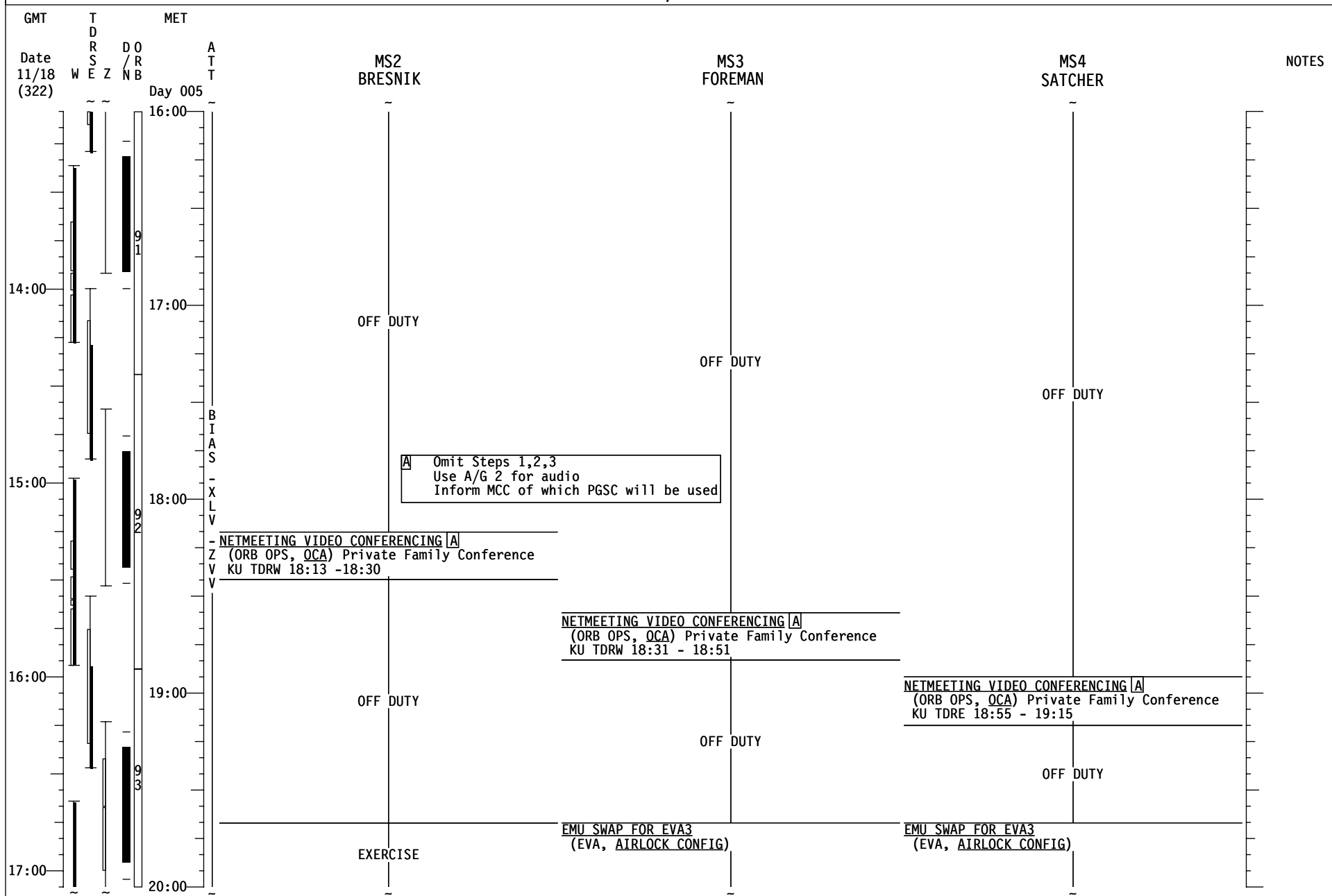
STS-129/ULF3 FD07



STS-129/ULF3 FD07



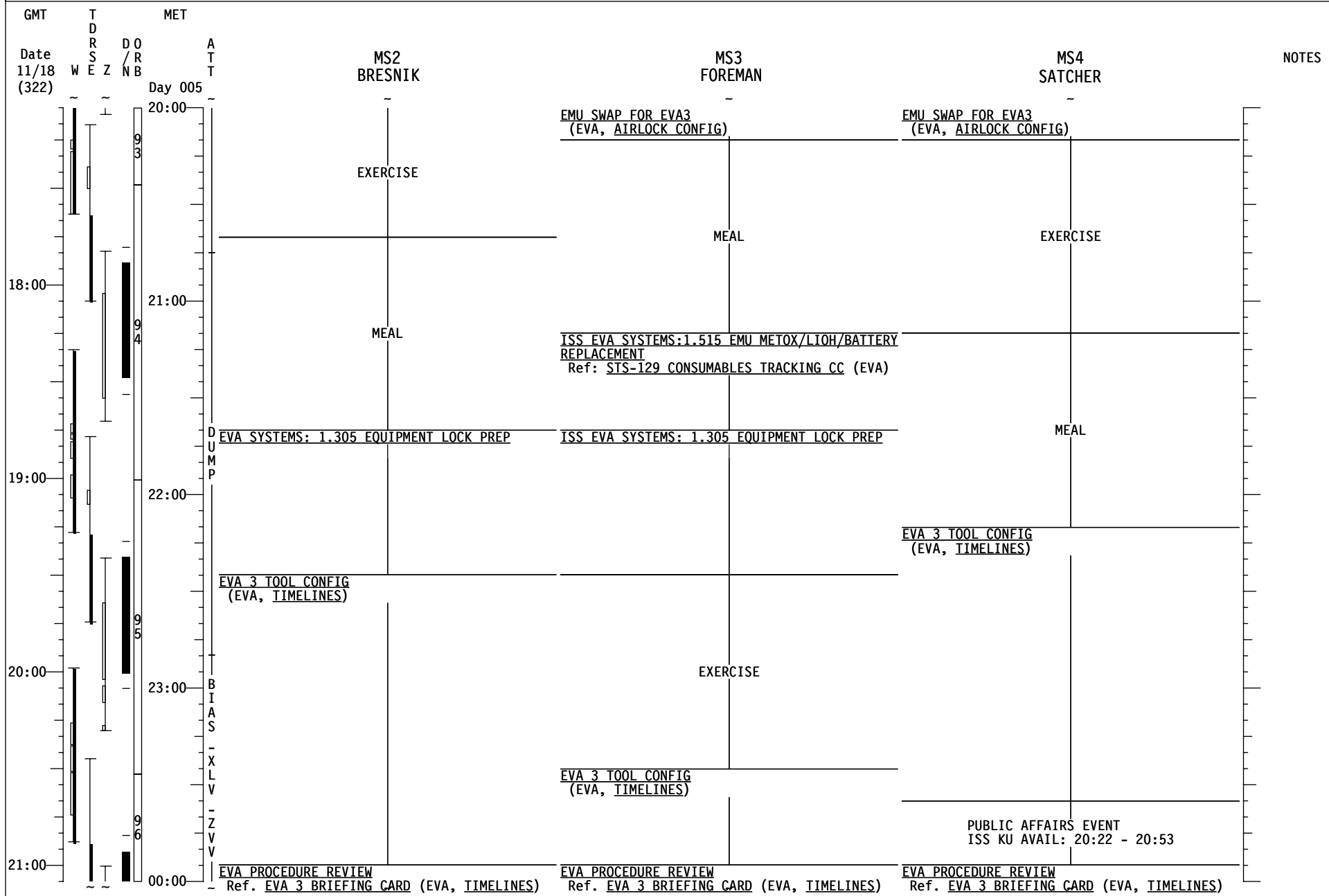
STS-129/ULF3 FD07



STS-129/ULF3 FD07

GMT	TDRS W E Z	MET Day 005	A T T D O R B N B	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
18:00				MEAL <div style="border: 1px solid black; padding: 2px; display: inline-block;">B1 A12/AUTO/VERN When ISS in Free Drift, DAP: LVLH When jet activity stopped for > 5sec, DAP: FREE >2sec, Then DAP: AUTO</div>	MEAL	MEAL	
				H/O ATTITUDE CONTROL CMG TA to ORB B MNVR (TRK) BIAS -XLV -ZVV (DUMP) TG=2 BV=5 P=163 Y=358 OM=194 A12/AUTO/VERN Init TRK When in attitude: DAP:B12			DAILY TRANSFER LIST UPDATE Ref. Transfer List & MSG XXX
				CWC OVERBOARD DUMP (ORB OPS, ECLS) Initiate Condensate Dump	SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Perform FILL TERMINATION		TRANSFER OPS Ref. Transfer List & MSG XXX
				N2 REPRESS USING PAYLOAD N2 VLVS C	SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) INIT FILL #9 Ref. MSG XXX		
				PUBLIC AFFAIRS EVENT ISS KU AVAIL: 18:27 - 19:05	PUBLIC AFFAIRS EVENT ISS KU AVAIL: 18:27 - 19:05	PUBLIC AFFAIRS EVENT ISS KU AVAIL: 18:27 - 19:05	
19:00				C N2 REPRESS USING PAYLOAD N2 VALVES (ORB OPS, ECLS) Perform REPRESS SETUP AND INIT Steps 1, 3-7 MCC will TMBU S/W FDA	TRANSFER OPS Ref. Transfer List & MSG XXX	D N2 REPRESS USING PAYLOAD N2 VALVES (ORB OPS, ECLS) Perform REPRESS TERM AND RECONFIG Steps 8-13 MCC will TMBU S/W FDA	
				CWC OVERBOARD DUMP (ORB OPS, ECLS) Perform DUMP TERMINATION		EXERCISE	
				PWR DUMP - SUPPLY LINE (ORB OPS, ECLS) Dump SN TBS (Barcode #TBS) Dump dur. ~30 min	SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Perform FILL TERMINATION		
				MNVR (TRK) BIAS -XLV -ZVV TG=2 BV=5 P=163 Y=358 OM=168 A12/AUTO/VERN Init TRK	CWC TRANSFER Transfer 2 CWCs to ISS	CUCU TRANSFER & INSTALL Ref. Transfer List & MSG XXX	
20:00				A N2 REPRESS USING PAYLOAD N2 VLVS D - When ISS is GO for deadband collapse, DAP:B13	SHUTTLE CONDENSATE COLLECTION (ORB OPS, ECLS) Perform CHANGEOUT Use CWC S/N XXX	TRANSFER OPS Ref. Transfer List & MSG XXX	
				- When ISS is Go for att. control, DAP:FREE Z Then select DAP A, DAP:A12/FREE/VERN			
					PUBLIC AFFAIRS EVENT ISS KU AVAIL: 20:22 - 20:53	PUBLIC AFFAIRS EVENT ISS KU AVAIL: 20:22 - 20:53	
21:00					EVA PROCEDURE REVIEW Ref. EVA 3 BRIEFING CARD (EVA, TIMELINES)	EVA PROCEDURE REVIEW Ref. EVA 3 BRIEFING CARD (EVA, TIMELINES)	

STS-129/ULF3 FD07



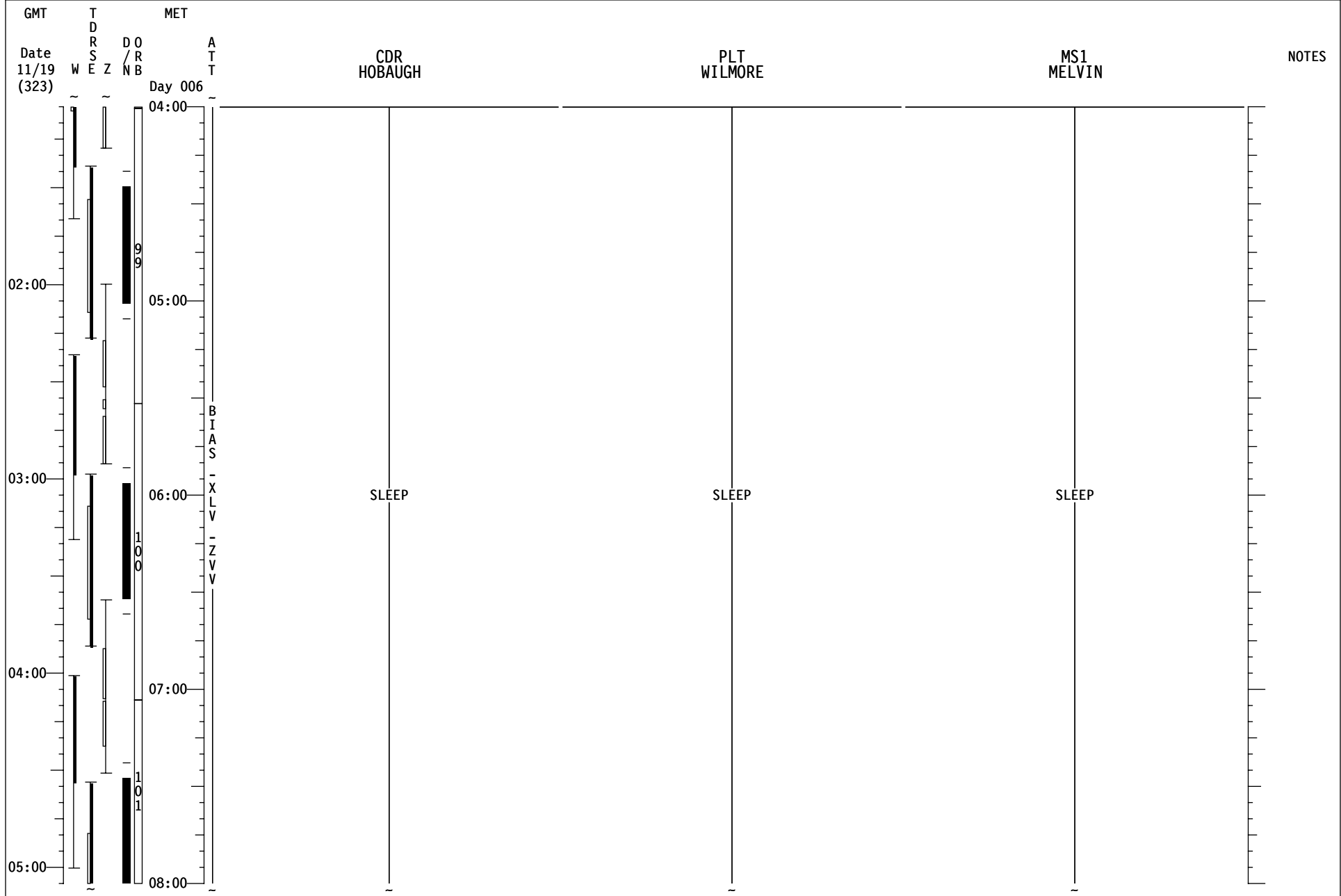
STS-129/ULF3 FD07

GMT	T D R S W E Z	MET D O R / N B	A T T	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
Date 11/18 (322)		Day 006					
				<u>EVA PROCEDURE REVIEW</u> Ref. <u>EVA 3 BRIEFING CARD (EVA, TIMELINES)</u>	<u>EVA PROCEDURE REVIEW</u> Ref. <u>EVA 3 BRIEFING CARD (EVA, TIMELINES)</u>	<u>EVA PROCEDURE REVIEW</u> Ref. <u>EVA 3 BRIEFING CARD (EVA, TIMELINES)</u>	
22:00				<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS) Perform Air Quality Report to MCC		<u>CGBA and ABRS STATUS CK (CUE CARD) CGBA only</u> <u>GLACIER STATUS CHECK (CUE CARD)</u> <u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	
					EXERCISE ARED is available	<u>TRANSFER TAGUP</u> Coordinate with transfer counterparts	
23:00						<u>TRANSFER BRIEF</u> Call down status to MCC	
				EXERCISE ARED is available	<u>TV (ILL OPS)(P/TV, CC)ILL ON - A,D</u>	<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	
					<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)		
00:00				<u>PRIVATE MEDICAL CONFERENCE</u> L9 PAYLOAD STATION A/G(two) - OFF Perform via A/G 2			
				<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)			
01:00							
04:00							

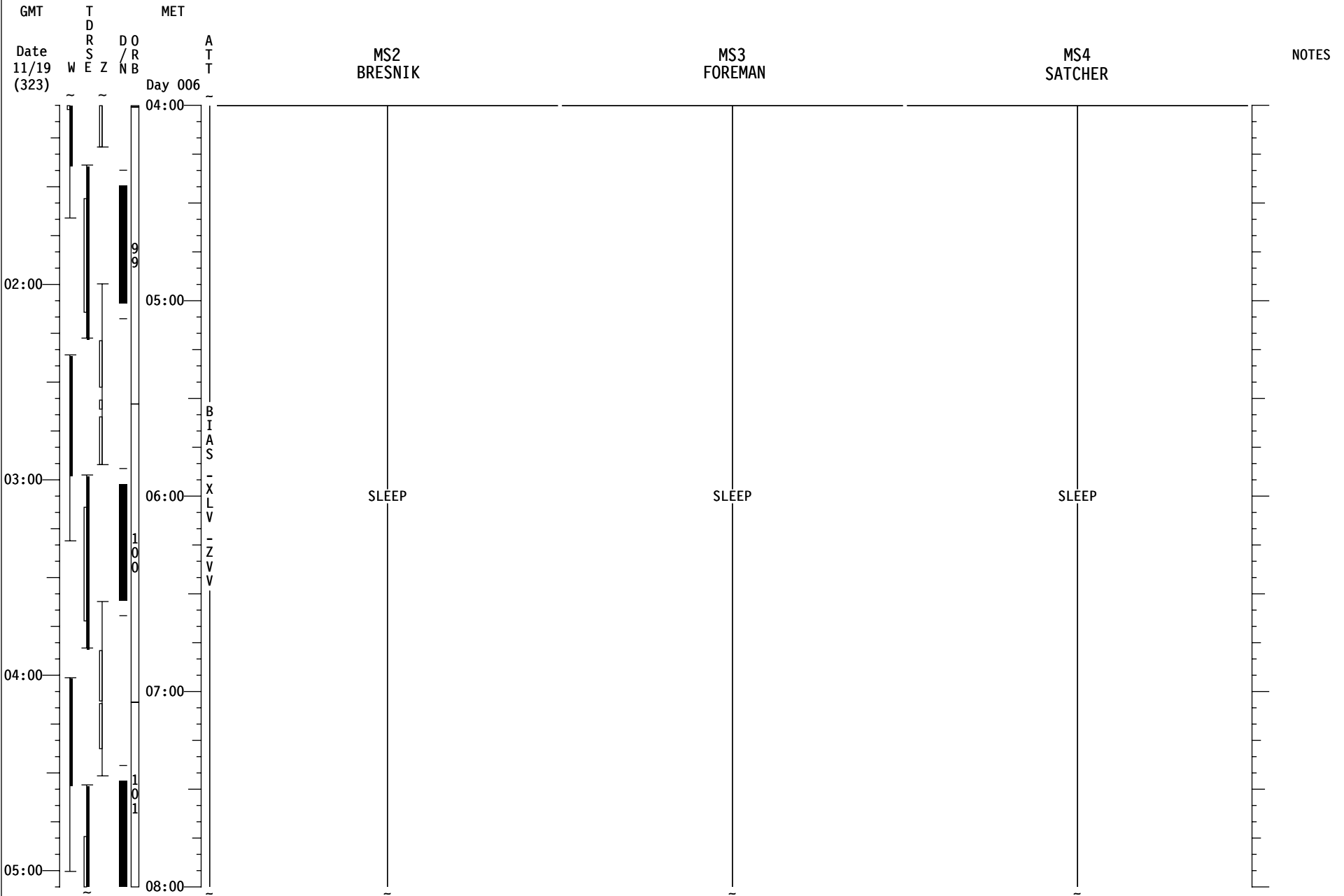
STS-129/ULF3 FD07

GMT	T D R S W E Z	MET	A T T	MS2 BRESNIK	MS3 FOREMAN	MS4 SATCHER	NOTES
Date 11/18 (322)		Day 006					
		00:00		<u>EVA PROCEDURE REVIEW</u> Ref. <u>EVA 3 BRIEFING CARD (EVA, TIMELINES)</u>	<u>EVA PROCEDURE REVIEW</u> Ref. <u>EVA 3 BRIEFING CARD (EVA, TIMELINES)</u>	<u>EVA PROCEDURE REVIEW</u> Ref. <u>EVA 3 BRIEFING CARD (EVA, TIMELINES)</u>	
		22:00		<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	<u>POST EVA CONFERENCE</u> Media format: Crew preference Discuss EVA and future impacts	<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	
		23:00			<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)		
		00:00		<u>ISS EVA SYSTEMS: 1.206 10.2 PSIA CAMPOUT</u> <u>MASK PREBREATHE</u>		<u>ISS EVA SYSTEMS: 1.206 10.2 PSIA CAMPOUT</u> <u>MASK PREBREATHE</u>	
		01:00		<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)		<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	

