Space Shuttle Program
FLIGHT DATA FILE

JSC-48000-134

Flight Plan

STS-134/ULF-6

(L-35 FDO Trajectory)

Mission Operations Directorate
Operations Division

Final
March 18, 2011

Launch Date: Tues. April 19, 2011 GMT
Launch Time: 109/23:48:53 GMT
April 19, 2011, 19:48:53 EDT

For the latest working copy of the Flight Plan, visit
http://modspops.jsc.nasa.gov/mod/DO/DO4/Joint/134_ULF6/default.aspx

National Aeronautics and
Space Administration

Lyndon B. Johnson Space Center
Houston, Texas

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

MISSION OPERATIONS DIRECTORATE

FLIGHT PLAN
STS-134

FINAL
March 18, 2011

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Lead RPE	DO4/S. Kirk	281-483-0486

LIST OF EFFECTIVE PAGES

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INTRODUCTION

The STS-134 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-17462-134, STS-134 Flight Requirements Document
- NSTS-37326, Shuttle Crew Scheduling Constraints
- NSTS-21507, ISS-ULF6 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-134 Flight Plan is based on a launch date of April 19, 2011, at 23:48:53 GMT (19:48:53 PM EDT). 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.jsc.nasa.gov/mod/DO/DO4/Joint/134_ULF6/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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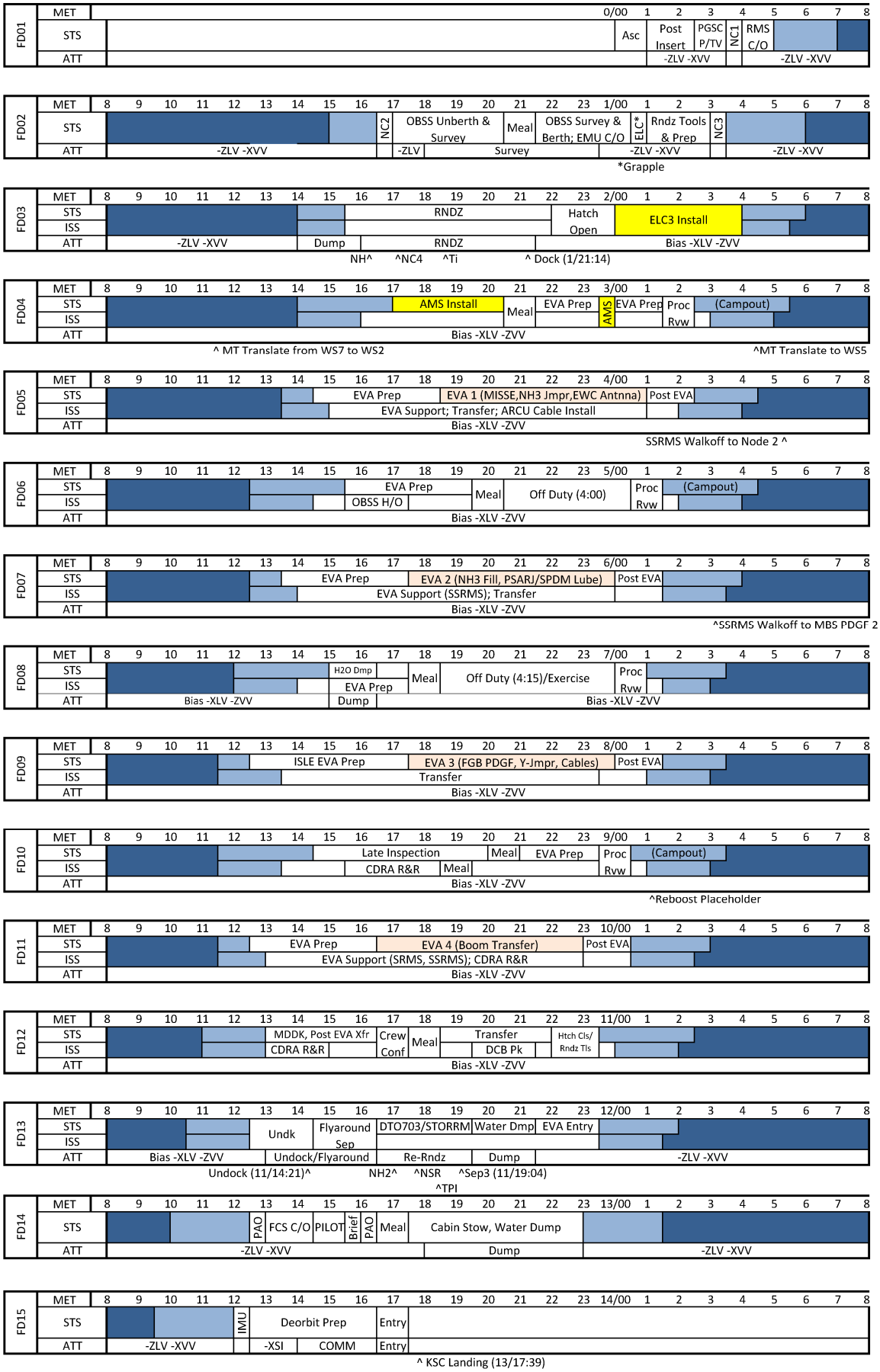
STS-134/ULF-6 Overview Timeline (14+1+2)

Launch: April 19, 2011; GMT 23:48:53



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SUMMARY TIMELINE

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GMT 04/19/11 (109) 04/20 01 02 03 04 05 06 07 08 09 10 11

MET Day 000 000/00 01 02 03 04 05 06 07 08 09 10 11 12

MNVR

FD01

| | | |

GMT 04/20/11 (110) 12 13 14 15 16 17 18 19 20 21 22 23

MET Day 000 12 13 14 15 16 17 18 19 20 21 22 23 001/00

FD02

STS 134	CDR MARK	SLEEP; POST SLEEP; NC2^ OMS BURN; POST SLEEP; MDK#; MDDK XFER PREP; MNVR; NOSE; MEAL; MNVR; PORT; IMU; POD*; NLP; VACCINE; O2-I; EMU C/O; O2-T; LOADS; MNVR; ♣
STS 134	PLT BOX	SLEEP; LOG; POST SLEEP; OMS BURN; POST SLEEP; MNVR; STBD; STBD WING SURVEY; MEAL; PORT WING SURVEY; OBSS BERTH
STS 134	MS1 SPANKY	SLEEP; POST SLEEP; MCIU*; OBSS UNBERTH; STBD WING SURVEY; NOSE CAP SURVEY; MEAL; EMU C/O PREP; EMU C/O
STS 134	MS2 ROBERTO	SLEEP; LOG; POST SLEEP; OBSS UNBERTH; P/TV09; MDDK XFER PREP; MEAL; PORT WING SURVEY; OBSS BERTH
STS 134	MS3 DREW	SLEEP; POST SLEEP; PGSC SETUP (PART II); ERG SETUP; STBD WING SURVEY; NOSE CAP SURVEY; MEAL; EMU C/O PREP; EMU C/O
STS 134	MS4 TAZ	SLEEP; LOG; POST SLEEP; POLYBK; OPS; POST; SLEEP; ERG SETUP; CUBE8; CUBE7; CUBE8; MEAL; NOSE CAP SURVEY; PORT WING SURVEY
KU	CH 2	OCA
KU	CH 3	AMS; TV; AMS; LDRI
DAY/NIGHT		
ORBIT		9; 10; 11; 12; 13; 14; 15; 16; 17
TDRS	W	
TDRS	E	
TDRS	Z	
ORB ATT		-ZLV -XVV; NC2; STBD; NOSE; PORT
NOTES		*FILTER CK; #STATUS CHECK; *B POD HTR RECONFIG; ♣FLTR CLN

GMT 04/20/11 (110) 04/21 01 02 03 04 05 06 07 08 09 10 11

MET Day 001 001/00 01 02 03 04 05 06 07 08 09 10 11 12

FD02

STS 134	CDR MARK	FLTR CLN; FCPRG; CRYO O2 SNSR CK; FCMS OPS; WSB*; CWC-I S/U; PRE SLEEP; NC3^ RCS BURN; MNVR ZLV; FUT MNVR; PMC A/G; PRE SLEEP; SLEEP
	PLT BOX	OBSS BERTH; ELC GRPL; LDRI D/L; OMS POD SRVY; BIOKIS*; RCS BURN; PRE SLEEP; SLEEP
	MS1 SPANKY	EMU C/O; EVA PREP FOR XFER; PRE SLEEP; SLEEP
	MS2 ROBERTO	OBSS BERTH; ELC GRPL; C/L CMR INSTL; DOCKING REXNT; SSV-2; RNDZ TOOLS C/O; SSV-3; PRE SLEEP; SLEEP
	MS3 DREW	EMU C/O; EVA PREP FOR XFER; STORRM PGSC S/U; STORRM TOOLS C/O; OCA*; PRE SLEEP; SLEEP
	MS4 TAZ	C/L CMR INSTL; DOCKING REXNT; WLES; RNDZ TOOLS C/O; MDK#; PRE SLEEP; SLEEP
KU	CH 2	OCA; AMS
	CH 3	LDRI; AMS; OCA

DAY/NIGHT

ORBIT 17 18 19 20 21 22 23 24 25

TDRS W E Z

ORB ATT -ZLV -XVV; NC3; -ZLV -XVV

*CNTLR SWAP *ACT 1

NOTES

*DOWNLINK RATE RECONFIG

#STATUS CHECK

GMT 04/21/11 (111) 12 13 14 15 16 17 18 19 20 21 22 23

MET Day 001 12 13 14 15 16 17 18 19 20 21 22 23 002/00

FD03

STS 134																													
CDR MARK	SLEEP	MNVR^ DUMP	POST SLEEP	IMU	GRPB	PWRUP	NH^	NC4^	ISS RNDZ OPS	TI^	RPM^	APPROACH T/L	DOCKING*	MNVR	HATCH LEAK CK - STS	GRPB	PWRDN	INGRS HATCH OPEN	HI	SAFETY	BRIEF
PLT BOX	SLEEP	LOG	POST SLEEP	GRPB	PWRUP	ISS RNDZ OPS	APPROACH T/L	DOCKING*	HATCH LEAK CK - STS	SOPCTUS	GRPB	PWRDN	DAP-B13	ATTH/O	HI	SAFETY	BRIEF
MS1 SPANKY	SLEEP	POST SLEEP	OCA*	MCIU%	EMU REMOVAL	ISS RNDZ OPS	PTVO2 S/U	P/TVO2 OPS	DOCKING*	SV-3	DK AUD	HI	SAFETY	BRIEF
MS2 ROBERTO	SLEEP	LOG	POST SLEEP	SIMO INIT	POST SLEEP	SIMO TERM	MDDK#	COND CWC S/U	EXERCISE	O2-I	ISS RNDZ OPS	O2-T	ISS RNDZ OPS	APPROACH T/L	DOCKING*	ODS PREP FOR INGR	INGRS HATCH OPEN	HI	SAFETY	BRIEF
MS3 DREW	SLEEP	POST SLEEP	ISS RNDZ OPS	APPROACH T/L	DOCKING*	POST RNDZ PGSC CNFG	WLES	P/TV10	STORRM	HI	SAFETY	BRIEF
MS4 TAZ	SLEEP	LOG	POST SLEEP	EMU REMOVAL	XFER	UPDAT	EXERCISE	ISS RNDZ OPS	APPROACH T/L	DOCKING*	PTVO4	STEUP	ODS PREP FOR INGR	P/TVO4 OPS	HI	SAFETY	BRIEF

KU		
CH 2	AMS	RADAR	AMS
CH 3	OCA	RADAR	TV

NO EXERCISE: [A] ♣ [C] D

DAY/NIGHT

ORBIT: 25 26 27 28 29 30 31 32 33

TDRS W E Z

ISS TDRS AVAIL

ORB ATT: -ZLV -XVV | -ZLV +YVV | RNDZ | D ♣[B] | BIAS -XLV -ZVV @ACT

NOTES

[A] NO ARED/T2 [ISS MNVR]
[B] NO ARED/T2 [ISS MNVR]
[C] NO ARED/T2 [ISS MNVR]
[D] NO EXERCISE [DEADBAND COLLAPSE]

#STATUS CHECK %FILTER CK *DOWNLINK RATE RECONFIG

***DOCKING 1/21:14**

GMT 04/21/11 (111) 12 13 14 15 16 17 18 19 20 21 22 23

MET Day 001 12 13 14 15 16 17 18 19 20 21 22 23 002/00

FD03

ISS	ISS CDR DIMA	SLEEP				POST SLEEP			PW	DPC	PW							TVIS				MEAL											HI	SAFETY	BRIEF
ISS	FE-1 ALEXANDER	SLEEP				POST SLEEP			PW	DPC	TVIS					VELO						MEAL									AK1M STS	SAMPLE	HI	SAFETY	BRIEF
ISS	FE-2 ANDREY	SLEEP				POST SLEEP			PW	DPC	VELO					TVIS						MEAL											HI	SAFETY	BRIEF
ISS	FE-3 RON	SLEEP			RST	POST SLEEP			PW	DPC	SHTR CLS			T2				ARED			RPM S/U VRFY	MEAL	TIMER	TIMER	ACT	⊕		PMA2 CFG		HATCH LK CK			ISS HATCH OPEN		HI	SAFETY	BRIEF
ISS	FE-5 PAOLO	SLEEP				POST SLEEP			PW	DPC	HAMP/D			CEVIS			CSA-CP MNT			RPM S/U VRFY	MEAL	PREP	800 RPM	PHOTOS	RPMDL	DEACT		PMA2 CFG		HATCH LK CK		ICOM	ISS HATCH OPEN		HI	SAFETY	BRIEF
ISS	FE-6 CADY	SLEEP				POST SLEEP		DOUG S/U		DPC	D2XS	DUCOPP		ARED	N2XFER		PCS P/U	T2				MEAL	PREP	400 RPM	PHOTOS	FFQ				GC/DMS				CRINST	VSW	HI	SAFETY	BRIEF

TDRS AVAIL

NO EXERCISE [A] [C] D

ISS DAY/NIGHT

ISS DAILY ORBIT	14	15	16	1	2	3	4	5	6
ORBIT	3197	3198	3199	3200	3201	3202	3203	3204	3205

NOTES

[A] NO ARED/T2 [ISS MNVR]
[B] NO ARED/T2 [ISS MNVR]
[C] NO ARED/T2 [ISS MNVR]
[D] NO EXERCISE [DEADBAND COLLAPSE]

♣C&T DK CNFG
⊕APPRCH-DOC
♦[B]

*CAMCORDER CONF

***DOCKING 1/21:14 (111/21:03 GMT)**

GMT 04/21/11 (111) 04/22 01 02 03 04 05 06 07 08 09 10 11

MET Day 002 002/00 01 02 03 04 05 06 07 08 09 10 11 12

| STS 134 | | |

GMT 04/21/11 (111) 04/22 01 02 03 04 05 06 07 08 09 10 11

MET Day 002 002/00 01 02 03 04 05 06 07 08 09 10 11 12

FD03

ISS	ISS CDR DIMA	SAFETY	BRIEF		VELO	PW	DPC	PRE SLEEP-ISS					SLEEP	
ISS	FE-1 ALEXANDER	SAFETY	BRIEF			PW	DPC	PRE SLEEP-ISS					SLEEP	
ISS	FE-2 ANDREY	SAFETY	BRIEF			PW	DPC	PRE SLEEP-ISS					SLEEP	
ISS	FE-3 RON	SAFETY	BRIEF	FFQ	SODF XFER	PCN INCORP	PW	DPC	PRE SLEEP-ISS	RST			SLEEP	
ISS	FE-5 PAOLO	SAFETY	BRIEF	VID	ROUTER FFQ	ARED	PW	DPC	MPC	PRE SLEEP-ISS	MPC		SLEEP	
ISS	FE-6 CADY	SAFETY	BRIEF	O2 XFER SETUP	O2 INIT	N2 INIT	D2XS	PW	GC/DMS	DPC	PRE SLEEP-ISS	VSW	SLEEP	
	TDRS AVAIL													

NO EXERCISE		[E]	[F]	[G]	[H]					[I]
ISS DAY/NIGHT										
ISS DAILY ORBIT	6	7	8	9	10	11	12	13	14	
ISS ORBIT	3205	3206	3207	3208	3209	3210	3211	3212		

NOTES

*CAMCORDER CONFIG

[E] NO EXERCISE [ELC UNBERTH]
[F] NO EXERCISE [DOUBLE GRAPPLE]
[G] NO EXERCISE [ELC INSTALL]
[H] NO UNISOLATED EXERCISE [1ST-2ND STAGE CAPTURE]
[I] NO UNISOLATED EXERCISE [MT XLATE]

GMT 04/22/11 (112) 12 13 14 15 16 17 18 19 20 21 22 23

MET Day 002 12 13 14 15 16 17 18 19 20 21 22 23 003/00

FD04

STS 134	CDR MARK	SLEEP; POST SLEEP; O2-I; POST SLEEP; O2-T; MDK#; CWCI-I; FILL #1; CWCI-I; FILL #2; CWCI-I; FILL #3; CWCI-I; XFER-R; IFER; UPDAT; CONGD/O; MDDK XFER; NLP VACC TERM; CSGBV-*2; EXERCISE; PAO; EVENT; MEAL; O2 TERM
	PLT BOX	SLEEP; LOG; POST SLEEP; P/TV06; SSRMS AMS GRPL; SSRMS AMS INSTALL; CAPTURE; LIMP; CAPTURE; BRAKE; MEAL; PAO; EVENT; EXERCISE; DEMATE; UMA; MATE; AMS RLS
	MS1 SPANKY	SLEEP; POST SLEEP; EXERCISE; POST SLEEP; BATTL; INSTL; REBA*; REBA; C/O; AMS PGSC DEACT; SSC; SETUP; MEAL; E_LK PREP; PAO; EVENT; QD FAM OPS; EVA TOOL CONFIG
	MS2 ROBERTO	SLEEP; LOG; POST SLEEP; P/TV08; AMS; MCIU*; AMS GRPL; AMS UNBERTH & H/O; AMS; UNGRPL; VIABLE; ACT; IENOS; IS/U; MDDK XFER; EXERCISE; MEAL; MDDK XFER
	MS3 DREW	SLEEP; POST SLEEP; AMS GRPL; AMS UNBERTH & H/O; AMS; UNGRPL; P/TV06; EXERCISE; MEAL; QD FAM OPS; EVA TOOL CONFIG
	MS4 TAZ	SLEEP; POST SLEEP; EXERCISE; POST SLEEP; SSRMS AMS GRPL; SSRMS AMS INSTALL; CAPTURE; LIMP; CAPTURE; BRAKE; MEAL; E_LK PREP; PAO; EVENT; QD FAM OPS; VERIF EMU SIZE; DEMATE; UMA; MATE; AMS RLS
KU	CH 2	OCA
	CH 3	AMS; TV
NO EXERCISE		[I]; [A]; NO EX[B]; [C]; [D]; [E]
DAY/NIGHT		
ORBIT		41; 42; 43; 44; 45; 46; 47; 48; 49
TDRS	W E Z	
ISS	TDRS AVAIL	
ORB ATT		BIAS -XLV -ZVV

NOTES

[I] NO UNISOLATED EXERCISE [MT XLATE]
[A] NO EXERCISE [AMS UNBERTH]
[B] NO EXERCISE [DOUBLE GRAPPLE]
[C] NO EXERCISE [AMS INSTALL]
[D] NO UNISOLATED EXERCISE [1ST THRU 3RD STAGE CAPUTRE]
[E] NO UNISOLATED EXERCISE [UMA MATING]

#STATUS CHECK
*FILTER CK
*INSTALL
*TEMP CHANGE

GMT 04/22/11 (112) 12 13 14 15 16 17 18 19 20 21 22 23

MET Day 002 12 13 14 15 16 17 18 19 20 21 22 23 003/00

FD04

ISS	ISS CDR DIMA	SLEEP		POST SLEEP		DPC	PW	VELO								MEAL							
ISS	FE-1 ALEXANDER	SLEEP		POST SLEEP		DPC	PW									MEAL						TVIS	
ISS	FE-2 ANDREY	SLEEP		POST SLEEP		DPC	TVIS			PW						MEAL							VELO
ISS	FE-3 RON	SLEEP	RST	POST SLEEP		DPC	T2			PW		BATT	INSTL	REBA*	REBA C/O	MEAL	S/U		PAO	EVENT		ARED	O2 TERM
ISS	FE-5 PAOLO	SLEEP		POST SLEEP		DPC	ARED			PW	P/TV	RK DR OPN	POS ROT	BIO KIT RMV	BIO KIT INSTL	MEAL	POS ROT	RK DR CLS				ARCU CBL INST	
ISS	FE-6 CADY	SLEEP		POST SLEEP		DPC	VSW	CCR INST	CEVIS	PW				EVA CAMERA CNFG		MEAL						ARCU CBL INST	
	TDRS AVAIL																						

NO EXERCISE		[I]									[A]		NO EX	[B]				[C]	[D]				[E]
ISS	DAY/NIGHT																						
ISS	DAILY ORBIT	14		15			1			2			3			4			5			6	
ISS	ORBIT	3213		3214			3215			3216			3217			3218			3219			3220	

NOTES

[I] NO UNISOLATED EXERCISE [MT XLATE] *CAMCORDER CONFIG *INSTALL
[A] NO EXERCISE [AMS UNBERTH]
[B] NO EXERCISE [DOUBLE GRAPPLE]
[C] NO EXERCISE [AMS INSTALL]
[D] NO UNISOLATED EXERCISE [1ST THRU 3RD STAGE CAPTURE]
[E] NO UNISOLATED EXERCISE [UMA MATING]

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FD04

STS 134

CDR MARK	O2 TERM	STS O2 P/B CONFIG		PAO	EVENT	EVA PROC RVW	♣	PMC OCA	PRE SLEEP	MASK PB/TOOL CONFIG	PRE SLEEP	SLEEP
PLT BOX	AMS RLS	CCR MV		PRLA	PRECRDL	EVA PROC RVW	DAP	PRE SLEEP				SLEEP
MS1 SPANKY	EVA TOOL CONFIG			PAO	EVENT	EVA PROC RVW		PRE SLEEP				SLEEP
MS2 ROBERTO	MDDK XFER	XFR BRF	PREP XFER	BREIF	BIOKIS*	PRECRDL	EVA PROC RVW	MDDK#	PRE SLEEP			SLEEP
MS3 DREW	EVA TOOL CONFIG			PAO	EVENT	EVA PROC RVW	PRE SLEEP			MASK PB/TOOL CONFIG	PRE SLEEP	SLEEP
										10.2 DPRS		ISS Airlock Campout at 10.2 PSI
MS4 TAZ	AMS RLS		EVA TOOL CONFIG	PAO	EVENT	EVA PROC RVW	PRE SLEEP			MASK PB/TOOL CONFIG	PRE SLEEP	SLEEP

NO EXERCISE — NO UNISOLATED EX [F]

DAY/NIGHT

ORBIT: 49 50 51 52 53 54 55 56

TDRS: W E Z

ISS TDRS AVAIL

ORB ATT: BIAS -XLV -ZVV

NOTES: *ACT 2 ♣PRE SLEEP #STATUS CHECK [F] NO UNISOLATED EXERCISE [MT XLATE]

GMT 04/22/11 (112) 04/23 01 02 03 04 05 06 07 08 09 10 11

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FD04

ISS	ISS CDR DIMA	TVIS; PW; DPC; PW; PRE SLEEP-ISS; SLEEP
ISS	FE-1 ALEXANDER	TVIS; VELO; PW; DPC; PW; PRE SLEEP-ISS; SLEEP
ISS	FE-2 ANDREY	VELO; PW; DPC; PW; PRE SLEEP-ISS; SLEEP
ISS	FE-3 RON	O2 TERM; STS O2 P/B CONFIG; EVA PROC RVW; PW; DPC; PW; ♣; PRE SLEEP-ISS; RST; SLEEP
ISS	FE-5 PAOLO	⊕; CEVIS; EVA PROC RVW; PW; DPC; PRE SLEEP-ISS; MASK PB/TOOL CONFIG; PRE SLEEP; SLEEP
ISS	FE-6 CADY	⊕; ARED; EVA PROC RVW; PW; DPC; VSW; CCRMV; PRW; MPC; PRE SLEEP-ISS; MPC; SLEEP
	TDRS AVAIL	
NO EXERCISE		NO UNISOLATED EX [F]
ISS	DAY/NIGHT	
ISS	DAILY ORBIT	7; 8; 9; 10; 11; 12; 13; 14
ISS	ORBIT	3221; 3222; 3223; 3224; 3225; 3226; 3227; 3228

NOTES

⊕ARCU CBL INST

♣PAO DEACT

*CAMCORDER CONFIG

[F] NO UNISOLATED EXERCISE [MT XLATE]

GMT 04/23/11 (113) 12 13 14 15 16 17 18 19 20 21 22 23

MET Day 003 12 13 14 15 16 17 18 19 20 21 22 23 004/00

FD05

STS 134

CDR MARK	SLEEP; POST SLEEP; PMC A/G; HYG BRK/ HATCH CLS; CAMPOUT EVA PREP; EMU; PURGE; EMU PREBREATHE; C_LK DPRS; P-DPS; P/TV07 EVA; MEAL; P/TV07 EVA
PLT BOX	SLEEP; LOG; POST SLEEP; INHIB; PADS/U; IAPE; IMU; FILTER INSPECT; CWCI-I; FILL #4; CWCI-I; FILL #5; CWCI-I; FILL #6; CWCI-I; XFER; MDDK XFER; MEAL; MDDK XFER
MS1 SPANKY	SLEEP; POST SLEEP; MCIU*; EXERCISE; EVA 1 IVA SUPPORT
MS2 ROBERTO	SLEEP; LOG; POST SLEEP; MDDK#; IENOS@; XFER; UPDAT; VIDS/U; IAPE; P/TV07; EVAS/U; EXERCISE; MDDK XFER; MEAL; LIOH XFER; MDDK XFER
MS3 DREW	SLEEP; POST SLEEP; HYGIENE BREAK/ P/B (14.7 RPRS, 10.2 DPRS); CAMPOUT EVA PREP; EMU; PURGE; EMU PREBREATHE; C_LK DPRS; P-DPS; EGRS; SETUP; MISSE 7 RETRIEVE; MISSE 8 INSTALL; P3-P4 NH3 JMPR INSTL; P5 NH3 JMPR; P6-EAS NH3 JMPR; LAB EWC ANTENNA; P16A/ J16A MATE; P1-P2 MATE*; EVA 1 (6:30)
MS4 TAZ	SLEEP; POST SLEEP; HYGIENE BREAK/ P/B; CAMPOUT EVA PREP; EMU; PURGE; EMU PREBREATHE; C_LK DPRS; P-DPS; EGRS; SETUP; MISSE 7 RETRIEVE; S3 CETA LIGHT INSTL; STBD SARJ CVR 7 INST; P3-P4 NH3 JMPR INSTL; P4 NH3 JMPR STOW; LAB EWC ANTENNA; P3-P4 MATE; P16A/ J16A MATE; CLEANUP

NO EXERCISE: NO UNISOL EXER [A]

DAY/NIGHT

ORBIT: 57 58 59 60 61 62 63 64

TDRS: W E Z

ISS TDRS AVAIL

ORB ATT: BIAS -XLV -ZVV

NOTES: *FILTER CK; @STATUS CHECK; #STATUS CHECK; [A] NO UNISOLATED EXERCISE [EVA CREW ON ELC2 OR OUTBOARD OF SARJ]; *QD TOOL E

GMT 04/23/11 (113) 12 13 14 15 16 17 18 19 20 21 22 23

MET Day 003 12 13 14 15 16 17 18 19 20 21 22 23 004/00

FD05

ISS	ISS CDR DIMA	SLEEP	POST SLEEP	DPC	PW	PFC	TVIS	VELO	MEAL															
ISS	FE-1 ALEXANDER	SLEEP	POST SLEEP	DPC	PW	PFC	VELO	TVIS	MEAL															
ISS	FE-2 ANDREY	SLEEP	POST SLEEP	DPC	PW	PFC	MEAL	VELO	TVIS															
ISS	FE-3 RON	SLEEP	RST	POST SLEEP	HYG BRK/ HATCH CLS	CAMPOUT EVA PREP	CEVIS	ARCU CBL INST	MEAL	VIDSU	MPCON	CSI INSTL	MPCOFF	ARED	IMMNSLV									
ISS	FE-5 PAOLO	SLEEP	RST	POST SLEEP	HYG BRK/ HATCH CLS	CAMPOUT EVA PREP	EMU	PURGE	EMU PREBREATHE	C_LK DPRS	ARED	MEAL	TOCA	GC/DMS	T2									
ISS	FE-6 CADY	SLEEP	RST	POST SLEEP	DPC	PW	GC/DMS	TOCA	HAMPD	TEST	INHIB	PADD	T2	ARCU CBL INST	MEAL	BLB-MS SP-RMVL	GLOVE	ARED						

TDRS AVAIL

NO EXERCISE | NO UNISOL EXER [A]

ISS DAY/NIGHT

ISS	DAILY ORBIT	15	16	1	2	3	4	5	6
	ORBIT	3229	3230	3231	3232	3233	3234	3235	3236

[A] NO UNISOLATED EXERCISE [EVA CREW ON ELC2 OR OUTBOARD OF SARJ]

NOTES

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FD05

STS 134		
CDR MARK	P/TV07 EVA; PRPS; CTK; RPRS; POST EVA W/H2O; PRE SLEEP; PMC A/G; PRE SLEEP	ISS EXTERNAL SURVEY — SLEEP
PLT BOX	MDDK XFER; EXERCISE; ILON; PRE SLEEP	SLEEP
MS1 SPANKY	EVA 1 IVA SUPPORT; PRE SLEEP; POST EVA; TAGUP; PRE SLEEP	SLEEP
MS2 ROBERTO	MDDK XFER; XFER BRF; PREP; XFER; BRIEF; MDDK#; PRE SLEEP	SLEEP
MS3 DREW	QD TOOL BAG RCFG; CLNUP; PRPS; CTK; RPRS; POST EVA W/H2O; POST EVA; TAGUP; PRE SLEEP	SLEEP
MS4 TAZ	CLEANUP; CLNUP; PRPS; CTK; RPRS; POST EVA W/H2O; POST EVA; TAGUP; PRE SLEEP	SLEEP