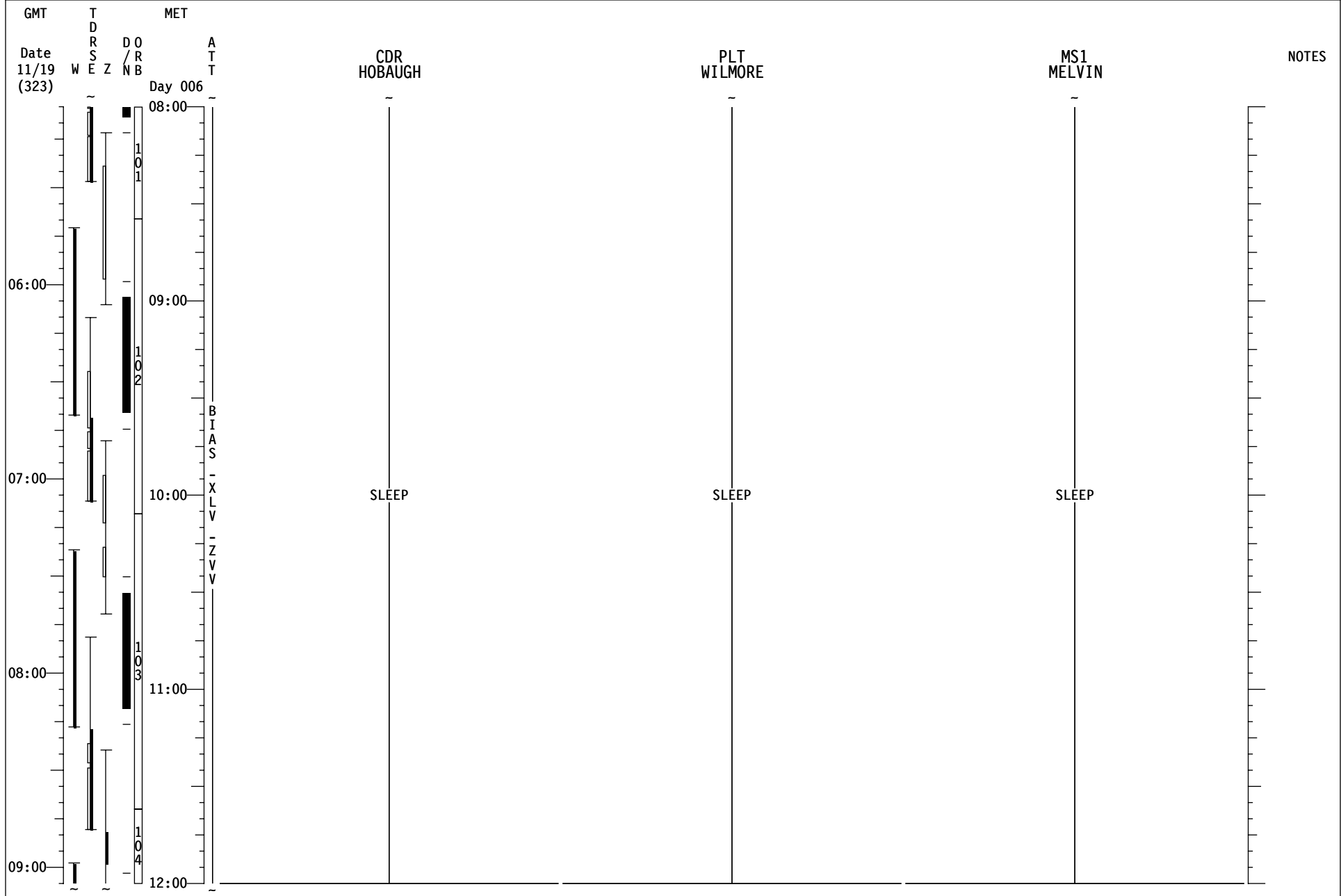
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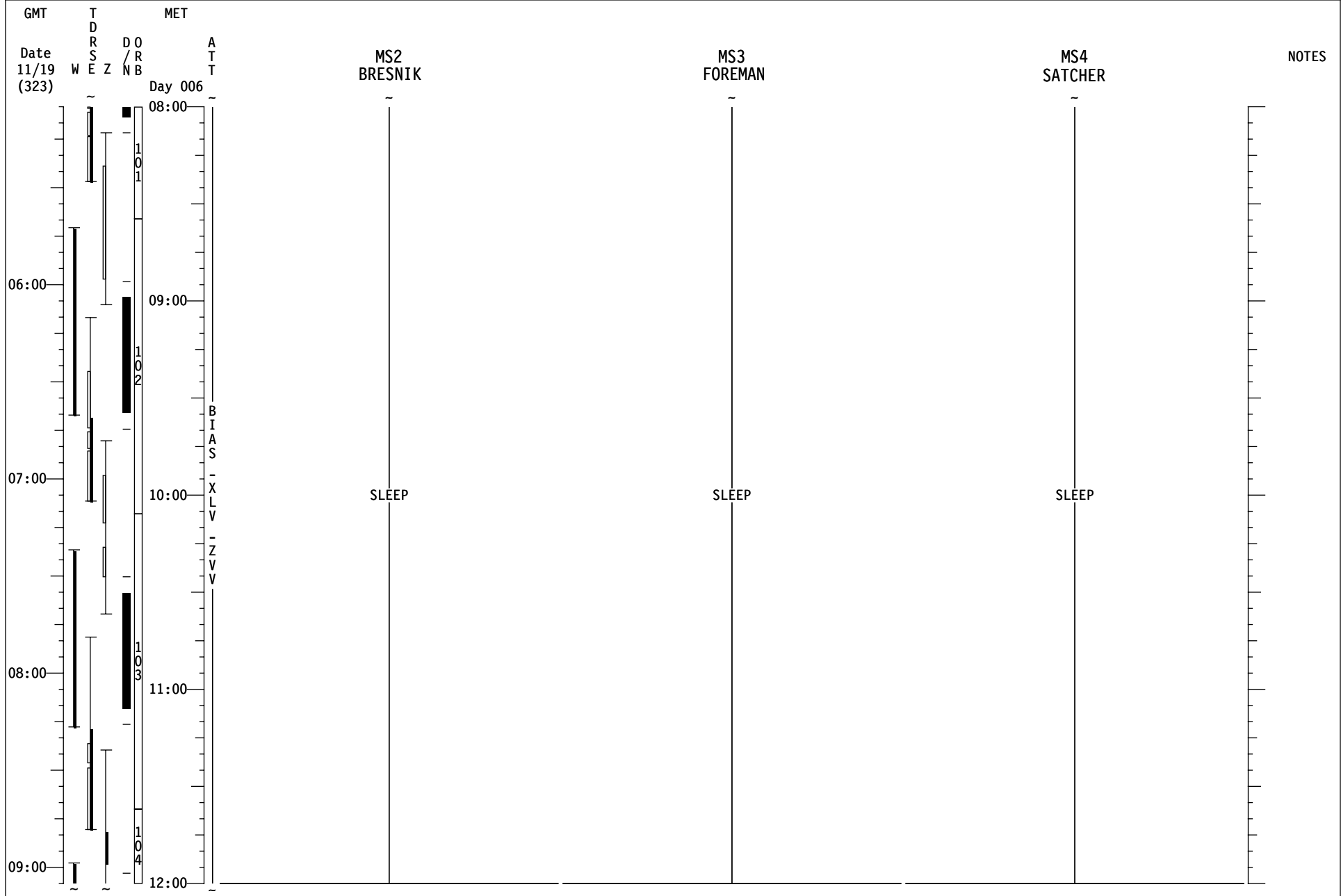
STS-129/ULF3 FD07



STS-129/ULF3 FD07



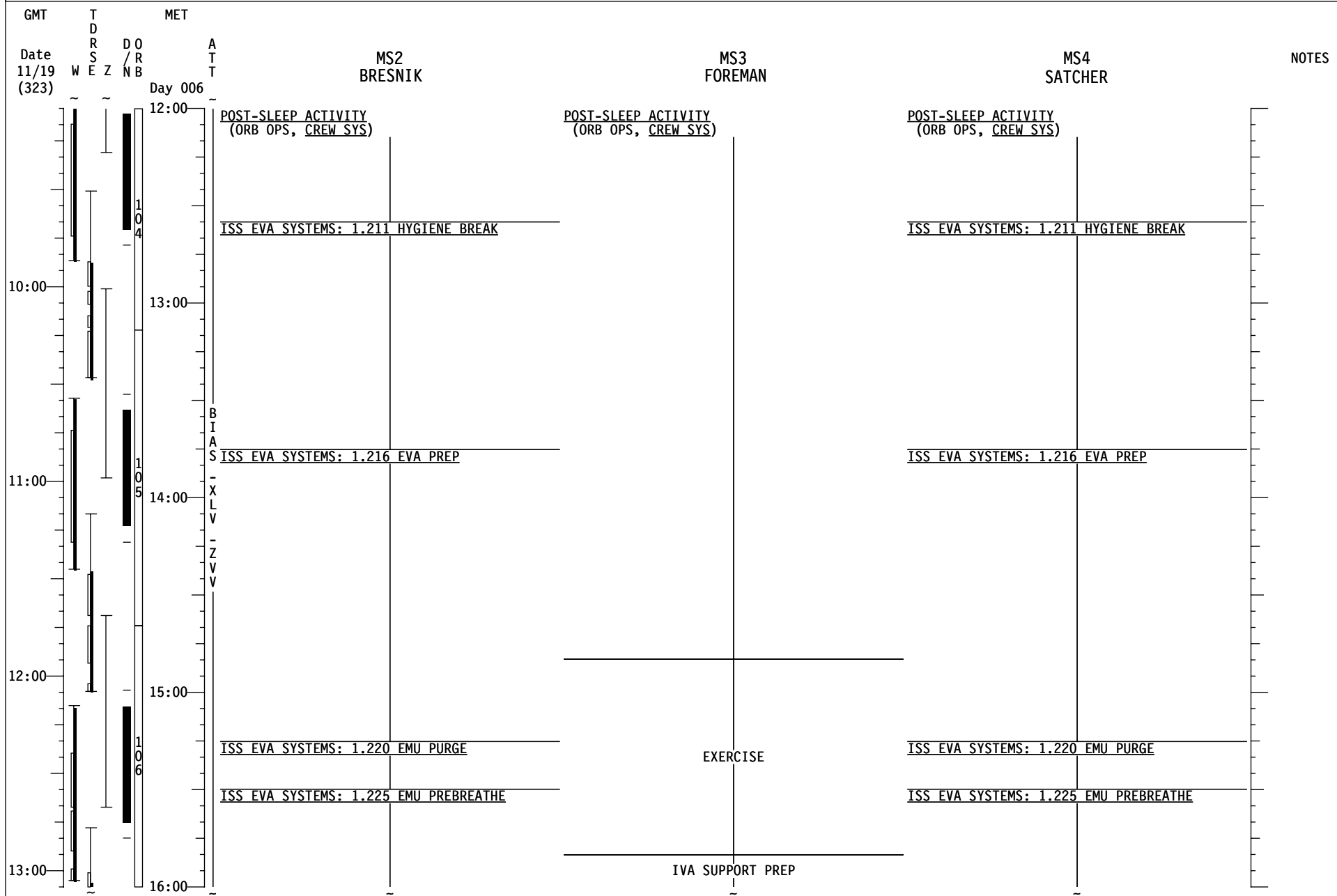
STS-129/ULF3 FD07



STS-129/ULF3 FD08

GMT	T D R S E Z	MET	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
Date 11/19 (323)	W E Z	DO R /R NB Day 006				
			<u>SLEEP LOGBOOK (SDBI 1634)</u> <u>POST-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	<u>SLEEP LOGBOOK (SDBI 1634)</u> <u>POST-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	<u>SLEEP LOGBOOK (SDBI 1634)</u> <u>POST-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	
			<u>PRIVATE MEDICAL CONFERENCE</u> L9 PAYLOAD STATION A/G(two) - OFF Perform via A/G 2			FD08 EZ ACTIVITIES: ✓OCAC FILTER & MDDK DUCT SCREEN TEPC (STATUS CHECK) (ORB OPS, CREW SYS) HARD REBOOT ALL PGSCs EXCEPT: STS-1(OCA ROUTER), STS-5 (RPOP2), AND STS-6(WLES)
			<u>POST-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)			
10:00				<u>ISS EVA SYSTEMS: 1.211</u> HYGIENE BREAK		
				<u>ISS EVA SYSTEMS: 1.216</u> EVA PREP		
11:00						
12:00			<u>L17 Check MCIU filter screen</u> <u>TV (ILLUMINATOR OPS)(P/TV, CC)ILL OFF - ALL</u> <u>IMU STAR OF OPPTY ALIGN (ORB OPS, GNC)</u> <u>EVA 3 INHIBIT PAD</u> (EVA, TIMELINES)			
			<u>WCS COMPACTOR OPS (DUAL-VANE)</u> (CUE CARD)	<u>ISS EVA SYSTEMS: 1.220</u> EMU PURGE		<u>CGBA and ABRS STATUS CK(CUE CARD) CGBA only</u> <u>GLACIER STATUS CHECK (CUE CARD)</u> <u>P/TV09 GLACIER</u> (PHOTO/TV, SCENES) Perform Video, Photos
			<u>SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS)</u> INIT FILL #10 Ref. MSG XXX	<u>ISS EVA SYSTEMS: 1.225</u> EMU PREBREATHE		<u>GLACIER SET POINT (ASSY OPS, PAYLOADS)</u>
			<u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX			<u>DAILY TRANSFER LIST UPDATE</u> Ref. Transfer List & MSG XXX
13:00						<u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX

STS-129/ULF3 FD08

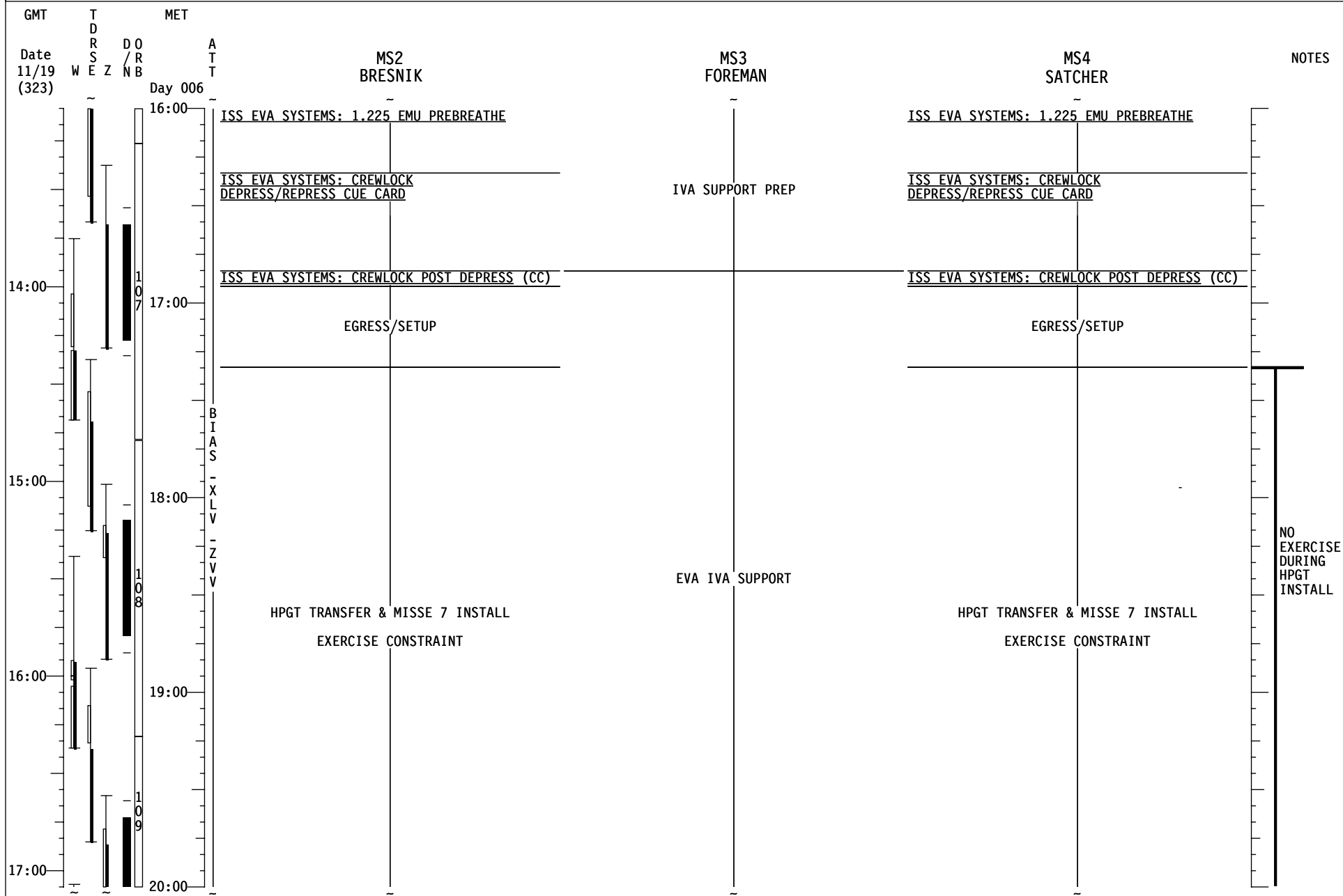


STS-129/ULF3 FD08

GMT	T D R S E Z	MET	A T T	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
Date 11/19 (323)	W E Z	Day 006					
16:00				TRANSFER OPS Ref. Transfer List & MSG XXX	ISS EVA SYSTEMS: 1.225 EMU PREBREATHE	TRANSFER OPS Ref. Transfer List & MSG XXX	
				N2 REPRESS USING PAYLOAD N2 VLVS [A] P/TV07 EVA (PHOTO/TV, SCENES) Setup	ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CUE CARD		
				SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Perform FILL TERMINATION			
14:00				P/TV07 EVA (PHOTO/TV, SCENES) Ops	ISS EVA SYSTEMS: CREWLOCK POST DEPRESS (CC)	EXERCISE	
					ROBOTICS: 1.410 EVA3- HPGT TRANSFER	ROBOTICS: 1.410 EVA3- HPGT TRANSFER	
				[A] N2 REPRESS USING PAYLOAD N2 VALVES (ORB OPS, ECLS) Perform REPRESS SETUP AND INIT Steps 1, 3-7 MCC will TMBU S/W FDA			
				[B] N2 REPRESS USING PAYLOAD N2 VALVES (ORB OPS, ECLS) Perform REPRESS TERM AND RECONFIG Steps 8-13 MCC will TMBU S/W FDA			
15:00				Z N2 REPRESS USING PAYLOAD N2 VLVS [B] V PWR FILL (ORB OPS, ECLS) Init Fill #1 Fill dur ~30 min Ref. MSG XXX			
				PWR FILL (ORB OPS, ECLS) Init Fill #2 Fill dur ~30 min Ref. MSG XXX			
16:00				PWR FILL (ORB OPS, ECLS) Init Fill #3 Fill dur ~30 min Ref. MSG XXX			
17:00				SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) INIT FILL #11 Ref. MSG XXX			

NO EXERCISE DURING HPGT INSTALL

STS-129/ULF3 FD08



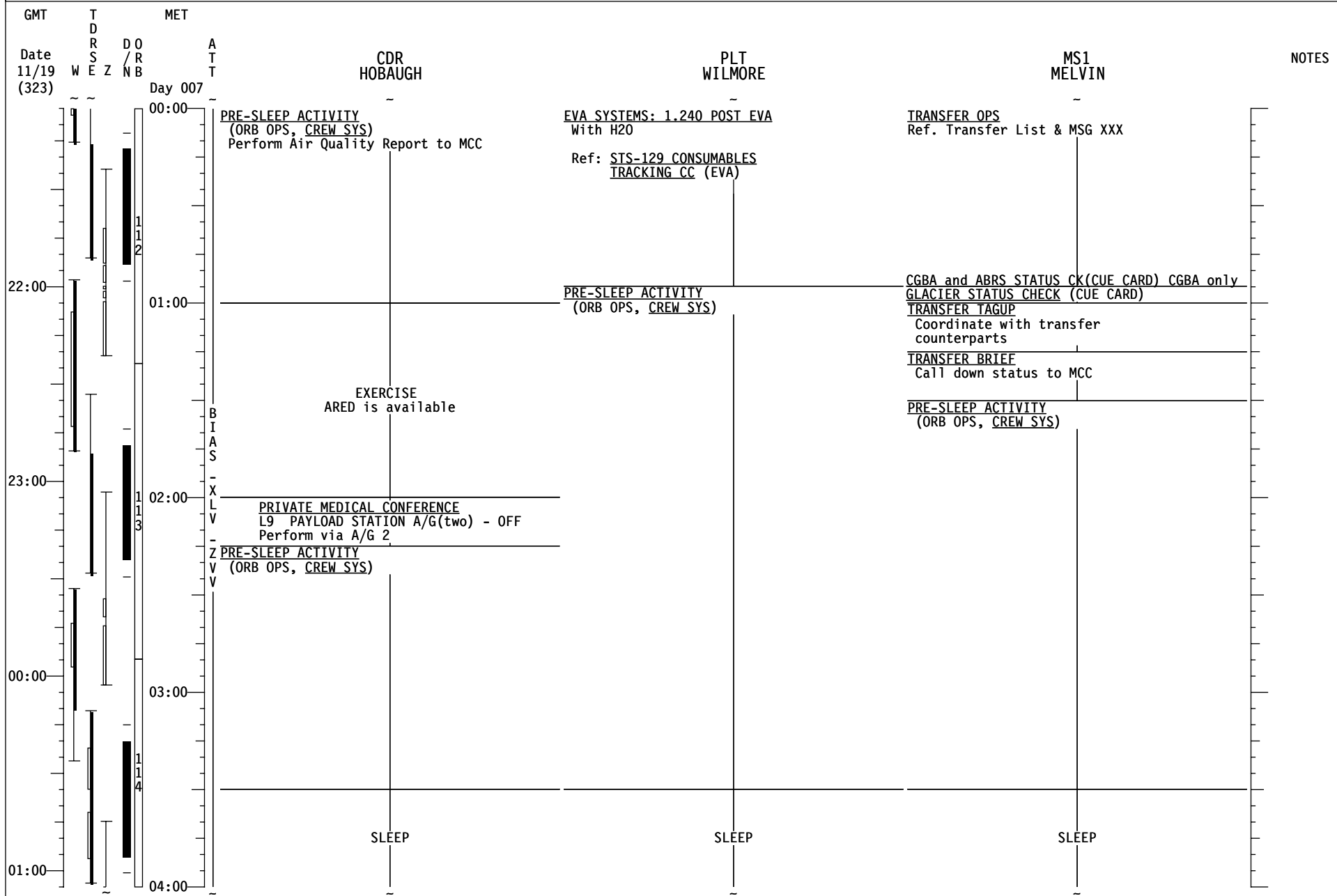
STS-129/ULF3 FD08

GMT	TDRS W E Z	MET Day 006	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
11/19 (323)			SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) INIT FILL #10 Ref. MSG XXX	ROBOTICS: 1.410 EVA3- HPGT TRANSFER	ROBOTICS: 1.410 EVA3- HPGT TRANSFER	NO EXERCISE DURING HPGT INSTALL
18:00			MEAL	MEAL	MEAL	
			SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Perform FILL TERMINATION			NO UNISOLATED EXERCISE DURING PAS DEPLOY (NO ERGOMETER, HC-1, OR VELO)
			CWC TRANSFER Transfer 2 CWCs to ISS	TRANSFER OPS Ref. Transfer List & MSG XXX	TRANSFER OPS Ref. Transfer List & MSG XXX	
19:00			P/TV08 EXTERNAL SURVEY (PHOTO/TV, SCENES) X L V Setup, Perform Step 2			
			P/TV08 EXTERNAL SURVEY (PHOTO/TV, SCENES) Z V When SETUP, Step 2 complete, V Perform OPS, Item 2			
20:00			JOINT OPS: 3.103 NITROGEN XFER TERMINATION Steps 3-5.1 Notify MCC-H when complete	EXERCISE		
			ISS EVA SYSTEMS: PRE REPRESS (CC) ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CUE CARD			
			TV (ILL OPS) (P/TV, CC) ILL ON - A,D PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS) Perform Air Quality Report to MCC	EVA SYSTEMS: 1.240 POST EVA With H2O		
21:00				Ref: STS-129 CONSUMABLES TRACKING CC (EVA)		
00:00						

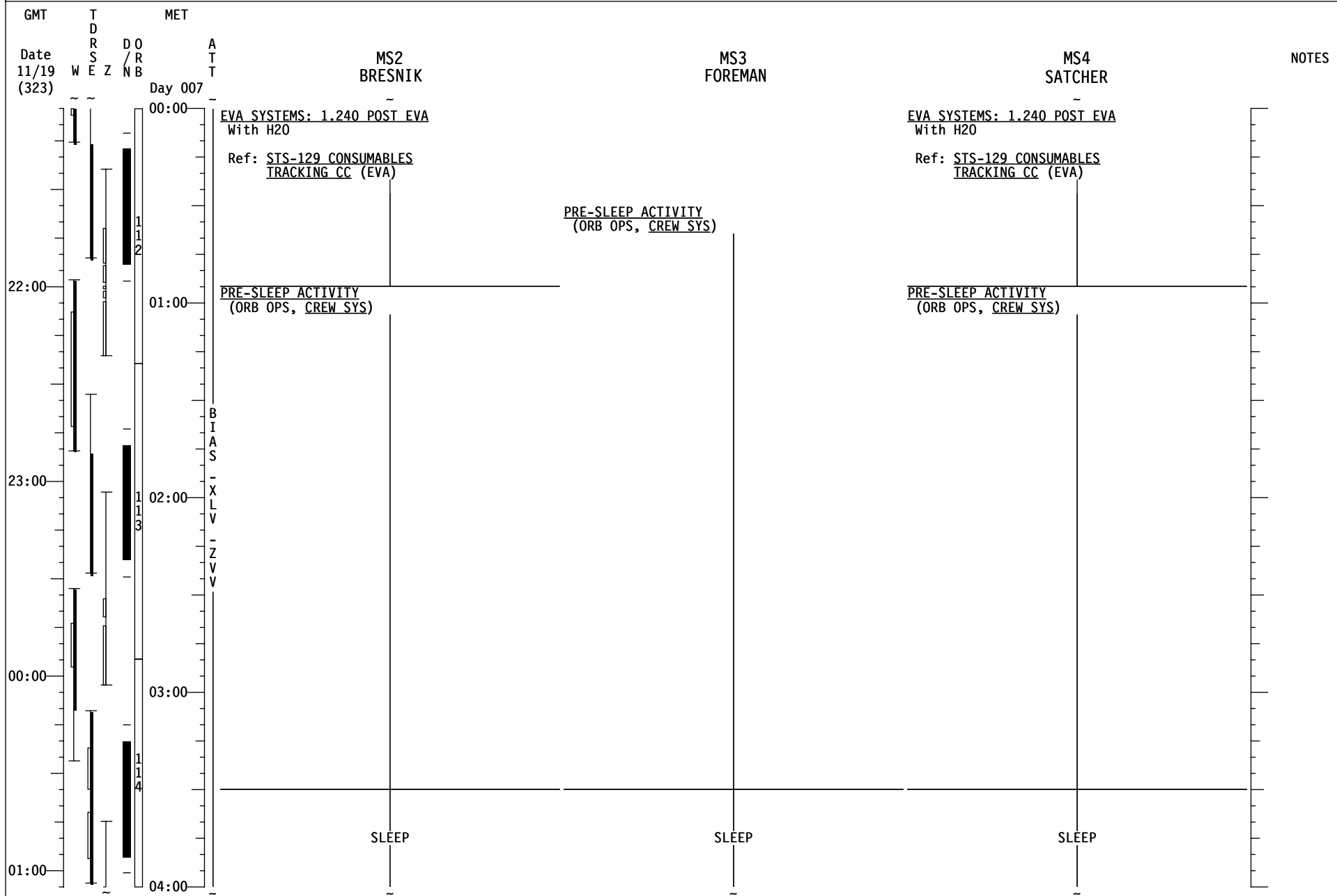
STS-129/ULF3 FD08

GMT	T D R S E Z	MET	MS2 BRESNIK	MS3 FOREMAN	MS4 SATCHER	NOTES
Date 11/19 (323)	W E Z	DO R NB Day 006				
			HPGT TRANSFER & MISSE 7 INSTALL EXERCISE CONSTRAINT		HPGT TRANSFER & MISSE 7 INSTALL EXERCISE CONSTRAINT	NO EXERCISE DURING HPGT INSTALL
18:00		21:00	S3 ZENITH/INBD PAS DEPLOY EXERCISE CONSTRAINT		S3 ZENITH/INBD PAS DEPLOY EXERCISE CONSTRAINT	NO UNISOLATED EXERCISE DURING PAS DEPLOY (NO ERGOMETER, HC-1, OR VELO)
				EVA IVA SUPPORT		
19:00		22:00	A/L MMOD SHIELDS			
			GET AHEADS		GET AHEADS	
20:00		23:00	EVA CLEANUP & INGRESS		EVA CLEANUP & INGRESS	
			<u>ISS EVA SYSTEMS: PRE REPRESS (CC)</u>		<u>ISS EVA SYSTEMS: PRE REPRESS (CC)</u>	
			<u>ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CUE CARD</u>	<u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX	<u>ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CUE CARD</u>	
			<u>EVA SYSTEMS: 1.240 POST EVA With H2O</u>		<u>EVA SYSTEMS: 1.240 POST EVA With H2O</u>	
			Ref: <u>STS-129 CONSUMABLES TRACKING CC (EVA)</u>		Ref: <u>STS-129 CONSUMABLES TRACKING CC (EVA)</u>	
21:00		00:00				

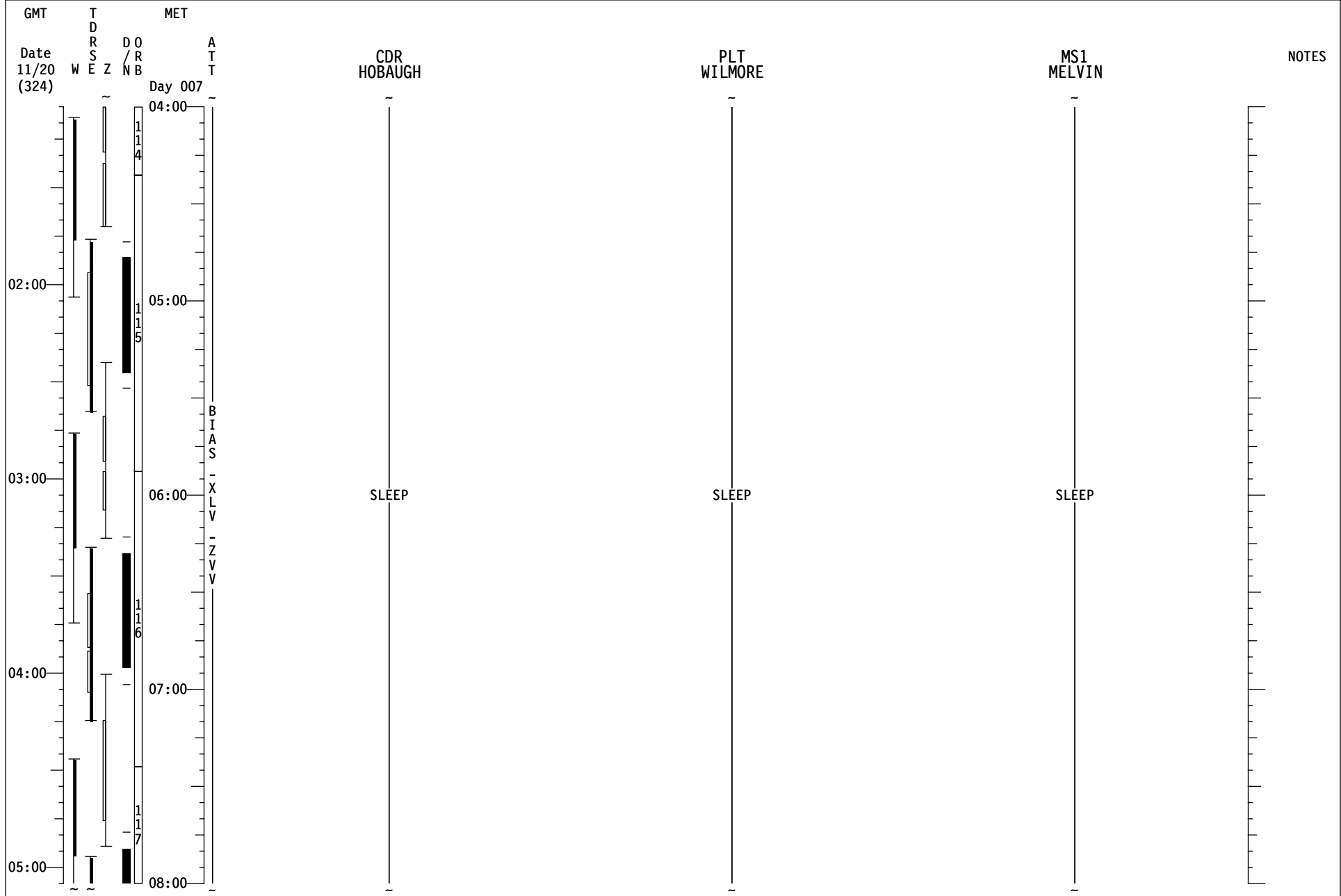
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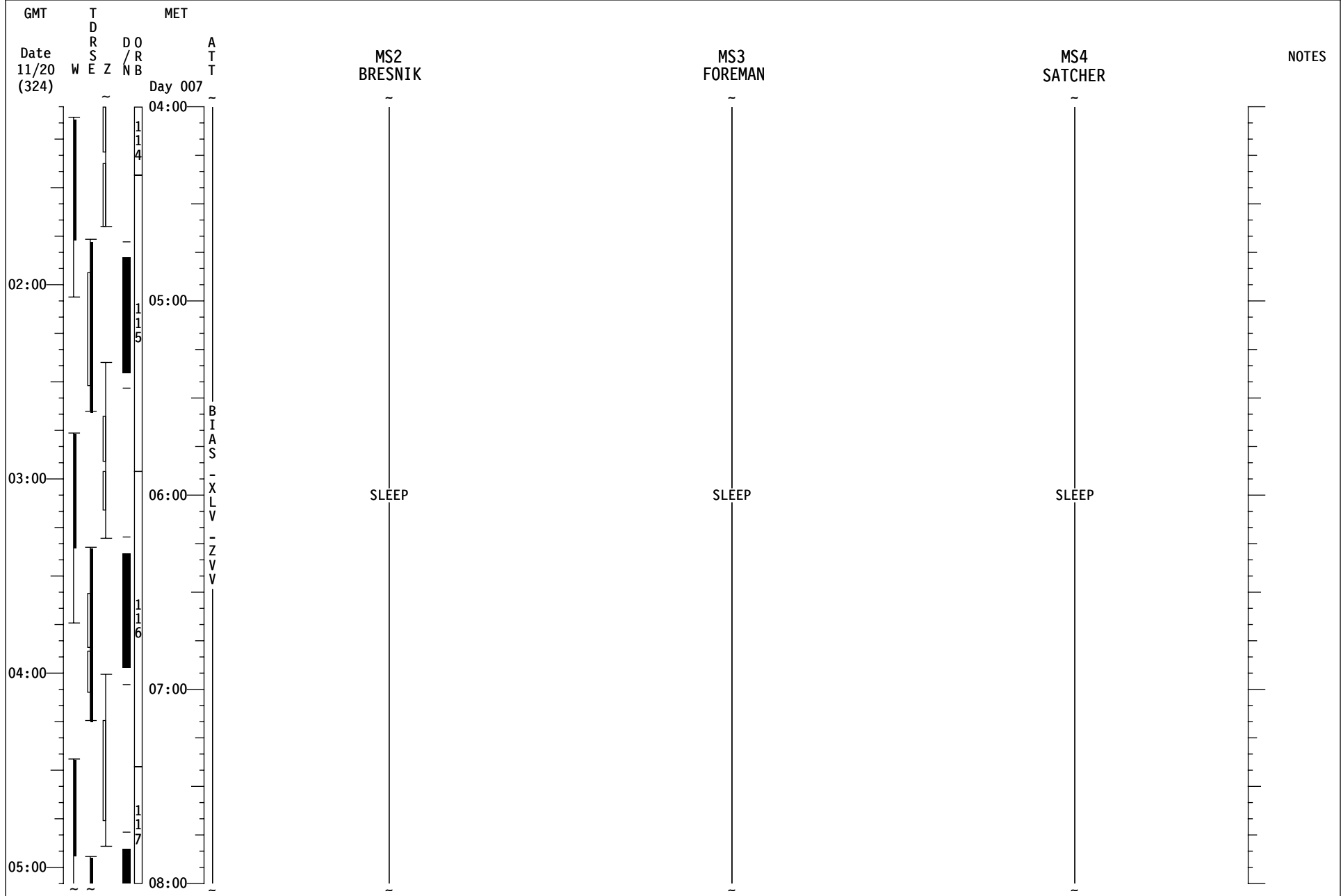
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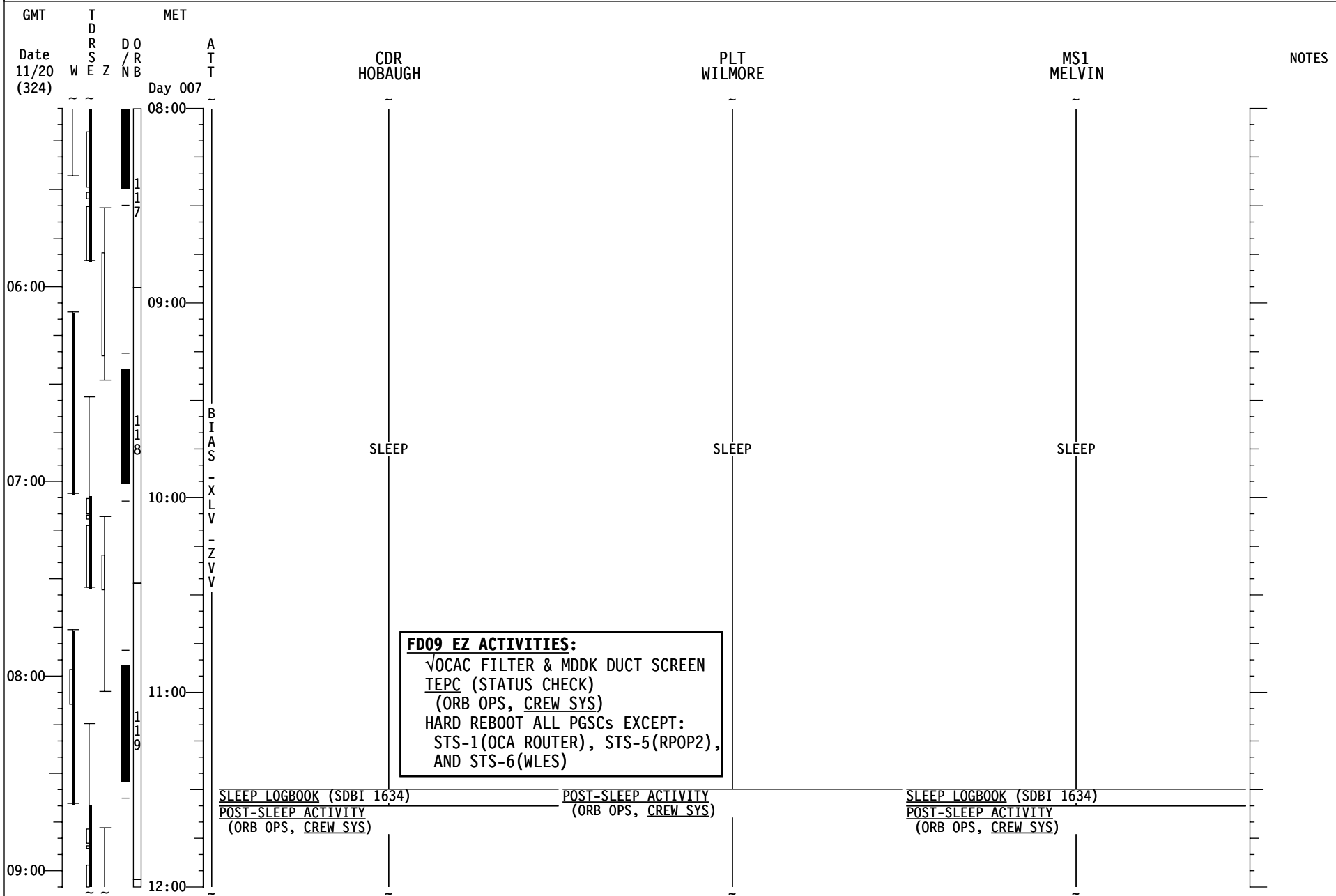
STS-129/ULF3 FD08



STS-129/ULF3 FD08



STS-129/ULF3 FD09



STS-129/ULF3 FD09

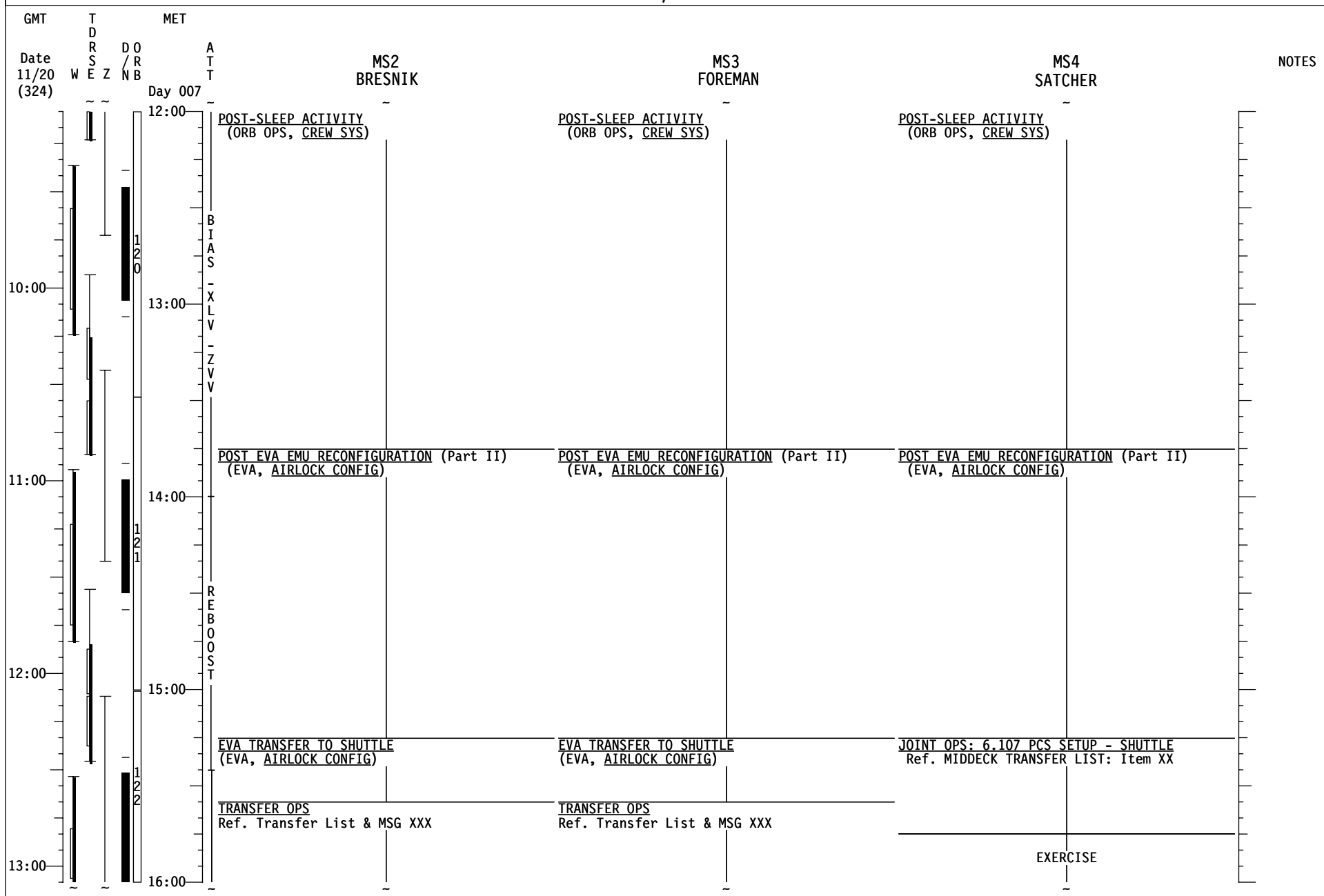
GMT	T D R S W E Z	MET D O R / N B Day 007	A T T C D R H O B A U G H	P L T W I L M O R E	M S 1 M E L V I N	N O T E S
12:00			POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
10:00						
11:00						
14:00			TV (ILLUMINATOR OPS)(P/TV, CC)ILL OFF - ALL	IMU STAR OF OPPTY ALIGN (ORB OPS, GNC)	CGBA and ABRSTATUS OK(CUE CARD) CGBA only	
			AUTO REBOOST (INIT) (ORB OPS, REBOOST/DAP) Steps 1-4, CONFIG 3	H/O ATTITUDE CONTROL CMGA TO to ORBITER/A	GLACIER STATUS CHECK (CUE CARD)	
				MNVR TO REBOOST B	DAILY TRANSFER LIST UPDATE Ref. Transfer List & MSG XXX	
				AUTO REBOOST (INIT) (ORB OPS, REBOOST/DAP) Steps 1-4, CONFIG 3	ULF-3 DESCENT SAMPLE TRANSFER FROM MELFI TO GLACIER (ASSY OPS, TRANSFER)	
				SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) INIT FILL #12 Ref. MSG XXX		
12:00			EXERCISE	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	TRANSFER OPS Ref. Transfer List & MSG XXX	
15:00						
			AUTO REBOOST (Term)(ORB OPS, REBOOST/DAP) Step 5 Only, CONFIG 3	AUTO REBOOST (Term)(ORB OPS, REBOOST/DAP) Step 5 Only, CONFIG 3		
			MNVR (TRK) BIAS -XLV -ZVV TG=2 BV=5 P=163 Y=358 OM=168 A12/AUTO/VERN Init TRK	SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Perform FILL TERMINATION		
13:00			CWC TRANSFER Transfer 1 CWCs to ISS			
16:00				When ISS is GO for deadband collapse,DAP:B13		

A When ISS is Free Drift, DAP:LVLH
When jet activity stopped for >5 sec,
DAP: FREE >2 sec, Then DAP: AUTO

B TG=2 BV=5 P=176 Y=0 OM=176
A12/AUTO/VERN Init TRK

C

STS-129/ULF3 FD09



STS-129/ULF3 FD09

GMT	TDRS W E Z	MET Day 007	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
16:00			<u>SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS)</u> INIT FILL #13 Ref. MSG XXX	When ISS is Go for att. control, DAP:FREE Then select DAP A, DAP:A12/FREE/VERN L17 Check MCIU filter screen	<u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX	
			<u>JOINT OPS: 3.122 PREBREATHE USING SHUTTLE O2 TEARDOWN</u> Steps 2-7 MCC-H will perform Step 2.4 & 5.5	<u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX		<u>MDS TRANSFER TO SHUTTLE (ASSY OPS, PAYLOADS)</u> <u>D2xs SETUP (CUE CARD)</u> Perform D2xs PROGRAM in cabin Document MDS in final installed location
17:00			<u>SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS)</u> Perform <u>FILL TERMINATION</u>			
			<u>CWC TRANSFER</u> Transfer 1 CWCs to ISS	<u>SHUTTLE CONDENSATE COLLECTION</u> (ORB OPS, ECLS) Perform <u>CHANGEOUT</u> Use CWC S/N XXX, Ref. MSG XXX	<u>TRANSFER BRIEF</u> Call down status to MCC	
18:00			CREW CONFERENCE ISS KU AVAIL: 14:33 - 15:12	CREW CONFERENCE ISS KU AVAIL: 14:33 - 15:12	CREW CONFERENCE ISS KU AVAIL: 14:33 - 15:12	
			CREW PHOTO	CREW PHOTO	CREW PHOTO	
19:00			MEAL	MEAL	MEAL	
20:00			OFF DUTY	OFF DUTY	OFF DUTY	