NO EXERCISE

DAY/NIGHT

ORBIT 64 65 66 67 68 69 70 71 72

TDRS W E Z

ISS TDRS AVAIL

ORB ATT BIAS -XLV -ZVV

NOTES #STATUS CHECK

GMT 04/23/11 (113) 04/24 01 02 03 04 05 06 07 08 09 10 11

MET Day 004 004/00 01 02 03 04 05 06 07 08 09 10 11 12

FD05

ISS	ISS CDR DIMA			PW		DPC	PW	PRE SLEEP-ISS												SLEEP				
ISS	FE-1 ALEXANDER			PW		DPC	PW	PRE SLEEP-ISS												SLEEP				
ISS	FE-2 ANDREY	TVIS		PW		DPC	PW	PRE SLEEP-ISS												SLEEP				
ISS	FE-3 RON		PRPS	CTLK	RPRS	POST EVA W/H2O					PRE SLEEP-ISS			RST						SLEEP				
ISS	FE-5 PAOLO	T2	PRPS	CTLK	RPRS	POST EVA W/H2O					PRE SLEEP-ISS			RST						SLEEP				
ISS	FE-6 CADY	ARED		HAMPU	GLOVE	PHOTO	EVA*	DPC	BSA INIT	MPC	PRE SLEEP-ISS			MPCT	RST					SLEEP				
	TDRS AVAIL																							
NO EXERCISE																								
ISS	DAY/NIGHT																							
ISS	DAILY ORBIT	6	7					8				9				10			11			12		13		14
ISS	ORBIT	3236	3237					3238				3239				3240			3241			3242		3243		3244

*D/L

NOTES

GMT 04/24/11 (114) 12 13 14 15 16 17 18 19 20 21 22 23

MET Day 004 12 13 14 15 16 17 18 19 20 21 22 23 005/00

STS 134

FD06

CDR MARK	SLEEP	POST SLEEP					PAO EVENT	POST SLEEP			N2 XFER TERM	N2-I		PAO EVENT		IMU	EXERCISE		N2-T	MEAL		OFF DUTY		PFC OCA	OFF DUTY
PLT BOX	SLEEP	LOG	POST SLEEP					OBSS GRPL	OUBNSERTH	HANDOFF	UNGRP H/O	CRRMV		PAO EVENT	CWC-I	FILL #7	CWC-I	FILL #8	CWC-I	XFER	MEAL	OFF DUTY	PFC OCA	OFF DUTY	
MS1 SPANKY	SLEEP	POST SLEEP						EXERCISE			EMU SWAP	BATT	INSTL	REBA*	REBA C/O	EVA TOOL CONFIG				MEAL		OFF DUTY		PFC OCA	OFF DUTY
MS2 ROBERTO	SLEEP	LOG	POST SLEEP				IENOSG	MDK#	MLOF#	MCIU*	OBSS H/O		OBSS H/O	OBSS H/O		EXERCISE			MEAL		PAO EVENT	OFF DUTY		PFC OCA	OFF DUTY
MS3 DREW	SLEEP	ASPRN	POST SLEEP					OBSS H/O			OBSS H/O	E_LK PREP			EXERCISE			EVA TOOL CONFIG		MEAL		OFF DUTY		PFC OCA	OFF DUTY
MS4 TAZ	SLEEP	LOG	ASPRN	POST SLEEP			PAO EVENT	POST SLEEP			EMU SWAP	E_LK PREP			EVA TOOL CONFIG					MEAL		PFC OCA	OFF DUTY		

NO EXERCISE: NO EX [A]

DAY/NIGHT

ORBIT: 72 73 74 75 76 77 78 79 80

TDRS: W E Z

ISS TDRS AVAIL

ORB ATT: BIAS -XLV -ZVV

NOTES: [A] NO EXERCISE [DOUBLE GRAPPLE]

*FILTER CK
@STATUS CHECK
#STATUS CHECK

*INSTALL

GMT 04/24/11 (114) 12 13 14 15 16 17 18 19 20 21 22 23

MET Day 004 12 13 14 15 16 17 18 19 20 21 22 23 005/00

FD06

ISS	ISS CDR DIMA	SLEEP	POST SLEEP	PW	DPC	PW											MEAL	OFF DUTY				VELO	TVIS	
ISS	FE-1 ALEXANDER	SLEEP	POST SLEEP	PW	DPC	PW										VELO	MEAL	OFF DUTY		TVIS		OFF DUTY		
ISS	FE-2 ANDREY	SLEEP	POST SLEEP	PW	DPC	PW											MEAL	OFF DUTY				TVIS		VELO
ISS	FE-3 RON	SLEEP	SALIVA / RST	POST SLEEP	PW	DPC	PW		S/U	PAO EVENT	D2XS FLSH	♣CWC PT1	N2 XFER TERM	CWC PT2		PFC		MEAL	OFF DUTY		ARED		CEVIS	OFF DUTY
ISS	FE-5 PAOLO	SLEEP	POST SLEEP	PW	DPC	PW	L_ION INIT						BATT INSTL	REBA*	REBA C/O		PFC		MEAL	PAO EVENT	⊕	OFF DUTY	L_ION TERM	T2	ARED
ISS	FE-6 CADY	SLEEP	POST SLEEP		♦D2XS	PW	DPC	PW	VSW / CRI INST	PAO EVENT	OBSS GRPL	OBSS UNBERTH / HANDOFF	UNGRP H/O	VSW	D2XS	BSA TERM		ARED	MEAL	PFC	D2XS / CAMR	OFF DUTY		T2
	TDRS AVAIL																							
NO EXERCISE													NO EX [A]											
ISS	DAY/NIGHT																							
ISS	DAILY ORBIT	14	15		1					2					3			4			5		6	7
ISS	ORBIT	3244	3245		3246					3247					3248			3249			3250		3251	3252

♦FLASH BATT *CAMCORDER CONFIG ♣FLASH BATT *CAMCORDER CONFIG *INSTALL ⊕PAO DEACT

NOTES

[A] NO EXERCISE [DOUBLE GRAPPLE]

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MET Day 005 005/00 01 02 03 04 05 06 07 08 09 10 11 12

FD06

STS 134								
CDR MARK	OFF DUTY	EVA PROC RVW	PRE SLEEP	PMC A/G	PRE SLEEP	MASK PB/TOOL CONFIG	PRE SLEEP	SLEEP
PLT BOX	OFF DUTY	EVA PROC RVW	PRE SLEEP	EXERCISE		PRE SLEEP		SLEEP
MS1 SPANKY	OFF DUTY	EVA PROC RVW	PRE SLEEP			MASK PB/TOOL CONFIG	PRE SLEEP	SLEEP
MS2 ROBERTO	OFF DUTY	EVA PROC RVW	MDDK#	PRE SLEEP				SLEEP
MS3 DREW	OFF DUTY	EVA PROC RVW	PRE SLEEP			MASK PB/TOOL CONFIG	PRE SLEEP	SLEEP
						10.2 DPRS	ISS Airlock Campout at 10.2 PSI	
MS4 TAZ	OFF DUTY	EVA PROC RVW	EXERCISE	PRE SLEEP				SLEEP

NO EXERCISE

DAY/NIGHT

ORBIT 80 81 82 83 84 85 86 87 88

TDRS W E Z

ISS TDRS AVAIL

ORB ATT BIAS -XLV -ZVV

NOTES #STATUS CHECK

GMT 04/24/11 (114) 04/25 01 02 03 04 05 06 07 08 09 10 11

MET Day 005 005/00 01 02 03 04 05 06 07 08 09 10 11 12

FD06

ISS	ISS CDR DIMA	TVIS	PW	DPC	PRE SLEEP-ISS								SLEEP
ISS	FE-1 ALEXANDER	OFF DUTY	PW	DPC	PRE SLEEP-ISS								SLEEP
ISS	FE-2 ANDREY	VELO	PW	DPC	PRE SLEEP-ISS								SLEEP
ISS	FE-3 RON	OFF DUTY	EVA PROC RVW	PW	DPC	PRE SLEEP-ISS			RST				SLEEP
ISS	FE-5 PAOLO	ARED	EVA PROC RVW	PW	DPC	PRE SLEEP-ISS	MASK PB/TOOL CONFIG		PRE	SLEEP			SLEEP
ISS	FE-6 CADY	T2	EVA PROC RVW	PW	DPC	MPC	PRE SLEEP-ISS			MPC			SLEEP
	TDRS AVAIL												

NO EXERCISE

ISS										
	DAY/NIGHT									
	DAILY ORBIT	7	8	9	10	11	12	13	14	15
	ORBIT	3252	3253	3254	3255	3256	3257	3258	3259	3260

NOTES

GMT 04/25/11 (115) 12 13 14 15 16 17 18 19 20 21 22 23

MET Day 005 12 13 14 15 16 17 18 19 20 21 22 23 006/00

STS 134

FD07

CDR MARK	SLEEP	POST SLEEP	PMC A/G	HYG BRK/ HATCH CLS	CAMPOUT EVA PREP	EMU	PURGE	EMU PREBREATHE	C_LK DPRS	P/TV07 EVA	MEAL	P/TV07 EVA	P-RPS ♣
PLT BOX	SLEEP	LOG	POST SLEEP	INHIB	PAD	CWC-I	FILL #9	CWC-I	FILL #10	CWC-I	FILL #11	CWC-I	XFER	IMU	MDDK XFER	MEAL	SSRMS SPDM LUBE	CCR RMV	MDDK XFER	EXERCISE
MS1 SPANKY	SLEEP	POST SLEEP	HYGIENE BREAK/ P/B	CAMPOUT EVA PREP	EMU	PURGE	EMU PREBREATHE	C_LK DPRS	P-DPS	EGRESS SETUP	P3-P4	REROUTE	ATA TO FILL	PSARJ REMOVE COVERS	PSARJ 1ST LUBE	P3-P4 NH3 JUMPR STOW	S1 RAD GRPL BAR STOW	PSARJ 2ND LUBE	PSARJ INSTALL COVERS	CLNGUPS	P-RPS ⊕
MS2 ROBERTO	SLEEP	LOG	POST SLEEP	IENOS@	MDKU#	DIU*	XFER	UPDAT	P/TV07	EVAS/U	ISOAM	EXERCISE	IFOAM*	MDDK XFER	MEAL	MDDK XFER
MS3 DREW	SLEEP	POST SLEEP	HYGIENE BREAK/ P/B 14.7 RPRS 10.2 DPRS	CAMPOUT EVA PREP	EMU	PURGE	EMU PREBREATHE	C_LK DPRS	P-DPS	EGRESS SETUP	P3-P4	REROUTE	P5/P6 NH3 FILL/VENT	PSARJ REMOVE COVERS	EAS SETUP/ VENT	NH3 VENT TOOL CLNUP	NH3 STOW JMPR	ATA TO VENT	SPDM CLA CVR INSTL	SPDM LEE LUBE	PSARJ 2ND LUBE	PSARJ INSTALL COVERS	CLNGUPS	P-RPS ♦
MS4 TAZ	SLEEP	LOG	POST SLEEP	EXERCISE	EVA 2 IVA SUPPORT

EVA 2 (6:30)

NO EXERCISE: NO UNISOL EXER [A] — NO UNISOL EXER [B]

DAY/NIGHT

ORBIT: 88 89 90 91 92 93 94 95 96

TDRS: W E Z

ISS TDRS AVAIL

ORB ATT: BIAS -XLV -ZVV

NOTES

[A] NO UNISOLATED EXERCISE [EVA CREW OUTSIDE OF SARJ]

[B] NO UNISOLATED EXERCISE [APFR FOR SPDM LEE LUBE]

*FILTER CK

@STATUS CHECK

#STATUS CHECK

*STOW

♣C_LK RPRS

⊕C_LK RPRS

♦C_LK RPRS

GMT 04/25/11 (115) 12 13 14 15 16 17 18 19 20 21 22 23

MET Day 005 12 13 14 15 16 17 18 19 20 21 22 23 006/00

FD07

ISS	ISS CDR DIMA	SLEEP; POST SLEEP; PW; DPC; PW; VELO; TVIS; MEAL
ISS	FE-1 ALEXANDER	SLEEP; POST SLEEP; PW; DPC; PW; VELO; TVIS; MEAL
ISS	FE-2 ANDREY	SLEEP; POST SLEEP; PW; DPC; PW; MEAL; TVIS; VELO
ISS	FE-3 RON	SLEEP; RST; POST SLEEP; HYG BRK/ HATCH CLS; CAMPOUT EVA PREP; T2; ARED; MEAL; ЕДВ SMPL; P-RPS ♣
ISS	FE-5 PAOLO	SLEEP; POST SLEEP; HYG BRK/ HATCH CLS; CAMPOUT EVA PREP; EMU PURGE; EMU PREBREATHE; C_LK DPRS; P-DPS; T2; MEAL; VIS; FLYWHL; ARED; ROPE; P-RPS ♣
ISS	FE-6 CADY	SLEEP; BISP; POST SLEEP; PW; DPC; PW; HAMPD; TEST; GC/DMS; INHIB; PAD; ARED; T2; GLOVE; MEAL; GC/DMS; VSW; CCRINST; SSRMS SPDM LUBE

TDRS AVAIL

NO EXERCISE: NO UNISOL EXER [A]; NO UNISOL EXER [B]

ISS									
DAY/NIGHT									
DAILY ORBIT	15	16	1	2	3	4	5	6	7
ORBIT	3260	3261	3262	3263	3264	3265	3266	3267	3268

NOTES

[A] NO UNISOLATED EXERCISE [EVA CREW OUTSIDE OF SARJ]
[B] NO UNISOLATED EXERCISE [APFR FOR SPDM LEE LUBE]

*CAMCORDER CONFIG

♣C_LK RPRS

GMT 04/25/11 (115) 04/26 01 02 03 04 05 06 07 08 09 10 11

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

STS 134

FD07

CDR MARK	♣	POST EVA W/H20			PRE SLEEP	POST EVA	TAGUP	PRE SLEEP	PMC A/G	PRE SLEEP	ISS EXTERNAL SURVEY		SLEEP
PLT BOX		EXERCISE				ILON	PRE SLEEP						SLEEP
MS1 SPANKY	⊕	POST EVA W/H20			PRE SLEEP	POST EVA	TAGUP	PRE SLEEP					SLEEP
MS2 ROBERTO		MDDK XFER	TAGUP	XFER	BRIEF	MDDK #	PRE SLEEP						SLEEP
MS3 DREW	♦	POST EVA W/H20			PRE SLEEP	POST EVA	TAGUP	PRE SLEEP					SLEEP
MS4 TAZ				PRE SLEEP		POST EVA	TAGUP	PRE SLEEP					SLEEP

NO EXERCISE

DAY/NIGHT

ORBIT 96 97 98 99 100 101 102 103 104

TDRS W E Z

ISS TDRS AVAIL

ORB ATT BIAS -XLV -ZVV

NOTES
♣C_LK RPRS #STATUS CHECK
⊕C_LK RPRS
♦C_LK RPRS

GMT 04/25/11 (115) 04/26 01 02 03 04 05 06 07 08 09 10 11

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

FD07

ISS	ISS CDR DIMA		PW	DPC	PRE SLEEP-ISS						SLEEP			
ISS	FE-1 ALEXANDER		PW	DPC	PRE SLEEP-ISS						SLEEP			
ISS	FE-2 ANDREY	VELO	PW	DPC	PRE SLEEP-ISS						SLEEP			
ISS	FE-3 RON	* POST EVA W/H2O			PRE SLEEP-ISS			RST			SLEEP			
ISS	FE-5 PAOLO	* POST EVA W/H2O			PRE SLEEP-ISS						SLEEP			
ISS	FE-6 CADY	GLOVE / PHOTO / VSW / HAMPU / EVA* / EVA*	BSA INIT	DPC / MPC	PRE SLEEP-ISS			MPC			SLEEP			
	TDRS AVAIL													

NO EXERCISE

ISS									
DAY/NIGHT									
DAILY ORBIT	7	8	9	10	11	12	13	14	15
ORBIT	3268	3269	3270	3271	3272	3273	3274	3275	

NOTES

*C_LK RPRS
*CAMCORDER CONFIG
*D/L
*D/L

GMT 04/26/11 (116) 12 13 14 15 16 17 18 19 20 21 22 23

MET Day 006 12 13 14 15 16 17 18 19 20 21 22 23 007/00

STS 134

FD08

CDR MARK	POST SLEEP	IMU	POST SLEEP	CWC DUMP	INIT	CWC DUMP	TERM	PAO EVENT	FILTER INSPECT	PAO EVENT	MEAL	OFF DUTY	EXERCISE	♣					
PLT BOX	LOG	POST SLEEP	N2-I	SPLY	INIT	SPLY	TERM	PAO EVENT	N2-T	MEAL	OFF DUTY	EXERCISE	OFF DUTY	⊕					
MS1 SPANKY	ASPRN	POST SLEEP	E_LK PREP	EVA TOOL CONFIG	PAO EVENT	MEAL	OFF DUTY	EXERCISE	OFF DUTY	♦									
MS2 ROBERTO	LOG	POST SLEEP	IENOS@	MMDIKU#*	MEAL	OFF DUTY	EXERCISE	OFF DUTY	®										
MS3 DREW	ASPRN	POST SLEEP	E_LK PREP	EVA TOOL CONFIG	MEAL	OFF DUTY	EXERCISE	OFF DUTY	♥										
MS4 TAZ	LOG	POST SLEEP	BATT	INSTL	POST SLEEP	PAO EVENT	EVA TOOL CONFIG	PAO EVENT	MEAL	OFF DUTY	EXERCISE	OFF DUTY	△						

NO EXERCISE

DAY/NIGHT

ORBIT 104 105 106 107 108 109 110 111

TDRS W E Z

ISS TDRS AVAIL

ORB ATT BIAS -XLV -ZVV

NOTES

@STATUS CHECK
*FILTER CK
#STATUS CHECK

♣EVA PROC
⊕EVA PROC
®EVA PROC

GMT 04/26/11 (116) 12 13 14 15 16 17 18 19 20 21 22 23

MET Day 006 12 13 14 15 16 17 18 19 20 21 22 23 007/00

FD08

ISS	ISS CDR DIMA	POST SLEEP; PW; DPC; PW; TVIS; VELO; PMC; MEAL; OFF DUTY; PW
ISS	FE-1 ALEXANDER	POST SLEEP; PW; DPC; PW; PMC; MEAL; OFF DUTY; TVIS; VELO; OFF DUTY; PW
ISS	FE-2 ANDREY	POST SLEEP; PW; DPC; PW; PMC; MEAL; OFF DUTY; TVIS; VELO; PW
ISS	FE-3 RON	SALIVA; POST SLEEP; PW; DPC; PW; S/U; PMC; PCN INCORP; MEAL; ♣; OFF DUTY; T2; ARED; OFF DUTY; ⊕
ISS	FE-5 PAOLO	POST SLEEP; PW; DPC; PW; L_ION INIT; EPO HYDR; EPO STAT; EPO OBS; MEAL; PMC; OFF DUTY; ARED; T2; L_ION TERM; OFF DUTY; ⊕
ISS	FE-6 CADY	POST SLEEP; PW; DPC; PW; BATT INSTL; D2XS; BSA TERM; PMC; PCN INCORP; D2XS; MEAL; OFF DUTY; D2XS CAMR; OFF DUTY; T2; ARED
	TDRS AVAIL	
NO EXERCISE		
ISS	DAY/NIGHT	
ISS	DAILY ORBIT	15; 1; 2; 3; 4; 5; 6; 7
ISS	ORBIT	3276; 3277; 3278; 3279; 3280; 3281; 3282; 3283
	NOTES	♣PAO DEACT; ⊕EVA PROC

GMT 04/26/11 (116) 04/27 01 02 03 04 05 06 07 08 09 10 11

MET Day 007 007/00 01 02 03 04 05 06 07 08 09 10 11 12

STS 134	FD08					FD09
CDR MARK	EVA PROC RVW	PRE SLEEP	PMC A/G	PRE SLEEP	SLEEP	POST SLEEP
PLT BOX	EVA PROC RVW	PRE SLEEP			SLEEP	LOG POST SLEEP
MS1 SPANKY	EVA PROC RVW	PRE SLEEP			SLEEP	POST SLEEP
MS2 ROBERTO	EVA PROC RVW	MDK #	PRE SLEEP		SLEEP	LOG POST SLEEP
MS3 DREW	EVA PROC RVW	PRE SLEEP			SLEEP	POST SLEEP
MS4 TAZ	EVA PROC RVW	PRE SLEEP			SLEEP	POST SLEEP

NO EXERCISE

DAY/NIGHT

ORBIT 112 113 114 115 116 117 118 119

TDRS W E Z

ISS TDRS AVAIL

ORB ATT BIAS -XLV -ZVV

NOTES #STATUS CHECK

GMT 04/26/11 (116) 04/27 01 02 03 04 05 06 07 08 09 10 11

MET Day 007 007/00 01 02 03 04 05 06 07 08 09 10 11 12

ISS	FD08													FD09
	ISS CDR DIMA	PW	♣	DPC		PRE SLEEP-ISS			SLEEP					POST SLEEP
	FE-1 ALEXANDER	PW	♣	DPC		PRE SLEEP-ISS			SLEEP					POST SLEEP
	FE-2 ANDREY	PW	♣	DPC		PRE SLEEP-ISS			SLEEP					POST SLEEP
	FE-3 RON	EVA PROC RVW		DPC		PRE SLEEP-ISS			SLEEP					POST SLEEP
	FE-5 PAOLO	EVA PROC RVW		DPC		PRE SLEEP-ISS			SLEEP				RST	POST SLEEP
	FE-6 CADY	ARED		DPC	MPC	PRE SLEEP-ISS	MPC		SLEEP				RST	POST SLEEP
	TDRS AVAIL													
NO EXERCISE														
ISS	DAY/NIGHT													
	DAILY ORBIT	8												
	ORBIT													
NOTES		♣PRE SLEEP-ISS												

GMT 04/27/11 (117) 12 13 14 15 16 17 18 19 20 21 22 23

MET Day 007 12 13 14 15 16 17 18 19 20 21 22 23 008/00

STS 134

FD09

CDR MARK	POST SLEEP; PMC A/G; ISLE EVA PREP; EMU; PURGE; ISLE EMU PREBREATHE; C_LK DPRS; P-DPS; P/TV07 EVA; MEAL; P/TV07 EVA; P-RPS ♣
PLT BOX	POST SLEEP; INHIB; PADR; CWC-I; FILL #12; CWC-I; FILL #13; CWC-I; FILL #14; CWC-I; XFER; IMU; MDDK XFER; EXERCISE; MEAL; GLACR; P/TV; MDDK XFER
MS1 SPANKY	POST SLEEP; ISLE EVA PREP; EMU; PURGE; ISLE EMU PREBREATHE; C_LK DPRS; P-DPS; EGRS SETUP; PDGF S/U; RETRIEVE PAMA/PDGF; FGB PDGF; INSTALL; VSC; INSTALL; FGB Y-JMPR CH 1/4; 1553 DATA CABLE INST; FGB Y-JMPR CH 2/3; GET AHEAD; CLNUP INGRS; P-RPS ⊕
MS2 ROBERTO	POST SLEEP; MDDK#; IENOS@; XFER; UPDAT; P/TV07; EVAS/U; EXERCISE; MDDK XFER; MEAL; GLACIER TRANSFER; MDDK XFER ♦
MS3 DREW	POST SLEEP; ISLE EVA PREP; EMU; PURGE; ISLE EMU PREBREATHE; C_LK DPRS; P-DPS; EGRS SETUP; PDGF S/U; RETRIEVE PAMA/PDGF; FGB PDGF; INSTALL; VSC; INSTALL; FGB Y-JMPR CH 1/4; 1553 DATA CABLE INST; FGB Y-JMPR CH 2/3; PDGF/FGB; TRSTO; PHO; CLNUP INGRS; P-RPS ®
MS4 TAZ	POST SLEEP; MCIU*; EXERCISE; EVA 3 IVA SUPPORT

EVA 3 (6:30)

NO EXERCISE

DAY/NIGHT

ORBIT 120 121 122 123 124 125 126 127

TDRS W E Z

ISS TDRS AVAIL

ORB ATT BIAS -XLV -ZVV

NOTES
@STATUS CHECK
#STATUS CHECK
*FILTER CK
♣C_LK RPRS
⊕C_LK RPRS
®C_LK RPRS

GMT 04/27/11 (117) 12 13 14 15 16 17 18 19 20 21 22 23

MET Day 007 12 13 14 15 16 17 18 19 20 21 22 23 008/00

FD09

ISS	ISS CDR DIMA	POST SLEEP	PW	DPC	PW	TVIS		VELO				MEAL												PW
ISS	FE-1 ALEXANDER	POST SLEEP	PW	DPC	PW	VELO		TVIS				MEAL												PW
ISS	FE-2 ANDREY	POST SLEEP	PW	DPC	PW							MEAL						VELO		TVIS				PW
ISS	FE-3 RON	POST SLEEP	ISLE EVA PREP					T2		ARED		MEAL	CSI FEED							PW			PRPS	♣
ISS	FE-5 PAOLO	POST SLEEP	ISLE EVA PREP					EMU PURGE	ISLE EMU PREBREATHE		C_LK DPRS	MEAL	FFQ			ARED			T2		SNBBR	PW	PRPS	♣
ISS	FE-6 CADY	POST SLEEP	PW	DPC	PW	HAMPD	TEST		INHIB	PAD	CSA-CP C/O		P/TV	RK DR OPN	POS ROT	BIO SMP C/O	POS ROT	RK DR CLS		MEAL	PLCK	TEPC	GLACIER TRANSFER		GLOVE	T2	ARED		PW	HAMPU
	TDRS AVAIL																													
NO EXERCISE																														
ISS	DAY/NIGHT																													
ISS	DAILY ORBIT																													
ISS	ORBIT																													
	NOTES																													

♣C_LK RPRS

GMT 04/27/11 (117) 04/28 01 02 03 04 05 06 07 08 09 10 11

MET Day 008 008/00 01 02 03 04 05 06 07 08 09 10 11 12

| STS 134 | FD09 | | |

GMT 04/27/11 (117) 04/28 01 02 03 04 05 06 07 08 09 10 11

MET Day 008 008/00 01 02 03 04 05 06 07 08 09 10 11 12

		FD09																					FD10
ISS	ISS CDR DIMA	PW		DPC	PRE SLEEP-ISS																		POST SLEEP
ISS	FE-1 ALEXANDER	PW		DPC	PRE SLEEP-ISS																		POST SLEEP
ISS	FE-2 ANDREY	PW		DPC	PRE SLEEP-ISS																		POST SLEEP
ISS	FE-3 RON	*	POST EVA			PRE SLEEP-ISS																SALIVA	POST SLEEP
ISS	FE-5 PAOLO	*	POST EVA			PRE SLEEP-ISS				RST													POST SLEEP
ISS	FE-6 CADY	GLOVE	PHOTO	EVA*	BSA INIT	DPC	MPC	PRE SLEEP-ISS			MPC	RST											POST SLEEP
	TDRS AVAIL																						
NO EXERCISE																							
ISS	DAY/NIGHT																						
ISS	DAILY ORBIT																						
ISS	ORBIT																						
	NOTES	*C_LK RPRS *D/L																					

GMT 04/28/11 (118) — MET Day 008 — 009/00

FD10

STS 134		
CDR	MARK	POST SLEEP; EXERCISE; POST SLEEP; IMU; N2-I; XFER; UPDAT; MDDK XFER; PAO EVENT; CWC #2 INIT; MEAL; CWC #2 TERM; CWC XFER; PAO EVENT; N2-T; PAO EVENT; SPINAL; XFR BRF; PREP; XFER; BREF; EVA PROC RVW
PLT	BOX	POST SLEEP; STBD WING SRVY; PORT WING SURVEY; ILOF; MYCO; MEAL; PAO EVENT; SPINAL; EXERCISE; EVA PROC RVW
MS1	SPANKY	POST SLEEP; STBD WING SRVY; MEAL; EMU SWAP; BATT INSTL; EXERCISE; E_LK PREP; EVA TOOL CONFIG; EVA PROC RVW
MS2	ROBERTO	POST SLEEP; MDK# IEN@S; CWC S/U; CWC #1 INIT; EXERCISE; CWC #1 TERM; NOSE CAP SRVY; PORT WING SURVEY; MEAL; LDRI DOWNLINK; EVA PROC RVW
MS3	DREW	POST SLEEP; MCIU*; STBD WING SRVY; NOSE CAP SRVY; EMU SWAP; BATT INSTL; EXERCISE; MEAL; PAO EVENT; EVA TOOL CONFIG; EVA PROC RVW
MS4	TAZ	POST SLEEP; CUBE 7 XFER; EXERCISE; NOSE CAP SRVY; PORT WING SURVEY; MEAL; E_LK PREP; EVA TOOL CONFIG; EVA PROC RVW