STS-129/ULF3 FD09

GMT	T D R S W D O R B E S Z / N B	MET Day 007	MS2 BRESNIK	MS3 FOREMAN	MS4 SATCHER	NOTES
16:00			<u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX	<u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX		
					EXERCISE	
				EXERCISE		C For step 5, a parameter of Reset does not need to be selected and just press Sel button
14:00			EXERCISE			<u>J-ROBO: 1.101 JEMRMS FINAL ACTIVATION</u> C Steps 5,6 <u>J-ROBO: 1.173 JEMRMS MNVR TO STOWED POSN AFTER EE LUBE</u>
				<u>TRANSFER TAGUP</u> Coordinate with transfer counterparts		
				<u>TRANSFER BRIEF</u> Call down status to MCC	<u>J-ROBO: 1.109 JEMRMS DEACTIVATION PREP</u>	
15:00			CREW CONFERENCE ISS KU AVAIL: 14:33 - 15:12	CREW CONFERENCE ISS KU AVAIL: 14:33 - 15:12	CREW CONFERENCE ISS KU AVAIL: 14:33 - 15:12	
			CREW PHOTO	CREW PHOTO	CREW PHOTO	
16:00			MEAL	MEAL	MEAL	
17:00			OFF DUTY	OFF DUTY	OFF DUTY	

STS-129/ULF3 FD09

GMT	TDRSZ	MET	ATT	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
Date 11/20 (324)	W E Z	Day 007					
18:00				OFF DUTY	OFF DUTY	OFF DUTY	
19:00							
							P/TV05 ISS INTERNAL OPS (PHOTO/TV, SCENES) Perform DEACTIVATION
20:00							
				FAREWELL	FAREWELL	FAREWELL	
				Z JOINT OPS: 4.102 SHUTTLE/ISS V DUCT REMOVAL & HATCH CLOSING V MCC-H can perform steps 2 & 3 on crew request	P/TV09 GLACIER (PHOTO/TV, SCENES) Perform Video, Photos	NOMINAL H2O CONFIG (ORB OPS, ECLS) FES PRI A Req'd	
				C/L CAMR INSTALL (PHOTO/TV, REF PROC) Perform step 1 only	RNDZ TOOLS CHECKOUT (RNDZ, RNDZ TOOLS)	CGBA and ABRs STATUS CK (CUE CARD) CGBA only GLACIER STATUS CHECK (CUE CARD)	
21:00							
				PCS ACTIVATION D			
				<div style="border: 1px solid black; padding: 5px;"> D 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 </div>			
					EXERCISE	EXERCISE	
21:00							
00:00							

STS-129/ULF3 FD09

GMT	T D R S E Z	MET	MS2 BRESNIK	MS3 FOREMAN	MS4 SATCHER	MS5 STOTT	NOTES
Date 11/20 (324)	W E Z	Day 007					
18:00		20:00	OFF DUTY	OFF DUTY	OFF DUTY		
		21:00					
		19:00					
19:00		22:00	FAREWELL	FAREWELL	FAREWELL	FAREWELL	
		20:00					
20:00		23:00					
		21:00					
21:00		00:00					

PODF: 2.014 ULF-3 DOUBLE COLDBAG PACK

P/TV04 INGRESS/EGRESS (PHOTO/TV, SCENES) Setup

Z JOINT OPS: 4.102 SHUTTLE/ISS DUCT REMOVAL & HATCH CLOSING
V MCC-H can perform steps 2 & 3 on crew request

P/TV03 UNDOCK (PHOTO/TV, SCENES) Setup

NLP ACTIVATION (ASSY OPS, PAYLOADS) Activate GAPS G-H (Vaccine 6) Steps 2,6,11

NLP ACTIVATION (ASSY OPS, PAYLOADS) Activate GAPS 9-16 (Cells 2)

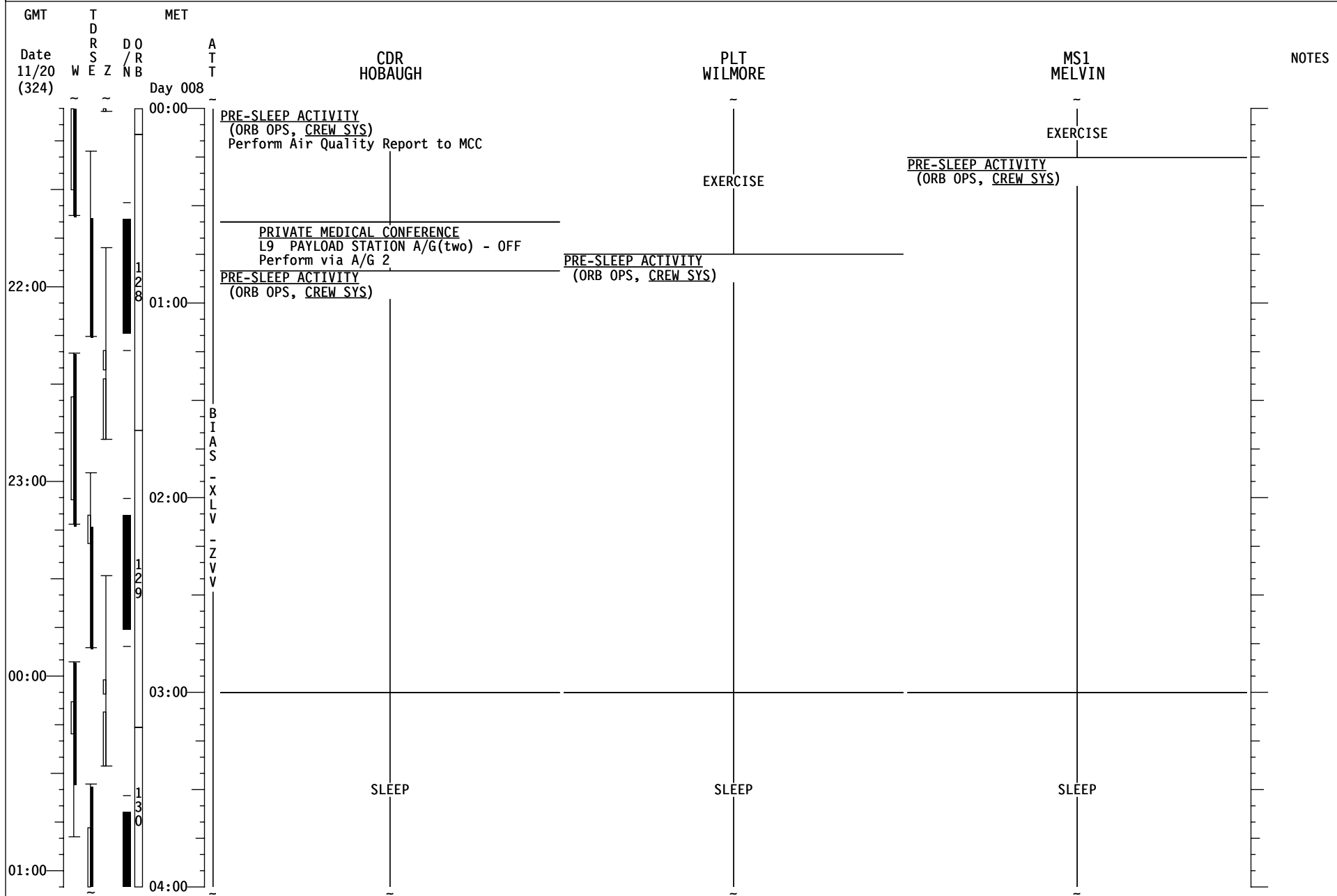
JOINT OPS: 4.104 ODS VEST/PMA DPRS & HATCH LEAK CHECK

JOINT OPS: 4.104 ODS VEST/PMA DPRS & HATCH LEAK CHECK

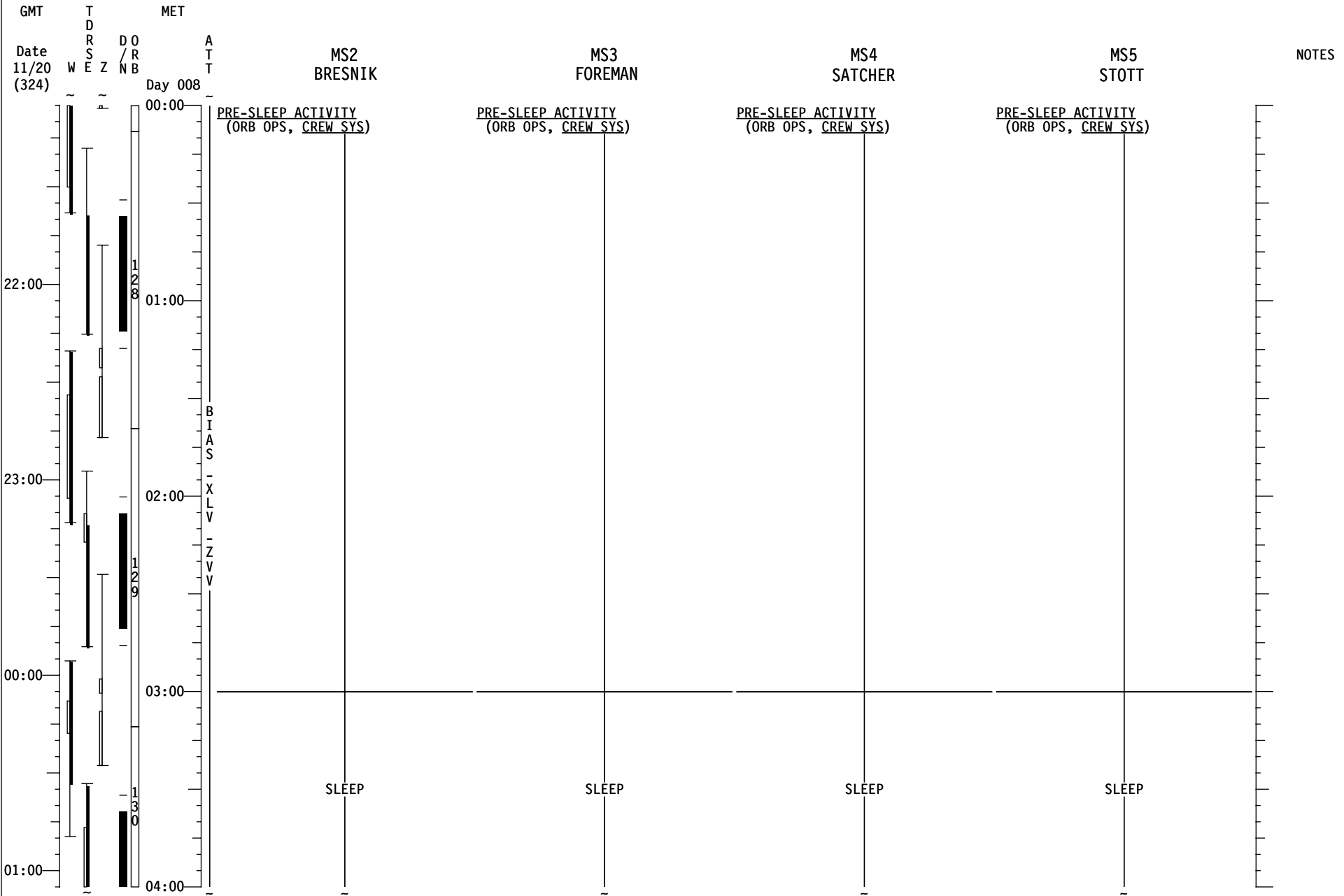
RNDZ TOOLS CHECKOUT (RNDZ, RNDZ TOOLS)