NO EXERCISE

DAY/NIGHT

ORBIT: 135, 136, 137, 138, 139, 140, 141, 142, 143

TDRS: W, E, Z

ISS TDRS AVAIL

ORB ATT: BIAS -XLV -ZVV

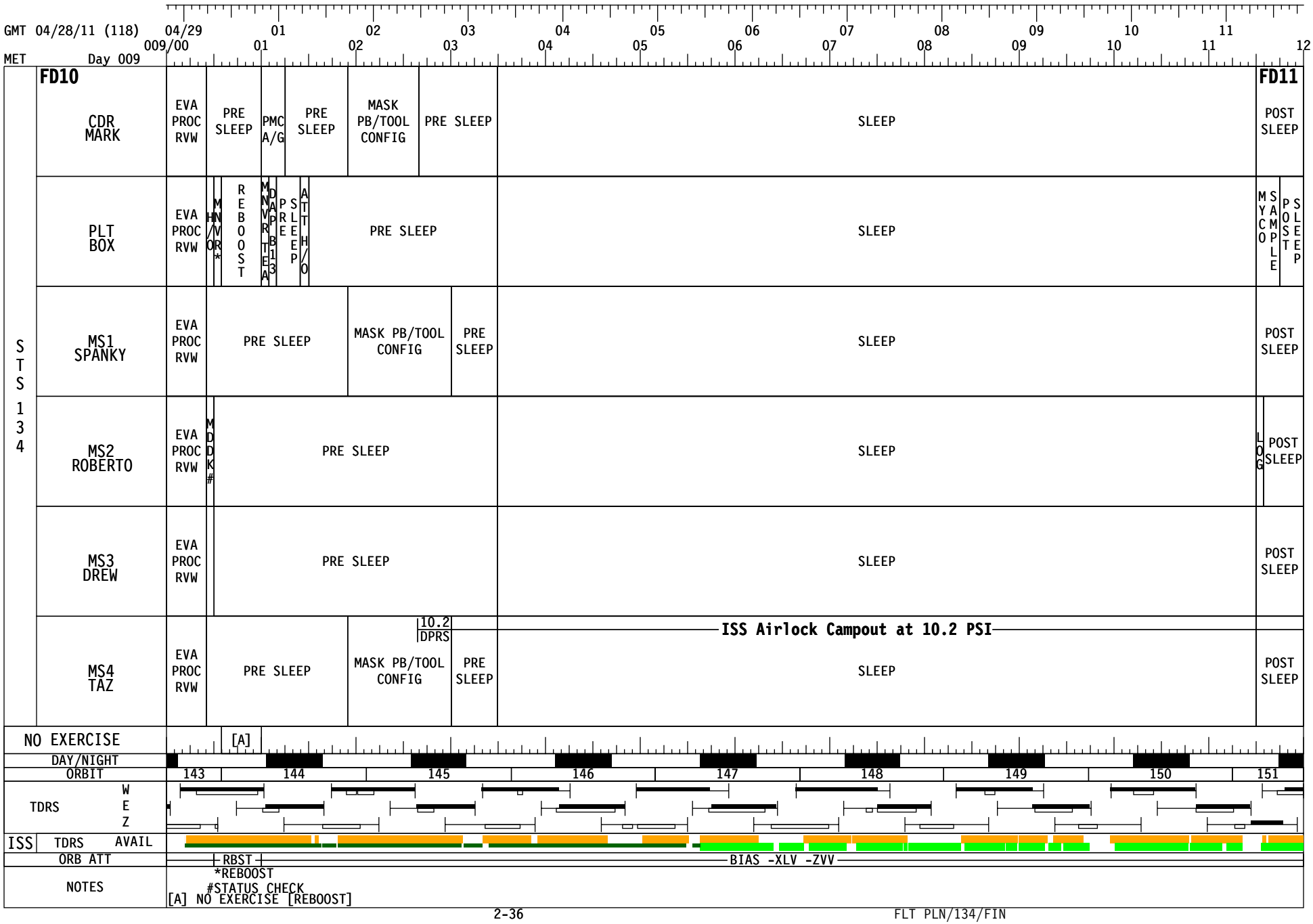
NOTES: @STATUS CHECK; #STATUS CHECK; *FILTER CK

GMT 04/28/11 (118) 12 13 14 15 16 17 18 19 20 21 22 23 009/00

MET Day 008

FD10

ISS	ISS CDR DIMA	POST SLEEP	PW	DPC	PW																MEAL						VELO		TVIS
ISS	FE-1 ALEXANDER	POST SLEEP	PW	DPC	PW																MEAL						TVIS		VELO	PW
ISS	FE-2 ANDREY	POST SLEEP	PW	DPC	PW	VELO				TVIS											MEAL									PW
ISS	FE-3 RON	POST SLEEP		DPC	PW	T2			PW		H2O RCHRG		T2 ALIGN	KABIN		CDRA-REAR-UTILITIES			RACK	KABIN	MEAL		MYCO PREP	MYCO^	AREA DOS STOW	AREA DOS S/U	FFQ		PAO EVENT	ARED	EVA PROC RVW
ISS	FE-5 PAOLO	POST SLEEP	PW	DPC	PW	ARED				CEVIS						CDRA-REAR-UTILITIES			RACK	KABIN	MEAL	T2 ALIGN		MYCO^	SPINAL S/U				SPINAL DATA CLCT OPR	SPINAL H/W STOW	EVA PROC RVW
ISS	FE-6 CADY	POST SLEEP	PW	DPC	PW	D2XS	P/TV	RK DR OPN	POS ROT	BIO SMP C/O		POS ROT	RK DR CLS		KABIN	CDRA-REAR-UTILITIES	D2XS	BSA TERM	S/U	PAO EVENT	MEAL	FFQ	♣	MYCO^	D2XS CAMR	D2XS CAMR	ARED	⊕	CEVIS	EVA PROC RVW
	TDRS AVAIL																												
NO EXERCISE																													
ISS	DAY/NIGHT																												
ISS	DAILY ORBIT																												
ISS	ORBIT																												
	NOTES																							♣MELFI INS ^ CREW REVIEW &2DNT INS					⊕PAO DEACT		


GMT 04/28/11 (118)
04/29
01
02
03
04
05
06
07
08
09
10
11
12
MET Day 009
009/00
STS 134
FD10
FD11
CDR MARK
EVA PROC RVW
PRE SLEEP
PMC A/G
PRE SLEEP
MASK PB/TOOL CONFIG
PRE SLEEP
SLEEP
POST SLEEP
PLT BOX
EVA PROC RVW
HN/VOR*
REBOOST
MNVR TEA
DAP B13
PRE
SLEEP
ATT H/O
PRE SLEEP
SLEEP
MYCO
SAMPLE
POST
SLEEP
MS1 SPANKY
EVA PROC RVW
PRE SLEEP
MASK PB/TOOL CONFIG
PRE SLEEP
SLEEP
POST SLEEP
MS2 ROBERTO
EVA PROC RVW
MDK#
PRE SLEEP
SLEEP
LOG
POST SLEEP
MS3 DREW
EVA PROC RVW
PRE SLEEP
SLEEP
POST SLEEP
MS4 TAZ
EVA PROC RVW
PRE SLEEP
MASK PB/TOOL CONFIG
10.2
DPRS
PRE SLEEP
ISS Airlock Campout at 10.2 PSI
SLEEP
POST SLEEP
NO EXERCISE
[A]
DAY/NIGHT
ORBIT
143
144
145
146
147
148
149
150
151
TDRS
W
E
Z
ISS
TDRS AVAIL
ORB ATT
RBST
BIAS -XLV -ZVV
NOTES
*REBOOST
#STATUS CHECK
[A] NO EXERCISE [REBOOST]

GMT 04/28/11 (118) 04/29 01 02 03 04 05 06 07 08 09 10 11

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

ISS	FD10 ISS CDR DIMA	TVIS	DPC	PW	PRE SLEEP-ISS																				FD11 POST SLEEP
	FE-1 ALEXANDER	PW	DPC	PW	PRE SLEEP-ISS																				POST SLEEP
	FE-2 ANDREY	PW	DPC	PW	PRE SLEEP-ISS																				POST SLEEP
	FE-3 RON	EVA PROC RVW	DPC	PW	PRE SLEEP-ISS																				DRY MYCO CLCT RST ♣
	FE-5 PAOLO	EVA PROC RVW	DPC	PW	PRE SLEEP-ISS			MASK PB/TOOL CONFIG			PRE SLEEP														MYCO CLCT POST SLEEP
	FE-6 CADY	EVA PROC RVW	DPC	PW	MPC	PRE SLEEP-ISS								MPC											⊕ MYCO CLCT MELFI ^
	TDRS AVAIL																								
NO EXERCISE				[A]																					
ISS	DAY/NIGHT																								
	DAILY ORBIT																								
	ORBIT																								
NOTES		[A] NO EXERCISE [REBOOST]																							♣POST SLEE ⊕POST SLEEP ^ MYCO INS

GMT 04/29/11 (119) 12 13 14 15 16 17 18 19 20 21 22 23

MET Day 009 12 13 14 15 16 17 18 19 20 21 22 23 010/00

FD11

STS 134	
CDR MARK	POST SLEEP; PMC A/G; HYG BRK/ HATCH CLS; CAMPOUT EVA PREP; EMU PURGE; EMU PREBREATHE; C_LK DPRS; P-DPS; OBSS UNGRPL; P/TV07 EVA; N2-I; P/TV07 EVA; FILTER INSPECT; CWC#3 INIT; MEAL; CWC#3 TERM; CWC#4 INIT; N2-TI; P/TV07 EVA; CWC#4 TERM; P/TV07 EVA; O2-T; CWC XFER; P-RPS; C LK; RPRS; POST EVA W/H2O
PLT BOX	POST SLEEP; INHIB PADIB; EXERCISE; IMU; CRS INST; SRMS GRAPS; OBSS; SSRMS OBSS STOW; SSRMS OBSS GF SWAP; CRRMV; MEAL; MDDK XFER; RMS PWRDN; O2 CONFIG; TO XFER
MS1 SPANKY	♣ HYGIENE BREAK/ P/B; CAMPOUT EVA PREP; EMU PURGE; EMU PREBREATHE; C_LK DPRS; P-DPS; EGRS SETUP; OBSS STOW; P6 PDGF RETRIEVE; OBSS EFGF/PDFG SWAP; STOW EFGF IN TSA; ELC3 SPDM ARM RLS; CLNUP INGRS; P-RPS; C LK; RPRS; POST EVA W/H2O
MS2 ROBERTO	POST SLEEP; INOS@; MDKU#; XFER*; UPDAT; P/TV07; EVAS/U; EXERCISE; OBSS UNGRPL; MDDK XFER; MEAL; MDDK XFER; RMS PWRDN; XFR BRF; PREP; XFER; BREF
MS3 DREW	POST SLEEP; EVA 4 IVA SUPPORT; EXERCISE; PRE; SLEEP
MS4 TAZ	14.7 RPRS; 10.2 DPRS; ⊕ HYGIENE BREAK/ P/B; CAMPOUT EVA PREP; EMU PURGE; EMU PREBREATHE; C_LK DPRS; P-DPS; EGRS SETUP; OBSS STOW; P6 PDGF RETRIEVE; OBSS EFGF/PDFG SWAP; OTP; INSPECT; ELC3 SPDM ARM RLS; MLI; INSTL; CLNUP INGRS; P-RPS; C LK; RPRS; POST EVA W/H2O

EVA 4 (6:30)

NO EXERCISE: NO EXER [A]; NO UNISOL [B]; NO UNISOL [C]

DAY/NIGHT

ORBIT: 151 152 153 154 155 156 157 158 159

TDRS W E Z

ISS TDRS AVAIL

ORB ATT: BIAS -XLV -ZVV

NOTES
♣POST SLEEP
⊕POST SLEEP
*FILTER CK
@STATUS CHECK
#STATUS CHECK
[A] NO EXERCISE [OBSS STOW] [B] NO UNISOLATED EXERCISE [CREW OUTBOARD OF SARJ FOR P6 PDGF RETRIEVE]
[C] NO UNISOLATED EXERCISE [SPDM EDF RELEASE]

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MET Day 009 12 13 14 15 16 17 18 19 20 21 22 23 010/00

FD11

ISS	ISS CDR DIMA	POST SLEEP; PW; DPC; PW; TVIS; VELO; MEAL; PW
ISS	FE-1 ALEXANDER	POST SLEEP; PW; DPC; PW; VELO; MEAL; TVIS; PW
ISS	FE-2 ANDREY	POST SLEEP; PW; DPC; PW; MEAL; TVIS; VELO; PW
ISS	FE-3 RON	POST SLEEP; HYG BRK/ HATCH CLS; CAMPOUT EVA PREP; ARED; T2 ALIGN; KABIN; FRAME; MEAL; RACK; KABIN; SECURE; T2; P-RPS; CLK; RPRS; POST EVA W/H2O
ISS	FE-5 PAOLO	POST SLEEP; HYG BRK/ HATCH CLS; CAMPOUT EVA PREP; EMU; PURGE; EMU PREBREATHE; C_LK DPRS; P-DPS; KABIN; MEAL; RACK; KABIN; T2 ALIGN; ARED; T2; P-RPS; CLK; RPRS; POST EVA W/H2O
ISS	FE-6 CADY	POST SLEEP; TEST; VHSAWM; DPC; T2; INHIB; PAD; SSRMS; GRAPS; OBSS; SSRMS OBSS STOW; FRAME; SSRMS OBSS GF SWAP; MEAL; GLOVE; ARED; GLOVE; PHOTO; EVA*; O2 RECONFIG; TOXFER
	TDRS AVAIL	
NO EXERCISE		NO EXER [A]; NO UNISOL [B]; NO UNISOL [C]
ISS	DAY/NIGHT	
ISS	DAILY ORBIT	
ISS	ORBIT	

NOTES

*CAMCORDER CONFIG

*D/L

[A] NO EXERCISE [OBSS STOW]
[B] NO UNISOLATED EXERCISE
[CREW OUTBOARD OF SARJ FOR P6 PDGF RETRIEVE]
[C] NO UNISOLATED EXERCISE [SPDM EDF RELEASE]

GMT 04/29/11 (119) 04/30 01 02 03 04 05 06 07 08 09 10 11

MET Day 010 010/00 01 02 03 04 05 06 07 08 09 10 11 12

ISS EXTERNAL SURVEY

STS 134	FD11																							FD12
CDR MARK	POST EVA W/H2O	PRE SLEEP	POST EVA	TAG UP	PRE	SLEEP	PMC A/G	PRE SLEEP	SLEEP															POST SLEEP
PLT BOX	O2 RECONFIG	TO XFER	O2 INIT	ILON	PRE SLEEP																		LOG	POST SLEEP
MS1 SPANKY	♣	PRE SLEEP	POST EVA	TAG UP	PRE SLEEP																		ASPRN	POST SLEEP
MS2 ROBERTO	MDK #	PRE SLEEP																					LOG	POST SLEEP
MS3 DREW	PRE SLEEP		POST EVA	TAG UP	PRE SLEEP																			POST SLEEP
MS4 TAZ	⊕	PRE SLEEP	POST EVA	TAG UP	PRE SLEEP																		LOG	ASPRN POST SLEEP

NO EXERCISE	
DAY/NIGHT	
ORBIT	159 160 161 162 163 164 165 166 167
TDRS W	
TDRS E	
TDRS Z	
ISS TDRS AVAIL	
ORB ATT	BIAS -XLV -ZVV
NOTES	♣POST EVA W/H2O ⊕POST EVA W/H2O #STATUS CHECK

GMT 04/29/11 (119) 04/30 01 02 03 04 05 06 07 08 09 10 11

MET Day 010 010/00 01 02 03 04 05 06 07 08 09 10 11 12

| | | FD11 | | |

GMT 04/30/11 (120) 12 13 14 15 16 17 18 19 20 21 22 23

MET Day 010 12 13 14 15 16 17 18 19 20 21 22 23 011/00

FD12

STS 134																								
CDR MARK	POST SLEEP	PAO EVENT	POST SLEEP	PWR FILL #1	PWR FILL #2	H2O*	PWR XFER	D/L*	MEAL	CREW CONF	CREW PHOTO	O2-I	FIS	EXERCISE	O2-T	O2 TERM	O2 XFER TEARDOWN	FAREL WELL	EGRS HATCH CLOSE	HATCH LEAK CHECK	PRE SLEEP			
PLT BOX	POST SLEEP	ILOF	IMU	EXERCISE	MDDK XFER			D/L*	MEAL	CREW CONF	CREW PHOTO	MDDK XFER			COND	CHG/O		FAREL WELL	EGRS HATCH CLOSE	HATCH LEAK CHECK	PCSACT	PRE SLEEP		
MS1 SPANKY	POST SLEEP	POST EVA EMU RECONFG				POST EVA	XFR/STS	D/L*	MEAL	CREW CONF	CREW PHOTO				SSC	TEARDOWN	PCS T/D	FAREL WELL	WLES	EXERCISE		PRE SLEEP		
MS2 ROBERTO	POST SLEEP	MCDU*	MCDUK#	IENOS@	XFER	UPDAT	MDDK XFER		EXERCISE	D/L*	MEAL	CREW CONF	CREW PHOTO	MDDK XFER	IENOS	STOWS	VIABLE*	XFR BRF	PREP	XFER	BRIEF	FAREL WELL	SSV-3	RNDZ TOOLS C/O	SSV-2	C/L CAMR	INSTL	MDK#	♣
MS3 DREW	POST SLEEP	POST EVA EMU RECONFG				POST EVA	XFR/STS	D/L*	MEAL	CREW CONF	CREW PHOTO				EXERCISE			FAREL WELL		PS/TOV10	STOORM	TC/OOLS		PRE SLEEP		
MS4 TAZ	POST SLEEP				MDDK XFER			D/L*	MEAL	CREW CONF	CREW PHOTO	MDDK XFER					EXERCISE	PTV05	DEACT	FAREL WELL		RNDZ TOOLS C/O		C/L CAMR	INSTL	PRE SLEEP	

NO EXERCISE

DAY/NIGHT

ORBIT 167 168 169 170 171 172 173 174

TDRS W E Z

ISS TDRS AVAIL

ORB ATT BIAS -XLV -ZVV

NOTES

*FILTER CK
#STATUS CHECK
@STATUS CHECK

*NOMINAL CONFIG
*CREW CHOICE

*POUCH CLOSE

♣PRE SLEEP
#STATUS CHEC

GMT 04/30/11 (120) 12 13 14 15 16 17 18 19 20 21 22 23 011/00

MET Day 010

FD12

ISS	ISS CDR DIMA	POST SLEEP	PW	DPC	PW		VELO	TVIS		D/L*	MEAL	CREW CONF	CREW PHOTO				FARE	WELL		PW	DPC
ISS	FE-1 ALEXANDER	POST SLEEP	PW	DPC	PW					D/L*	MEAL	CREW CONF	CREW PHOTO		VELO		FARE	WELL	TVIS		DPC
ISS	FE-2 ANDREY	POST SLEEP	PW	DPC	PW	TVIS				D/L*	MEAL	CREW CONF	CREW PHOTO				FARE	WELL	PW	VELO	DPC
ISS	FE-3 RON	POST SLEEP	BLD SU	DPC	IMMN BLOOD	SLV STW	BLD STW	POST EVA EMU RECONFG	CWC PT1	CWC PT2	S/U	D/L*	MEAL	CREW CONF	CREW PHOTO	POST EVA EMU RECONFG	T2	ARED	FARE	EGRS HATCH CLOSE	♣ PW	DPC
ISS	FE-5 PAOLO	POST SLEEP	PW	DPC	IMMN OPR	BED201-RMV		T2		D/L*	MEAL	CREW CONF	CREW PHOTO	RFTA R&R	DCB RVW	DCB ULF6 PACK	DCB XFR		FARE	WELL	ARED	DPC
ISS	FE-6 CADY	POST SLEEP	PW	DPC	PW	BED201-RMV		ARED		D/L*	MEAL	CREW CONF	CREW PHOTO	EVA CAMR*	DCB RVW	DCB ULF6 PACK	O2 XFER TEARDOWN		FARE	WELL	T2	PW DPC

TDRS AVAIL

NO EXERCISE

ISS: DAY/NIGHT; DAILY ORBIT; ORBIT

NOTES: *CREW CHOICE ♣PAO DEACT

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MET Day 011 011/00 01 02 03 04 05 06 07 08 09 10 11 12

STS 134

	FD12			FD13
CDR MARK	PRE SLEEP	PMC A/G	PRE SLEEP	SLEEP	POST SLEEP
PLT BOX	PRE SLEEP			SLEEP	LOG	POST SLEEP
MS1 SPANKY	PRE SLEEP			SLEEP	POST SLEEP
MS2 ROBERTO	PRE SLEEP			SLEEP	LOG	POST SLEEP
MS3 DREW	PRE SLEEP			SLEEP	POST SLEEP
MS4 TAZ	PRE SLEEP			SLEEP	LOG	POST SLEEP

NO EXERCISE

DAY/NIGHT

ORBIT 175 176 177 178 179 180 181 182

TDRS W E Z

ISS TDRS AVAIL

ORB ATT BIAS -XLV -ZVV

NOTES

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MET Day 011 011/00 01 02 03 04 05 06 07 08 09 10 11 12

ISS	FD12														FD13
	ISS CDR DIMA	PRE SLEEP-ISS					SLEEP								POST SLEEP
	FE-1 ALEXANDER	PRE SLEEP-ISS					SLEEP								POST SLEEP
	FE-2 ANDREY	PRE SLEEP-ISS					SLEEP								POST SLEEP
	FE-3 RON	PRE SLEEP-ISS					SLEEP								POST SLEEP
	FE-5 PAOLO	MPC	PRE SLEEP-ISS	MPC			SLEEP							RST	POST SLEEP
	FE-6 CADY	PRE SLEEP-ISS					SLEEP							RST	POST SLEEP
	TDRS AVAIL														
NO EXERCISE															
ISS	DAY/NIGHT														
	DAILY ORBIT														
	ORBIT														
NOTES															

GMT 05/01/11 (121) 12 13 14 15 16 17 18 19 20 21 22 23

MET Day 011 12 13 14 15 16 17 18 19 20 21 22 23 012/00

FD13

SEP1^ SEP2^ NH2^ NSR^ TPI^ SEP3^

| STS 134 | | |

GMT 05/01/11 (121) 12 13 14 15 16 17 18 19 20 21 22 23

MET Day 011 12 13 14 15 16 17 18 19 20 21 22 23 012/00

FD13

ISS	ISS CDR DIMA	DPC	PW				TVIS	VELO	MEAL		PFC			PW	DPC	♣
ISS	FE-1 ALEXANDER	DPC	PW			PFC	MEAL		TVIS	VELO		PW	DPC	♣
ISS	FE-2 ANDREY	DPC	PW				MEAL	PFC		VELO	TVIS	PW	DPC	♣
ISS	FE-3 RON	DPC	PW		PMA2 DEPRESS / DOCKING AFT	ARED		MEAL	BPSMU / STOWU	PBA*	IMV DUCT RMV		T2	PFC	PW	DPC	♣
ISS	FE-5 PAOLO	DPC	PW	PMA2 DEPRESS	PMA2 DEPRESS / DOCKING AFT		PMA2 DEPRESS PT1	MEAL	PMA2 DEPRESS	PT2 DEPRESS	PMA2 PT3	T2	PFC	ARED	PW	DPC	⊕
ISS	FE-6 CADY	DPC	PW	♦		UNDK	VIDEO	T2		MEAL	PCS P/D	AUDIO	ARED	PFC	PW	DPC	MPC	®

UNDOCK*

TDRS AVAIL

NO EXERCISE [A] [B] [C] D

ISS DAY/NIGHT
ISS DAILY ORBIT
ISS ORBIT

NOTES

♦SHTTR CLS

*PBA RELOCATE

[A] NO ARED/T2 EXERCISE [ISS ATTITUDE MNVR]
[B] NO ARED/T2 EXERCISE [UNDOCK]
[C] NO ARED/T2 EXERCISE [ISS ATTITUDE MNVR]
[D] NO ARED/T2 EXERCISE [ISS ATTITUDE MNVR]

♣PRE SLEEP-I
⊕PRE SLEEP-I
®PRE SLEEP-I

***UNDOCK 11/14:21**

GMT 05/01/11 (121) 05/02 01 02 03 04 05 06 07 08 09 10 11

MET Day 012 012/00 01 02 03 04 05 06 07 08 09 10 11 12

STS 134

	FD13				FD14		
CDR MARK	PMC A/G	PRE SLEEP	SLEEP		POST SLEEP		PAO EVENT
PLT BOX	PRE SLEEP		SLEEP	LOG	POST SLEEP	W/B #	PAO EVENT
MS1 SPANKY	PRE SLEEP		SLEEP		POST SLEEP		PAO EVENT
MS2 ROBERTO	PRE SLEEP		SLEEP	LOG	POST SLEEP		PAO EVENT
MS3 DREW	PRE SLEEP		SLEEP		POST SLEEP	OCA*	PAO EVENT
MS4 TAZ	PRE SLEEP		SLEEP	LOG	POST SLEEP	♣	PAO EVENT

DAY/NIGHT

ORBIT 191 192 193 194 195 196 197 198

TDRS W E Z

ORB ATT -ZLV -XVV

NOTES

♣PAO SETUP - D
#HEATER ACT
*DOWNLINK RATE
RECONFIG

GMT 05/02/11 (122) 12 13 14 15 16 17 18 19 20 21 22 23

MET Day 012 12 13 14 15 16 17 18 19 20 21 22 23 013/00

FD14

STS 134																								
CDR MARK	POST SLEEP	IMU	FCS C/O	RCS HOT	FIRE	PILOT OPS	D/O BRIEF	MEAL	PAO EVENT	CELLS6	FEST-I	L-1 COMM CHK	EXERCISE	CABIN STOW	L-1 COMM CHK	CATBIN	STOW	COMM2	ENTRY*	FCGB-A#	PRE SLEEP	PMC A/G	PRE SLEEP
PLT BOX	POST SLEEP		FCS C/O	RCS HOT	FIRE	PILOT OPS	D/O BRIEF	MEAL	PAO EVENT	DUMP MNVR	WASTE INSTTE	EXERCISE	WASTE TERM	CWC INIT DUMP	CABIN STOW	CWC TERM DUMP	CWC INIT DUMP	CABIN STOW	CWC TERM DUMP	MNVR -ZLV	PRE SLEEP		
MS1 SPANKY	POST SLEEP	FILTER CLEANING		EXERCISE		COND TD CWC	D/O BRIEF	MEAL	PAO EVENT	CABIN STOW									MADS@	KU STOW	PRE SLEEP		
MS2 ROBERTO	POST SLEEP	MDDK#	♣	FCS C/O	RCS HOT	FIRE	EXERCISE	D/O BRIEF	MEAL	PAO EVENT	CABIN STOW							P/TV09	BIOKIS*	MDDK#	KU STOW	PRE SLEEP	
MS3 DREW	POST SLEEP		EXERCISE	STORRM DEACT	WLES		D/O BRIEF	MEAL	PAO EVENT	OCA*	CABIN STOW				ENTRY	ACTIVE CONFIG LOCK	ERG STOW	WLES	DEACT	PGSC STOW PART I	PRE SLEEP		
MS4 TAZ	PS	SSV DEACT	FCS C/O PTV		EXERCISE		D/O BRIEF	MEAL	PAO EVENT	ENTRY EVIDEO SEUOP	CABIN STOW						ERG STOW	CUBE7			PRE SLEEP		

DAY/NIGHT

ORBIT 198 199 200 201 202 203 204 205 206

TDRS W E Z

GND — MLA — DFR — MLA — WSS — DFR — WSS — DFR — WSS

ORB ATT -ZLV -XVV F -ZLV -ZLV -XVV -ZLV +YVV -ZLV -XVV

NOTES
♣POST SLEEP
#STATUS CHECK
*DOWNLINK RATE RECONFIG
*ARABIDOP TERM *COOLING CNFG
#MUFFLER INSTALL
@POWER ON #STATUS CHECK

GMT 05/02/11 (122) 05/03 01 02 03 04 05 06 07 08 09 10 11

MET Day 013 013/00 01 02 03 04 05 06 07 08 09 10 11 12

STS 134

	FD14		FD15					
CDR MARK	PRE SLEEP	SLEEP	POST SLEEP	PMC A/G	POST SLEEP	GRPB	PWRUP	♣
PLT BOX	PRE SLEEP	SLEEP	LOG	POST SLEEP		GRPB	PWRUP	⊕
MS1 SPANKY	PRE SLEEP	SLEEP	POST SLEEP					
MS2 ROBERTO	PRE SLEEP	SLEEP	LOG	POST SLEEP				
MS3 DREW	PRE SLEEP	SLEEP	POST SLEEP					♦
MS4 TAZ	PRE SLEEP	SLEEP	LOG	POST SLEEP				

DAY/NIGHT

ORBIT: 206 207 208 209 210 211 212 213 214

TDRS W E Z

ORB ATT: -ZLV -XVV

NOTES

♣IMU ALIGN
⊕POST SLEE
♦P/TV STOW

GMT 05/03/11 (123) 12 13 14 15 16 17 18 19 20 21 22 23

MET Day 013 12 13 14 15 16 17 18 19 20 21 22 23 014/00

STS 134

FD15

CDR MARK	IMU ALIGN & / AVE RIF / TRK-XSI	DEORBIT PREP
PLT BOX	POST / SLEEP / WATCH	DEORBIT PREP
MS1 SPANKY	POST SLEEP / SAMDPS*	DEORBIT PREP
MS2 ROBERTO	♣ / MDKC# / WATCH / OCAC / STOW	DEORBIT PREP
MS3 DREW	P/TV / STOW / PGSC STOW PART II	DEORBIT PREP
MS4 TAZ	POST / SLEEP / WATCH / GIRA / STOW	DEORBIT PREP

D/O BURN*

LANDING#

DAY/NIGHT

ORBIT 214 215 216 217 218 219 220 221 222

TDRS W E Z

ORB ATT -XSI COMM

NOTES

♣POST SLEEP
*STRAIN GAGE ENABLE
#STATUS CHECK

***D/O TIG 13/16:36**
#KSC LANDING 13/17:39

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DETAILED TIMELINE

DETAILED TIMELINE

STS-134/ULF6 FD01

GMT Date 04/19 (109) | W | T D R S E | Z | D/N | O R B | MET Day 000 | ATT | CDR MARK | PLT BOX | MS1 SPANKY | NOTES

00:00 — 01:00 — 02:00 — 03:00 — 04:00

ATT: OMS2 — -ZLV -XVV — NC1

ACTIVITIES PRIOR TO 0/2:30 ARE IN THE ASCENT AND POST INSERTION CHECKLISTS.
THE ORBITER SHOULD BE IN A -ZLV -XVV ATTITUDE UPON ENTERING THE FLIGHT PLAN.