ARED

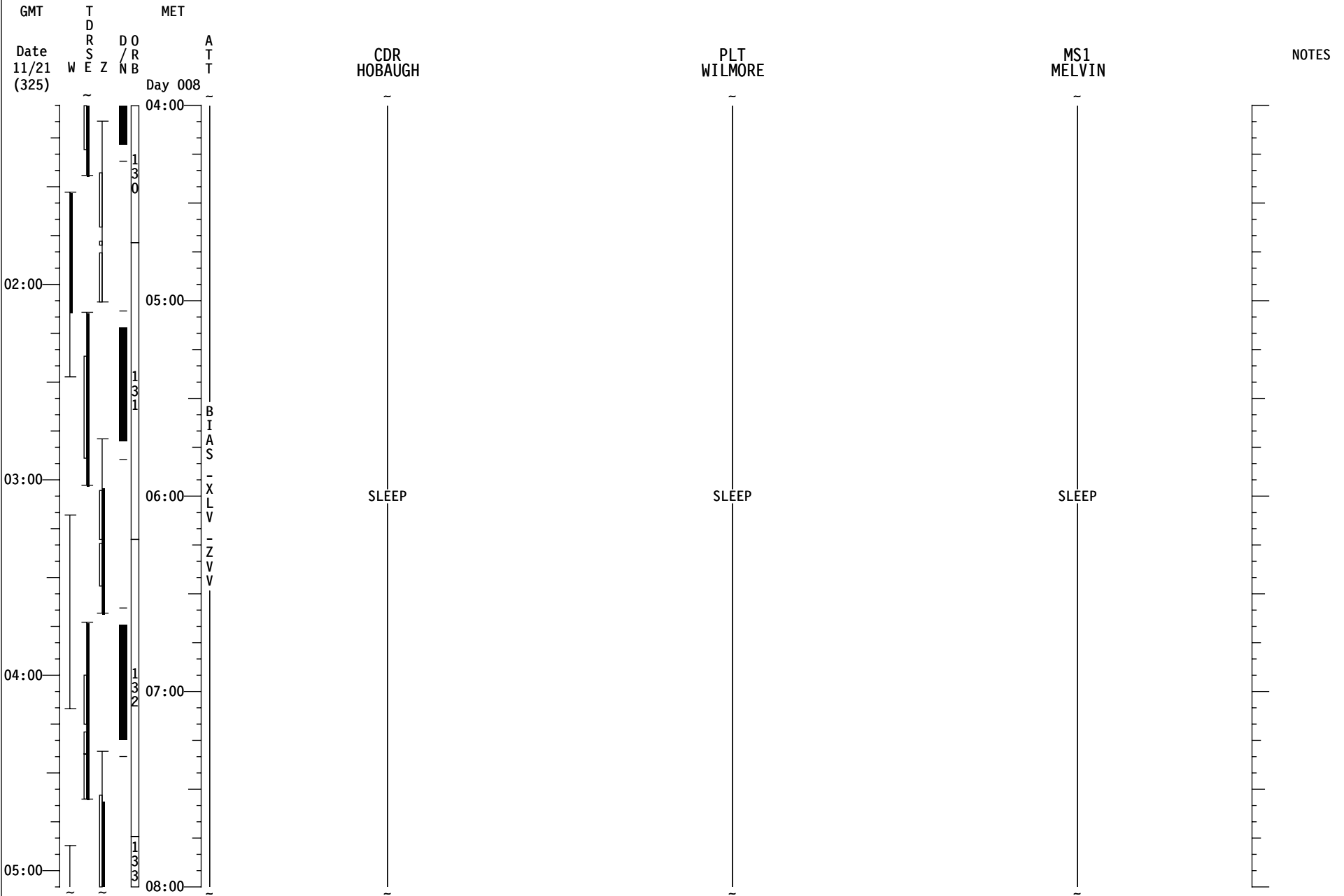
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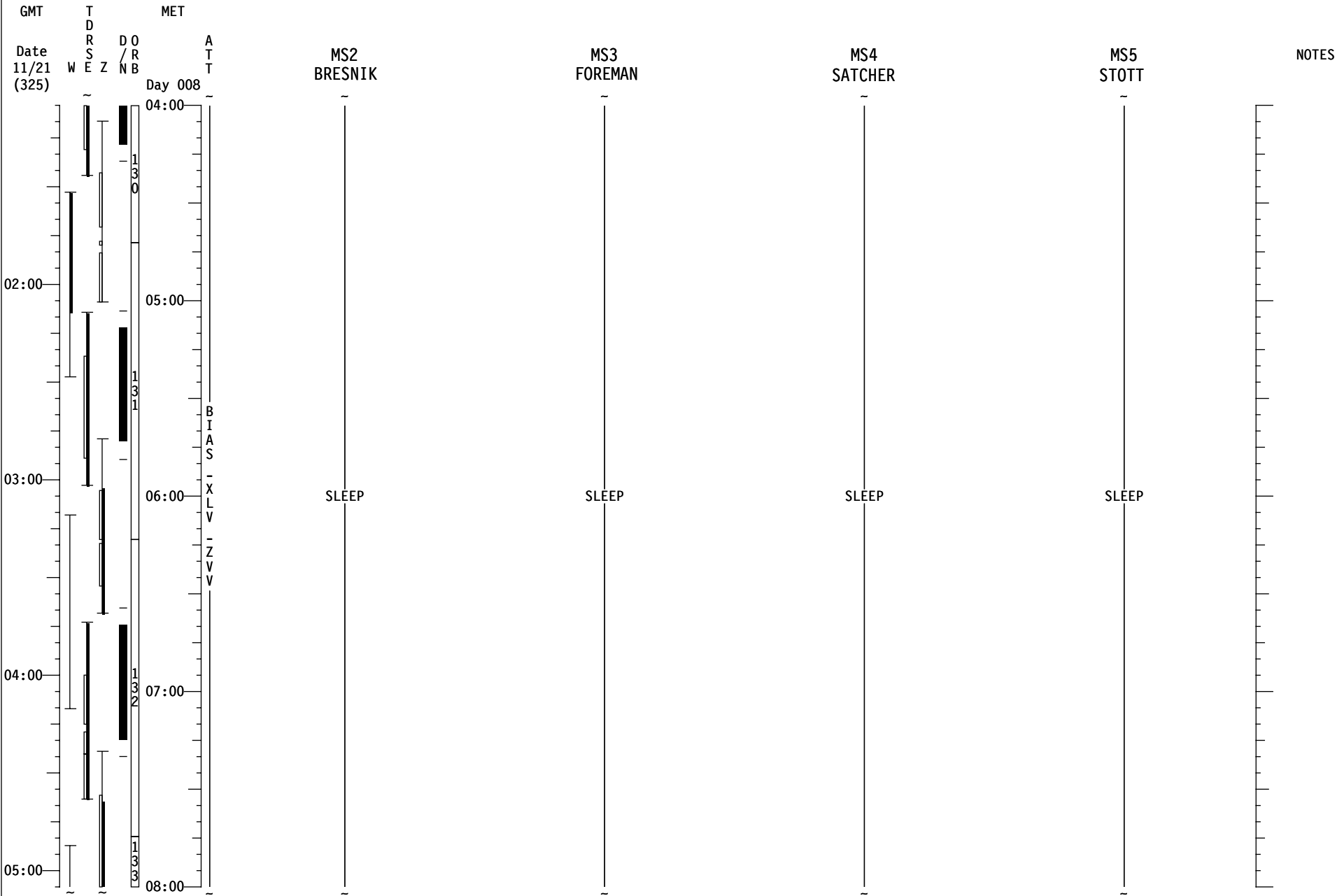
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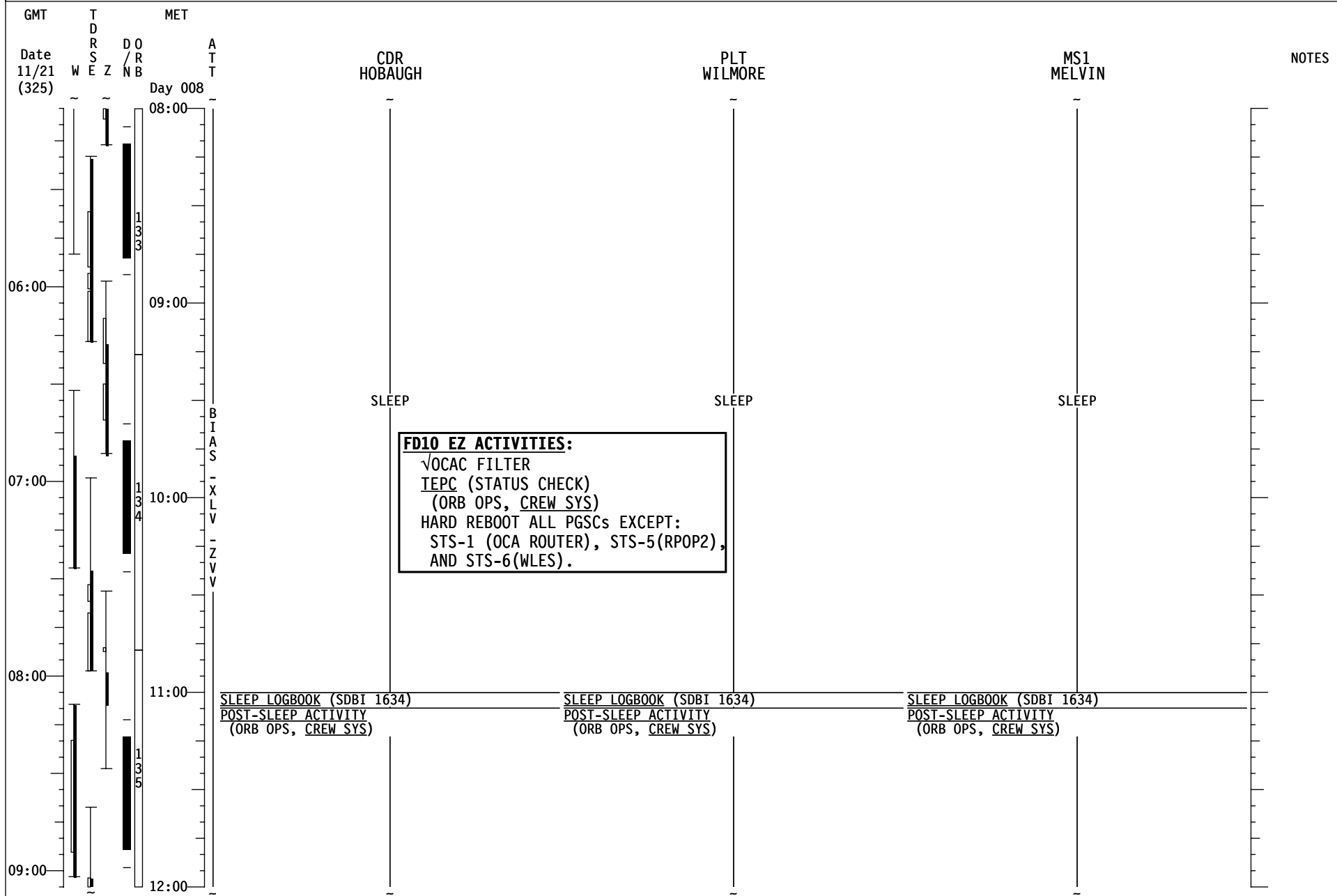
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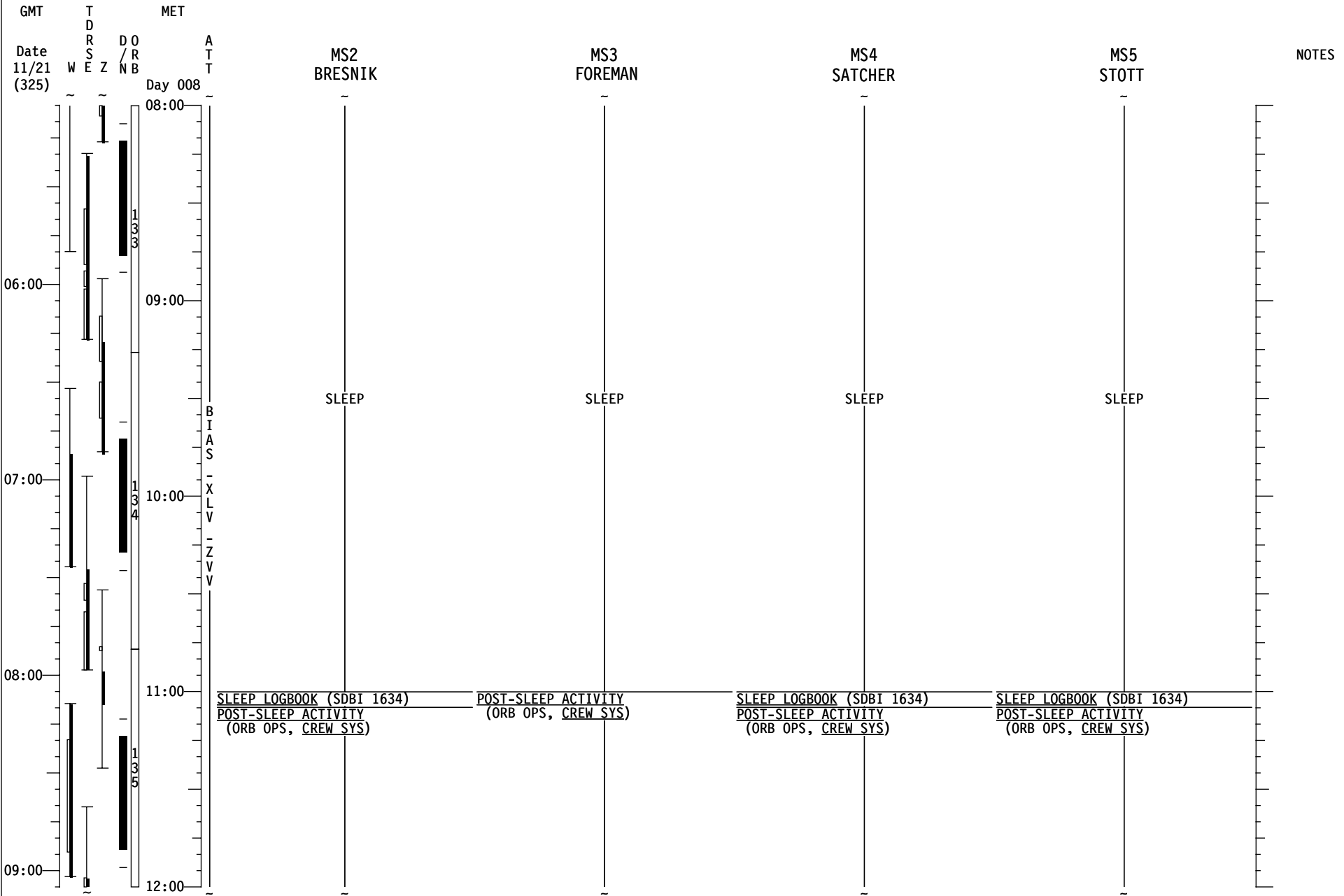
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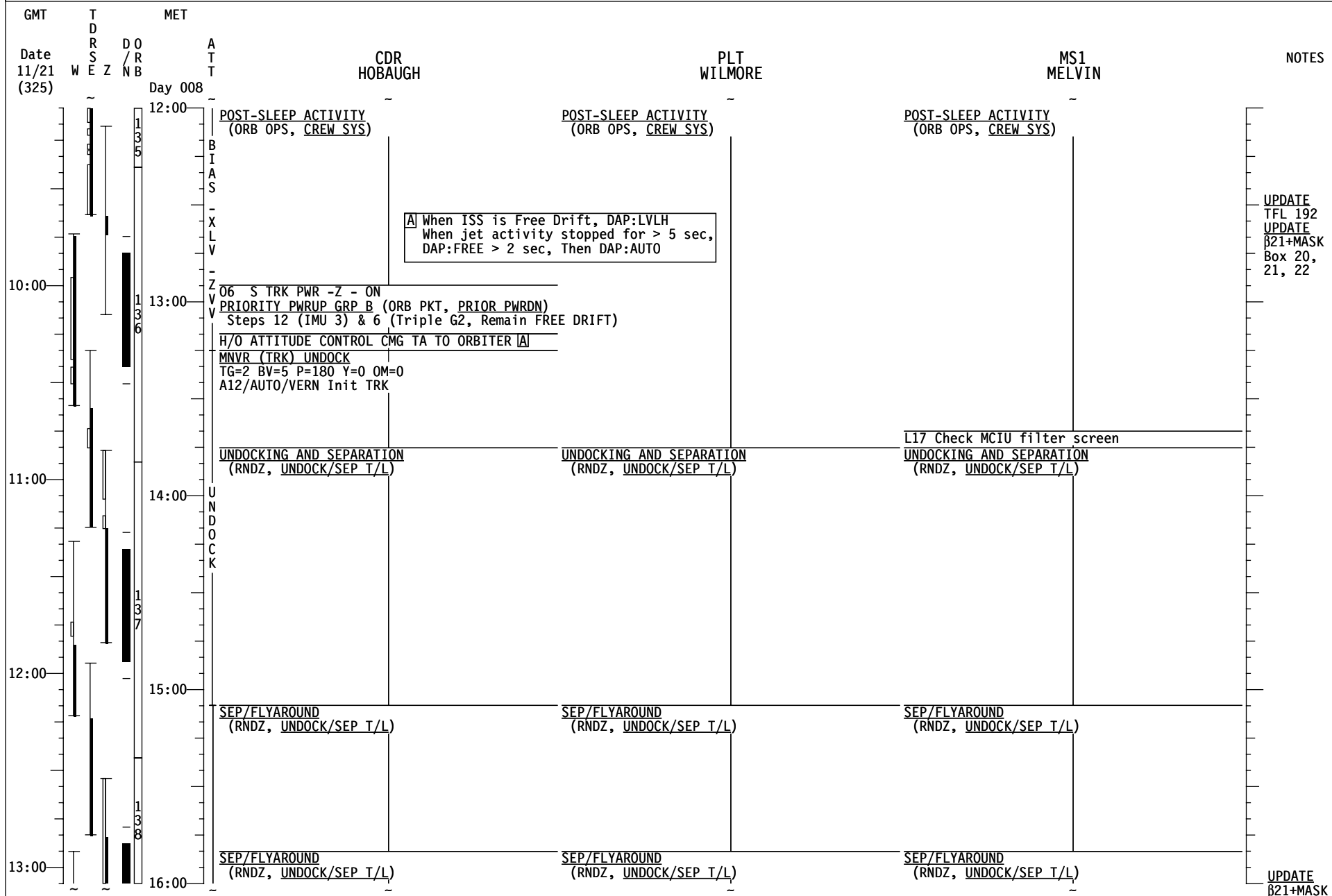
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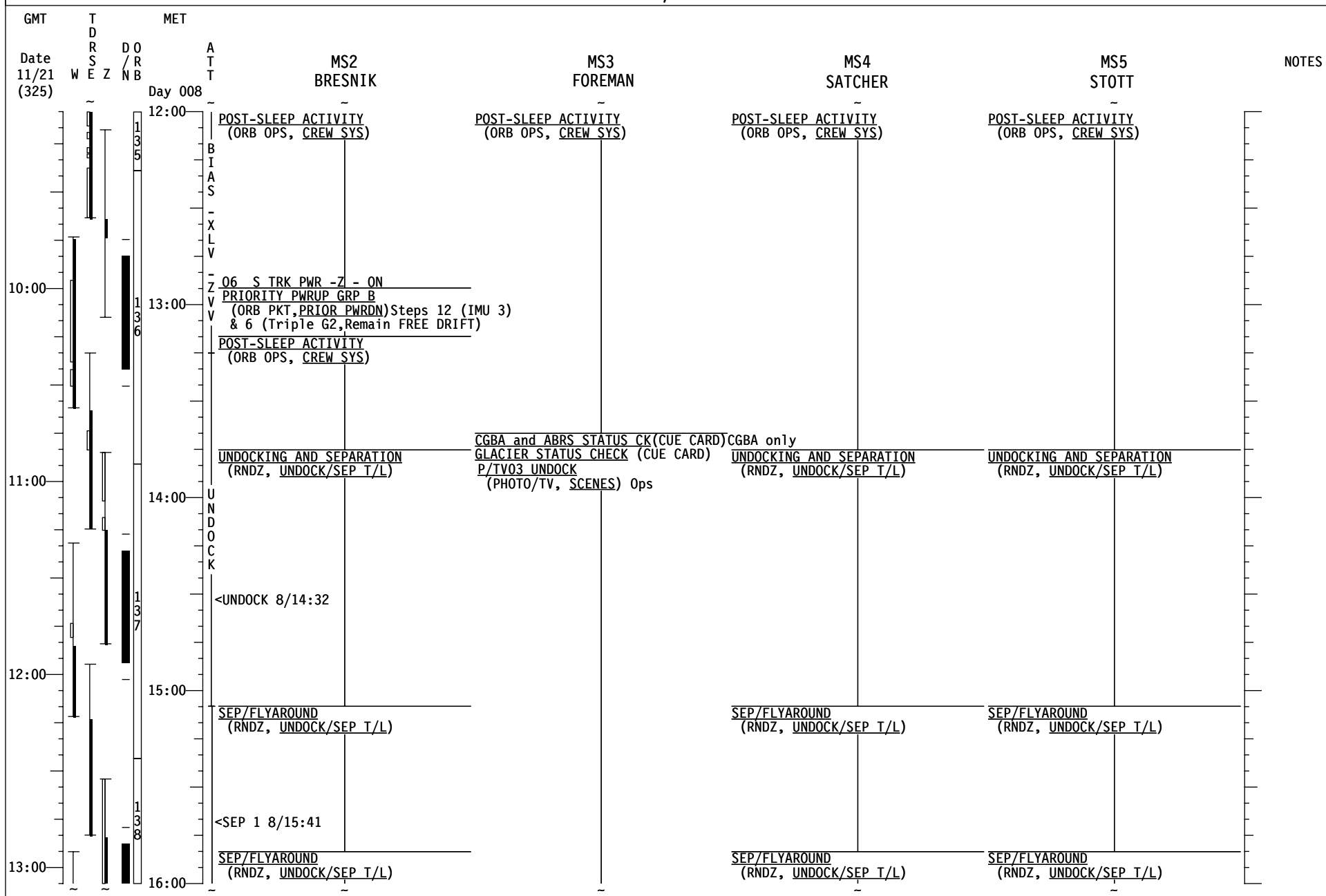
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STS-129/ULF3 FD10



STS-129/ULF3 FD10



STS-129/ULF3 FD10

GMT	T D R S E Z	MET	A T T	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
Date 11/21 (325)	W E Z	Day 008					
16:00				SEP/FLYAROUND (RNDZ, UNDOCK/SEP T/L)	SEP/FLYAROUND (RNDZ, UNDOCK/SEP T/L)	SEP/FLYAROUND (RNDZ, UNDOCK/SEP T/L)	
				<-SEP 2 8/16:15			
				MNVR (TRK) -ZLV +YVV (DUMP) TG=2 BV=3 OM=270 A1/AUTO/VERN Init TRK	HTR RECONFIG - CONFIG B (ORB OPS, EPS) SSP1 OIU PWR - OFF (v/b-bp) Expect BCE BYP PSP 1	COMM STRING 1 C/O (PART A) (ORB OPS, COMM/INST)	UPDATE TFL 188
				SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS) Initiate Waste Dump	SSV OUNRATE -4 PRIORITY PWRDN GRP B (ORB PKT, PRIOR PWRDN) Steps 5,6(Single G2),9,10 & 12 (In Step 12,IMU3-STBY)	JOINT OPS: 6.106 SSOR DEACTIVATION	UPDATE H2O WASTE DUMP QTY
14:00							
				MEAL	MEAL	MEAL	
15:00				SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS) Terminate Waste Dump	R1 PL PRI MNC - ON (tb-ON) OBSS UNBERTH (PDRS, OBSS OPS)	R1 PL PRI MNC - ON (tb-ON) OBSS UNBERTH (PDRS, OBSS OPS)	
				IMU STAR OF OPPTY ALIGN (ORB OPS, GNC)			
				SHUTTLE CONDENSATE COLLECTION (ORB OPS, ECLS) Perform TEARDOWN Ref. MSG XXX			
16:00							
				MNVR (TRK) BIAS +YSI (STBD SURVEY) TG=4 BV=5 P=0 Y=40 OM=270 A14/AUTO/VERN OBSS UNBERTH cmlpt, Init TRK	OBSS LDRI/IDC RCC SURVEY - STBD (PDRS, OBSS OPS)	OBSS LDRI/IDC RCC SURVEY - STBD (PDRS, OBSS OPS)	
				EXERCISE			
17:00							
20:00							

STS-129/ULF3 FD10

GMT	TDRS W E Z	MET D O R / R N B Day 008	A T T	MS2 BRESNIK	MS3 FOREMAN	MS4 SATCHER	MS5 STOTT	NOTES
16:00				SEP/FLYAROUND (RNDZ, UNDOCK/SEP T/L)	P/TV03 UNDOCK (PHOTO/TV, SCENES) Ops	SEP/FLYAROUND (RNDZ, UNDOCK/SEP T/L)	SEP/FLYAROUND (RNDZ, UNDOCK/SEP T/L)	
				CABIN TEMP CONTROLLER RECONFIG 2(1) (ORB OPS, ECLS)	P/TV03 UNDOCK (PHOTO/TV, SCENES) Deactivation	POST UNDOCK PGSC CONFIG Configure PGSCs per usage chart		
				PRIORITY PWRDN GRP B (ORB PKT, PRIOR PWRDN) Steps 5,6(Single G2),9,10 & 12 (In Step 12,IMU 3-STBY)	DIGITAL VIA VTR (CUE CARD, DIGITAL PLAYBACK) KU TDRW 18:00-18:32			
14:00								
				MEAL	MEAL	MEAL	MEAL	
15:00					EVA UNPACK & STOW (EVA, AIRLOCK CONFIG)	EVA UNPACK & STOW (EVA, AIRLOCK CONFIG)		
16:00				OBSS LDRI/IDC RCC SURVEY - STBD (PDRS, OBSS OPS)				
					POST ISS EVA ENT PREP (EVA, POST EVA ENT PREP)	POST ISS EVA ENT PREP (EVA, POST EVA ENT PREP)		
17:00								
20:00								

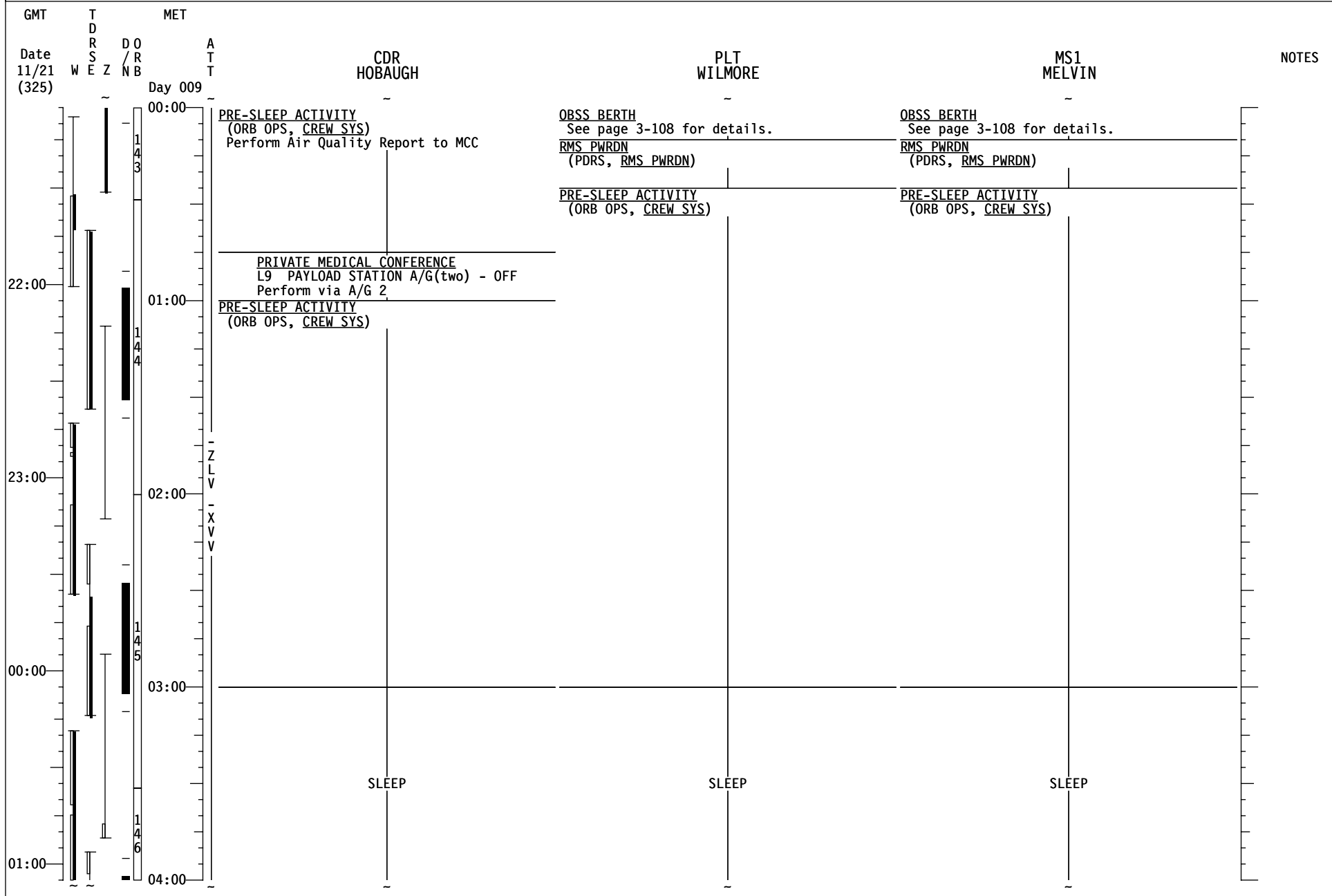
STS-129/ULF3 FD10

GMT	TDRS W E Z	MET Day 008	ATT A T T	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
18:00			BIAS	EXERCISE	OBSS LDRI/IDC RCC SURVEY - STBD (PDRS, OBSS OPS)	OBSS LDRI/IDC RCC SURVEY - STBD (PDRS, OBSS OPS)	
			BIAS	MNVR (TRK) BIAS +XSI (NOSE CAP) TG=4 BV=5 P=330 Y=0 OM=330 A14/AUTO/VERN RCC SURVEY-STBD cmlt, Init TRK	OBSS LDRI/IDC RCC SURVEY - NOSE CAP (PDRS, OBSS OPS)	OBSS LDRI/IDC RCC SURVEY - NOSE CAP (PDRS, OBSS OPS)	
19:00			BIAS	MNVR (TRK) BIAS -YSI (PORT SURVEY) TG=4 BV=5 P=0 Y=323 OM=165 A14/AUTO/VERN, RCC SURVEY-PORT Step 3 cmlt, Init TRK	OBSS LDRI/IDC RCC SURVEY - PORT (PDRS, OBSS OPS)	OBSS LDRI/IDC RCC SURVEY - PORT (PDRS, OBSS OPS)	
20:00			YSI				
21:00			ZLV	MNVR (TRK) -ZLV -XVV TG=2 BV=3 OM=0 A14/AUTO/VERN, RCC SURVEY-PORT Step 12 cmlt, Init TRK	OBSS BERTH (PDRS, OBSS OPS) When OBSS BERTH complete; R1 PL PRI MNC - OFF (tb-OFF) <u>Note:</u> Expect 'S200 APCU 1(2) TRIP' msgs	OBSS BERTH (PDRS, OBSS OPS) When OBSS BERTH complete; R1 PL PRI MNC - OFF (tb-OFF) <u>Note:</u> Expect 'S200 APCU 1(2) TRIP' msgs	
21:00			XV	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS) Perform Air Quality Report to MCC			

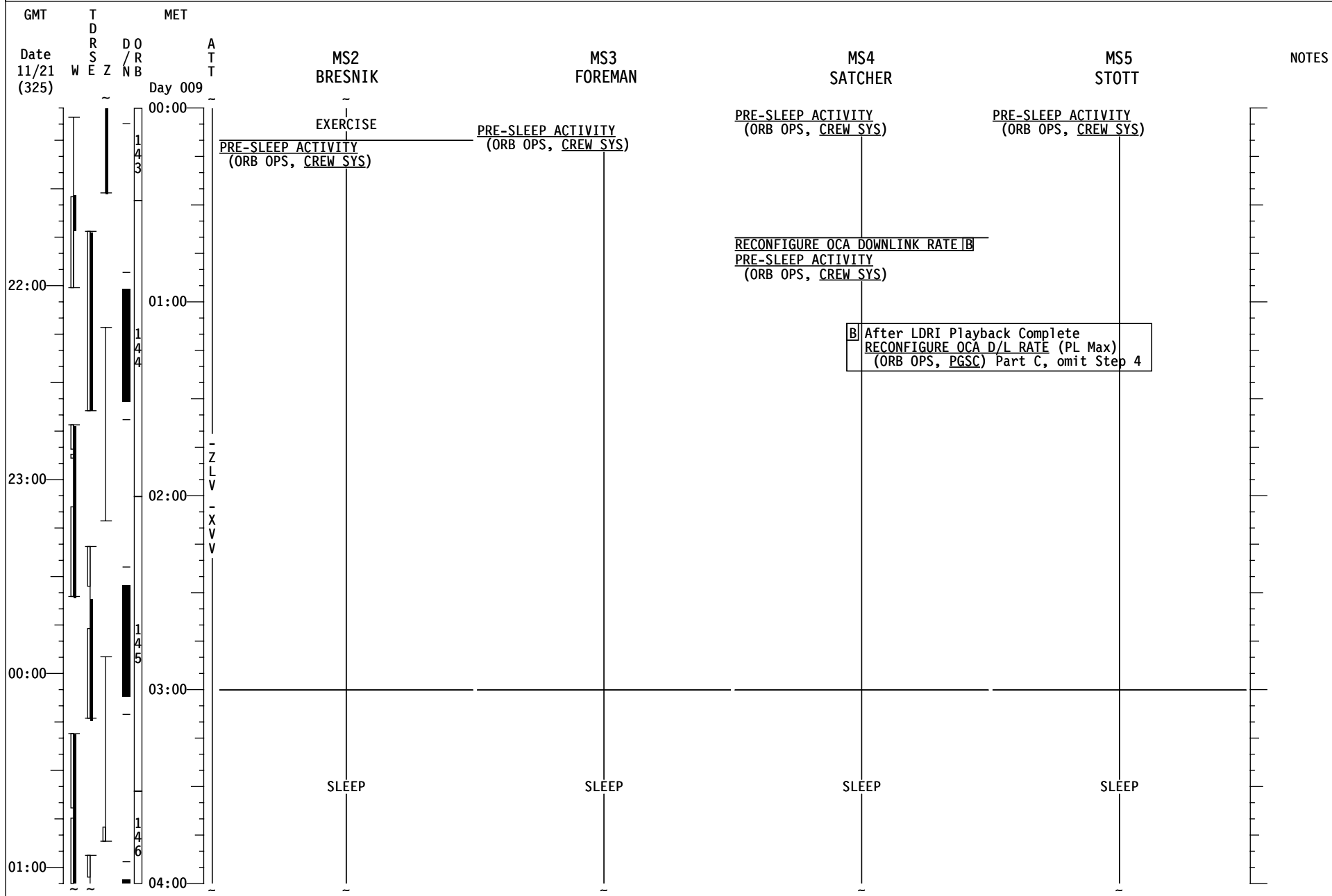
STS-129/ULF3 FD10

GMT	TDRS W E Z	MET Day 008	A T T	MS2 BRESNIK	MS3 FOREMAN	MS4 SATCHER	MS5 STOTT	NOTES
11/21 (325)								
18:00			B I A S S + X S I	OBSS LDRI/IDC RCC SURVEY - STBD (PDRS, OBSS OPS)	POST ISS EVA ENT PREP (EVA, POST EVA ENT PREP)	POST ISS EVA ENT PREP (EVA, POST EVA ENT PREP)		
				OBSS LDRI/IDC RCC SURVEY - NOSE CAP (PDRS, OBSS OPS)			EXERCISE	
19:00			B I A S S - Y S I	OBSS LDRI/IDC RCC SURVEY - PORT (PDRS, OBSS OPS)		EXERCISE		
20:00					EXERCISE			
21:00			Z L V X V V	EXERCISE		DIGITAL VIA VTR (CUE CARD, DIGITAL PLAYBACK) LDRI SURVEYS KU TDRE 22:24-23:19		
00:00					CGBA & ABRIS STS CK (CUE CARD) CGBA only GLACIER STATUS CHECK (CUE CARD)		MDS STATUS CHECK (ASSY OPS, PAYLOADS)	

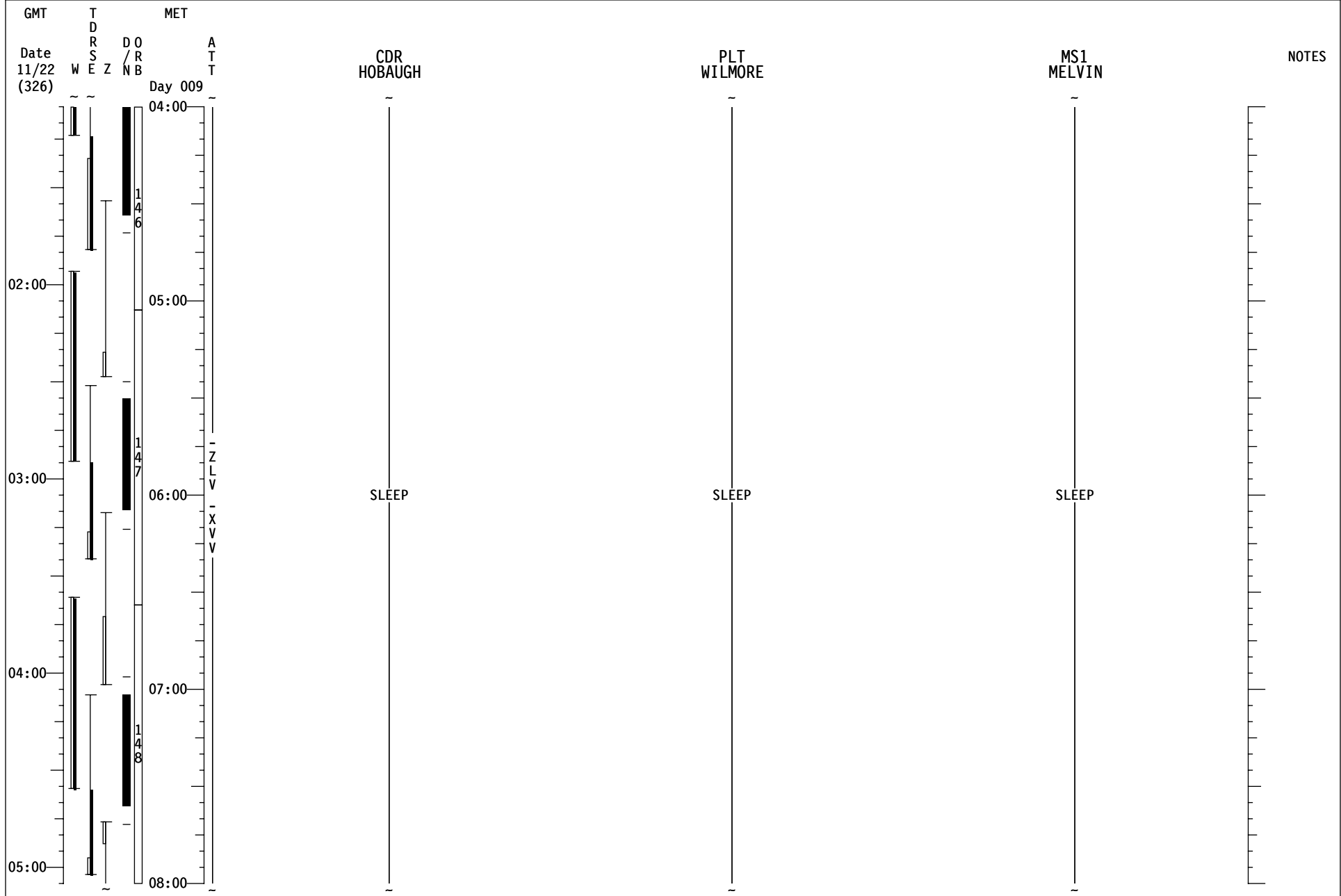
STS-129/ULF3 FD10



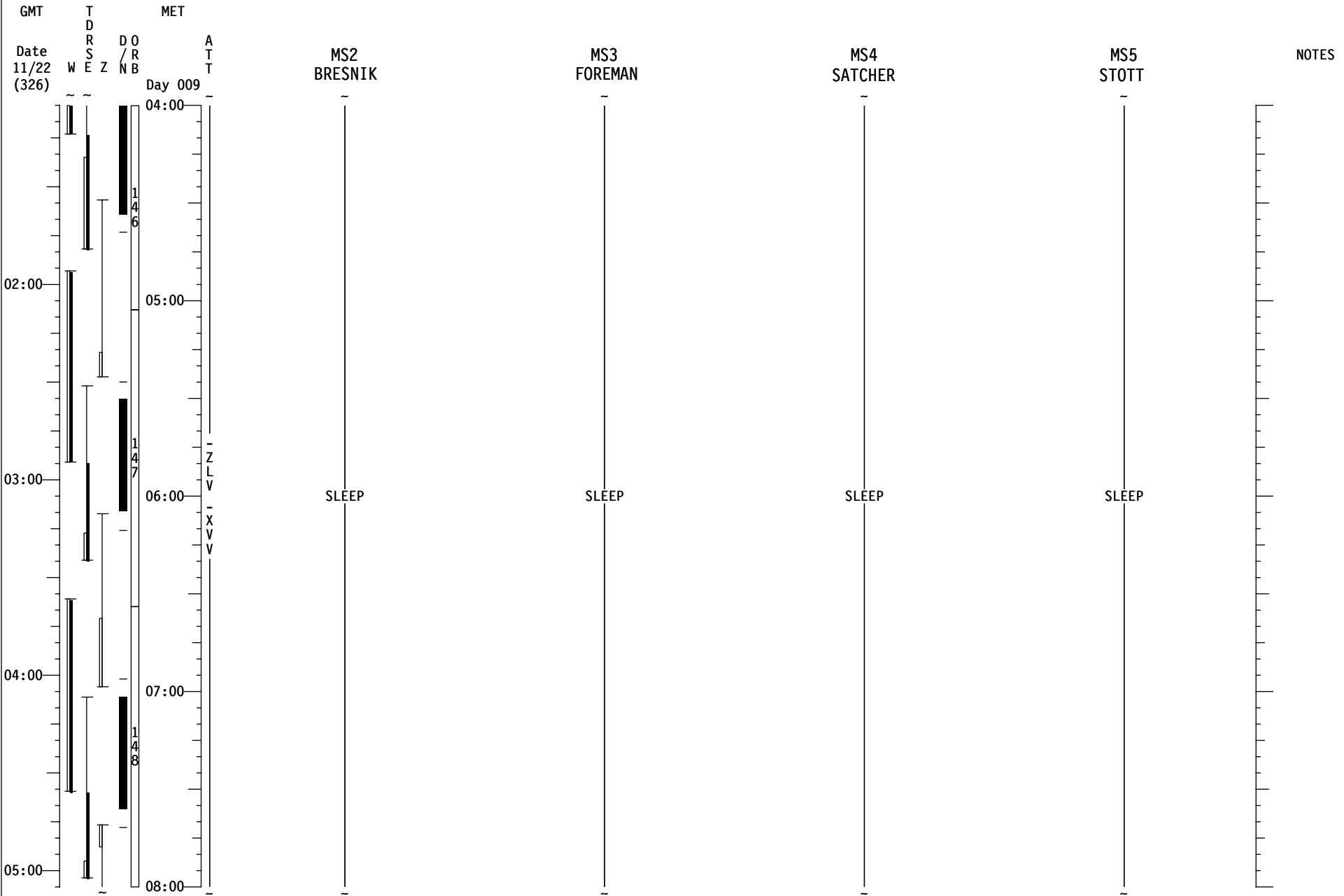
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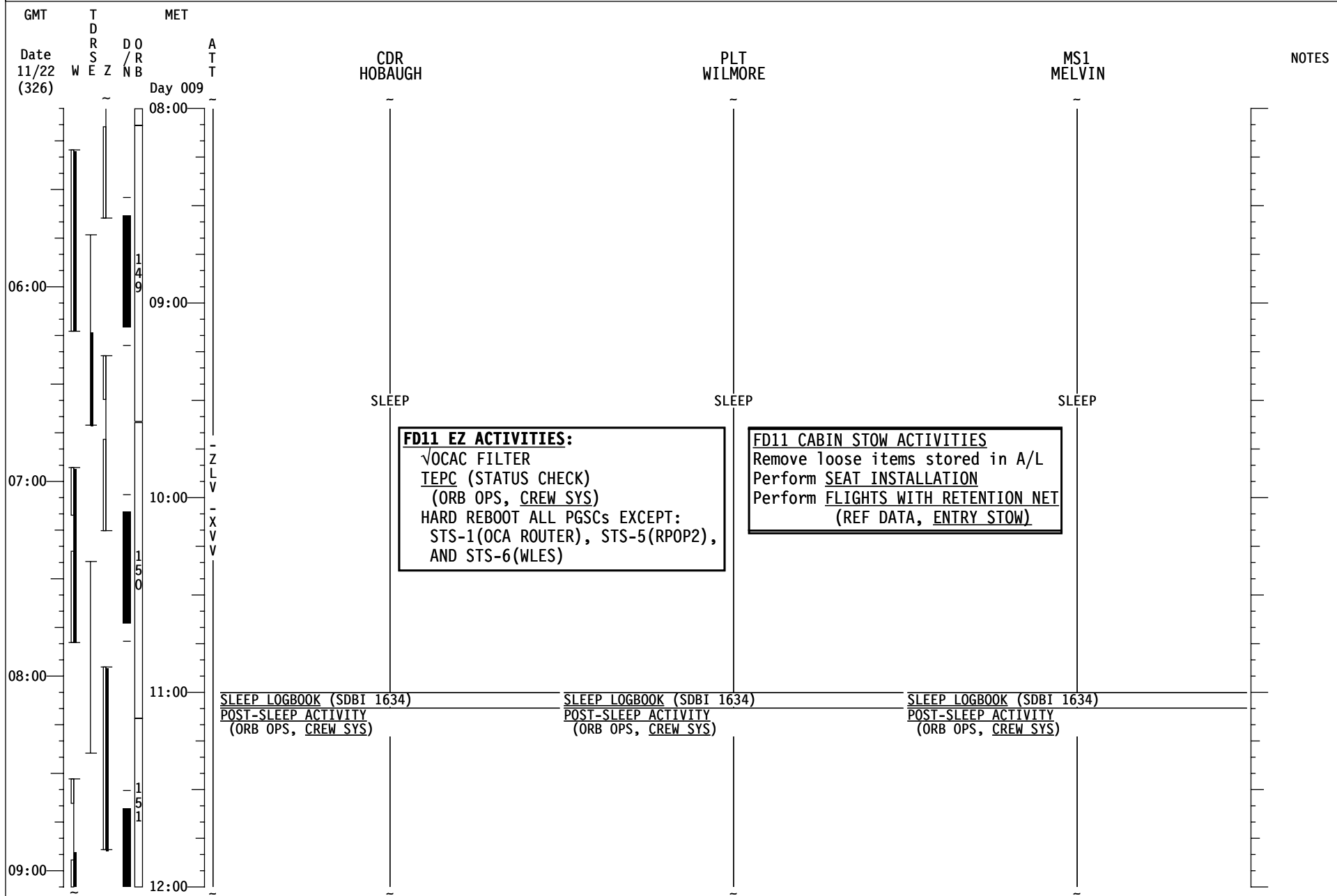
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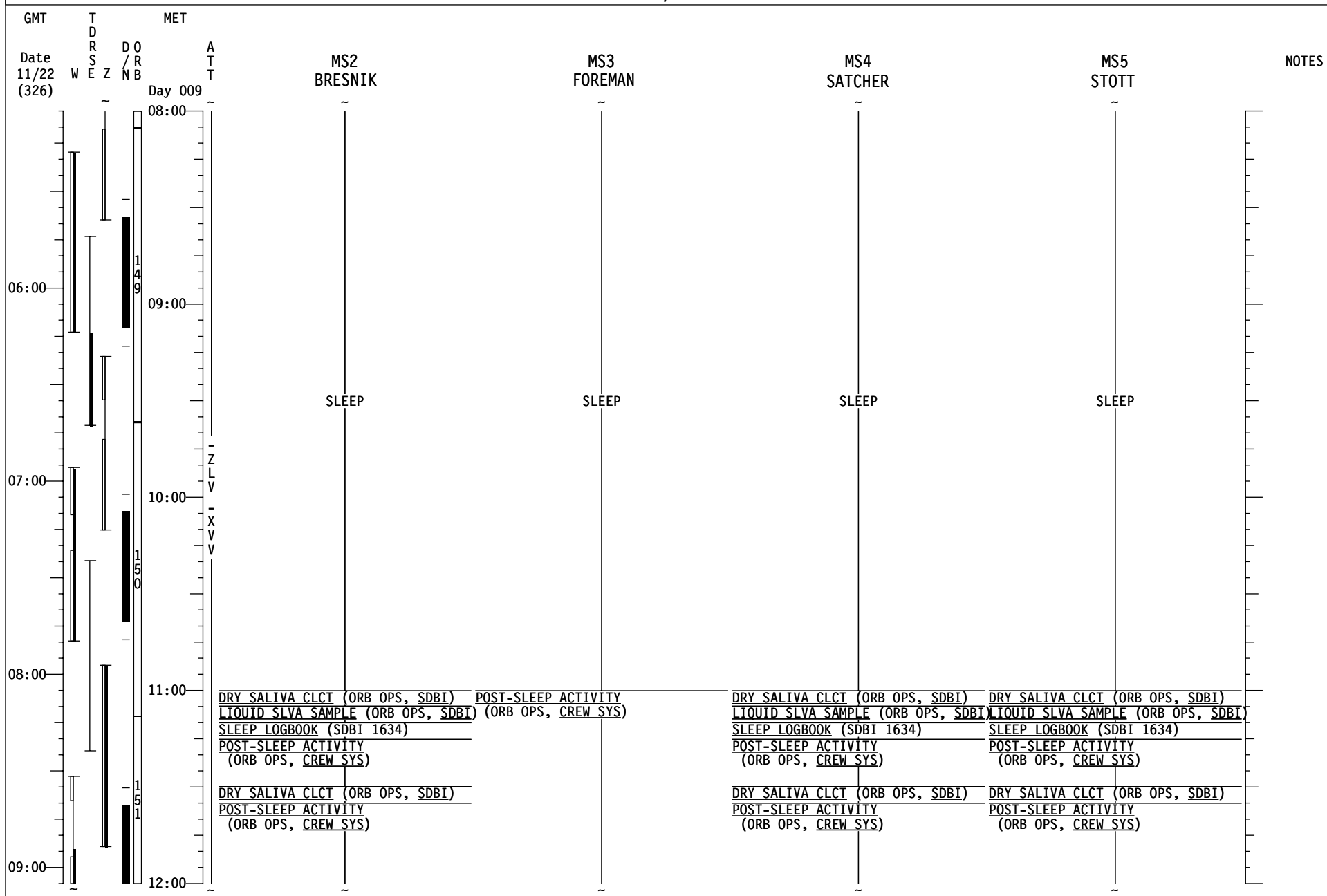
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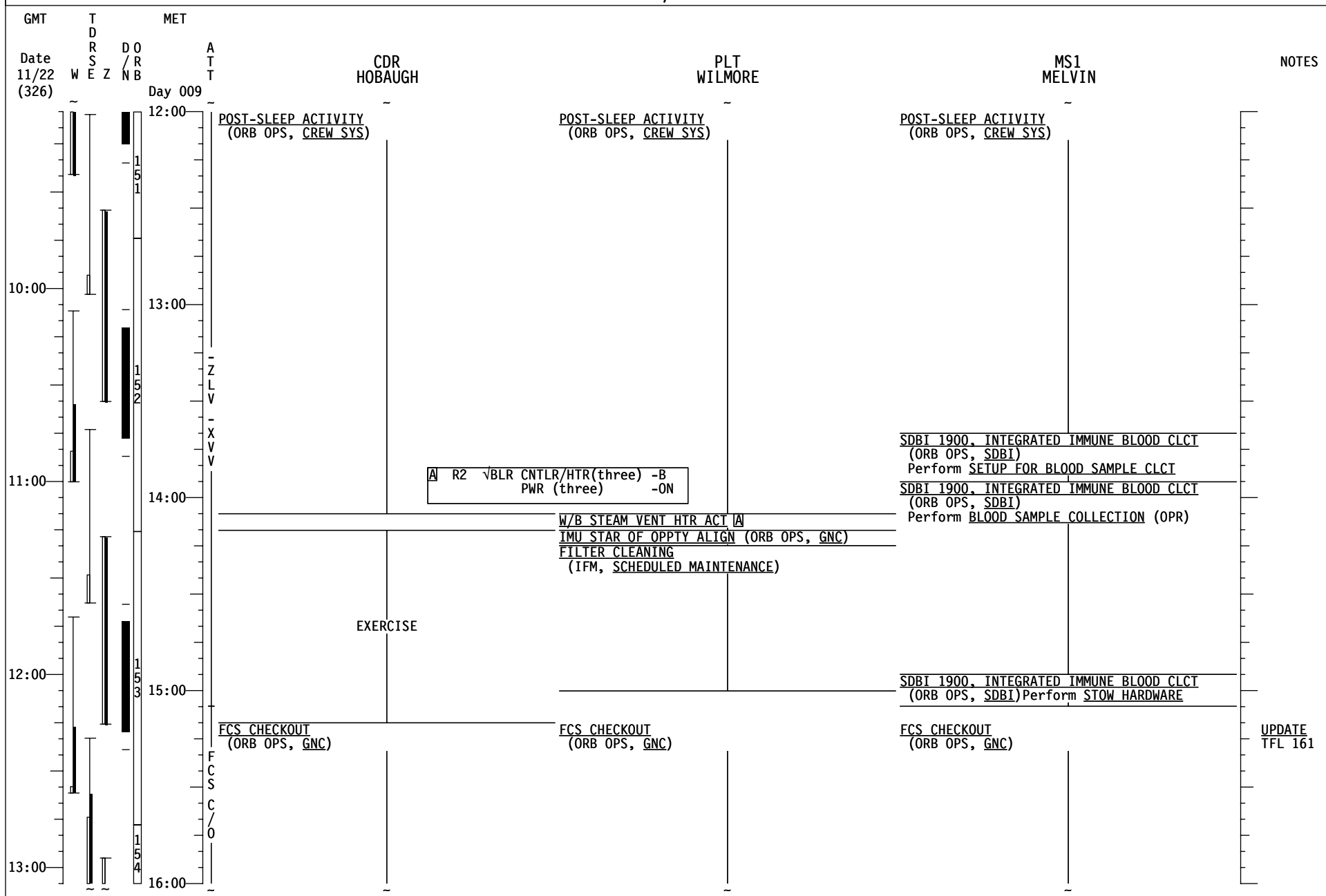
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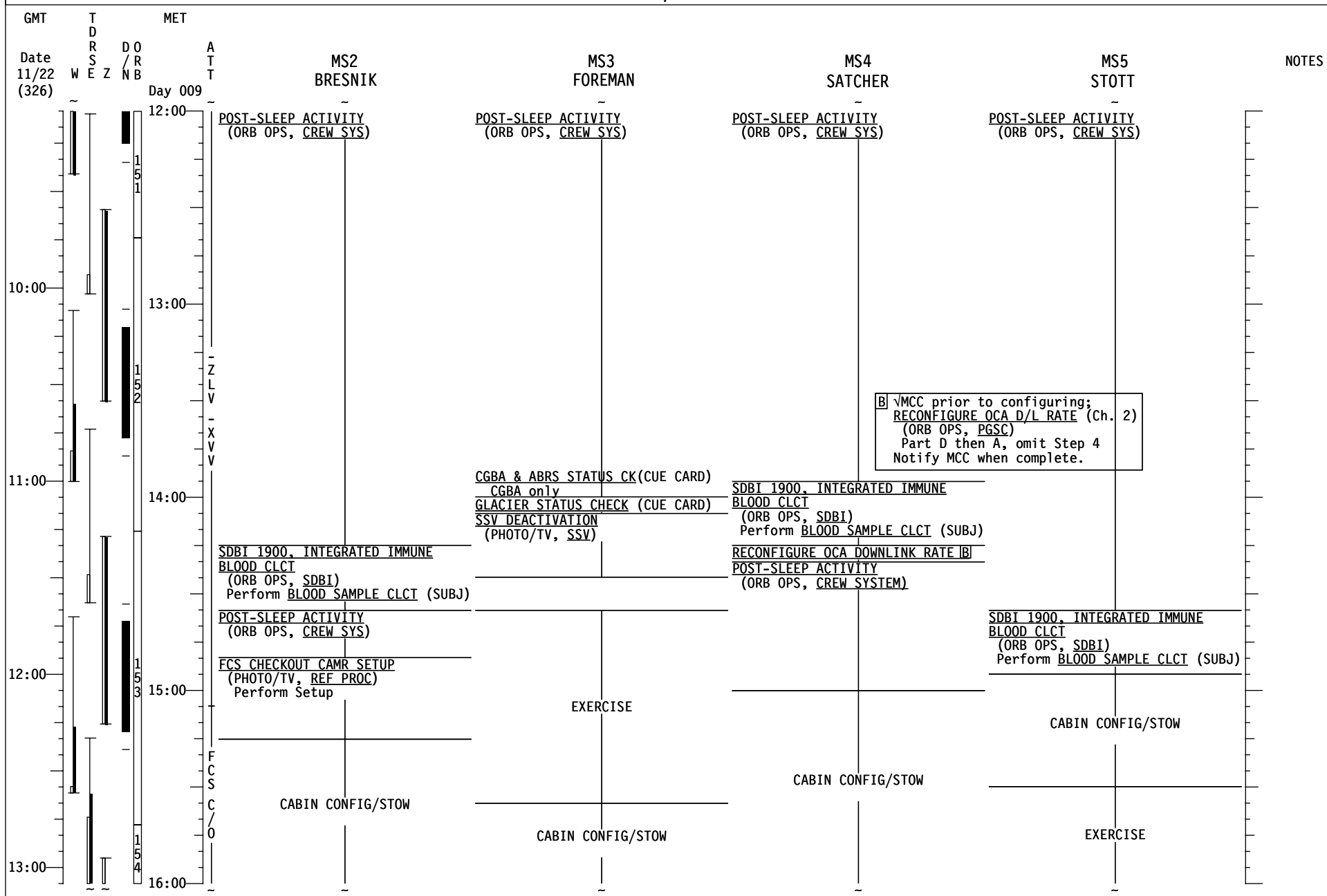
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STS-129/ULF3 FD11