FD01 EZ ACTIVITIES:
- PCS 1(2) CONFIG (ORB OPS, ECLS)
  - Config to PCS 1
  - MO10W 14.7 CAB REG INLET SYS1 VLV - CL
- LAMP TEST (ORB OPS, EPS)
- SMOKE DETN CKT TEST (ORB OPS, ECLS)
- CSA-CP BATTERY CHANGEOUT (ORB OPS, CSA-CP)
- CSA-CP CHECKOUT AND ZERO CALIBRATION OPS (ORB OPS, CSA-CP)
- VTR CLOCK SET (PHOTO/TV, DTV) if not performed for PLBD rec
- D3s (PHOTO/TV, REF PROC) Perform DATE/TIME SET

NOTES: UPLINK β21 + Mask

ELEVON PARK, GNC 201 (ORB OPS, GNC)

OCAC SETUP (ORB OPS, CREW SYS)

AFT CONTROLLER C/O (ORB OPS, GNC)

ON-ORBIT OMS BURN (ORB OPS, OMS)

< NC1 TIG (03:35)

MNVR (TRK) -ZLV -XVV
TG=2 BV=3 OM=0
A1/AUTO/VERN Init TRK

PRIORITY PWRDN GRP B (ORB PKT, PRIOR PWRDN)
Steps 2,5,6 (Single G2) & 12 (IMU 2)

INSTALL BLEED ORIFICE [A]
RMS PWRUP (PDRS, RMS PWRUP)

ON-ORBIT OMS BURN (ORB OPS, OMS)

PRIORITY PWRDN GRP B (ORB PKT, PRIOR PWRDN)
Steps 2,5,6 (Single G2) & 12 (IMU 2)

AMS ACTIVATION (ASSY OPS, PAYLOADS)

[A] MO69M Insert Bleed Orifice Assembly into LEH O2 8 QD
LEH O2 8 vlv-OP

NOTES: UPDATE ORBITAL MNVR PAD

STS-134/ULF6 FD01

GMT Date 04/19 (109) | W | TDRS E | Z | D/N | ORB | MET Day 000 | ATT | MS2 ROBERTO | MS3 DREW | MS4 TAZ | Ku Ch 2 | Ku Ch 3 | NOTES

00:00 — 01:00 — 02:00 — 03:00 — 04:00

ORB: 1, 2, 3

ATT: OMS2 — -ZLV — -XVV — NC1

MS2 ROBERTO

ON-ORBIT INITIALIZATION
(PDRS, ON-ORBIT INIT)

RMS PWRUP
(PDRS, RMS PWRUP)

P/TV01 VIDEO SETUP
(PHOTO/TV, SCENES)

MS3 DREW

PGSC ACT
OCA SETUP
PGSC NETWORK (A. SETUP)
PGSC HARD DISK LATE UPDATE
COLOR PRINTER UNSTOW & ASSEMBLE
COLOR PRINTER WARMUP & SELF-TEST
WINDECOM OPS (A. ACT)
WORLDMAP INITIALIZATION
(ORB OPS, PGSC)
If desired: STORRM PGSC SETUP & ACTIVATION
(RNDZ, RNDZ STORRM)
Minimum overnight config: OCA ROUTER, KFX, COLOR PRINTER, WLES, WAP

MS4 TAZ

P/TV01 VIDEO SETUP
(PHOTO/TV, SCENES)

Ku Ch 2

KU ANT STOWED — ASC | RCDR DUMP

Ku Ch 3

KU ANT STOWED — TV — AMS

STS-134/ULF6 FD01

GMT Date 04/20 (110) | W | T D R S E | Z | D/N | O R B | MET Day 000 | ATT

CDR MARK

04:00 PRIORITY PWRDN GRP B (ORB PKT, PRIOR PWRDN)
Steps 2,5,6 (Single G2) & 12 (IMU 2)
APU FD1 RECONFIGS B
IMU STAR OF OPPORTUNITY ALIGN (ORB OPS,GNC)
CGBA MUFFLER INSTALL Unstow from LiOH Box
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

Z L V 06 √UHF MODE - OFF
L9 PS AUD A/G 1,2 (two) - OFF
PRIVATE MEDICAL CONFERENCE, via A/G 2
X PRE-SLEEP ACTIVITY
V (ORB OPS, CREW SYS)
V

B R2 BLR PWR(three) - OFF
A12 APU HTR GG/FU PMP (three) - A AUTO

SLEEP

PLT BOX

PRIORITY PWRDN GRP B (ORB PKT, PRIOR PWRDN)
Steps 2,5,6 (Single G2) & 12 (IMU 2)
RMS CHECKOUT
(PDRS, RMS C/O)

RMS PLB SURVEY

RMS PWRDN (PDRS, RMS PWRDN) Step 1
DON ACTIWATCH (ORB OPS, SDBI)
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

SLEEP

MS1 SPANKY

AMS ACTIVATION
(ASSY OPS, PAYLOADS)

PGSC ACT
OCA SETUP
PGSC NETWORK (A. SETUP)
PGSC HARD DISK LATE UPDATE
COLOR PRINTER UNSTOW & ASSEMBLE
COLOR PRINTER WARMUP & SELF-TEST
WINDECOM OPS (A. ACT)
WORLDMAP INITIALIZATION
(ORB OPS, PGSC)
Minimum overnight config: OCA ROUTER, KFX, COLOR PRINTER, WLES, WAP

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

SLEEP

NOTES

CREW WAKE AT 00/15:00

STS-134/ULF6 FD01

GMT — Date 04/20 (110) — W T D R S E Z — D/N O R B — MET Day 000 — ATT

MS2 ROBERTO

- 04:00 P/TV01 VIDEO SETUP (PHOTO/TV, SCENES)
- RMS CHECKOUT (PDRS, RMS C/O)
- RMS PLB SURVEY
- RMS PWRDN (PDRS, RMS PWRDN) Step 1
- DON ACTIWATCH (ORB OPS, SDBI)
- CGBA STATUS CHK; GLACIER STATUS CHK (CC)
- PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- SLEEP

MS3 DREW

- PGSC ACT See page 3-3
- WLES ACTIVATION AND CHECKOUT (ORB OPS, WLE SENSORS)
- IMAGE FILE TRANSFER (PHOTO/TV, NIKON D2Xs) Perform DCS FILE TO HARD DRIVE for ET HANDHELD PHOTOS
- HD DIGITAL VIA CC (CUE CARD, DIGITAL PLAYBACK) ET HANDHELD VIDEO D/L KU TDRE (04:57-05:22)
- UMBILICAL WELL TPS CAMERA IMAGERY DOWNLOADING (ORB OPS, PGSC)
- PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- SLEEP

MS4 TAZ

- P/TV01 VIDEO SETUP (PHOTO/TV, SCENES)
- GIRA INSTALLATION (ORB OPS, ECLS)
- SHUTTLE EMER EYEWASH (SEE) After GIRA INSTALL, unstow and fill one drink container, label "FOR EYE RINSE ONLY." Attach on or near galley.
- DON ACTIWATCH (ORB OPS, SDBI)
- PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- SLEEP

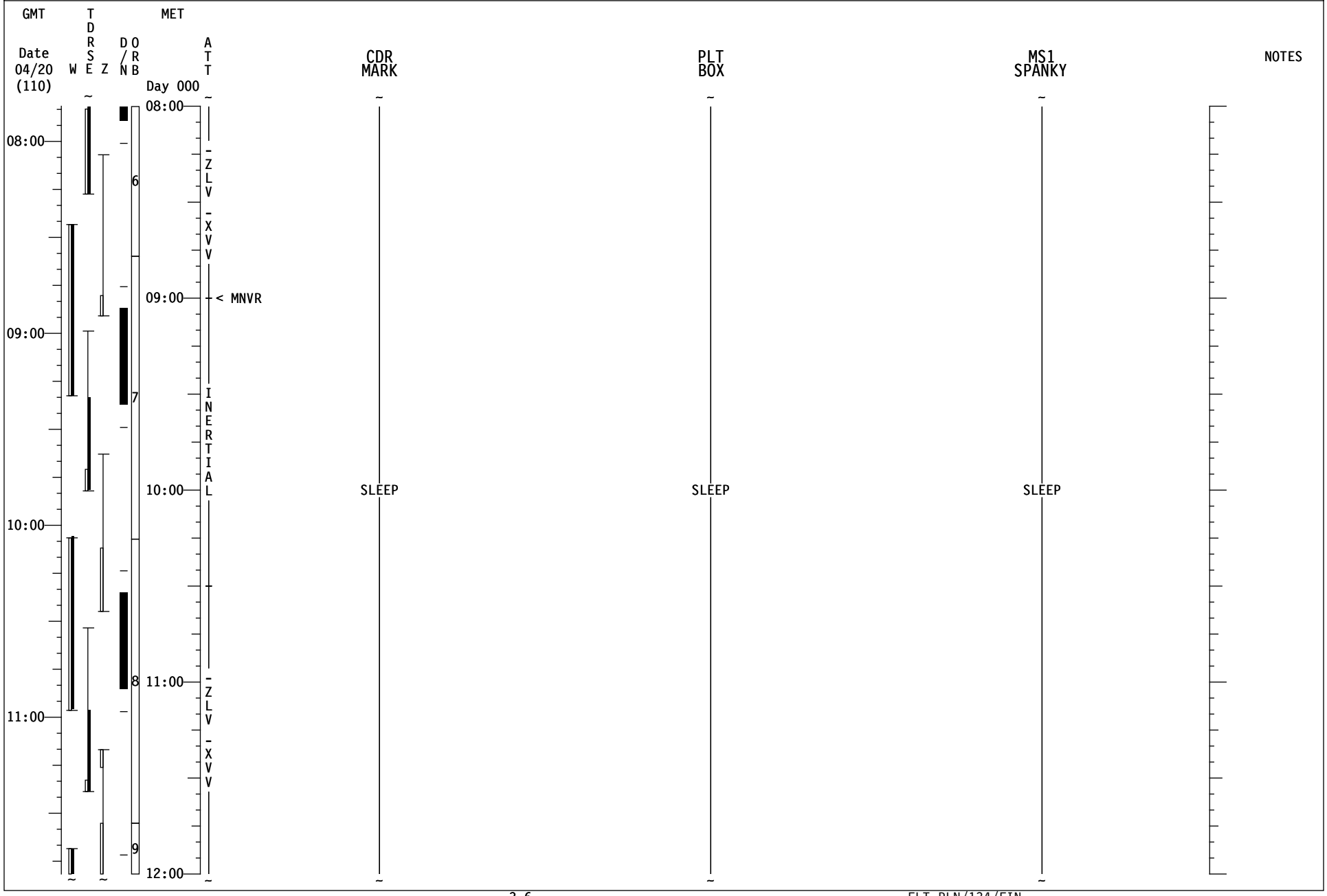
Ku Ch 2 3 — NOTES

ASCENT — OCA — AMS — TV — AMS

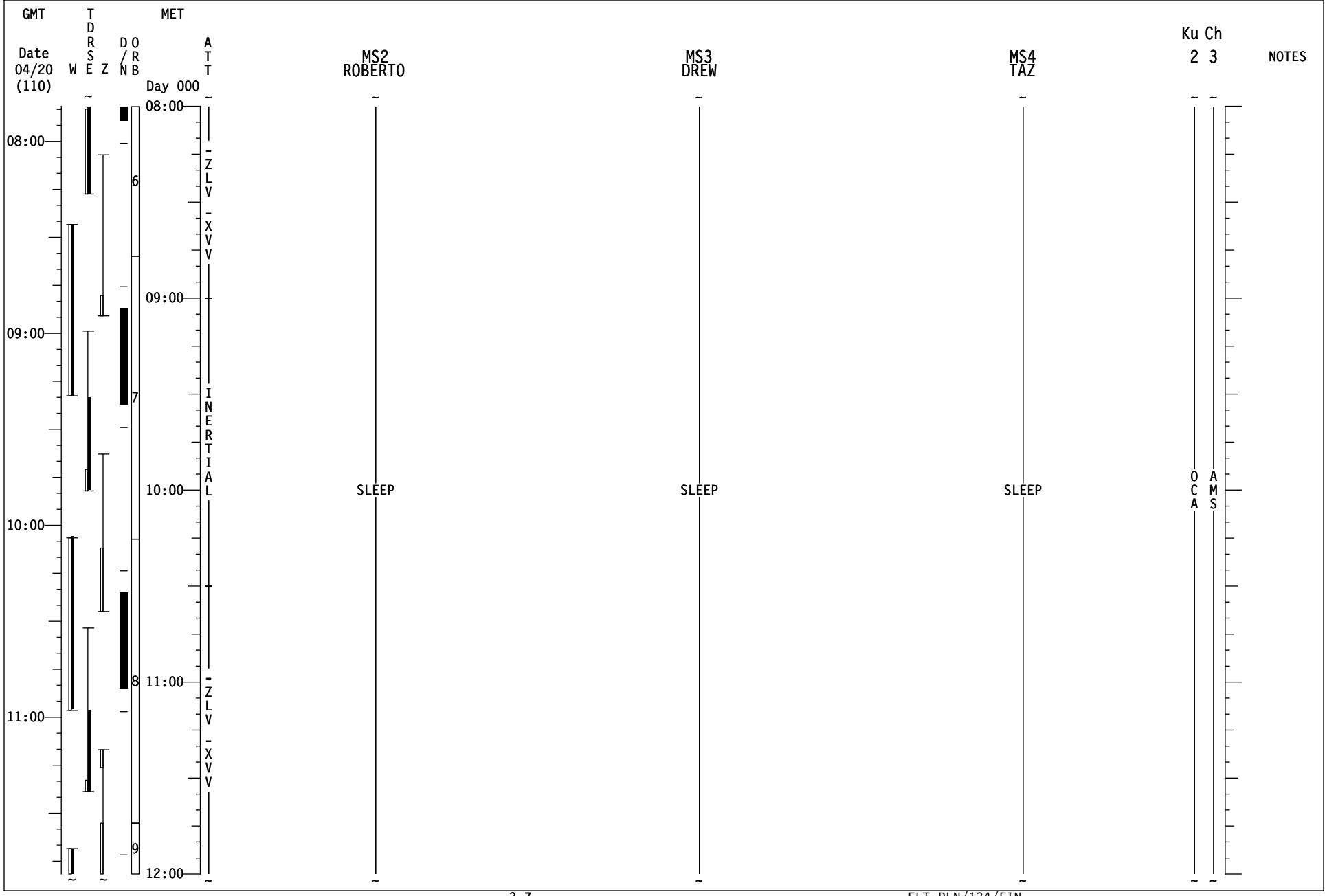
ZLV — XVV

CREW WAKE AT 00/15:00

STS-134/ULF6 FD01



STS-134/ULF6 FD01



STS-134/ULF6 FD02

GMT Date 04/20 (110) | W | TDRSE | Z | D/N | ORB | MET Day 000 | ATT | CDR MARK | PLT BOX | MS1 SPANKY | NOTES

12:00 13:00 14:00 15:00 16:00

9 10 11

-ZLV -XVV

SLEEP (CDR MARK)

SLEEP (PLT BOX)

SLEEP (MS1 SPANKY)

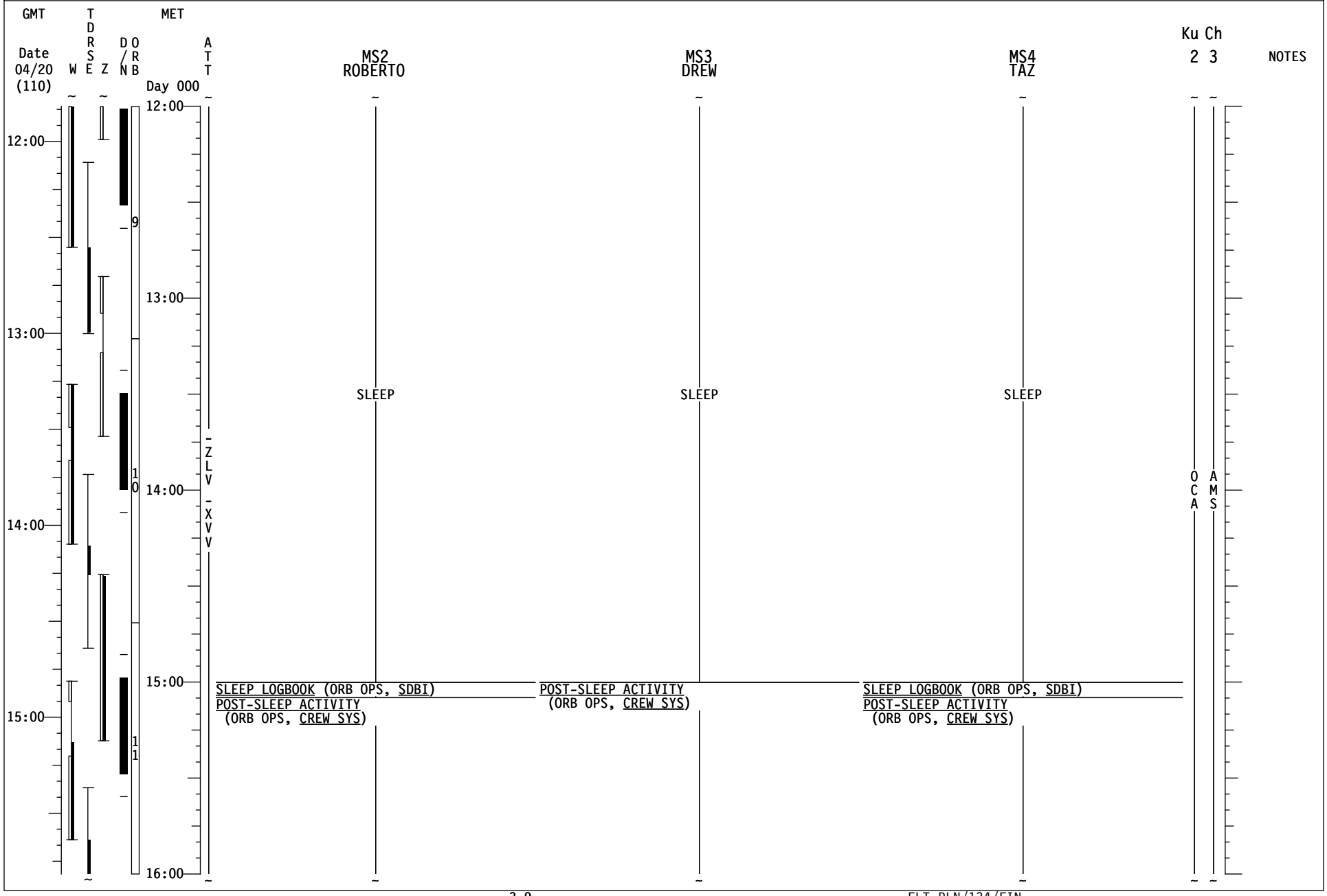
FD02 EZ ACTIVITIES:
√OCAC FILTER
HARD REBOOT: STS-2(WINDECOM), STS-3(KFX) & STS-4(RPOP)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
√HUM SEPS FOR H2O ACCUMULATION

SLEEP LOGBOOK (ORB OPS, SDBI)
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

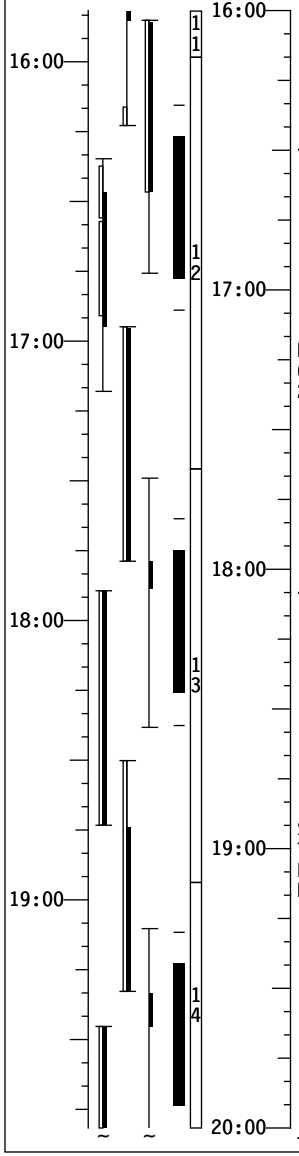
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

STS-134/ULF6 FD02



STS-134/ULF6 FD02

GMT Date 04/20 (110) | TDRS W E Z | D/N | ORB | MET Day 000 | ATT



MET	ATT	CDR MARK	PLT BOX	MS1 SPANKY	NOTES
16:00		POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
		ON-ORBIT OMS BURN (ORB OPS, OMS)	ON-ORBIT OMS BURN (ORB OPS, OMS)		UPDATE ORBITAL MNVR PAD
		< NC2 TIG (16:53)			
17:00	NC2	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	L17 Check MCIU filter screen OBSS UNBERTH (PDRS, OBSS OPERATIONS) For "√APCU Power" at end of Step 2: A15 √APCU 2 OUTPUT - OFF R1: Roberto, R2: Spanky	
18:00		CGBA STATUS CHK; GLACIER STATUS CHK (CC) MIDDECK TRANSFER PREP Ref. MSG XXX	MNVR (TRK) BIAS +YSI (STBD SURVEY) TG=4 BV=5 P=0 Y=40 OM=141 A14/AUTO/VERN, OBSS UNBERTH cmplt, Init TRK OBSS LDRI/IDC RCC SURVEY - STBD (PDRS, OBSS OPERATIONS) R1: Spanky, R2: Box, R3: Drew	OBSS LDRI/IDC RCC SURVEY - STBD (PDRS, OBSS OPERATIONS) R1: Spanky, R2: Box, R3: Drew	
19:00	STBD				
20:00					

STS-134/ULF6 FD02

GMT Date 04/20 (110) | W | TDRS E | Z | D/N | ORB | MET Day 000 | ATT | MS2 ROBERTO | MS3 DREW | MS4 TAZ | Ku 2 | Ch 3 | NOTES

16:00 — 17:00 — 18:00 — 19:00 — 20:00

ORB: 11, 12, 13, 14

ATT: NC2 (16:00–18:00), STBD (18:00–20:00)

MS2 ROBERTO

- POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- OBSS UNBERTH (PDRS, OBSS OPERATIONS) For "√APCU Power" at end of Step 2: A15 √APCU 2 OUTPUT - OFF R1: Roberto, R2: Spanky
- P/TV09 MIDDECK PAYLOADS (PHOTO/TV, SCENES) Item 7 Video
- MIDDECK TRANSFER PREP Ref. MSG XXX

MS3 DREW

- POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- PGSC ACT PGSC HARD DISK LATE UPDATE PGSC NETWORK (A. SETUP) (ORB OPS, PGSC) Set up any remaining PGSCs
- CYCLE ERGOMETER OPS (ORB OPS, CREW SYS) Perform ERGOMETER SETUP
- OBSS LDRI/IDC RCC SURVEY - STBD (PDRS, OBSS OPERATIONS) R1: Spanky, R2: Box, R3: Drew

MS4 TAZ

- POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- DIGITAL VIA VTR (CUE CARD, DIGITAL PLAYBACK) Window 4 Minicam KU TDRE (17:09-17:58)
- POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- CYCLE ERGOMETER OPS (ORB OPS, CREW SYS) Perform ERGOMETER SETUP
- CUBE LAB MODULE-8 ACT (ASSY OPS, PAYLOADS)
- CUBE LAB MODULE-7 ACTIVATION (ASSY OPS, PAYLOADS)
- CUBE LAB MODULE8-CRYSTALLIZATION (ASSY OPS, PAYLOADS)
- MEAL

Ku 2: OCA

Ch 3: AMS, TV, AMS, LDRI

STS-134/ULF6 FD02

GMT Date 04/20 (110) | W | T D R S E | Z | D/N | O R B | MET Day 000 | ATT

20:00 — 21:00 — 22:00 — 23:00

14 — 15 — 16 — 17

NOSE — PORT

CDR MARK	PLT BOX	MS1 SPANKY	NOTES
MIDDECK TRANSFER PREP Ref. MSG XXX	OBSS LDRI/IDC RCC SURVEY - STBD (PDRS, OBSS OPERATIONS) R1: Spanky, R2: Box, R3: Drew	OBSS LDRI/IDC RCC SURVEY - STBD (PDRS, OBSS OPERATIONS) R1: Spanky, R2: Box, R3: Drew	
MNVR (TRK) BIAS +XSI (NOSE CAP SURVEY) TG=4 BV=5 P=330 Y=0 OM=180 A14/AUTO/VERN, RCC SRVY-STBD cmplt, Init TRK			
		OBSS LDRI/IDC RCC SURVEY - NOSE (PDRS, OBSS OPERATIONS) R1: Drew, R2: Taz, R3: Drew	
	MEAL		
MEAL			
	OBSS LDRI/IDC RCC SURVEY - PORT (PDRS, OBSS OPERATIONS) R1: Box, R2: Roberto, R3: Taz		
MNVR (TRK) BIAS -YSI (PORT SURVEY) TG=4 BV=5 P=0 Y=323 OM=355 A14/AUTO/VERN, RCC SURVEY-PORT Step 3 cmplt, Init TRK			
IMU STAR OF OPPORTUNITY ALIGN (ORB OPS,GNC)		MEAL	
RCS/OMS POD HTR RECONFIG [A]			
NLP ACTIVATION (ASSY OPS, PAYLOADS) Activate Vaccine GAPs A-P	[A] A14 RCS/OMS HTR L POD - A OFF - B AUTO R POD - A OFF - B AUTO		
		EMU CHECKOUT PREP (EVA, AIRLOCK CONFIG)	
O2 REPRESS INIT [B]			
	[B] OCAC PWR - OFF C5 DIRECT O2 vlv - OP		
EMU CHECKOUT (EVA, CHECKOUTS)	[C] C5 DIRECT O2 vlv - CL OCAC PWR - ON	EMU CHECKOUT (EVA, CHECKOUTS)	
O2 REPRESS TERM (On MCC GO) [C] LOAD DAPS Ref. MSG XXX Item X		[D] MNVR (TRK) -ZLV -XVV TG=2 BV=3 OM=0 A14/AUTO/VERN, RCC SRVY-PORT Step 14 cmplt, Init TRK	
MNVR (TRK) -ZLV -XVV [D]	OBSS BERTH (PDRS, OBSS OPERATIONS) Record Camera D Skip Step 9 R1: Box, R2: Vittori		
FILTER CLEANING (IFM, SCHEDULED MAINTENANCE)			

STS-134/ULF6 FD02

GMT Date 04/20 (110) | W | T D R S E | Z | D/N | O R B | MET Day 000 | ATT

MS2 ROBERTO | MS3 DREW | MS4 TAZ | Ku 2 | Ch 3 | NOTES

20:00 — 21:00 — 22:00 — 23:00 — 00:00

14 — 15 — 16 — 17

NOSE — PORT

MS2 ROBERTO

- MIDDECK TRANSFER PREP
  Ref. MSG XXX
- MEAL
- OBSS LDRI/IDC RCC SURVEY - PORT
  (PDRS, OBSS OPERATIONS)
  R1: Box, R2: Roberto, R3: Taz
- OBSS BERTH
  (PDRS, OBSS OPERATIONS)
  Record Camera D
  Skip Step 9
  R1: Box, R2: Vittori

MS3 DREW

- OBSS LDRI/IDC RCC SURVEY - STBD
  (PDRS, OBSS OPERATIONS)
  R1: Spanky, R2: Box, R3: Drew
- OBSS LDRI/IDC RCC SURVEY - NOSE
  (PDRS, OBSS OPERATIONS)
  R1: Drew, R2: Taz, R3: Drew
- MEAL
- EMU CHECKOUT PREP
  (EVA, AIRLOCK CONFIG)
- EMU CHECKOUT
  (EVA, CHECKOUTS)

MS4 TAZ

- MEAL
- OBSS LDRI/IDC RCC SURVEY - NOSE
  (PDRS, OBSS OPERATIONS)
  R1: Drew, R2: Taz, R3: Drew
- OBSS LDRI/IDC RCC SURVEY - PORT
  (PDRS, OBSS OPERATIONS)
  R1: Box, R2: Roberto, R3: Taz

Ku 2: OCA

Ch 3: LDRI

STS-134/ULF6 FD02

GMT Date 04/20 (110) | T D R S E | W | Z | D/N | O R B | MET Day 001 | A T T

CDR MARK

- FILTER CLEANING(IFM, SCHEDULED MAINTENANCE)
- FUEL CELL PURGE - MANUAL (ORB OPS, EPS)
- CRYO O2 TK HTR SNSR CK (ORB OPS, EPS)
- FC MONITORING SYS (FCMS) OPS (ORB OPS, EPS)
- ZLV -XVV
- R2 BLR CNTLR/HTR (three) - B
- CWC-I FILL (ORB OPS, CWC-I FILL) Parts A-C Setup, Purge, and Teardown
- PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- ON-ORBIT +X RCS BURN (ORB OPS, RCS)
- NC3
- < NC3 TIG (03:15)
- MNVR (TRK) -ZLV -XVV TG=2 BV=3 OM=0 A1/AUTO/VERN Init TRK
- FUTURE LOADED MNVR (DUMP) TG=2 BV=3 OM=270 A1/AUTO/VERN (1/14:30), Init TRK
- O6 √UHF MODE - OFF
- L9 PS AUD A/G 1,2 (two) - OFF
- PRIVATE MEDICAL CONFERENCE, via A/G 2

PLT BOX

- OBSS BERTH (PDRS, OBSS OPERATIONS)
- ELC GRAPPLE (PDRS, ELC NOMINAL)
- DIGITAL VIA VTR (CUE CARD, DIGITAL PLAYBACK) LDRI SURVEYS KU TDRE (00:57-01:50)
- P/TVO8 EXTERNAL SURVEY (SETUP) Step 1
- P/TVO8 EXTERNAL SURVEY (OPS) (PHOTO/TV, SCENES) OMS Pod Survey - Item 1 Best Lighting (01:51-02:03)
- BIOKIS OPERATIONS (ASSY OPS, PAYLOADS) Steps 1 and 2
- ON-ORBIT +X RCS BURN (ORB OPS, RCS)
- PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)

MS1 SPANKY

- EMU CHECKOUT (EVA, CHECKOUTS)
- EVA PREP FOR ISS TRANSFER (EVA, AIRLOCK CONFIG)
- PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)

NOTES

- TFL 188
- TFL 199

STS-134/ULF6 FD02

GMT Date 04/20 (110) | W | TDRS E | Z | D/N | ORB 17 18 19 | MET Day 001 | ATT | MS2 ROBERTO | MS3 DREW | MS4 TAZ | Ku Ch 2 3 | NOTES

00:00 — 01:00 — 02:00 — 03:00

MET 00:00

ATT: OBSS BERTH

MS2: (PDRS, OBSS OPERATIONS)

MS3: EMU CHECKOUT (EVA, CHECKOUTS)

Ku Ch 3: L

MET 00:30

MS2: ELC GRAPPLE (PDRS, ELC NOMINAL)

MS3: EVA PREP FOR ISS TRANSFER (EVA, AIRLOCK CONFIG)

MET 00:45

MS2: C/L CAMR INSTALL (PHOTO/TV, C/L CAMR)

MS4: C/L CAMR INSTALL (PHOTO/TV, C/L CAMR)

MET 01:00

ATT: ZLV - XVV

MS2: DOCKING MECHANISM INITIALIZATION
DOCKING MECHANISM POWERUP
DOCKING RING EXTENSION
DOCKING MECHANISM POWERDOWN
(RNDZ, APDS)

MS4: DOCKING MECHANISM INITIALIZATION
DOCKING MECHANISM POWERUP
DOCKING RING EXTENSION
DOCKING MECHANISM POWERDOWN
(RNDZ, APDS)

Ku Ch 2: OCA

MET 01:30

MS2: SSV OUTRATE - 2

MS4: WLES RNDZ TOOLS C/O PREP (ORB OPS, WLES)

MET 01:45

MS2: RNDZ TOOLS CHECKOUT (RNDZ, RNDZ TOOLS)

MS4: RNDZ TOOLS CHECKOUT (RNDZ, RNDZ TOOLS)

MET 02:00

MS3: STORRM PGSC SETUP & ACTIVATION (RNDZ, RNDZ STORRM)

Ku Ch 3: AMS

MET 02:30

MS3: After RNDZ TOOLS C/O Step 3 complete, perform STORRM TOOLS CHECKOUT (RNDZ, RNDZ STORRM)

MET 03:00

ATT: NC3

MS2: SSV OUTRATE - 3
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)