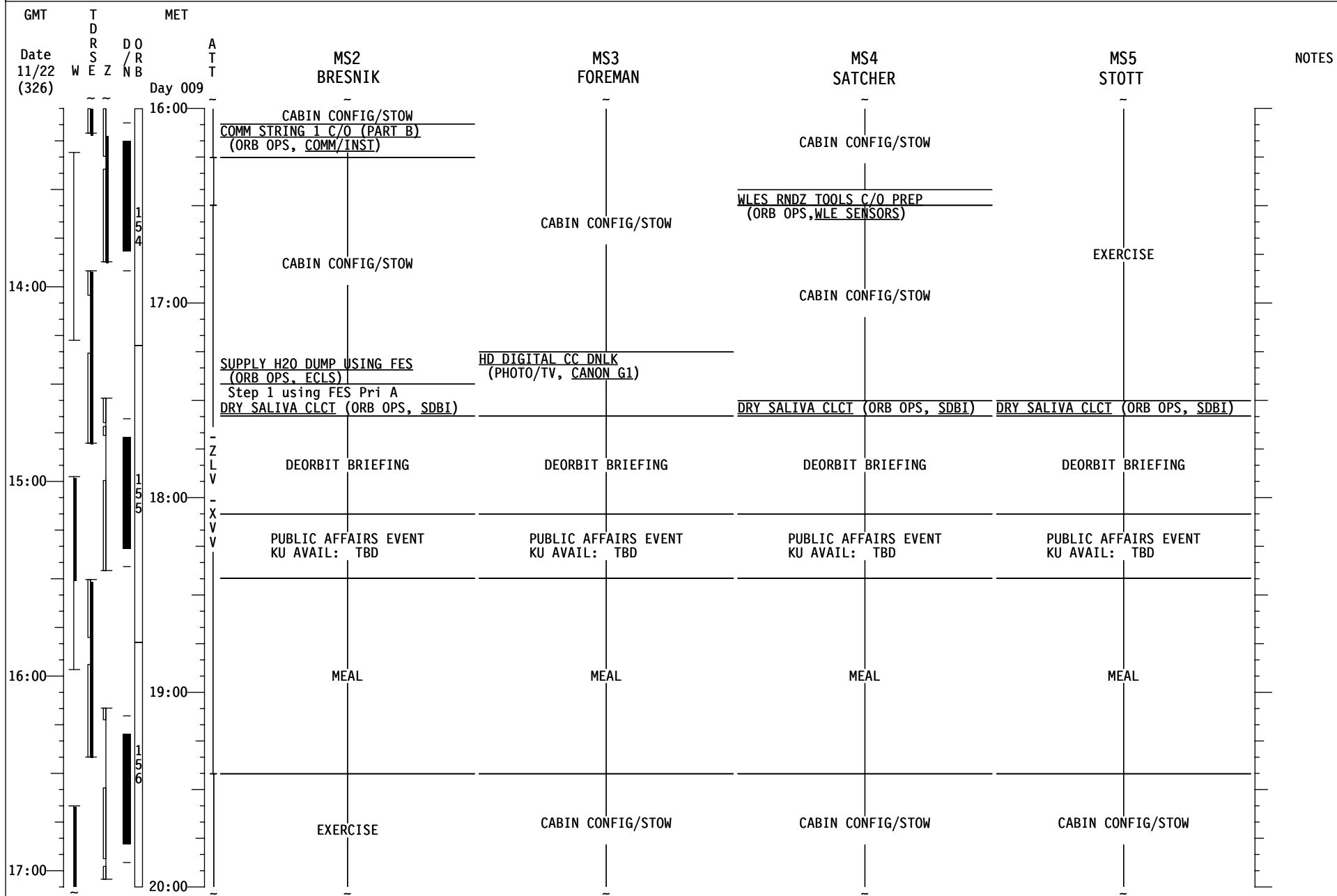
STS-129/ULF3 FD11



STS-129/ULF3 FD11

GMT	TDRS W E Z	MET Day 009	A T T	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
16:00				<u>FCS CHECKOUT</u> (ORB OPS, <u>GNC</u>)	<u>FCS CHECKOUT</u> (ORB OPS, <u>GNC</u>)	<u>FCS CHECKOUT</u> (ORB OPS, <u>GNC</u>)	<u>UPDATE</u> TFL 161
				<u>RCS HOT FIRE TEST</u> (ORB OPS, <u>RCS</u>) In Step 6, DAP: A1/AUTO/VERN	<u>RCS HOT FIRE TEST</u> (ORB OPS, <u>RCS</u>) In Step 6, DAP: A1/AUTO/VERN	<u>RCS HOT FIRE TEST</u> (ORB OPS, <u>RCS</u>) In Step 6, DAP: A1/AUTO/VERN	
				<u>PILOT WITH RHC</u> (ORB OPS, <u>PGSC</u>)	<u>PILOT WITH RHC</u> (ORB OPS, <u>PGSC</u>)	<u>PILOT WITH RHC</u> (ORB OPS, <u>PGSC</u>)	
17:00							
18:00				DEORBIT BRIEFING	DEORBIT BRIEFING	DEORBIT BRIEFING	
				PUBLIC AFFAIRS EVENT KU AVAIL: TBD	PUBLIC AFFAIRS EVENT KU AVAIL: TBD	PUBLIC AFFAIRS EVENT KU AVAIL: TBD	
19:00				MEAL	MEAL	MEAL	
				<u>MNVR (TRK) BIAS -ZLV -YVV (DUMP)</u> TG=2 BV=3 OM=70 A1/AUTO/VERN Init TRK	<u>ENTRY VIDEO SETUP</u> (PHOTO/TV, <u>REF PROC</u>)		
				<u>SUPPLY/WASTE WATER DUMP</u> (ORB OPS, <u>ECLS</u>) Initiate Supply/Waste Dump	CABIN CONFIG/STOW	CABIN CONFIG/STOW	
20:00							

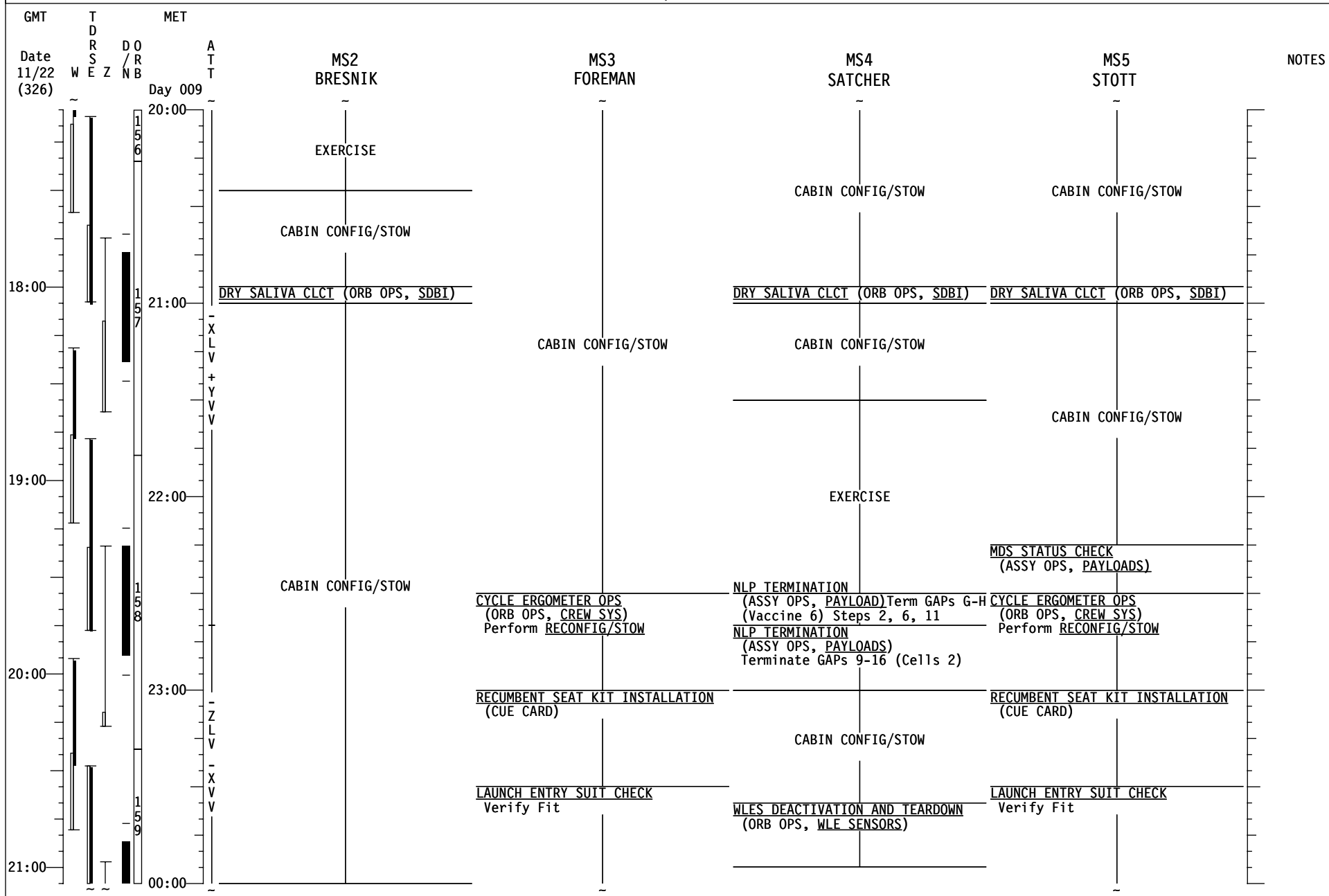
STS-129/ULF3 FD11



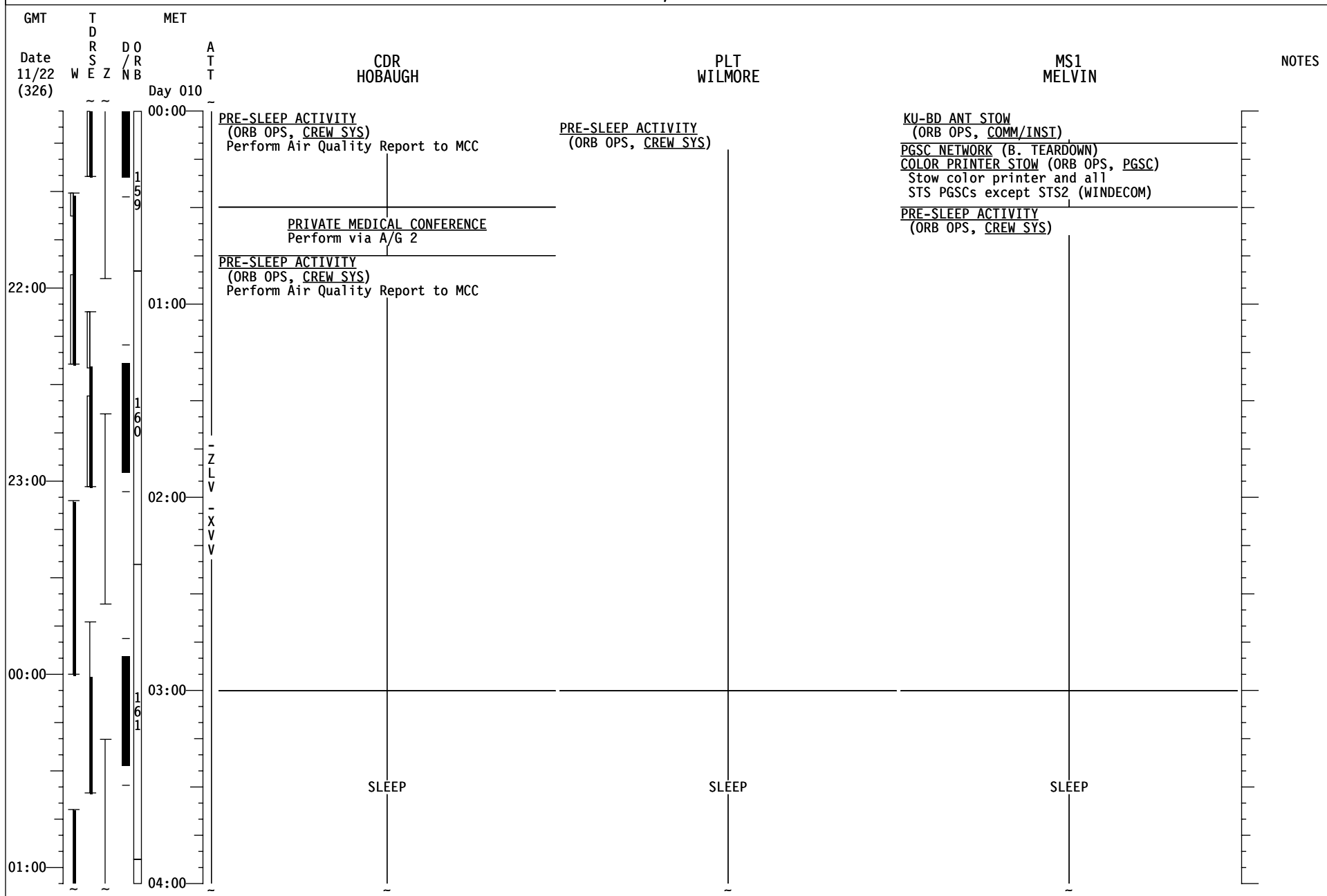
STS-129/ULF3 FD11

GMT	TDRS W E Z	MET DO R R N B	ATT Day 009	CDR HOBAUGH	PLT WILMORE	MS1 MELVIN	NOTES
20:00				CABIN CONFIG/STOW	CABIN CONFIG/STOW	CABIN CONFIG/STOW	
				CABIN CONFIG/STOW			LANDING-1 COMM C/O (ORB OPS, COMM/INST) MLA AOS 20:23 - 20:31
18:00				SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS) Terminate Supply/Waste Dump	EXERCISE		
				+ CWC OVERBOARD DUMP (ORB OPS, ECLS) Initiate Condensate Dump		EXERCISE	
19:00				CABIN CONFIG/STOW			LANDING-1 COMM C/O (ORB OPS, COMM/INST) DFR AOS 21:54 - 22:01
				CWC OVERBOARD DUMP (ORB OPS, ECLS) Perform DUMP TERMINATION			
				MNVR (TRK) -ZLV -XVV TG=2 BV=3 OM=0 A1/AUTO/VERN Init TRK	CABIN CONFIG/STOW		
20:00				CABIN CONFIG/STOW		CABIN CONFIG/STOW	
				C R12 VPU PWR - OFF(LED-off) Minimize use of P/TV equipment Dim cabin lighting to 25%			
21:00				A6L MADS STRAIN GAGE - ON ENTRY COOLING CONFIG [C] SUPPLY WATER DUMP USING FES (ORB OPS, ECLS) On MCC GO: Step 2, FES Pri A Req'd			CGBA and ABR STATUS CK(CUE CARD) CGBA only GLACIER STATUS CHECK (CUE CARD)
00:00							