MS3: OCA RECONFIG - 48 Mbps E
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)

MS4: CGBA STATUS CHK; GLACIER STATUS CHK (CC)
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)

Ku Ch 2: AMS

Ku Ch 3: OCA

MET 03:30

E RECONFIGURE OCA DOWNLINK RATE (48Mbps) (ORB OPS, PGSC) Part C, Omit step 4
L12 Ku BAND RATE - HI

MET 04:00

STS-134/ULF6 FD02

GMT Date 04/21 (111) | W | T D R S E | Z | D/N | O R B | MET Day 001 | ATT | CDR MARK | PLT BOX | MS1 SPANKY | NOTES

04:00 05:00 06:00 07:00

O6 √UHF MODE - OFF
L9 PS AUD A/G 1,2 (two) - OFF
PRIVATE MEDICAL CONFERENCE, via A/G 2

PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)

PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)

PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)

20 21 22

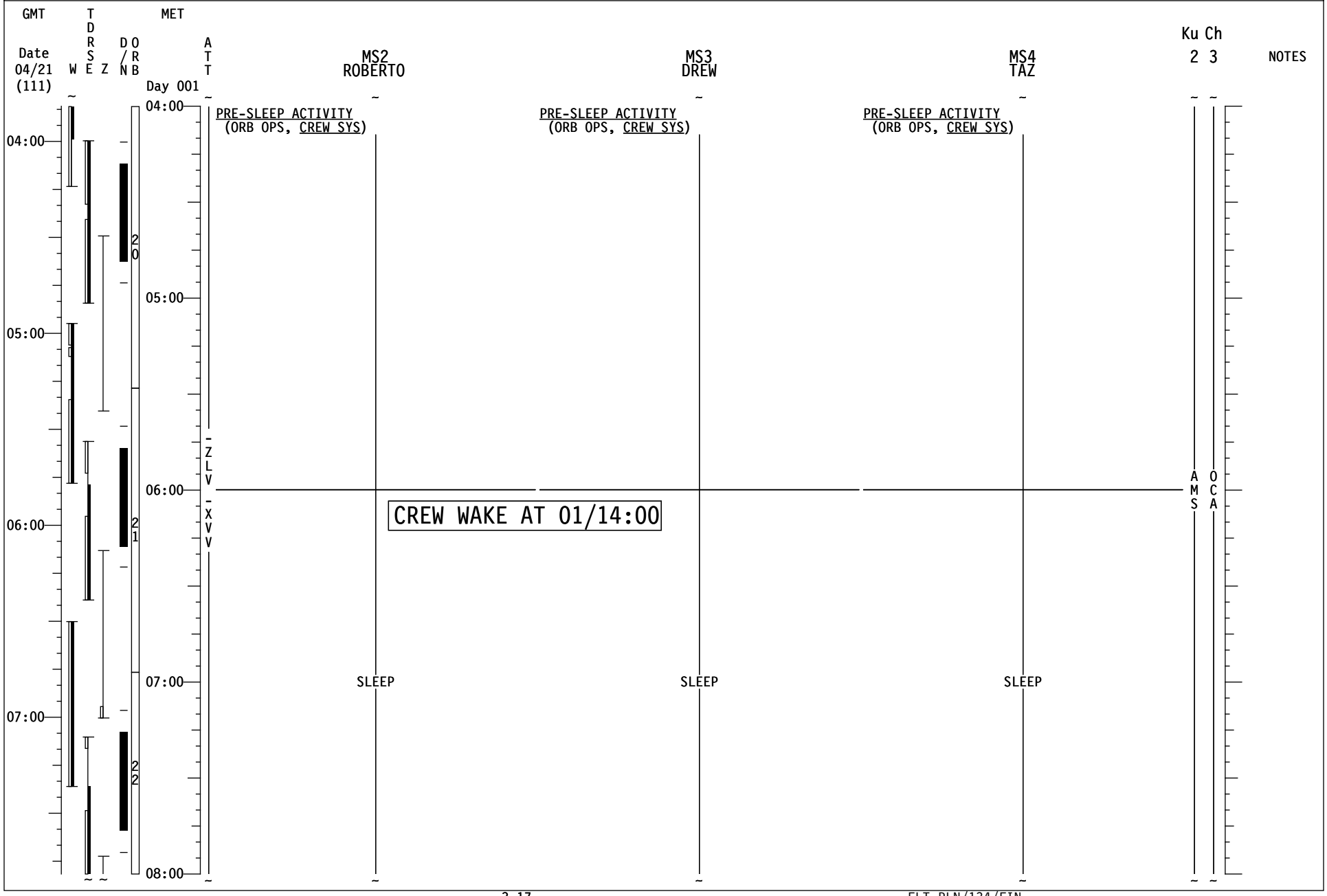
-ZLV -XVV

CREW WAKE AT 01/14:00

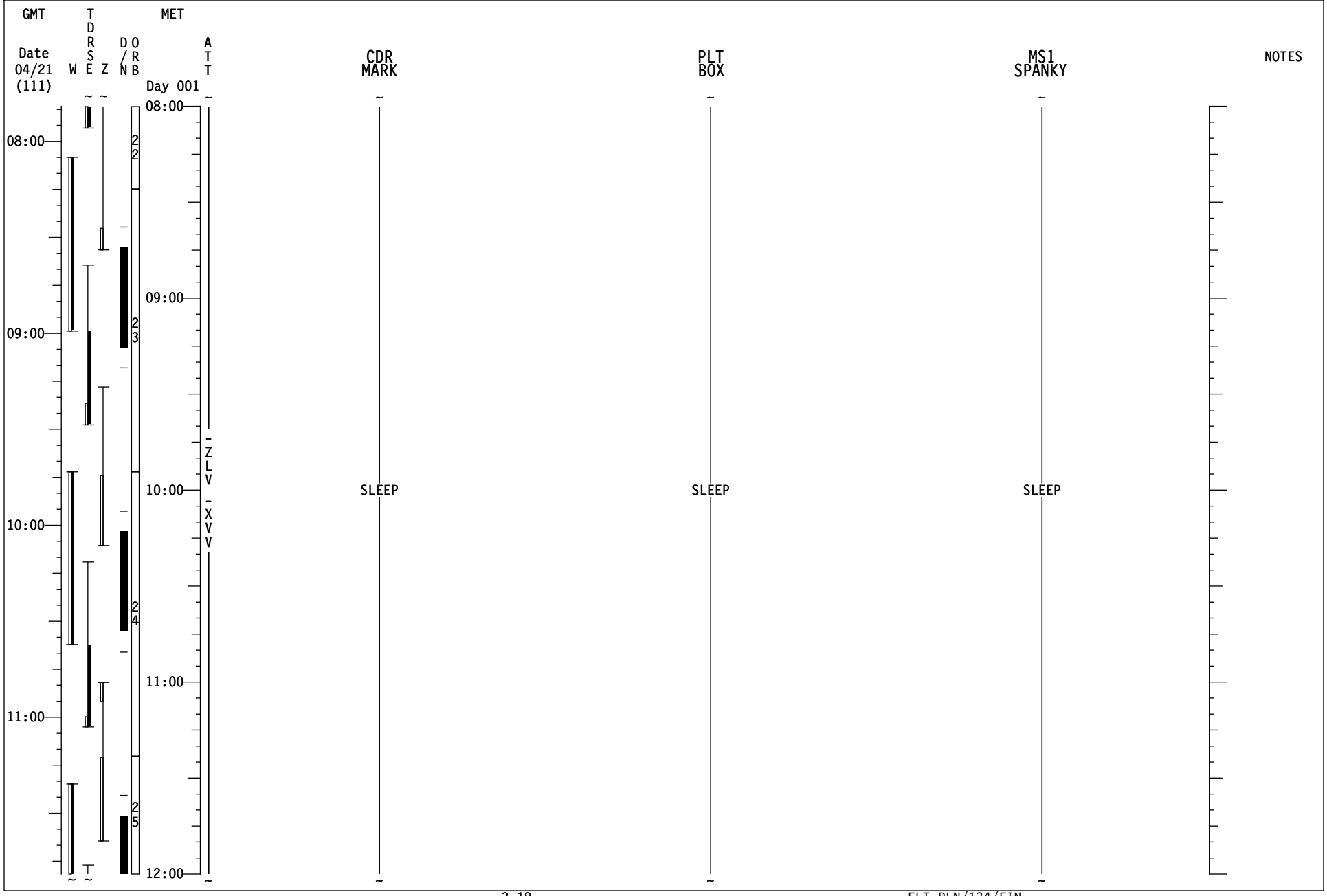
SLEEP SLEEP SLEEP

04:00 05:00 06:00 07:00 08:00

STS-134/ULF6 FD02



STS-134/ULF6 FD02



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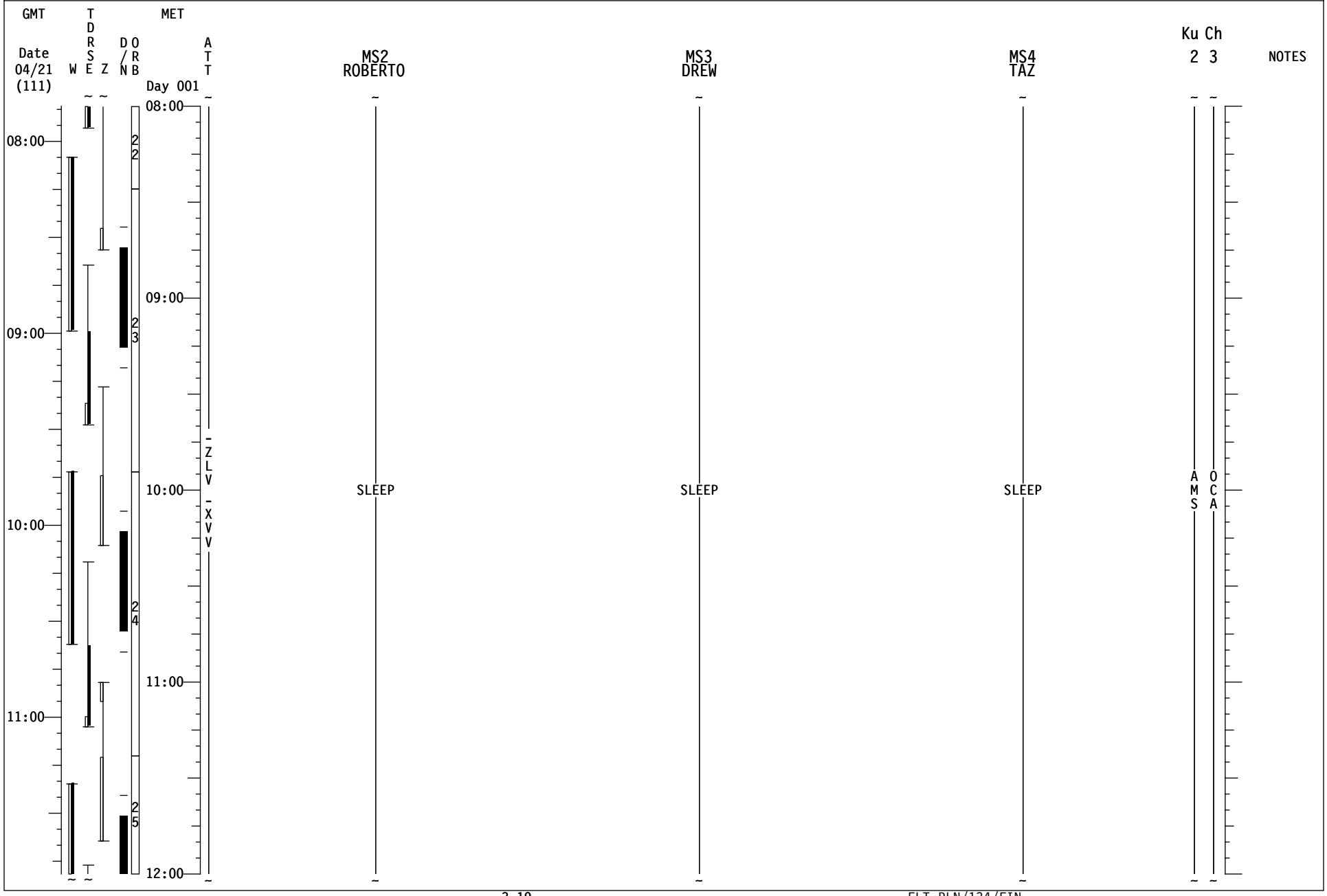
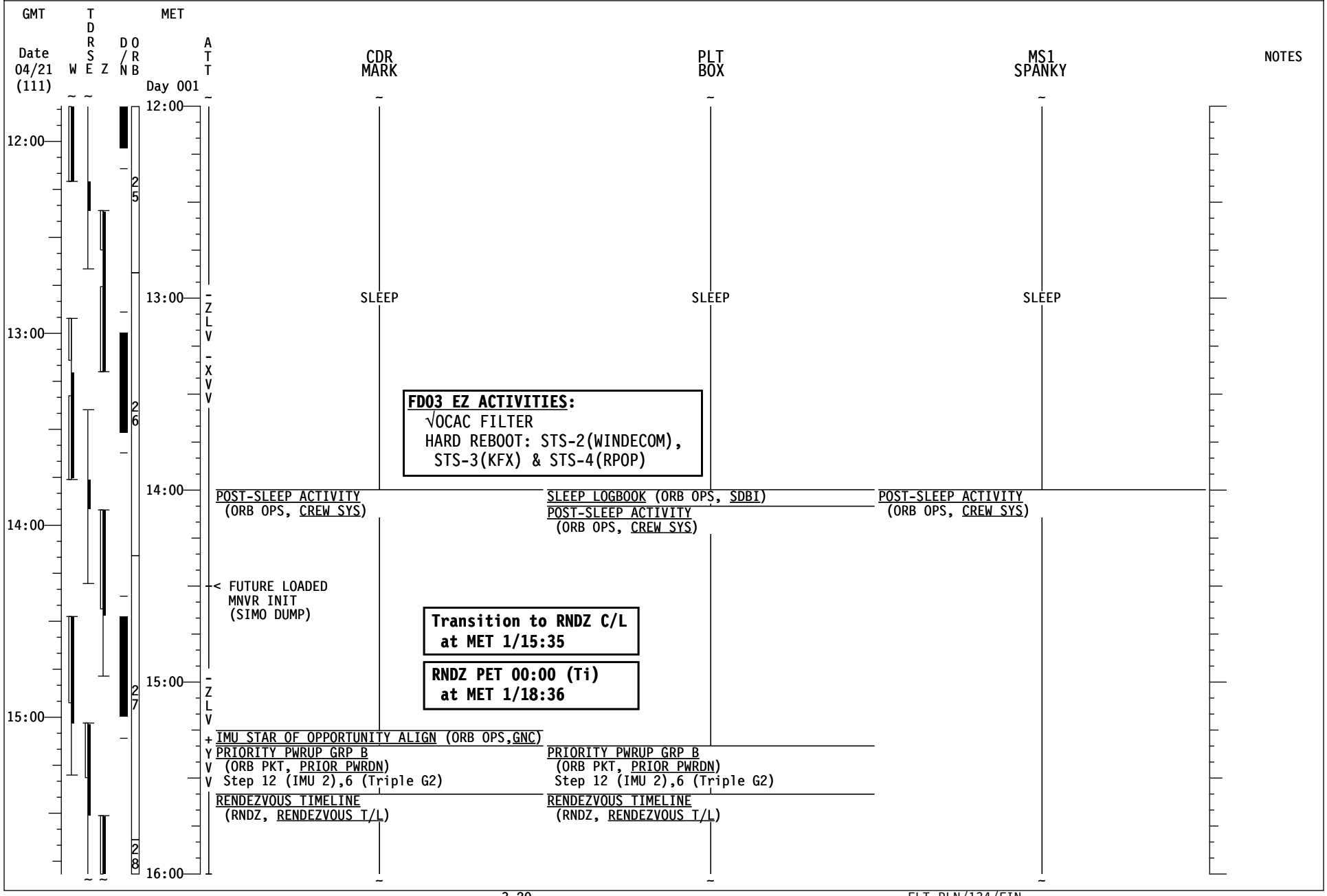


STS-134/ULF6 FD03



STS-134/ULF6 FD03

GMT Date 04/21 (111) | W | T D R S E | Z | D/N | O R B | MET Day 001 | ATT | MS2 ROBERTO | MS3 DREW | MS4 TAZ | Ku 2 | Ch 3 | NOTES

12:00 — 13:00 — 14:00 — 15:00

ORB: 25, 26, 27, 28

ATT: -ZLV -XVV -ZLV +YVV

12:00

13:00 — SLEEP — SLEEP — SLEEP

14:00 — SLEEP LOGBOOK (ORB OPS, SDBI) — POST-SLEEP ACTIVITY (ORB OPS, CREW SYS) — SLEEP LOGBOOK (ORB OPS, SDBI) — POST-SLEEP ACTIVITY (ORB OPS, CREW SYS) — AMS — OCA

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS)
Initiate Supply/Waste Dump, Ref. MSG XXX
√MNVR to dump attitude complete before initiating dump

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

15:00

SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS)
Terminate Supply/Waste Dump
Ref. MSG XXX

CGBA STATUS CHK; GLACIER STATUS CHK (CC)

SHUTTLE CONDENSATE COLLECTION (ORB OPS, ECLS) Perform SETUP
Hardware stowed in XXXX
Use CWC S/N XXXX

16:00

STS-134/ULF6 FD03

GMT Date 04/21 (111) | W | TDRS E | Z | D/N | ORB | MET Day 001 | ATT | CDR MARK | PLT BOX | MS1 SPANKY | NOTES

16:00 17:00 18:00 19:00

ORB: 28, 29, 30

16:00 17:00 18:00 19:00 20:00

ATT: RNDZ

CDR MARK

RENDEZVOUS TIMELINE
(RNDZ, RENDEZVOUS T/L)

< NH TIG (16:20)

< NC4 TIG (17:04)

< TI TIG (18:36)

PLT BOX

RENDEZVOUS TIMELINE
(RNDZ, RENDEZVOUS T/L)

A RECONFIGURE OCA DOWNLINK RATE (4 Mbps)
(ORB OPS, PGSC) Part D then B, Omit step 4

MS1 SPANKY

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

OCA RATE RECONFIG (4 Mbps) A

L17 Check MCIU filter screen

EMU REMOVAL
(EVA, AIRLOCK CONFIG)
Remove ICBs from EMUs, temp stow in
Post Insertion locker MF43H

RENDEZVOUS TIMELINE
(RNDZ, RENDEZVOUS T/L)

P/TV02 DOCK
(PHOTO/TV, SCENES)
SETUP

NOTES

NO ARED/T2 EXERCISE [ISS MNVR]

STS-134/ULF6 FD03

GMT — Date 04/21 (111) — W — TDRS E — Z — D/N — ORB — MET Day 001 — ATT — RNDZ

MS2 ROBERTO — MS3 DREW — MS4 TAZ — Ku 2 — Ch 3 — NOTES

16:00

SHUTTLE CONDENSATE COLLECTION
(ORB OPS, ECLS) Perform SETUP
~~Hardware stowed in XXXX~~
Use CWC S/N XXXX

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

EXERCISE

RENDEZVOUS TIMELINE
(RNDZ, RENDEZVOUS T/L)

28

17:00

AMS — OCA

O2 REPRESS INIT [B]
RENDEZVOUS TIMELINE
(RNDZ, RENDEZVOUS T/L)

EMU REMOVAL
(EVA, AIRLOCK CONFIG)
Remove ICBs from EMUs, temp stow in
Post Insertion locker MF43H

DAILY TRANSFER LIST UPDATE
Ref. Transfer List & MSG XXX

O2 REPRESS TERM (On MCC GO) [C]
RENDEZVOUS TIMELINE
(RNDZ, RENDEZVOUS T/L)

18:00

29

[B] OCAC PWR - OFF
C5 DIRECT O2 vlv - OP

[C] C5 DIRECT O2 vlv - CL
OCAC PWR - ON

EXERCISE

RADAR — RADAR

RENDEZVOUS TIMELINE
(RNDZ, RENDEZVOUS T/L)

19:00

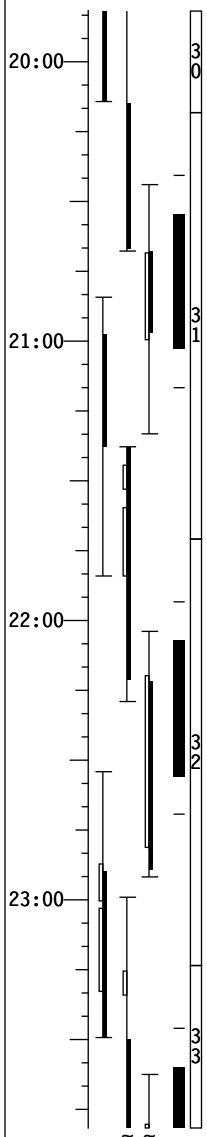
30

NO ARED/T2
EXERCISE
[ISS MNVR]

20:00

STS-134/ULF6 FD03

GMT — Date 04/21 (111) — W E Z — TDRS — D/N — ORB — MET Day 001 — ATT



CDR MARK

RENDEZVOUS TIMELINE
(RNDZ, RENDEZVOUS T/L)
APPROACH (CUE CARD)

RNDZ

D MNVR (TRK) BIAS -XLV -ZVV
TG=2 BV=5 P=164.80 Y=0.10 OM=192.98
Init TRK, DAP:FREE > 2 Sec, then
DAP: A12/AUTO/VERN

E SSPTS ODS CONNECTOR VERIF
A15 ODS MATE X1,X2(two) - ON
√MCC then - OFF

DOCKING 1/21:14

D

MNVR (TRK) BIAS -XLV -ZVV D
POST DOCKING HATCH LEAK CHECK
(RNDZ, APDS)

BIAS -XLV -ZVV

When MNVR complete and rates damped
PRIORITY PWRDN GRP B
(ORB PKT, PRIOR PWRDN) G
ASSY OPS: 1.100 HATCH OPENING, STORRM
DTO AND SHUTTLE/ISS DUCT INSTALL
√MCC-H complete with Step 1
Perform Steps 2-12, 15-16
MS3 will perform Step 9.4 (STORRM)

WELCOME

JOINT OPS: 12.100 SHUTTLE CREW
SAFETY BRIEFING
Mark/Ron

PLT BOX

RENDEZVOUS TIMELINE
(RNDZ, RENDEZVOUS T/L)
APPROACH (CUE CARD)

RETURN TO FLIGHT PLAN

POST DOCKING HATCH LEAK CHECK
(RNDZ, APDS)

SSPTS ODS CONNECTOR VERIF E
OPCU ACTIVATION F

When MNVR complete and rates damped
PRIORITY PWRDN GRP B
(ORB PKT, PRIOR PWRDN) G
When ISS is GO for deadband collapse, DAP: B13

DAP RECONFIG H

WELCOME

JOINT OPS: 12.100 SHUTTLE CREW
SAFETY BRIEFING
Box/Dima

MS1 SPANKY

P/TVO2 DOCK
(PHOTO/TV, SCENES)
SETUP
P/TVO2 DOCK
(PHOTO/TV, SCENES)
OPS

F On MCC GO:
A15 OPCU 1,2 V-ADJ (two) - CMD
CONV (two) - ON
R1 MN BUS TIE B - ON (tb-ON)
C - ON (tb-ON)

UPLINK
TFL 199
UPLINK
β21
+ Mask
Box 40,41

SSV OUTRATE - 3

JOINT OPS: 6.109 HARDLINE ICOM AUDIO
Steps 1, 5 & 6

G Step 6 (Single G2, in step 3 of
G2 SET CONTRACTION √MCC or pause
~3 min for DAP settling)
Step 12 (IMU 2)
O6 S TRK PWR -Z - OFF

H When ISS is GO for attitude control, DAP: FREE
DAP A12/FREE/VERN
Reload DAP B12

WELCOME

JOINT OPS: 12.100 SHUTTLE CREW
SAFETY BRIEFING
Spanky/Andrey

NOTES

UPLINK
β21 + Mask
Box 30,40

NO
ARED/T2
EXERCISE
[DOCKING]

NO
ARED/T2
EXERCISE
[ISS MNVR]

NO
EXERCISE
[DEADBAND
COLLAPSE]

STS-134/ULF6 FD03

GMT — Date 04/21 (111) — W — TDRS E — Z — D/N — ORB — MET Day 001 — ATT

MS2 ROBERTO — MS3 DREW — MS4 TAZ — Ku 2 — Ch 3 — NOTES

20:00 — 21:00 — 22:00 — 23:00 — 00:00

ORB: 30, 31, 32, 33

ATT: RNDZ, D, BIAS-XLV-ZVV

MS2 ROBERTO

RENDEZVOUS TIMELINE (RNDZ, RENDEZVOUS T/L)
APPROACH (CUE CARD)

DOCKING 1/21:14

AIRLOCK PREP FOR INGRESS - AIRLOCK FAN ACTIVE (RNDZ, APDS)

ASSY OPS: 1.100 HATCH OPENING, STORRM DTO AND SHUTTLE/ISS DUCT INSTALL
√MCC-H complete with Step 1
Perform Steps 2-12, 15-16
MS3 will perform Step 9.4 (STORRM)

WELCOME

JOINT OPS: 12.100 SHUTTLE CREW SAFETY BRIEFING
Roberto/Paolo

MS3 DREW

RENDEZVOUS TIMELINE (RNDZ, RENDEZVOUS T/L)
APPROACH (CUE CARD)

RETURN TO FLIGHT PLAN

POST RNDZ PGSC CONFIG
Configure PGSCs per usage chart

WLES DOCK/UNDK RECOVERY (ORB OPS, WLES)

P/TV10 STORRM (PHOTO/TV, SCENES) OPS

WELCOME

JOINT OPS: 12.100 SHUTTLE CREW SAFETY BRIEFING
Drew/Cady

MS4 TAZ

RENDEZVOUS TIMELINE (RNDZ, RENDEZVOUS T/L)
APPROACH (CUE CARD)

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

AIRLOCK PREP FOR INGRESS - AIRLOCK FAN ACTIVE (RNDZ, APDS)

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

WELCOME

JOINT OPS: 12.100 SHUTTLE CREW SAFETY BRIEFING
Taz/Alexander

Ku 2: RADAR, AMS
Ch 3: RADAR, TV

NOTES

NO ARED/T2 EXERCISE [DOCKING]

NO ARED/T2 EXERCISE [ISS MNVR]

NO EXERCISE [DEADBAND COLLAPSE]

STS-134/ULF6 FD03

GMT Date 04/21 (111) | TDRS W E Z | DON/ORB | MET Day 002 | ATT

CDR MARK

- JOINT OPS: 12.100 SHUTTLE CREW SAFETY BRIEFING — Mark/Ron
- JOINT OPS: 3.102 NITROGEN TRANSFER INIT — Verify MCC-H complete with Step 2 then perform Steps 3-4.3
- JOINT OPS: 3.115 O2 TRANSFER SETUP — Steps 2-6, Ground will perform steps 2.4, 6.6 and 7
- JOINT OPS: 3.128 O2 XFER TO HI P AND LO P TANKS Step 2
- TRANSFER OPS — Ref. Middeck Transfer List
- TRANSFER BRIEF PREP — Coordinate with transfer counterparts
- TRANSFER BRIEF — Call down status to MCC
- PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- L9 PS AUD A/G 1,2 (two) - OFF
- PRIVATE MEDICAL CONFERENCE — Private Conference via A/G 2

PLT BOX

- JOINT OPS: 12.100 SHUTTLE CREW SAFETY BRIEFING — Box/Dima
- ROBO: 1.105 ELC3 MHTEX SURVEY
- ROBO: 1.110 ELC3 HANDOFF AND INSTALL — Steps 1-4, EXERCISE CONSTRAINT
- ROBO: 1.110 ELC3 HANDOFF AND INSTALL — Steps 5-7.4, EXERCISE CONSTRAINT
- I RECONFIGURE OCA DOWNLINK RATE (2 Mbps) (ORB OPS, PGSC) Part A, Omit step 4
- S&M: 1.902 UCCAS NORMAL MATE — Steps 6-10
- ROBO: 1.110 ELC3 HANDOFF AND INSTALL Step 7.5
- S&M: 1.902 UCCAS NORMAL MATE — Steps 11-14
- ROBO: 1.110 ELC3 HANDOFF AND INSTALL Step 7.6
- CSS: 1.111 CUPOLA CREW RESTRAINT OPS Step 6
- PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)

MS1 SPANKY

- JOINT OPS: 12.100 SHUTTLE CREW SAFETY BRIEFING — Spanky/Andrey
- ELC UNBERTH AND HANDOFF (PDRS, ELC NOMINAL) EXERCISE CONSTRAINT
- ELC UNGRAPPLE AND VIEWING (PDRS, ELC NOMINAL) EXERCISE CONSTRAINT
- POST-DOCKING EVA TRANSFER/RECONFIG (EVA, AIRLOCK CONFIG)
- PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- OCA RATE RECONFIG (2 Mbps) I
- PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)

NOTES

- NO EXERCISE [ELC UNBERTH TO SRMS AT HOVER POS'N]
- NO EXERCISE [DOUBLE GRAPPLE]
- NO EXERCISE [MNVR TO INSTALL POS'N THRU 1ST STAGE CAPTURE]
- NO UNISOL EXERCISE [1ST-2ND STAGE CAPTURE]

STS-134/ULF6 FD03

GMT Date 04/21 (111) | TDRS W E Z | DON/ORB | MET Day 002 | ATT

00:00 01:00 02:00 03:00

DON/ORB: 33 34 35

ATT: BIAS-XLV-ZVV

MS2 ROBERTO	MS3 DREW	MS4 TAZ
JOINT OPS: 12.100 SHUTTLE CREW SAFETY BRIEFING Roberto/Paolo	JOINT OPS: 12.100 SHUTTLE CREW SAFETY BRIEFING Drew/Cady	JOINT OPS: 12.100 SHUTTLE CREW SAFETY BRIEFING Taz/Alexander
ELC UNBERTH AND HANDOFF (PDRS, ELC NOMINAL) EXERCISE CONSTRAINT	JOINT OPS: 6.107 PCS SETUP-SHUTTLE	P/TV05 ISS INTERNAL OPS (PHOTO/TV, SCENES) SETUP
		P/TV06 ROBOTICS OPERATIONS (PHOTO/TV, SCENES) SETUP
		ROBO: 1.110 ELC3 HANDOFF AND INSTALL Steps 1-4 EXERCISE CONSTRAINT
ELC UNGRAPPLE AND VIEWING (PDRS, ELC NOMINAL) EXERCISE CONSTRAINT		
P/TV06 ROBOTICS OPERATIONS (PHOTO/TV, SCENES) OPS, Item 2	POST-DOCKING EVA TRANSFER/RECONFIG (EVA, AIRLOCK CONFIG)	ROBO: 1.110 ELC3 HANDOFF AND INSTALL Steps 5-7.4 EXERCISE CONSTRAINT
	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	S&M: 1.902 UCCAS NORMAL MATE Steps 6-10
		ROBO: 1.110 ELC3 HANDOFF AND INSTALL Step 7.5
		S&M: 1.902 UCCAS NORMAL MATE Steps 11-14
CGBA STATUS CHK; GLACIER STATUS CHK (CC)		PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)		
DIGITAL VIA VTR (CUE CARD, DIGITAL PLAYBACK) C/L CAMR from 10 Ft. to Docking+2 min. KU TDRW (03:50-04:05)	EXERCISE	