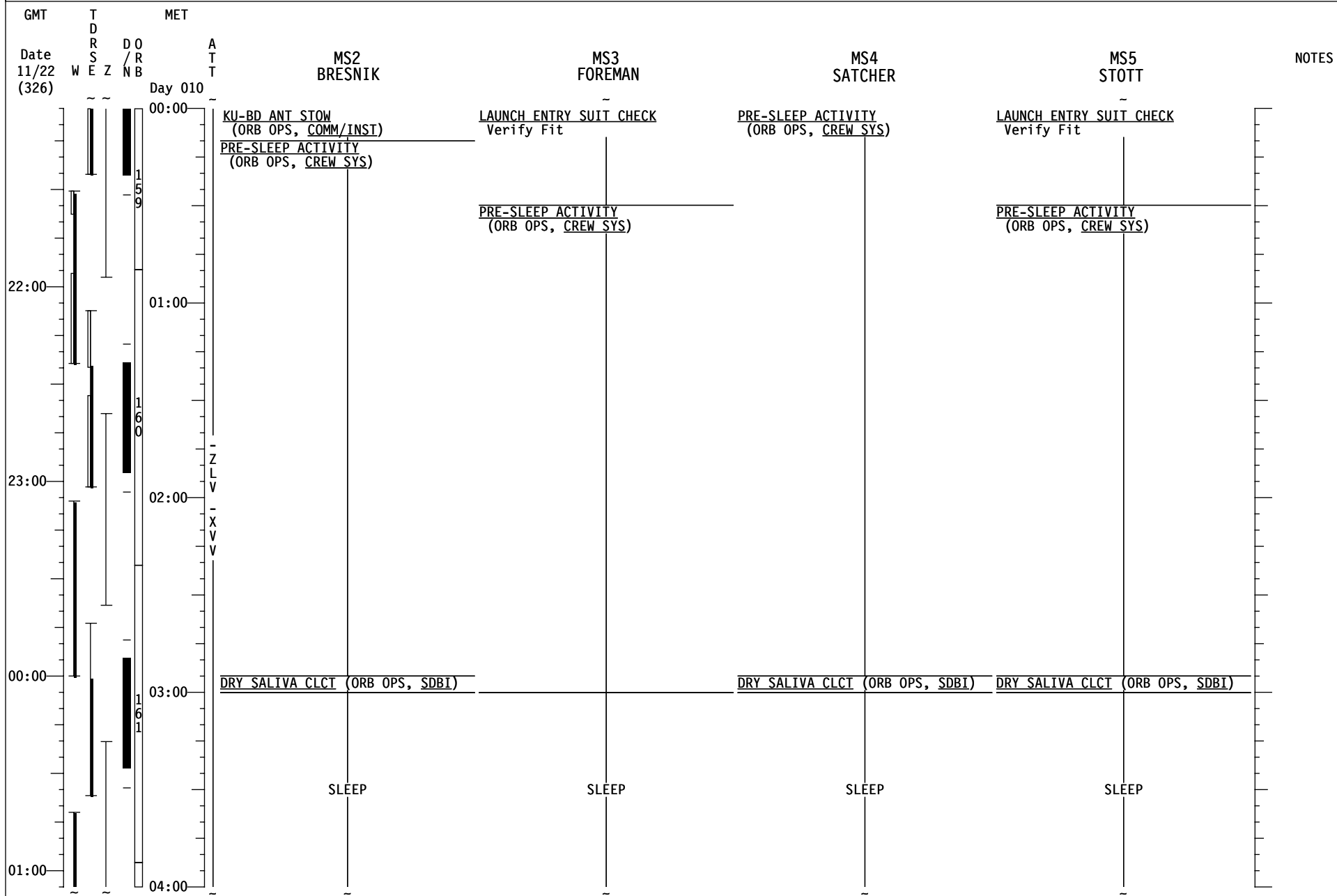
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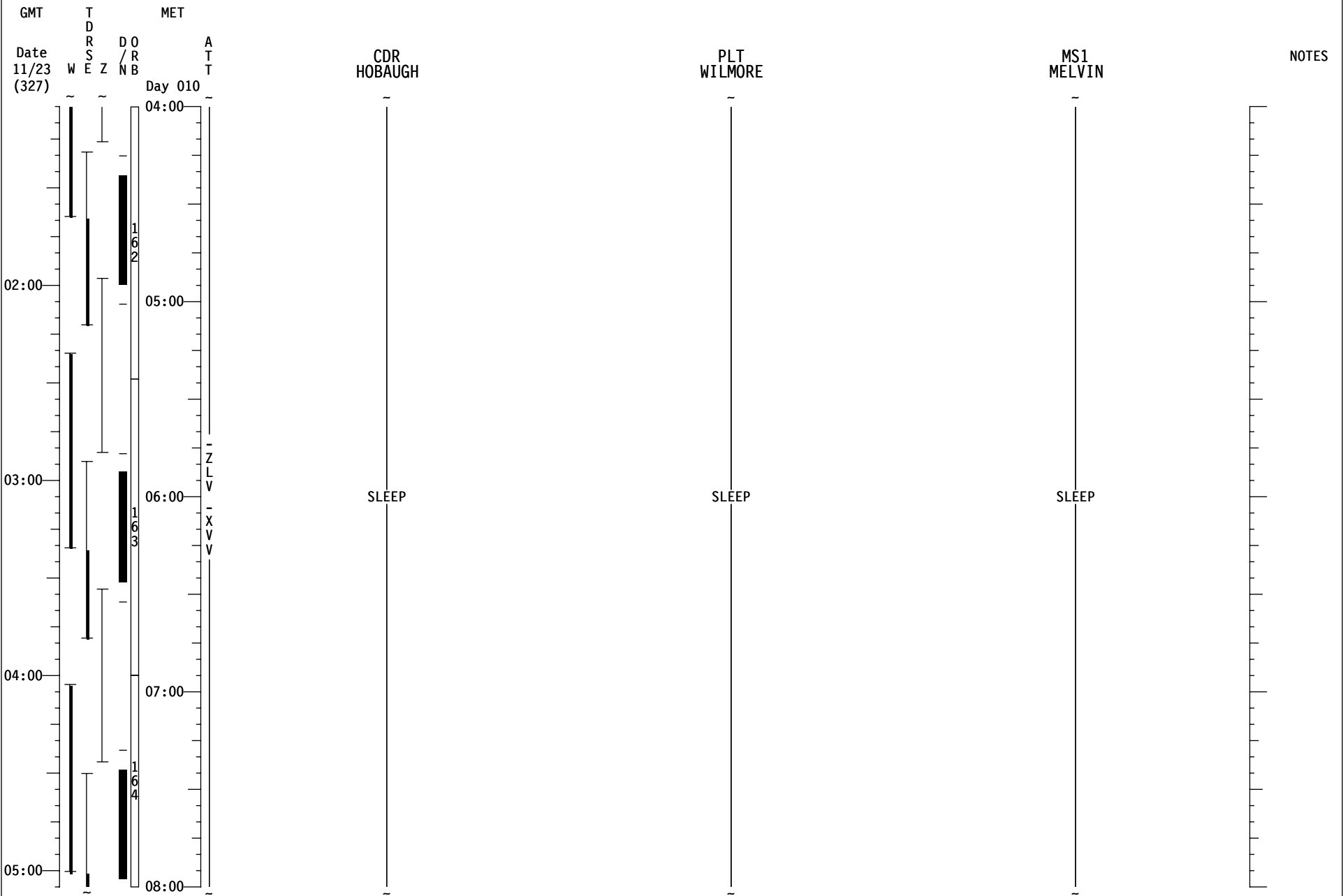
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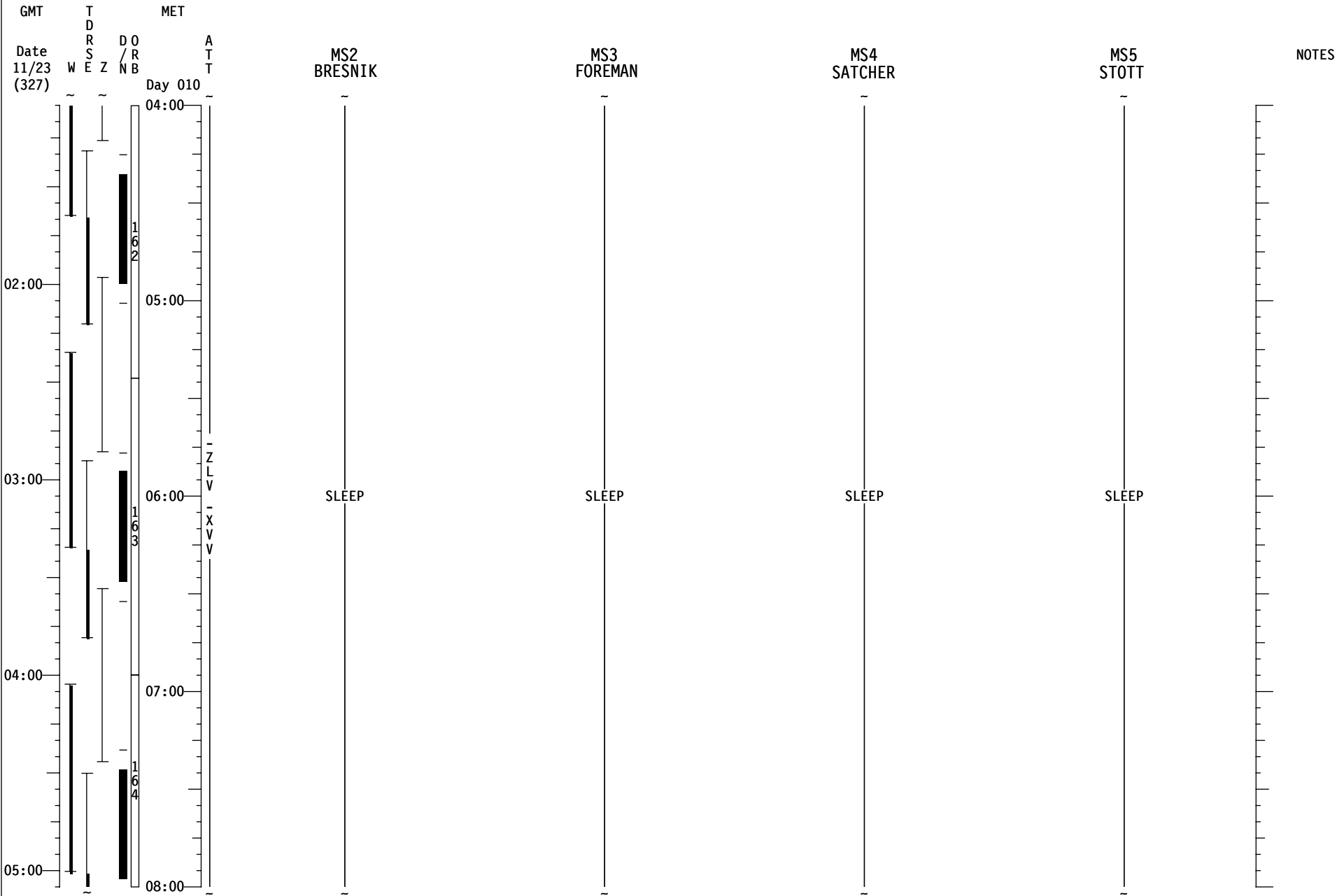
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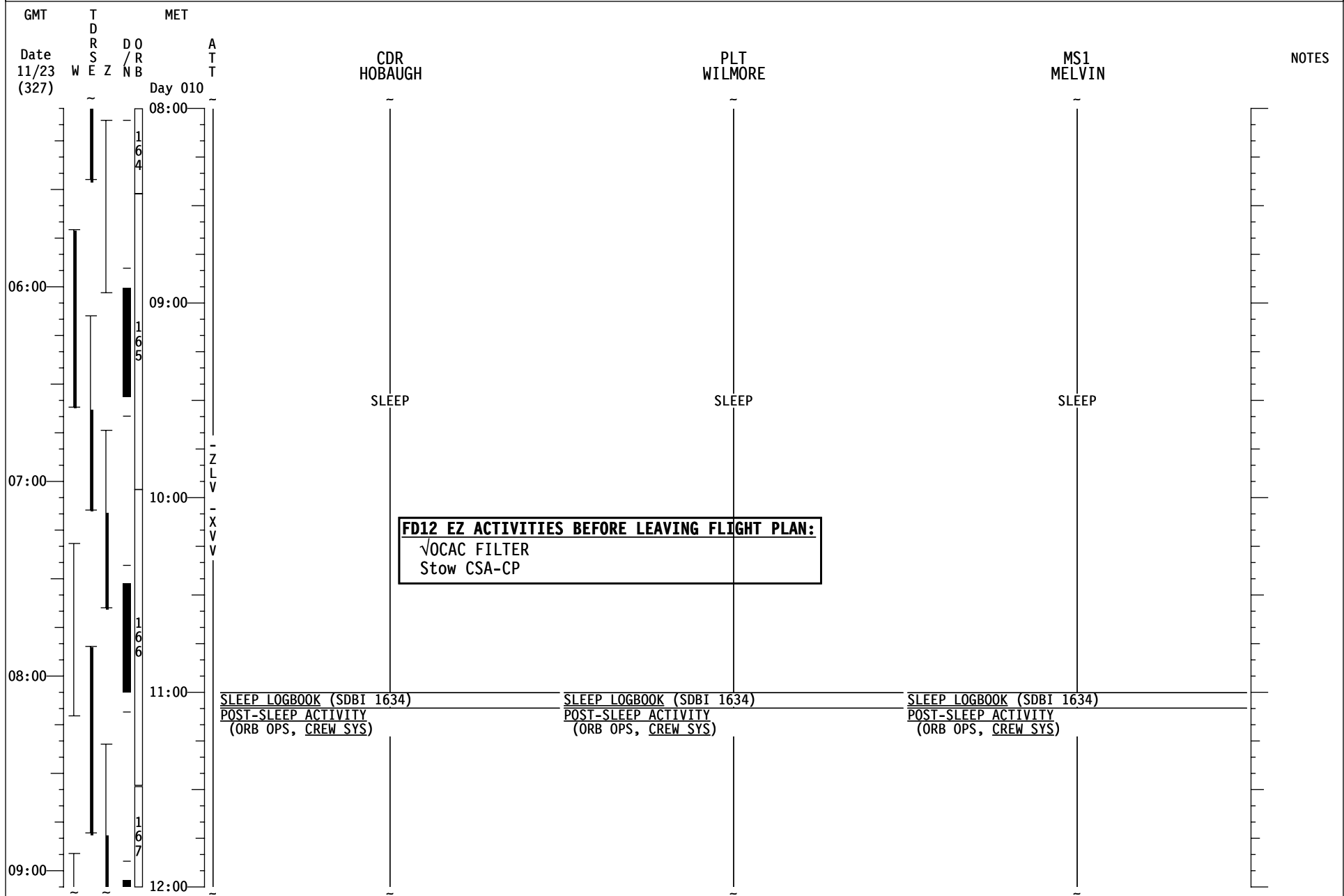
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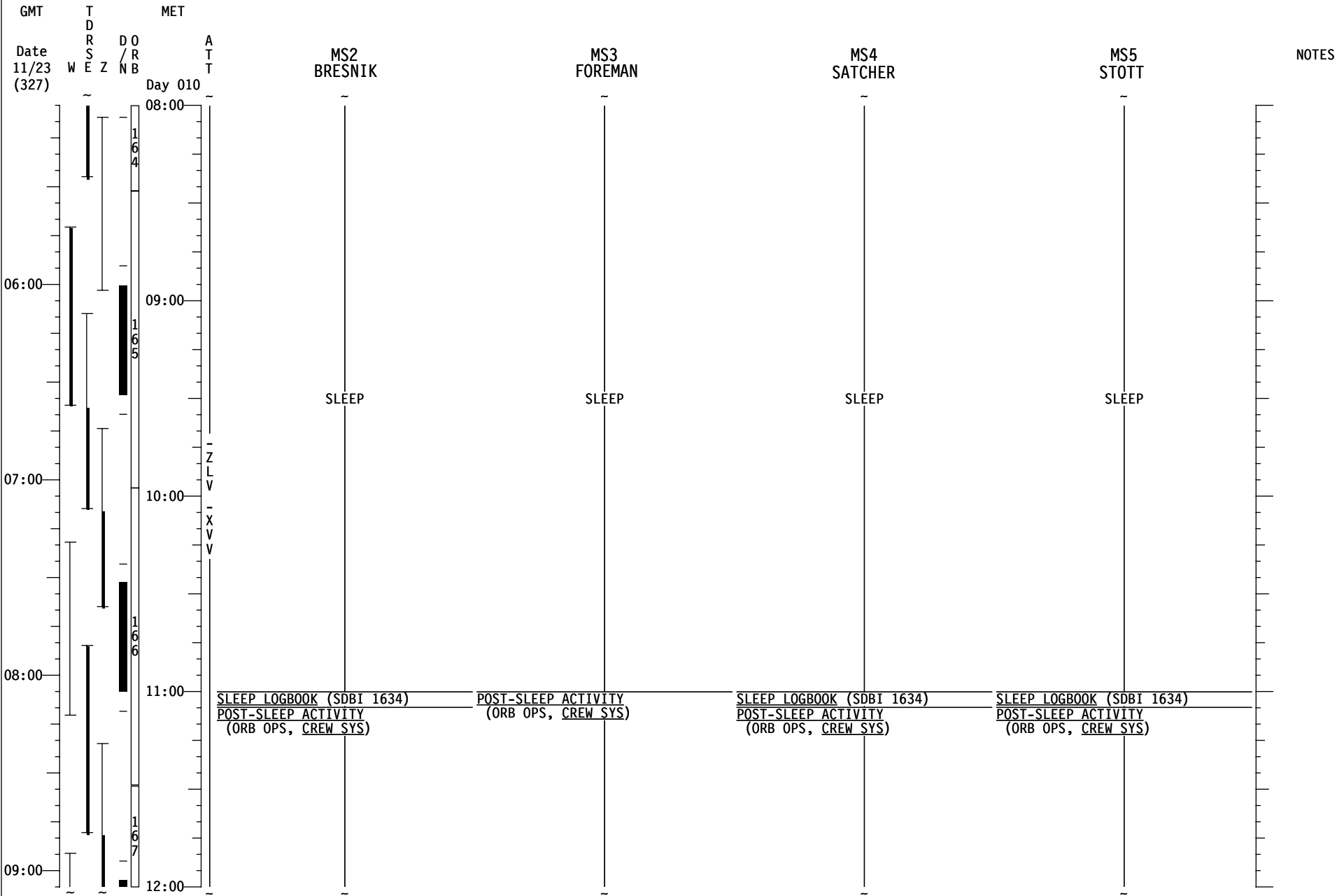
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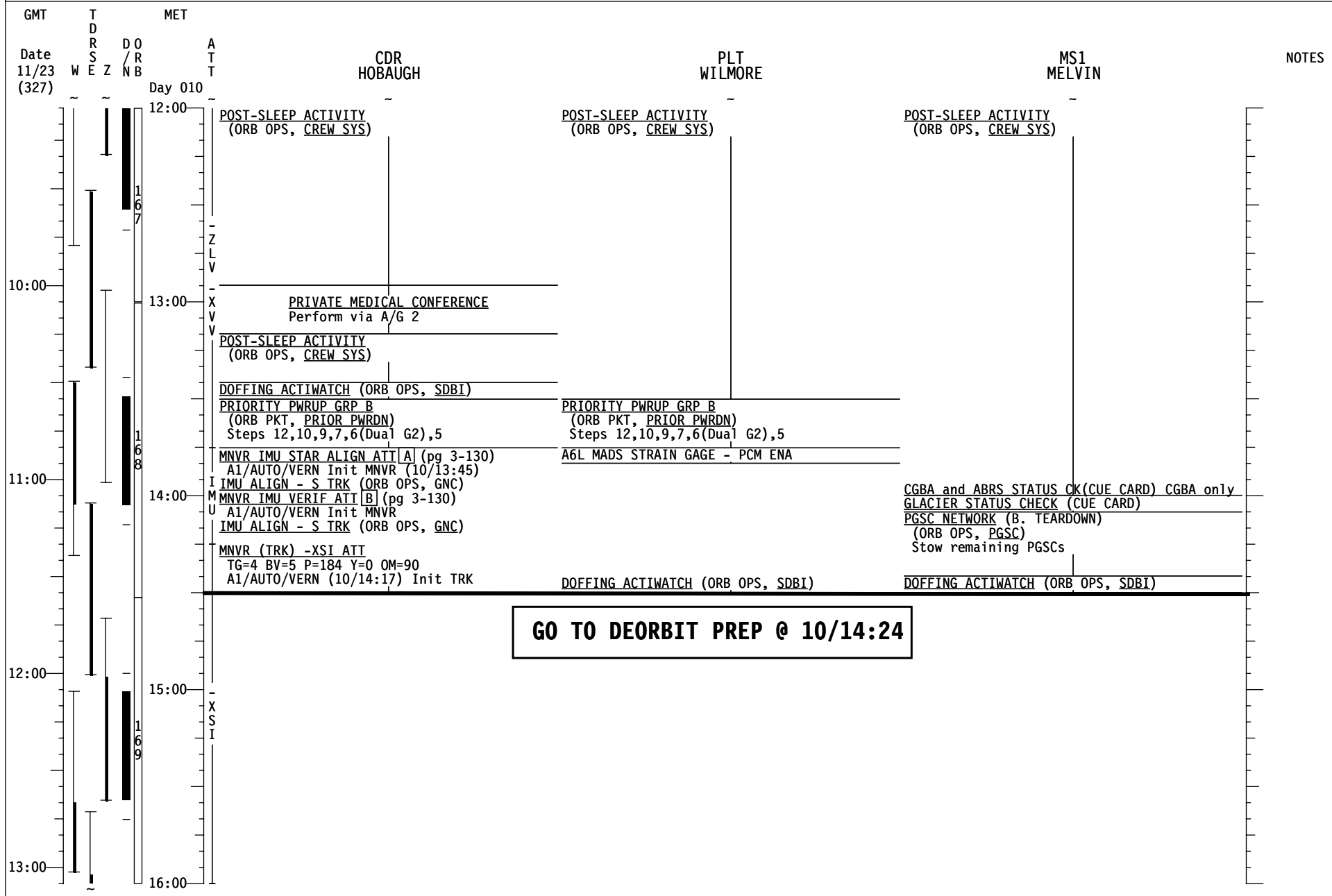
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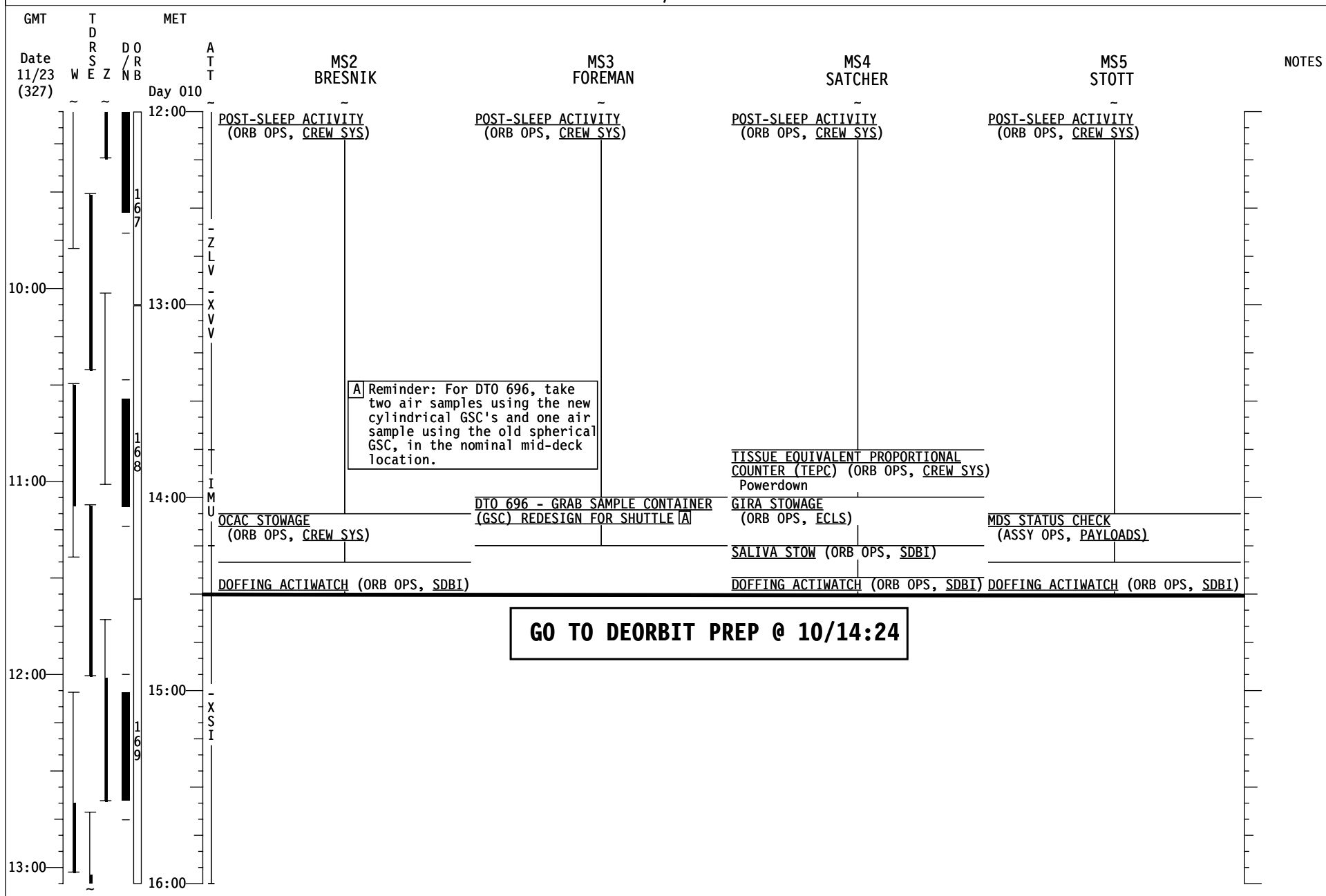
STS-129/ULF3 FD12



STS-129/ULF3 FD12



STS-129/ULF3 FD12



A	IMU STAR ALIGN PAD		
ID: -Y: 57, ACAMAR MET (10/13:30 TO 10/14:19)			
-Z: 84, ALPHA ARAE MET (10/13:51 TO 10/14:44)			
ANG DIFF: 83.7			
DUAL S TRKR ALIGNMENT		2nd ATTITUDE (SINGLE S TRKR) -Z: 57 -Y: 84	
R 237	R 142	319	
P 149	P 166	154	
Y 33	Y 38	20	
REQD ID:			
-Y: _____, -Z: _____, ANG ERR _____, _____			
ANG:	1	2	3
ΔX	() _____	() _____	() _____
ΔY	() _____	() _____	() _____
ΔZ	() _____	() _____	() _____
EXECUTION TIME: ____/____:____:____ MET			

B	IMU VERIFICATION STAR ALIGN PAD		
ID: -Y: 39, ALHENA MET (10/13:30 TO 10/14:20)			
-Z: 47, GIENAH MET (10/13:58 TO 10/14:47)			
ANG DIFF: 89.9			
DUAL S TRKR ALIGNMENT		2nd ATTITUDE (SINGLE S TRKR) -Z: 39 -Y: 47	
R 184	R 99	269	
P 251	P 264	243	
Y 352	Y 345	340	
REQD ID:			
-Y: _____, -Z: _____, ANG ERR _____, _____			
ANG:	1	2	3
ΔX	() _____	() _____	() _____
ΔY	() _____	() _____	() _____
ΔZ	() _____	() _____	() _____
If any ΔX, ΔY, OR ΔZ > 0.1 Check MCC			
EXECUTION TIME: ____/____:____:____ MET			



FLIGHT PLAN

STS
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