Ku Ch 2 3: AMS, TV; OCA, AMS

NOTES:
- NO EXERCISE [ELC UNBERTH TO SRMS AT HOVER POS'N]
- NO EXERCISE [DOUBLE GRAPPLE]
- NO EXERCISE [MNVR TO INSTALL POS'N THRU 1ST STAGE CAPTURE]
- NO UNISOL EXERCISE [1ST-2ND STAGE CAPTURE]

STS-134/ULF6 FD03

GMT Date 04/22 (112) | W | T D R S E | Z | D/N | O R B | MET | ATT | CDR MARK | PLT BOX | MS1 SPANKY | NOTES

Day 002 L9 PS AUD A/G 1,2 (two) - OFF

04:00 PRIVATE MEDICAL CONFERENCE
Private Conference via A/G 2
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

BIAS-XLV-ZVV

CREW WAKE AT 02/14:00

SLEEP

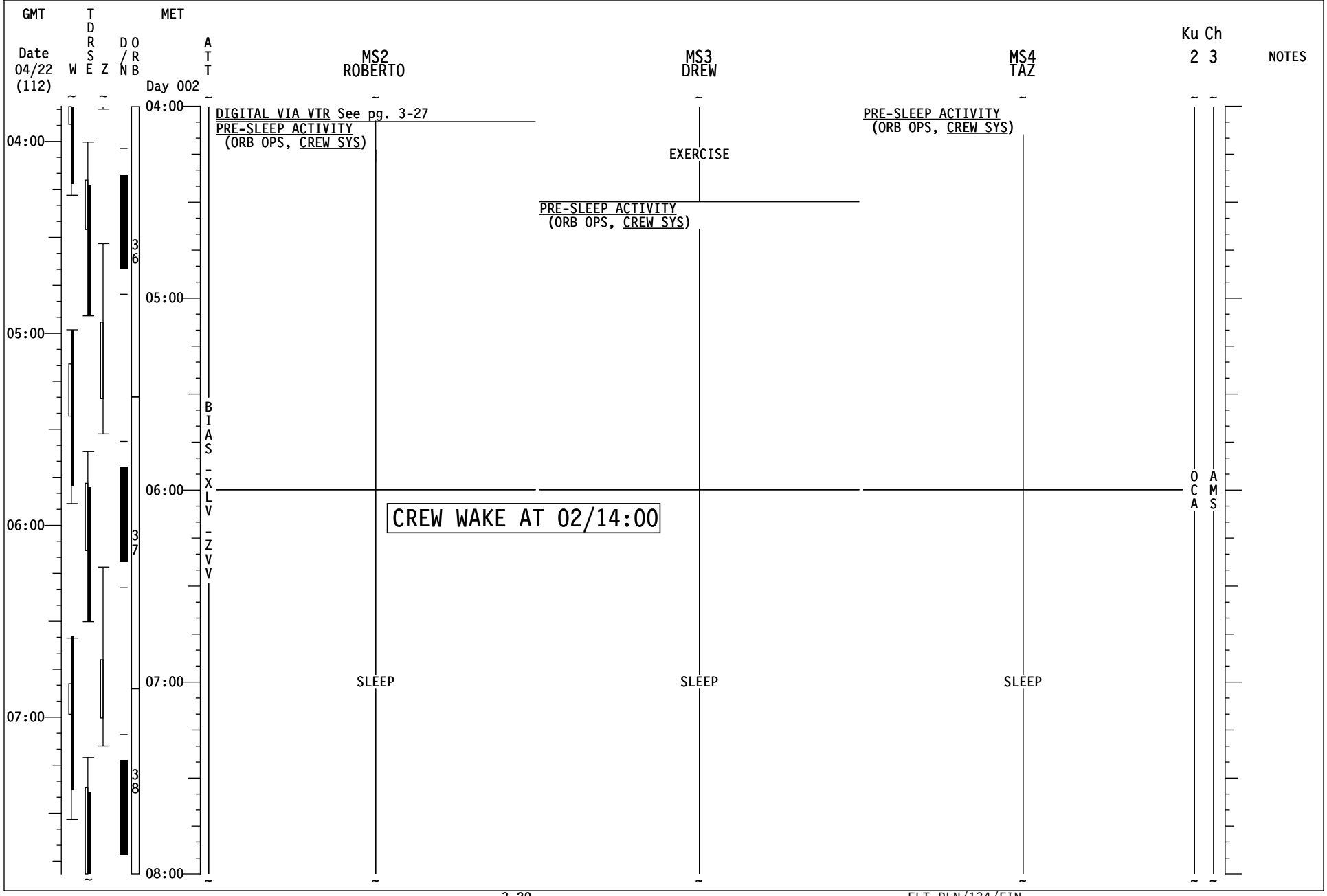
SLEEP

SLEEP

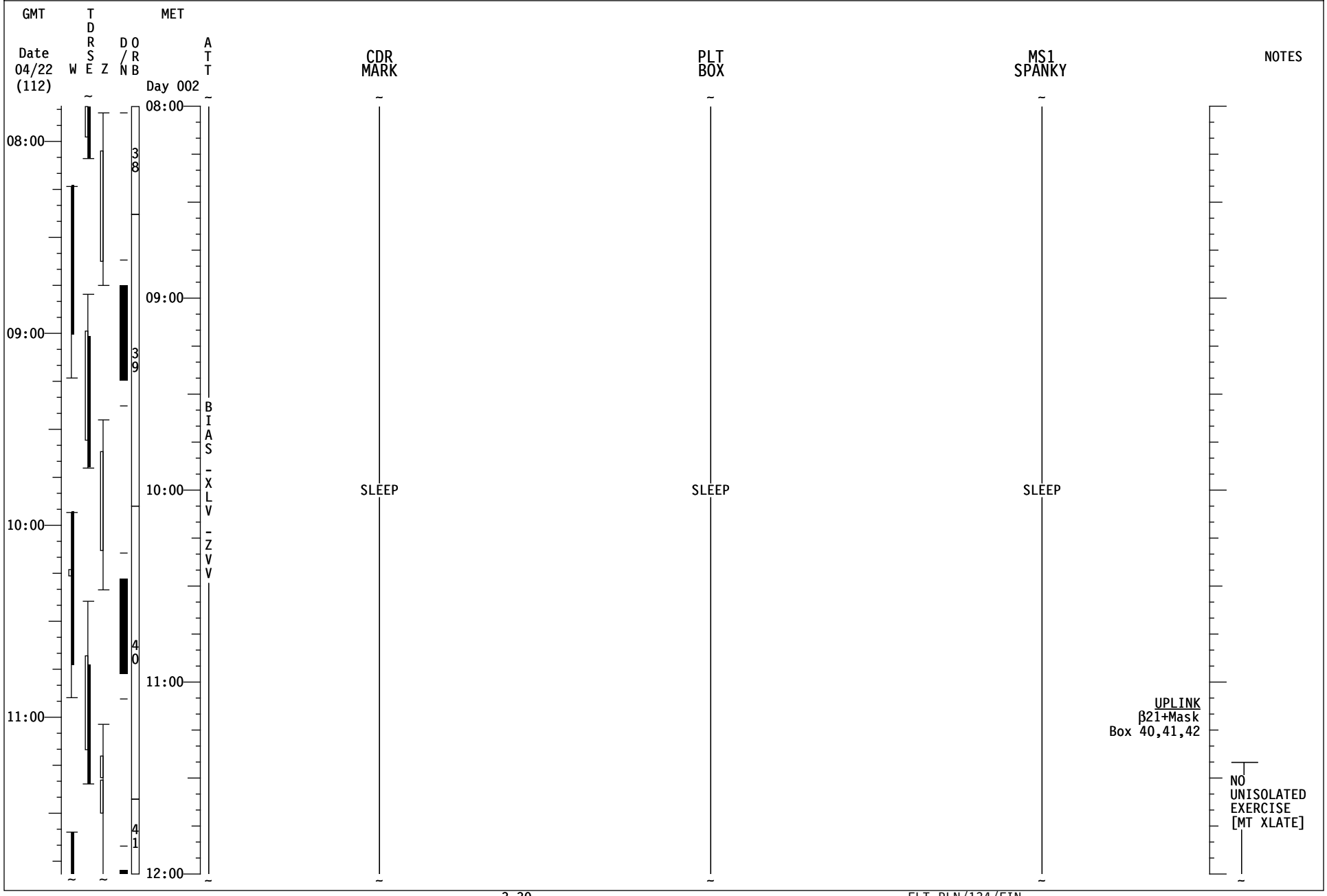
04:00 05:00 06:00 07:00 08:00

36 37 38

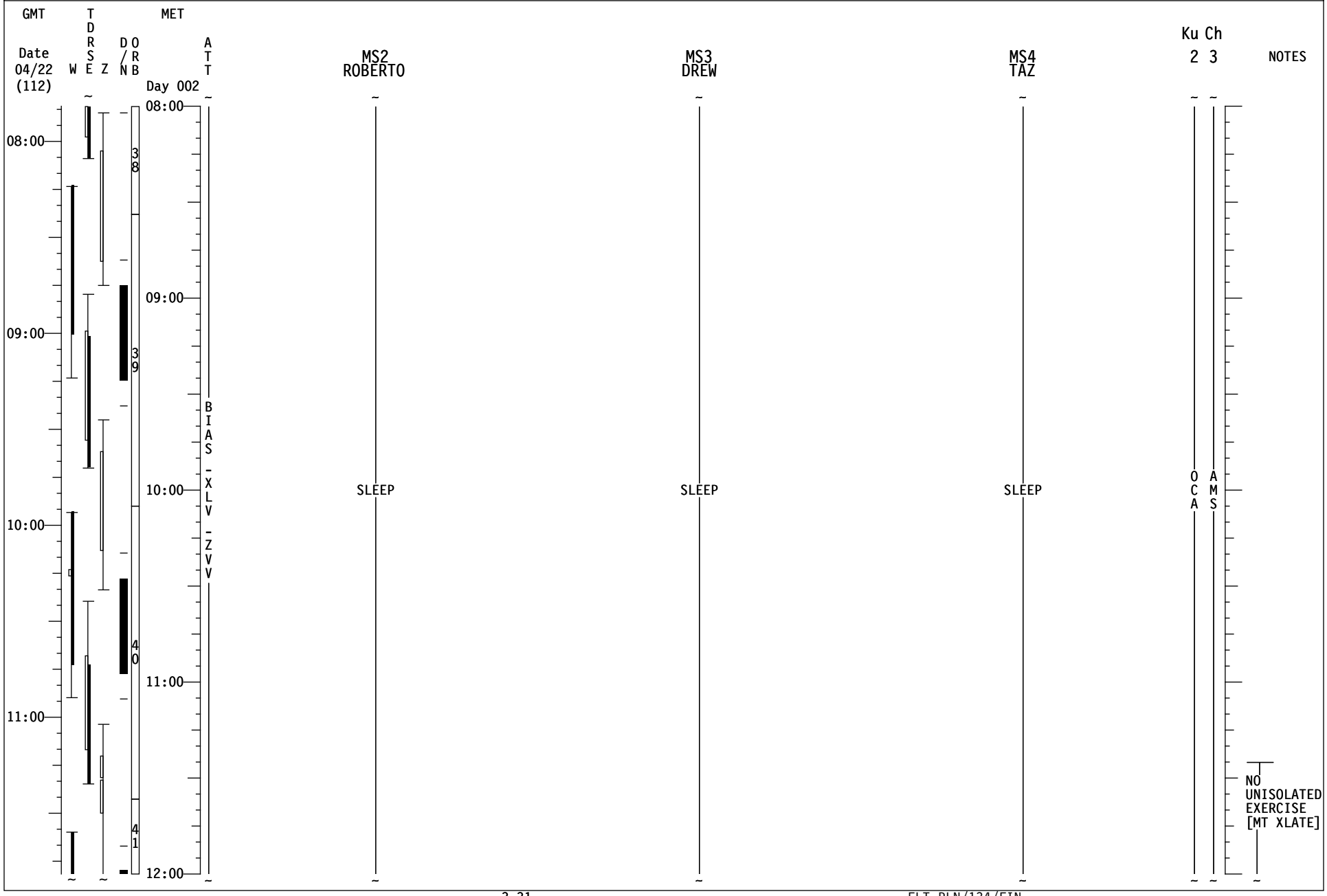
STS-134/ULF6 FD03



STS-134/ULF6 FD03



STS-134/ULF6 FD03



STS-134/ULF6 FD04

GMT Date 04/22 (112) | W | TDRS E | Z | D/N | ORB | MET Day 002 | ATT

CDR MARK | PLT BOX | MS1 SPANKY | NOTES

12:00 — 13:00 — 14:00 — 15:00 — 16:00

ORB: 41, 42, 43

ATT: BIAS-XLV, -ZVV

SLEEP (CDR MARK, PLT BOX, MS1 SPANKY)

FD04 EZ ACTIVITIES:
- √OCAC FILTER
- √MDDK DUCT SCREEN
- HARD REBOOT: STS-2(WINDECOM), STS-3(KFX) & STS-4(RPOP)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
√HUM SEPS FOR H2O ACCUMULATION

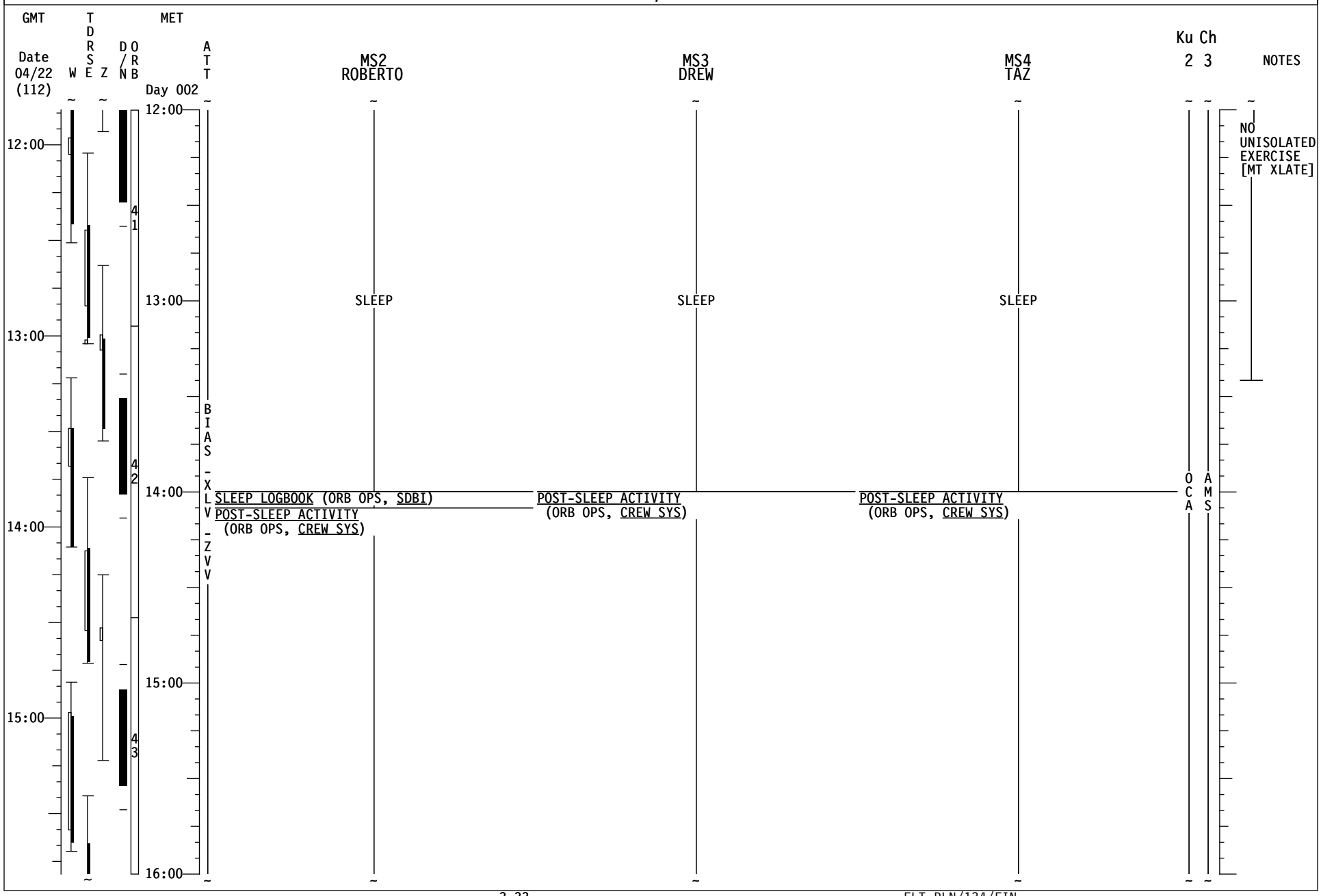
SLEEP LOGBOOK (ORB OPS, SDBI)
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

EXERCISE

NOTES:
- NO UNISOLATED EXERCISE [MT XLATE]
- UPLINK β21+ Mask Box 40, 41,43

STS-134/ULF6 FD04



STS-134/ULF6 FD04

GMT Date 04/22 (112) | W | T D R S E | Z | D/N | O R B | MET Day 002 | ATT

CDR MARK

16:00
- POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- √HUM SEPS FOR H2O ACCUMULATION
- O2 REPRESS INIT [A]
- POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

17:00
- O2 REPRESS TERM (On MCC GO) [B]
- CGBA STATUS CHK; GLACIER STATUS CHK (CC)
- CWC-I FILL #1 (ORB OPS, CWC-I FILL) Perform Parts D & E Ref. MSG XXX
- CWC-I FILL #2 (ORB OPS, CWC-I FILL) Perform Parts D & E Ref. MSG XXX
- CWC-I FILL #3 (ORB OPS, CWC-I FILL) Perform Parts D-F Ref. MSG XXX

18:00
- CWC-I TRANSFER Transfer 3 CWC-Is to ISS
- IMU STAR OF OPPORTUNITY ALIGN (ORB OPS,GNC)
- DAILY TRANSFER LIST UPDATE Ref. Transfer List & MSG XXX
- SHUTTLE CONDENSATE COLLECTION (ORB OPS, ECLS) Perform CHANGEOUT Ref. MSG XXX
- TRANSFER OPS Ref. Middeck Transfer List

19:00
- NLP TERMINATION (ASSY OPS, PAYLOADS) Terminate Vaccine GAPs A-P

20:00

BIAS-XLV-ZV

PLT BOX

- POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- [A] OCAC PWR - OFF; C5 DIRECT O2 vlv - OP
- [B] C5 DIRECT O2 vlv - CL; OCAC PWR - ON
- P/TV06 ROBOTICS OPERATIONS (PHOTO/TV, SCENES) OPS, Item 3
- ROBO: 1.210 AMS HANDOFF AND INSTALL Steps 1-4 EXERCISE CONSTRAINT
- ROBO: 1.210 AMS HANDOFF AND INSTALL Steps 5-8.4 EXERCISE CONSTRAINT
- [C] Ref. STS-134 CONSUMABLES TRACKING CC
- S&M: 1.911 PAS NORMAL MATE Steps 6-10 EXERCISE CONSTRAINT
- ROBO:1.210 AMS HANDOFF AND INSTALL Step 8.5 EXERCISE CONSTRAINT

MS1 SPANKY

- EXERCISE
- POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- ISS EVA SYSTEMS: 1.515 EMU METOX/LIOH/BATTERY REPLACEMENT Ref: STS-134 CONSUMABLES TRACKING CC
- ISS EVA SYS:1.307 REBA INSTALLATION/REMOVAL INSTALLATION [C]
- ISS EVA SYSTEMS: 1.403 REBA POWERED HARDWARE CHECKOUT Perform for EMUs 3004 and 3005
- AMS PGSC DEACT (ASSY OPS, PAYLOADS)

NOTES

- NO EXERCISE [AMS UNBERTH TO SRMS AT HOVER POS'N]
- NO EXERCISE [DOUBLE GRAPPLE]
- NO EXERCISE [MNVR TO & AT INSTALL POSITION]
- NO UNISOLATED EXERCISE

STS-134/ULF6 FD04

GMT — Date 04/22 (112) — MET Day 002

TDRS: W E Z — D/N — ORB

ATT: BIAS-XLV-ZVV

MS2 ROBERTO	MS3 DREW	MS4 TAZ
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
P/TV08 AMS (PHOTO/TV, SCENES) OPS		EXERCISE
L17 Check MCIU filter screen		
AMS GRAPPLE (PDRS, AMS NOMINAL)	AMS GRAPPLE (PDRS, AMS NOMINAL)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
AMS UNBERTH AND HANDOFF (PDRS, AMS NOMINAL) EXERCISE CONSTRAINT	AMS UNBERTH AND HANDOFF (PDRS, AMS NOMINAL) EXERCISE CONSTRAINT	
		ROBO: 1.210 AMS HANDOFF AND INSTALL Steps 1-4 EXERCISE CONSTRAINT
AMS UNGRAPPLE AND VIEWING (PDRS, AMS NOMINAL) EXERCISE CONSTRAINT	AMS UNGRAPPLE AND VIEWING (PDRS, AMS NOMINAL) EXERCISE CONSTRAINT	
VIABLE OPERATIONS (ASSY OPS, PAYLOADS) Step 1	P/TV06 ROBOTICS OPERATIONS (PHOTO/TV, SCENES) OPS, Item 3	ROBO: 1.210 AMS HANDOFF AND INSTALL Steps 5-8.4 EXERCISE CONSTRAINT
IENOS OPERATIONS (ASSY OPS, PAYLOADS) Step 1		
TRANSFER OPS Ref. Middeck Transfer List		
		S&M: 1.911 PAS NORMAL MATE Steps 6-10 EXERCISE CONSTRAINT
		ROBO:1.210 AMS HANDOFF AND INSTALL Step 8.5 EXERCISE CONSTRAINT

Ku Ch 2 3: AMS, OCA, TV

NOTES:
- NO EXERCISE [AMS UNBERTH TO SRMS AT HOVER POS'N]
- NO EXERCISE [DOUBLE GRAPPLE]
- NO EXERCISE [MNVR TO & AT INSTALL POSITION]
- NO UNISOLATED EXERCISE

STS-134/ULF6 FD04

GMT Date 04/22 (112) | W | TDRS E | Z | D/N | ORB | MET Day 002 | ATT

CDR MARK

- 20:00 NLP TERMINATION (ASSY OPS, PAYLOADS)
  Terminate Vaccine GAPs A-P
- CGBA ADJUST SET TEMP (ASSY OPS, PAYLOADS)
  SSV OUTRATE - 2
- EXERCISE
- PUBLIC AFFAIRS EVENT
  ISS KU AVAIL: 22:06-22:45
  NODE 2: Mark/Box/Spanky/Taz/Ron
- MEAL
- JOINT OPS: 3.128 O2 XFER TO HI P AND LO P TANKS; Step-3

PLT BOX

- S&M: 1.911 PAS NORMAL MATE
  Steps 11-14
  EXERCISE CONSTRAINT
- ROBO: 1.210 AMS HANDOFF AND INSTALL Step 8.6
- MEAL
- PUBLIC AFFAIRS EVENT
  ISS KU AVAIL: 22:06-22:45
  NODE 2: Mark/Box/Spanky/Taz/Ron
- EXERCISE
- ROBO:1.210 AMS HANDOFF AND INSTALL Step 8.7
- S&M: 1.911 PAS NORMAL MATE
  Steps 15-17
  EXERCISE CONSTRAINT
- ROBO: 1.220 AMS RELEASE AND MANEUVER TO MT TRANSLATION CONFIG

MS1 SPANKY

- AMS PGSC DEACT
  (ASSY OPS, PAYLOADS)
- 1.104 SET UP ORBITER SSC
  (ASSY OPS, ACT & C/O)
- MEAL
- ISS EVA SYSTEMS: 1.305 EQUIPMENT LOCK PREP
- PUBLIC AFFAIRS EVENT
  ISS KU AVAIL: 22:06-22:45
  NODE 2: Mark/Box/Spanky/Taz/Ron
- QD FAM OPS
  (EVA, TIMELINES)
  (EVA, TOOLS AND STOWAGE)
- EVA 1 TOOL CONFIGURATION
  (EVA, TIMELINES)
  Ref. STS-134 CONSUMABLES TRACKING CC
  Ref. MSG XXX

NOTES

- NO UNISOLATED EXERCISE [1ST THRU 3RD STAGE CAPTURE]
- TFL 184
- NO UNISOLATED EXERCISE [UMA MATING]

STS-134/ULF6 FD04

GMT Date 04/22 (112) | W | T D R S E | Z | D/N | O R B | MET Day 002 | A T T

MS2 ROBERTO | MS3 DREW | MS4 TAZ | NOTES

20:00 | 21:00 | 22:00 | 23:00

46 | 47 | 48 | 49

20:00 — TRANSFER OPS
Ref. Middeck Transfer List

P/TVO6 ROBOTICS OPERATIONS
(PHOTO/TV, SCENES) OPS, Item 3

S&M: 1.911 PAS NORMAL MATE
Steps 11-14
EXERCISE CONSTRAINT

NO UNISOLATED EXERCISE [1ST THRU 3RD STAGE CAPTURE]

ROBO: 1.210 AMS HANDOFF AND INSTALL Step 8.6

21:00 — EXERCISE — MEAL

ISS EVA SYSTEMS: 1.305 EQUIPMENT LOCK PREP

BIAS-XLV-ZVV

22:00 — EXERCISE — MEAL

PUBLIC AFFAIRS EVENT
ISS KU AVAIL: 22:06-22:45
NODE 2: Mark/Box/Spanky/Taz/Ron

QD FAM OPS
(EVA, TIMELINES)
(EVA, TOOLS AND STOWAGE)

QD FAM OPS
(EVA, TIMELINES)
(EVA, TOOLS AND STOWAGE)

23:00 — MEAL

Verify EMU 3005 sizing
Ref. STS-134 NOMINAL EMU SIZING
(EVA, EMU CONTINGENCY PROCS)

TRANSFER OPS
Ref. Middeck Transfer List

EVA 1 TOOL CONFIGURATION
(EVA, TIMELINES)
Ref. STS-134 CONSUMABLES TRACKING CC
Ref. MSG XXX

ROBO:1.210 AMS HANDOFF AND INSTALL Step 8.7

S&M: 1.911 PAS NORMAL MATE
Steps 15-17
EXERCISE CONSTRAINT

NO UNISOLATED EXERCISE [UMA MATING]

ROBO: 1.220 AMS RELEASE AND MANEUVER TO MT TRANSLATION CONFIG

00:00

STS-134/ULF6 FD04

GMT Date 04/22 (112) | W | TDRS E | Z | D/N | ORB | MET Day 003 | ATT

00:00 01:00 02:00 03:00

49 50 51

BIAS-XLV-ZVV

CDR MARK	PLT BOX	MS1 SPANKY	NOTES
JOINT OPS: 3.128 O2 XFER TO HI P AND LO P TANKS; Step 3	ROBO: 1.220 AMS RELEASE AND MANEUVER TO MT TRANSLATION CONFIG	EVA 1 TOOL CONFIGURATION (EVA, TIMELINES) Ref. STS-134 CONSUMABLES TRACKING CC Ref. MSG XXX	
JOINT OPS: 3.121 PREBREATHE USING SHUTTLE O2 SETUP (POST O2 XFER) Steps 1-4, Ground will perform steps 1.7 and 4.15	CSS: 1.111 CUPOLA CREW RESTRAINT OPS Step 6		
	PRLA CLOSE (ORB OPS, PRLA)		
PUBLIC AFFAIRS EVENT ISS KU AVAIL: 00:54-01:26 NODE 2: Mark/Spanky/Drew/Taz	AMS VIEWING TO PRECRADLE (PDRS, AMS NOMINAL)	PUBLIC AFFAIRS EVENT ISS KU AVAIL: 00:54-01:26 NODE 2: Mark/Spanky/Drew/Taz	
EVA 1 PROCEDURE REVIEW Ref. EVA 1 BRIEFING CARD (EVA, TIMELINES) Ref. MSG XXX	EVA 1 PROCEDURE REVIEW Ref. EVA 1 BRIEFING CARD (EVA, TIMELINES) Ref. MSG XXX	EVA 1 PROCEDURE REVIEW Ref. EVA 1 BRIEFING CARD (EVA, TIMELINES) Ref. MSG XXX	
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	DAP UPDATE Ref. MSG XXX Item X	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)		
Private Medical Conference via OCA KU TDRW (02:36-03:03) D			
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)			
D L9 PAYLOAD STATION A/G (two) - OFF NETMEETING VIDEO CONFERENCING (ORB OPS, PGSC) Use A/G2 for audio Inform MCC which PGSC will be used			
ISS EVA SYSTEMS: 1.206 10.2 PSIA CAMPOUT MASK PREBREATHE MCC-H-performs steps 1, 19			

STS-134/ULF6 FD04

GMT Date 04/22 (112) | W | TDRS E | Z | D/N | ORB | MET Day 003 | ATT

00:00 01:00 02:00 03:00

49 50 51

00:00 01:00 02:00 03:00 04:00

BIAS-XLV-ZVV

MS2 ROBERTO	MS3 DREW	MS4 TAZ	NOTES
TRANSFER OPS Ref. Middeck Transfer List	EVA 1 TOOL CONFIGURATION (EVA, TIMELINES) Ref. STS-134 CONSUMABLES TRACKING CC Ref. MSG XXX	ROBO: 1.220 AMS RELEASE AND MANEUVER TO MT TRANSLATION CONFIG EVA 1 TOOL CONFIGURATION (EVA, TIMELINES) Ref. STS-134 CONSUMABLES TRACKING CC Ref. MSG XXX	
TRANSFER BRIEF PREP Coordinate with transfer counterparts			
TRANSFER BRIEF Call down status to MCC			
BIOKIS OPERATIONS (ASSY OPS, PAYLOADS) Step 3	PUBLIC AFFAIRS EVENT ISS KU AVAIL: 00:54-01:26 NODE 2: Mark/Spanky/Drew/Taz	PUBLIC AFFAIRS EVENT ISS KU AVAIL: 00:54-01:26 NODE 2: Mark/Spanky/Drew/Taz	
AMS VIEWING TO PRECRADLE (PDRS, AMS NOMINAL)			
EVA 1 PROCEDURE REVIEW Ref. EVA 1 BRIEFING CARD (EVA, TIMELINES) Ref. MSG XXX	EVA 1 PROCEDURE REVIEW Ref. EVA 1 BRIEFING CARD (EVA, TIMELINES) Ref. MSG XXX	EVA 1 PROCEDURE REVIEW Ref. EVA 1 BRIEFING CARD (EVA, TIMELINES) Ref. MSG XXX	
CGBA STATUS CHK; GLACIER STATUS CHK (CC) PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
	ISS EVA SYSTEMS: 1.206 10.2 PSIA CAMPOUT MASK PREBREATHE MCC-H–performs steps 1, 19	ISS EVA SYSTEMS: 1.206 10.2 PSIA CAMPOUT MASK PREBREATHE MCC-H–performs steps 1, 19	

STS-134/ULF6 FD04

GMT Date 04/23 (113) | W | T D R S E | Z | D/N | O R B | MET Day 003 | ATT | CDR MARK | PLT BOX | MS1 SPANKY | NOTES

04:00 05:00 06:00 07:00

ORB: 51 52 53 54

ATT: BIAS-XLV-ZVV

04:00 05:00 06:00 07:00 08:00

CDR MARK

ISS EVA SYSTEMS: 1.206 10.2 PSIA CAMPOUT
MASK PREBREATHE MCC-H performs steps 1, 19

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

CREW WAKE AT 03/13:30

SLEEP

PLT BOX

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

SLEEP

MS1 SPANKY

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

SLEEP

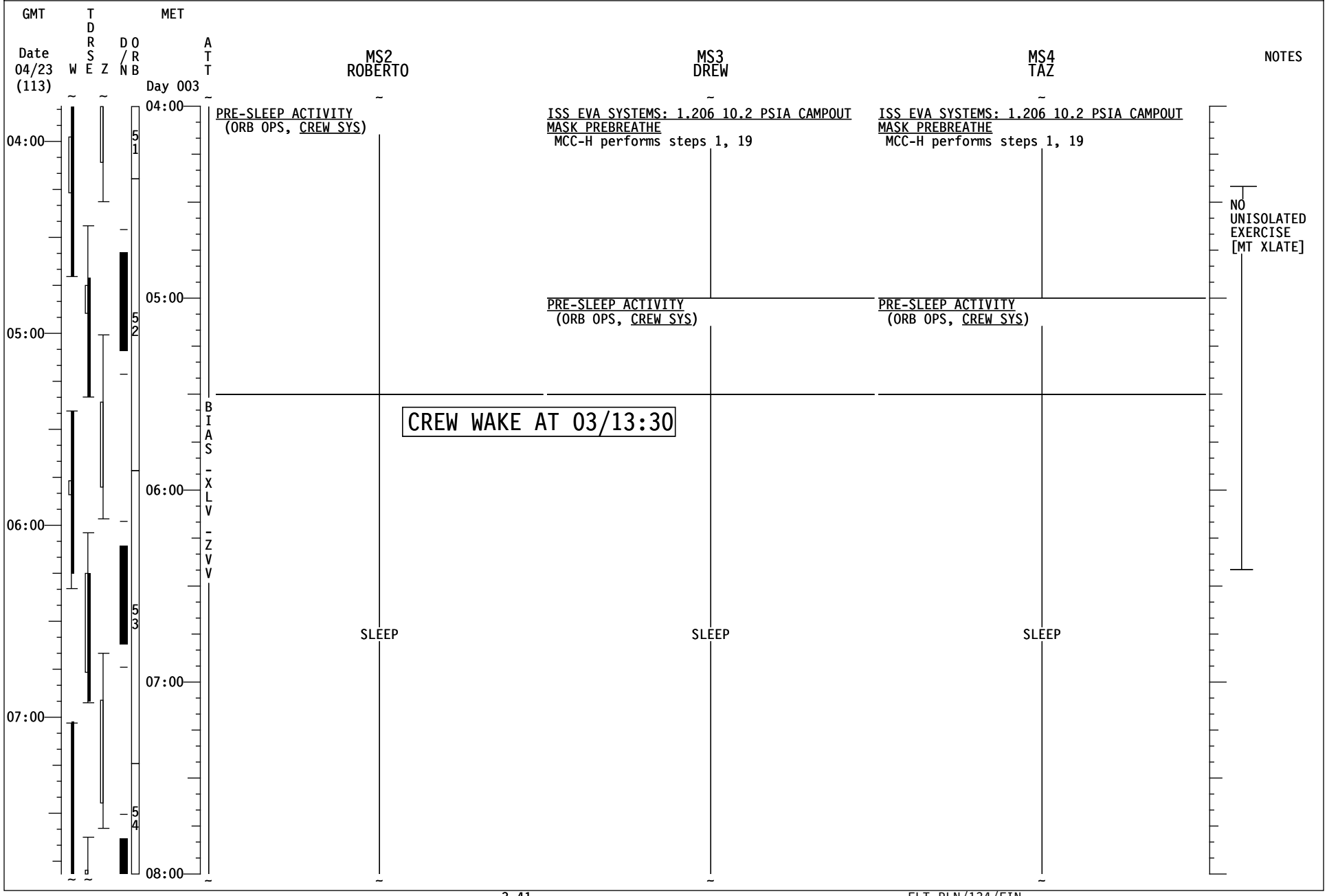
NOTES

UPLINK
β21+Mask
Box 40,41,42

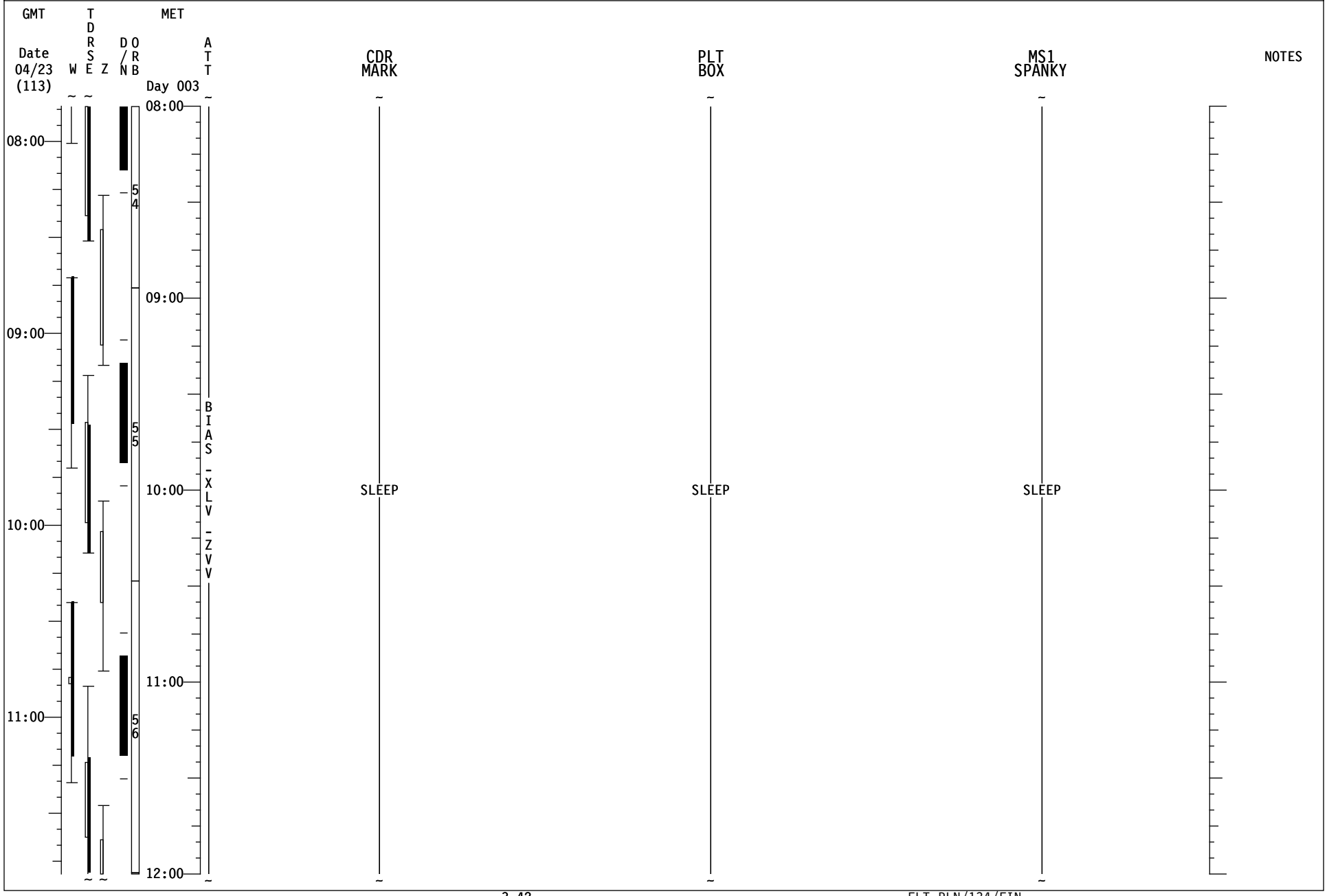
NO UNISOLATED EXERCISE [MT XLATE]

UPLINK
β21+Mask
Box 40,41,46

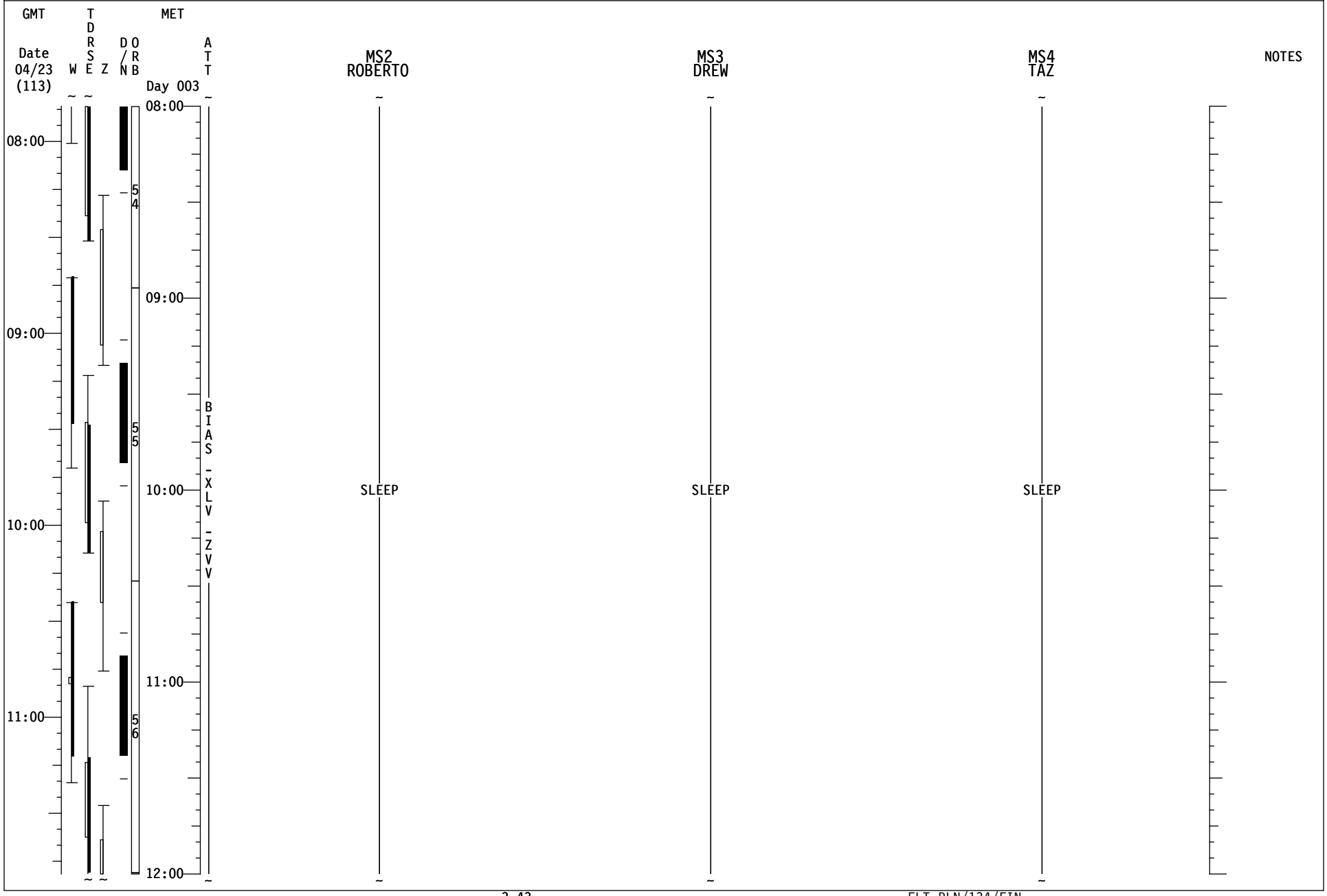
STS-134/ULF6 FD04



STS-134/ULF6 FD04



STS-134/ULF6 FD04



STS-134/ULF6 FD05

GMT Date 04/23 (113) | W | T D R S E | Z | D/N | O R B | MET Day 003 | ATT

CDR MARK | PLT BOX | MS1 SPANKY | NOTES

12:00 13:00 14:00 15:00 16:00

57 58 59

SLEEP (CDR MARK) | SLEEP (PLT BOX) | SLEEP (MS1 SPANKY)

FD05 EZ ACTIVITIES:
√OCAC FILTER
√MDDK DUCT SCREEN
HARD REBOOT: STS-2(WINDECOM), STS-3(KFX) & STS-4(RPOP)

BIAS-XLV-ZVV

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
√HUM SEPS FOR H2O ACCUMULATION

SLEEP LOGBOOK (ORB OPS, SDBI)
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

L9 PS AUD A/G 1,2 (two) - OFF
PRIVATE MEDICAL CONFERENCE
Private Conference via A/G 2

ISS EVA SYSTEMS: 1.211 HYGIENE BREAK
Perform steps 21-22, 24-25
MCC-H performs step 23

ISS EVA SYSTEMS: 1.216 EVA PREP
MCC-H performs step 1

STS-134/ULF6 FD05

GMT Date 04/23 (113) | W | T D R S E | Z | D/N | ORB | MET Day 003 | ATT | MS2 ROBERTO | MS3 DREW | MS4 TAZ | NOTES

12:00 13:00 14:00 15:00

57 58 59

12:00 13:00 14:00 15:00 16:00

BIAS-XLV-ZVV

SLEEP

SLEEP

SLEEP

SLEEP LOGBOOK (ORB OPS, SDBI)
POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

ISS EVA SYSTEMS: 1.211 HYGIENE BREAK
MCC-H performs steps 1-4, 16-20, 23

ISS EVA SYSTEMS: 1.211 HYGIENE BREAK
MCC-H performs steps 1-4, 16-20, 23

ISS EVA SYSTEMS: 1.216 EVA PREP
MCC-H performs step 1

ISS EVA SYSTEMS: 1.216 EVA PREP
MCC-H performs step 1

STS-134/ULF6 FD05

GMT Date 04/23 (113) | W | TDRS E | Z | D/N | ORB | MET Day 003 | ATT

CDR MARK

16:00
ISS EVA SYSTEMS: 1.216 EVA PREP
MCC-H performs step 1

17:00
ISS EVA SYSTEMS: 1.220 EMU PURGE
MCC-H performs steps 6 and 12

ISS EVA SYSTEMS: 1.225 EMU PREBREATHE
Steps 3, 7, 10 not required
MCC-H performs step 48

18:00
ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CC
Perform CREWLOCK DEPRESS

ISS EVA SYS:C-LK DPRS/RPRS CC POST DEPRESS

19:00
P/TV07 EVA
(PHOTO/TV, SCENES)
OPS

20:00

PLT BOX

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

EVA 1 INHIBIT PAD
(EVA, TIMELINES)
A7 √WIRELESS VID HTR - ON

P/TV09 MIDDECK PAYLOADS
(PHOTO/TV, SCENES) SETUP Item 5

TAPE OPERATIONS
(ASSY OPS, PAYLOADS)

IMU STAR OF OPPORTUNITY ALIGN (ORB OPS,GNC)

FILTER CLEANING
(IFM, SCHEDULED MAINTENANCE)
Inspect filters and clean
as necessary

CWC-I FILL #4
(ORB OPS, CWC-I FILL)
Perform Parts D & E
Ref. MSG XXX

CWC-I FILL #5
(ORB OPS, CWC-I FILL)
Perform Parts D & E
Ref. MSG XXX

CWC-I FILL #6
(ORB OPS, CWC-I FILL)
Perform Parts D-F
Ref. MSG XXX

CWC-I TRANSFER
Transfer 3 CWC-Is to ISS

TRANSFER OPS
Ref. Middeck Transfer List

MS1 SPANKY

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

L17 Check MCIU filter screen

EXERCISE

IVA SUPPORT EVA 1

NOTES

NO UNISOLATED EXERCISE [EVA CREW ON ELC2 OR OUTBOARD OF SARJ]

STS-134/ULF6 FD05

GMT Date 04/23 (113) | W | T D R S E | Z | D/N | O R B | MET Day 003 | ATT

16:00 17:00 18:00 19:00

59 60 61 62

BIAS-XLV-ZVV

16:00 17:00 18:00 19:00 20:00

MS2 ROBERTO	MS3 DREW	MS4 TAZ	NOTES
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	ISS EVA SYSTEMS: 1.216 EVA PREP MCC-H performs step 1	ISS EVA SYSTEMS: 1.216 EVA PREP MCC-H performs step 1	
CGBA STATUS CHK; GLACIER STATUS CHK (CC)			
IENOS OPS (ASSY OPS, PAYLOADS) Step 1.4			
DAILY TRANSFER LIST UPDATE Ref. Transfer List & MSG XXX			
P/TV09 MIDDECK PAYLOADS (PHOTO/TV, SCENES) SETUP Item 5	ISS EVA SYSTEMS: 1.220 EMU PURGE MCC-H performs steps 6 and 12	ISS EVA SYSTEMS: 1.220 EMU PURGE MCC-H performs steps 6 and 12	
IAPE OPERATIONS (ASSY OPS, PAYLOADS)	ISS EVA SYSTEMS: 1.225 EMU PREBREATHE Steps 3, 7, 10 not required MCC-H performs step 48	ISS EVA SYSTEMS: 1.225 EMU PREBREATHE Steps 3, 7, 10 not required MCC-H performs step 48	
P/TV07 EVA (PHOTO/TV, SCENES) SETUP			
EXERCISE	ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CC Perform CREWLOCK DEPRESS	ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CC Perform CREWLOCK DEPRESS	
	ISS EVA SYS:C-LK DPRS/RPRS CC POST DEPRESS	ISS EVA SYS:C-LK DPRS/RPRS CC POST DEPRESS	
	EGRESS/SETUP	EGRESS/SETUP	
TRANSFER OPS Ref. Middeck Transfer List			
	MISSE 7 RETRIEVE	MISSE 7 RETRIEVE	NO UNISOLATED EXERCISE [EVA CREW ON ELC2 OR OUTBOARD OF SARJ]
	MISSE 8 INSTALL	S3 CETA LIGHT INSTL	

STS-134/ULF6 FD05

GMT Date 04/23 (113) | W | T D R S E | Z | D/N | O R B | MET Day 003 | ATT

MET	ATT	CDR MARK	PLT BOX	MS1 SPANKY	NOTES
20:00	P/TV07 EVA (PHOTO/TV, SCENES) OPS		TRANSFER OPS Ref. Middeck Transfer List		NO UNISOLATED EXERCISE [EVA CREW ON ELC2 OR OUTBOARD OF SARJ]
21:00		MEAL	MEAL		
22:00	BIAS-XLV-ZVV P/TV07 EVA (PHOTO/TV, SCENES) OPS		TRANSFER OPS Ref. Middeck Transfer List	IVA SUPPORT EVA 1	
23:00					
00:00					

62 63 64

STS-134/ULF6 FD05

GMT Date 04/23 (113) | W | T D R S E | Z | D / N | O R B | MET Day 003 | A T T

20:00 21:00 22:00 23:00

62 63 64

20:00 21:00 22:00 23:00 00:00

BIAS-XLV -ZVV

MS2 ROBERTO	MS3 DREW	MS4 TAZ	NOTES
TRANSFER OPS Ref. Middeck Transfer List	MISSE 8 INSTALL	S3 CETA LIGHT INSTL	NO UNISOLATED EXERCISE [EVA CREW ON ELC2 OR OUTBOARD OF SARJ]
	P3-P4 NH3 JMPR INSTL	STBD SARJ COVER #7 INSTALL P3-P4 NH3 JMPR INSTL	
MEAL	P5P6 NH3 JMPR P6-EAS NH3 JMPR	P4 NH3 JMPR STOW	
LiOH TRANSFER Ref. Transfer List	LAB EWC ANTENNA	LAB EWC ANTENNA P3-P4 MATE	
TRANSFER OPS Ref. Middeck Transfer List	P16A/ J16A MATE	P16A/ J16A MATE	
	P1-P2 MATE FLUID QD TOOL BAG RECONFIG	CLEANUP	

STS-134/ULF6 FD05

GMT Date 04/23 (113) | W | T D R S E | Z | D/N | O R B | MET Day 004 | ATT

00:00 01:00 02:00 03:00

64 65 66 67

BIAS-XLV-ZVV

CDR MARK

00:00
P/TV07 EVA
(PHOTO/TV, SCENES)
OPS

ISS EVA SYS: C-LK DPRS/RPRS CC PRE REPRESS
ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CC
01:00
Perform CREWLOCK REPRESS
ISS EVA SYSTEMS: 1.240 POST EVA
With H2O RECHARGE
Steps 37, 39, 66 not required
MCC-H will perform Steps 43, 67-68
Ref. STS-134 CONSUMABLES TRACKING CC

02:00
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

L9 PS AUD A/G 1,2 (two) - OFF
PRIVATE MEDICAL CONFERENCE
03:00
Private Conference via A/G 2
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

04:00

PLT BOX

TRANSFER OPS
Ref. Middeck Transfer List

EXERCISE

ILLUMINATOR OPS (CC,TV) ILLUMINATORS ON-A,D
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

MS1 SPANKY

IVA SUPPORT EVA 1

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

L9 PS AUD A/G 1,2 (two) - OFF
POST EVA TAGUP
Private Conference via A/G 2
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

NOTES

STS-134/ULF6 FD05

GMT Date 04/23 (113) | W | T D R S E | Z | D/N | O R B | MET Day 004 | ATT

00:00 01:00 02:00 03:00

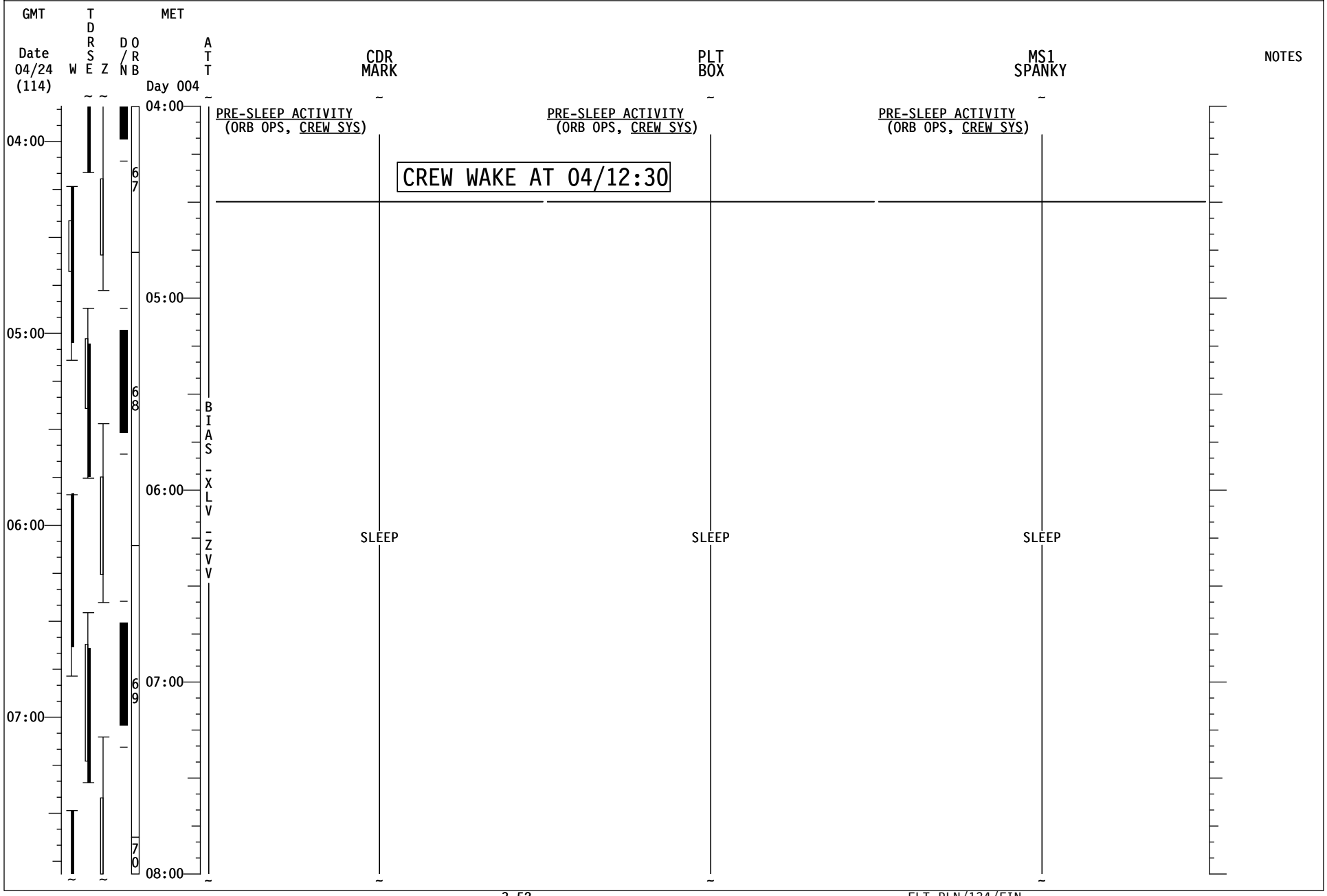
64 65 66 67

00:00 01:00 02:00 03:00 04:00

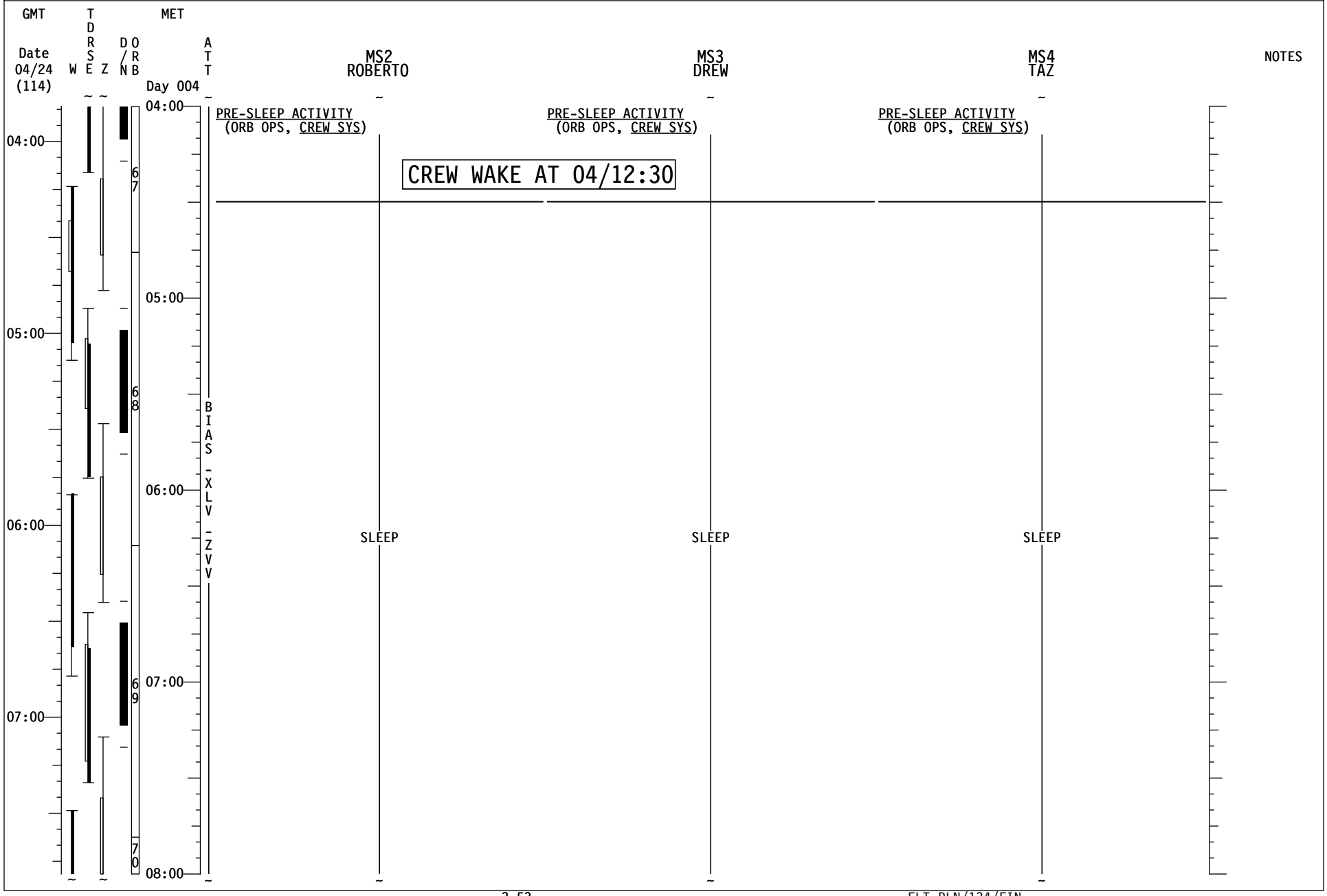
BIAS-XLV-ZVV

MS2 ROBERTO	MS3 DREW	MS4 TAZ	NOTES
TRANSFER OPS Ref. Middeck Transfer List	FLUID QD TOOL BAG RECONFIG	CLEANUP	
	CLEANUP/INGRESS	CLEANUP/INGRESS	
	ISS EVA SYS: C-LK DPRS/RPRS CC PRE REPRESS	ISS EVA SYS: C-LK DPRS/RPRS CC PRE REPRESS	
TRANSFER BRIEF PREP Coordinate with transfer counterparts	ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CC Perform CREWLOCK REPRESS	ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CC Perform CREWLOCK REPRESS	
TRANSFER BRIEF Call down status to MCC	ISS EVA SYSTEMS: 1.240 POST EVA With H2O RECHARGE Steps 37, 39, 66 not required MCC-H will perform Steps 43, 67-68 Ref. STS-134 CONSUMABLES TRACKING CC	ISS EVA SYSTEMS: 1.240 POST EVA With H2O RECHARGE Steps 37, 39, 66 not required MCC-H will perform Steps 43, 67-68 Ref. STS-134 CONSUMABLES TRACKING CC	
CGBA STATUS CHK; GLACIER STATUS CHK (CC) PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)			
	L9 PS AUD A/G 1,2 (two) - OFF POST EVA TAGUP Private Conference via A/G 2	L9 PS AUD A/G 1,2 (two) - OFF POST EVA TAGUP Private Conference via A/G 2	
	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	

STS-134/ULF6 FD05



STS-134/ULF6 FD05



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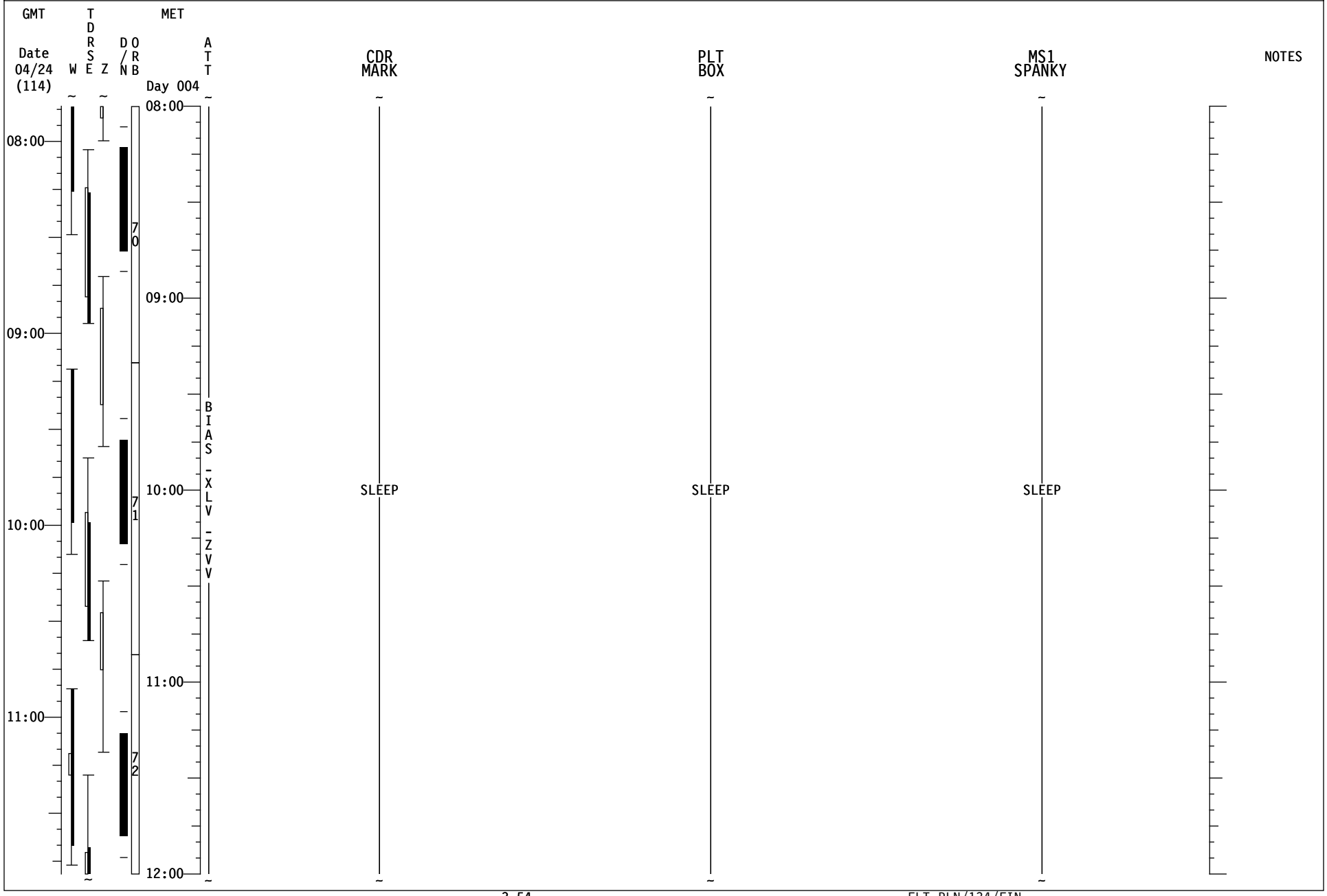
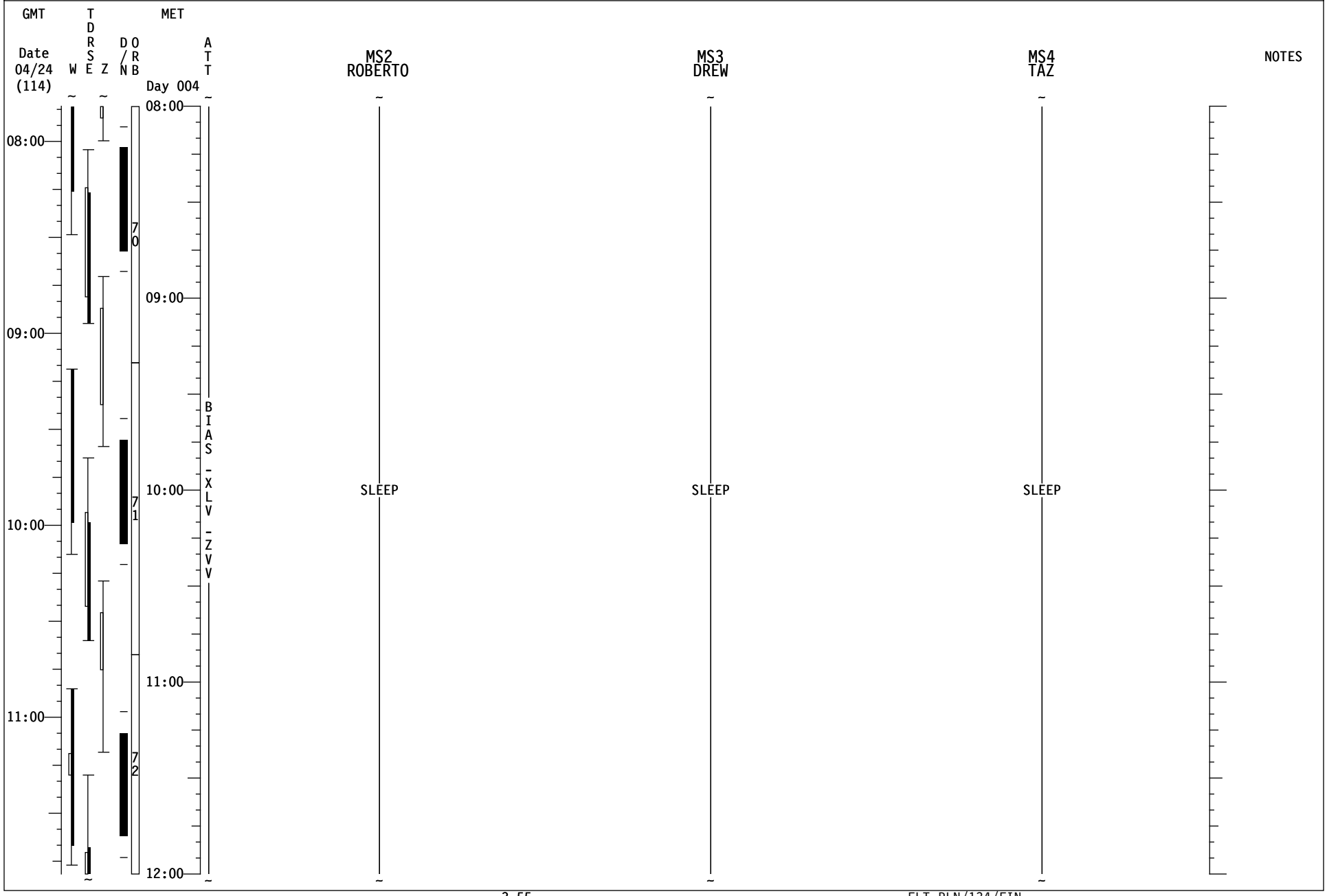


STS-134/ULF6 FD05



STS-134/ULF6 FD06

GMT Date 04/24 (114) | W | TDRS E | Z | D/N | ORB | MET Day 004 | ATT

12:00 13:00 14:00 15:00

72 73 74 75

12:00 13:00 14:00 15:00 16:00

BIAS-XLV-ZVV

FD06 EZ ACTIVITIES:
√OCAC FILTER
√MDDK DUCT SCREEN
HARD REBOOT: STS-2(WINDECOM), STS-3(KFX) & STS-4(RPOP)

CDR MARK	PLT BOX	MS1 SPANKY	NOTES
SLEEP	SLEEP	SLEEP	
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	SLEEP LOGBOOK (ORB OPS, SDBI) POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	UPLINK β21+Mask Box 40,41
PUBLIC AFFAIRS EVENT ISS KU AVAIL: 15:07-15:33 NODE 2: Mark/Taz/Ron/Cady			
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	ROBO:1.310 OBSS UNBERTH AND HANDOFF TO SRMS Steps 1-3	EXERCISE	

STS-134/ULF6 FD06

GMT Date 04/24 (114) | W | TDRS E | Z | D/N | ORB | MET Day 004 | ATT | MS2 ROBERTO | MS3 DREW | MS4 TAZ | NOTES

12:00 13:00 14:00 15:00

ORB: 72 73 74 75

ATT: BIAS-XLV-ZVV

12:00 13:00 14:00 15:00 16:00

MS2 ROBERTO	MS3 DREW	MS4 TAZ
SLEEP	SLEEP	SLEEP
SLEEP LOGBOOK (ORB OPS, SDBI)	EVA CREW: TAKE 1 ASPIRIN (325mg)	SLEEP LOGBOOK (ORB OPS, SDBI)
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	EVA CREW: TAKE 1 ASPIRIN (325mg)
		POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
IENOS OPS (ASSY OPS, PAYLOADS) Step 1.4		PUBLIC AFFAIRS EVENT ISS KU AVAIL: 15:07-15:33 NODE 2: Mark/Taz/Ron/Cady
CGBA STATUS CHK; GLACIER STATUS CHK (CC)		
ILLUMINATOR OPS (CC,TV) ILLUMINATORS OFF-ALL		
L17 Check MCIU filter screen		
OBSS HANDOFF TO SRMS - MNVR TO PRE-GRAPPLE (PDRS, OBSS HANDOFF)	OBSS HANDOFF TO SRMS - MNVR TO PRE-GRAPPLE (PDRS, OBSS HANDOFF)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
OBSS HANDOFF TO SRMS - STBD MRL RELEASE (PDRS, OBSS HANDOFF) EXERCISE CONSTRAINT		

STS-134/ULF6 FD06

GMT Date 04/24 (114) | W | TDRS E | Z | D/N | ORB | MET Day 004 | ATT

CDR MARK

- 16:00 — A N2 REPRESS USING PAYLOAD N2 VLVS (ORB OPS, ECLS) Steps 1, 3-7 MCC will TMBU SM Limits
- JOINT OPS: 3.103 NITROGEN TRANSFER TERM Steps 3-5, MCC-H will perform Step 5.3
- 17:00 — N2 REPRESS INIT A
- BIAS-XLV-ZVV
- PUBLIC AFFAIRS EVENT ISS KU AVAIL: 17:33-18:08 NODE 2: Mark/Box
- 18:00 — IMU STAR OF OPPORTUNITY ALIGN (ORB OPS,GNC)
- EXERCISE
- 19:00 — N2 REPRESS TERM C
- MEAL
- 20:00

PLT BOX

- ROBO:1.310 OBSS UNBERTH AND HANDOFF TO SRMS Steps 4-6 EXERCISE CONSTRAINT
- ROBO:1.310 OBSS UNBERTH AND HANDOFF TO SRMS Steps 7-10 EXERCISE CONSTRAINT
- CSS: 1.111 CUPOLA CREW RESTRAINT OPS Step 6
- PUBLIC AFFAIRS EVENT ISS KU AVAIL: 17:33-18:08 NODE 2: Mark/Box
- CWC-I FILL #7 (ORB OPS, CWC-I FILL) Perform Parts D & E Ref. MSG XXX
- CWC-I FILL #8 (ORB OPS, CWC-I FILL) Perform Parts D-F Ref. MSG XXX
- CWC-I TRANSFER Transfer 2 CWC-Is to ISS
- B Ref. STS-134 CONSUMABLES TRACKING CC
- C N2 REPRESS USING PAYLOAD N2 VLVS (ORB OPS, ECLS) Steps 8-13 MCC will TMBU SM Limits
- MEAL

MS1 SPANKY

- EXERCISE
- EMU SWAP FOR EVA 2 (EVA, AIRLOCK CONFIG) Ref. STS-134 CONSUMABLES TRACKING CC Ref. STS-134 NOMINAL EMU SIZING (EVA, EMU CONTINGENCY PROCS)
- ISS EVA SYS: 1.515 EMU METOX/LIOH/BATTERY REPLACEMENT Ref: STS-134 CONSUMABLES TRACKING CC
- ISS EVA SYS:1.307 REBA INSTALLATION/REMOVAL INSTALLATION B
- ISS EVA SYSTEMS: 1.403 REBA POWERED HARDWARE CHECKOUT Perform for EMU 3018
- EVA 2 TOOL CONFIGURATION (EVA, TIMELINES) Ref. CONSUMABLES TRACKING CUE CARD Ref. MSG XXX
- MEAL

NOTES

- NO EXERCISE [DOUBLE GRAPPLE]

STS-134/ULF6 FD06

GMT Date 04/24 (114) | W | TDRS E | Z | D/N | ORB | MET Day 004 | ATT

16:00 17:00 18:00 19:00

75 76 77

BIAS-XLV-ZVV

MS2 ROBERTO	MS3 DREW	MS4 TAZ	NOTES
		POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
OBSS HANDOFF TO SRMS - OBSS GRAPPLE (PDRS, OBSS HANDOFF) EXERCISE CONSTRAINT	OBSS HANDOFF TO SRMS - OBSS GRAPPLE (PDRS, OBSS HANDOFF) EXERCISE CONSTRAINT	EMU SWAP FOR EVA 2 (EVA, AIRLOCK CONFIG) Ref. STS-134 CONSUMABLES TRACKING CC Ref. STS-134 NOMINAL EMU SIZING (EVA, EMU CONTINGENCY PROCS)	NO EXERCISE [DOUBLE GRAPPLE]
	ISS EVA SYSTEMS: 1.305 EQUIPMENT LOCK PREP	ISS EVA SYSTEMS: 1.305 EQUIPMENT LOCK PREP	
EXERCISE	EXERCISE	EVA 2 TOOL CONFIGURATION (EVA, TIMELINES) Ref. CONSUMABLES TRACKING CUE CARD Ref. MSG XXX	
	EVA 2 TOOL CONFIGURATION (EVA, TIMELINES) Ref. CONSUMABLES TRACKING CUE CARD Ref. MSG XXX		
MEAL	MEAL	MEAL	
PUBLIC AFFAIRS EVENT ISS KU AVAIL: 19:50-20:31 Columbus: Roberto/Paolo			

STS-134/ULF6 FD06

GMT Date 04/24 (114) | W | TDRSE | Z | D/N | ORB | MET Day 004 | ATT | CDR MARK | PLT BOX | MS1 SPANKY | NOTES

20:00 — 21:00 — 22:00 — 23:00

ORB: 78 — 79 — 80

ATT: BIAS-XLV-ZVV

20:00 — 21:00 — 22:00 — 23:00 — 00:00

CDR MARK

- MEAL
- OFF DUTY
- Private Family Conference KU TDRX (XX:XX-XX:XX) D
- OFF DUTY

PLT BOX

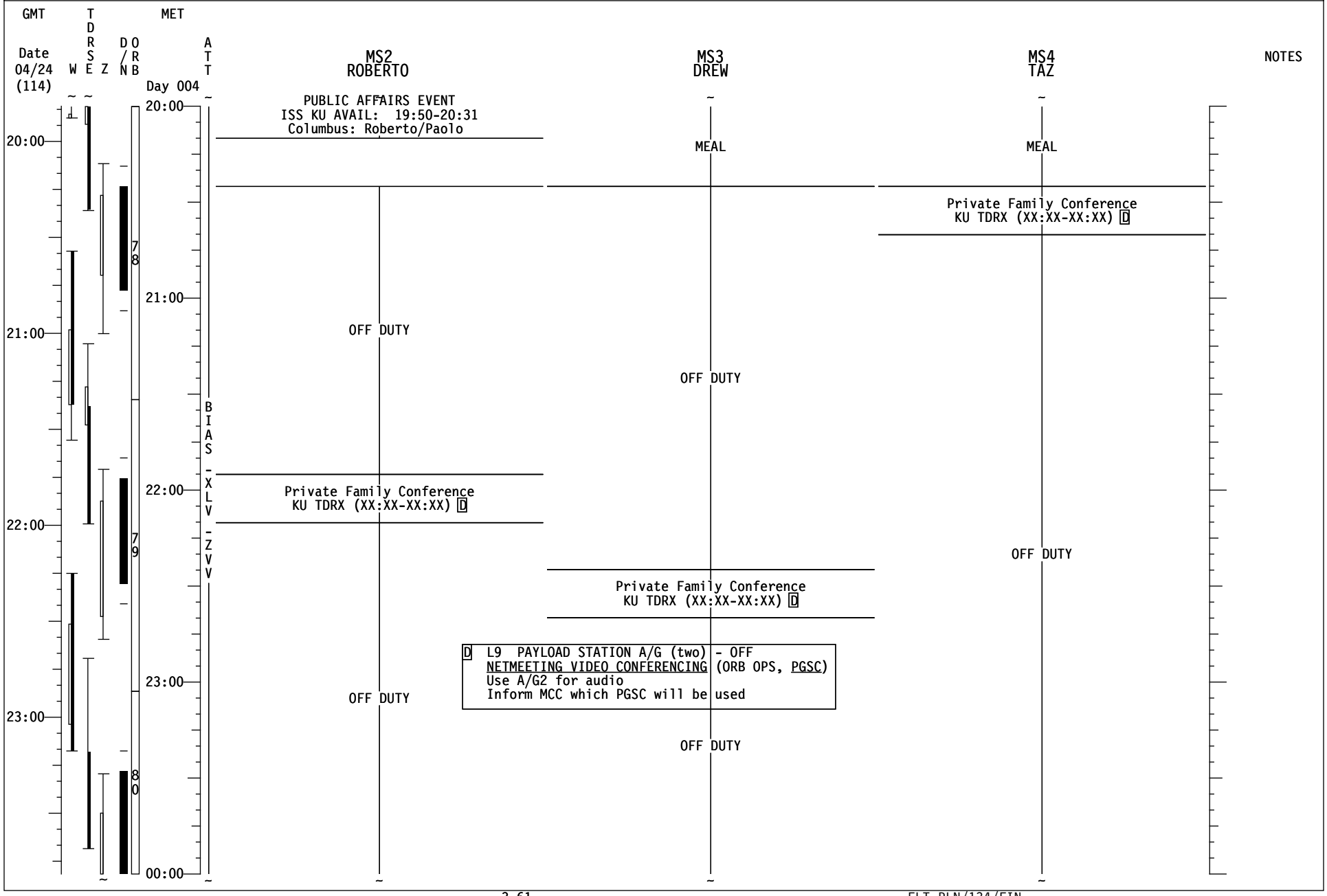
- MEAL
- OFF DUTY
- Private Family Conference KU TDRX (XX:XX-XX:XX) D
- OFF DUTY

MS1 SPANKY

- MEAL
- OFF DUTY
- Private Family Conference KU TDRX (XX:XX-XX:XX) D
- OFF DUTY

D L9 PAYLOAD STATION A/G (two) - OFF
NETMEETING VIDEO CONFERENCING (ORB OPS, PGSC)
Use A/G2 for audio
Inform MCC which PGSC will be used

STS-134/ULF6 FD06



STS-134/ULF6 FD06

GMT Date 04/24 (114) | W | T D R S E | Z | D/N | O R B | MET Day 005 | ATT

00:00 01:00 02:00 03:00

80 81 82 83

00:00 01:00 02:00 03:00 04:00

BIAS-XLV_ZVV

CDR MARK	PLT BOX	MS1 SPANKY	NOTES
OFF DUTY	OFF DUTY	OFF DUTY	
EVA 2 PROCEDURE REVIEW Ref. EVA 2 BRIEFING CARD (EVA, TIMELINES) Ref. MSG XXX	EVA 2 PROCEDURE REVIEW Ref. EVA 2 BRIEFING CARD (EVA, TIMELINES) Ref. MSG XXX	EVA 2 PROCEDURE REVIEW Ref. EVA 2 BRIEFING CARD (EVA, TIMELINES) Ref. MSG XXX	
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
L9 PS AUD A/G 1,2 (two) - OFF PRIVATE MEDICAL CONFERENCE Private Conference via A/G 2	EXERCISE		
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)			
ISS EVA SYSTEMS: 1.206 10.2 PSIA CAMPOUT MASK PREBREATHE MCC-H performs steps 1, 19	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	ISS EVA SYSTEMS: 1.206 10.2 PSIA CAMPOUT MASK PREBREATHE MCC-H performs steps 1, 19	
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)			

STS-134/ULF6 FD06

GMT Date 04/24 (114) | W | T D R S E | Z | D/N | O R B | MET Day 005 | ATT

MS2 ROBERTO | MS3 DREW | MS4 TAZ | NOTES

00:00 01:00 02:00 03:00 04:00

80 81 82 83

BIAS-XLV-ZVV

MS2 ROBERTO

OFF DUTY

EVA 2 PROCEDURE REVIEW
Ref. EVA 2 BRIEFING CARD
(EVA, TIMELINES)
Ref. MSG XXX

CGBA STATUS CHK; GLACIER STATUS CHK (CC)
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

MS3 DREW

OFF DUTY

EVA 2 PROCEDURE REVIEW
Ref. EVA 2 BRIEFING CARD
(EVA, TIMELINES)
Ref. MSG XXX

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

ISS EVA SYSTEMS: 1.206 10.2 PSIA CAMPOUT
MASK PREBREATHE
MCC-H performs steps 1, 19

MS4 TAZ

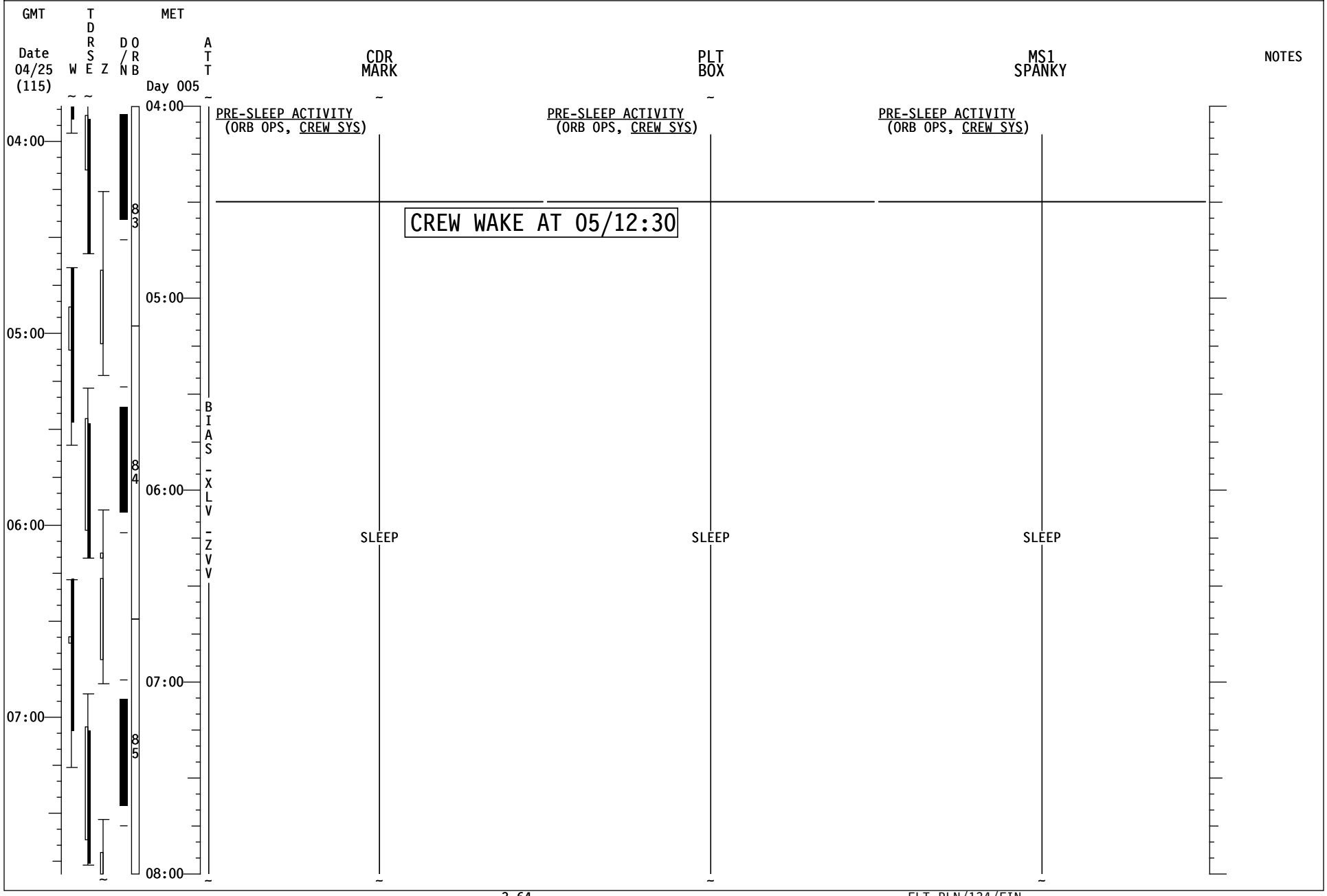
OFF DUTY

EVA 2 PROCEDURE REVIEW
Ref. EVA 2 BRIEFING CARD
(EVA, TIMELINES)
Ref. MSG XXX

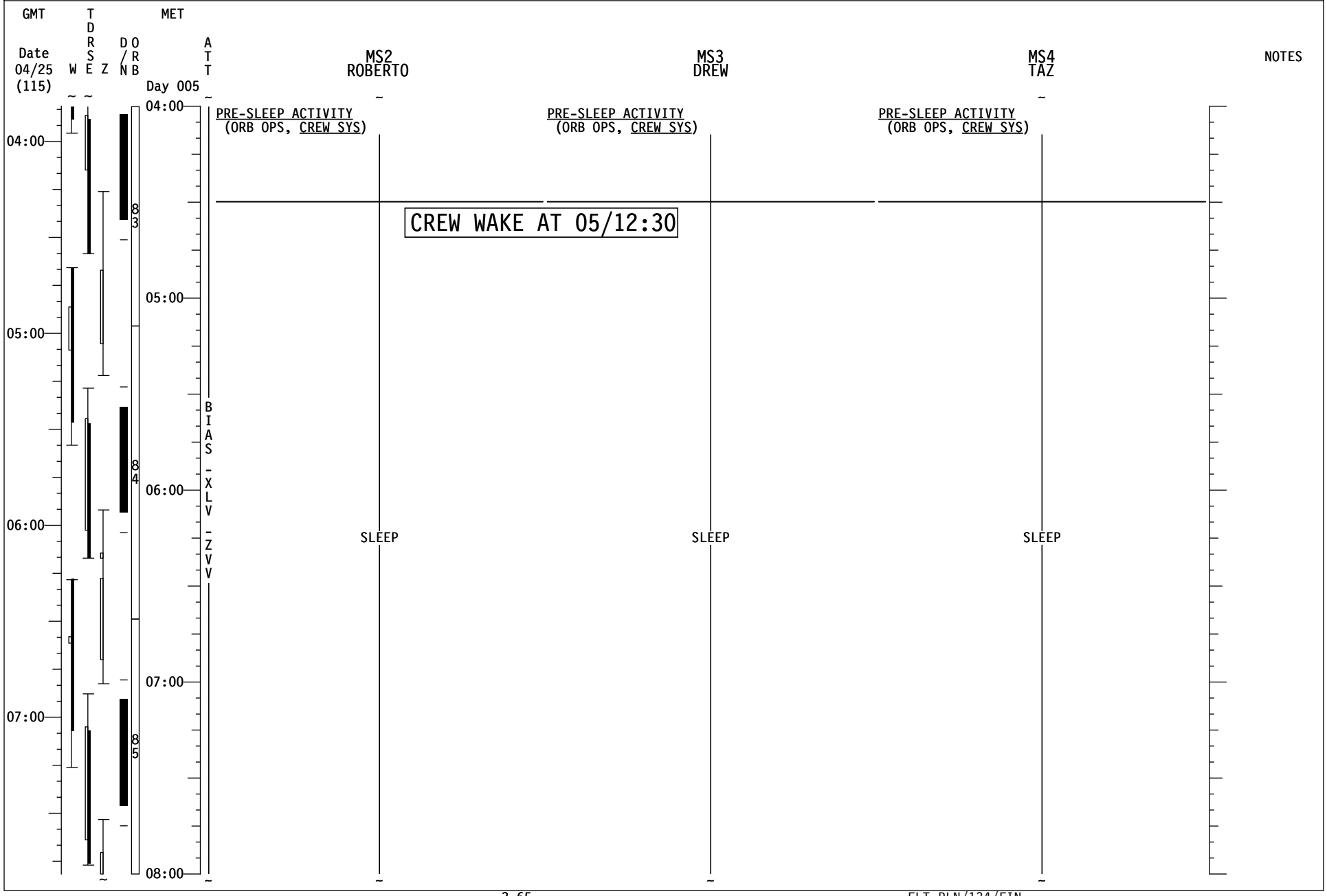
EXERCISE

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

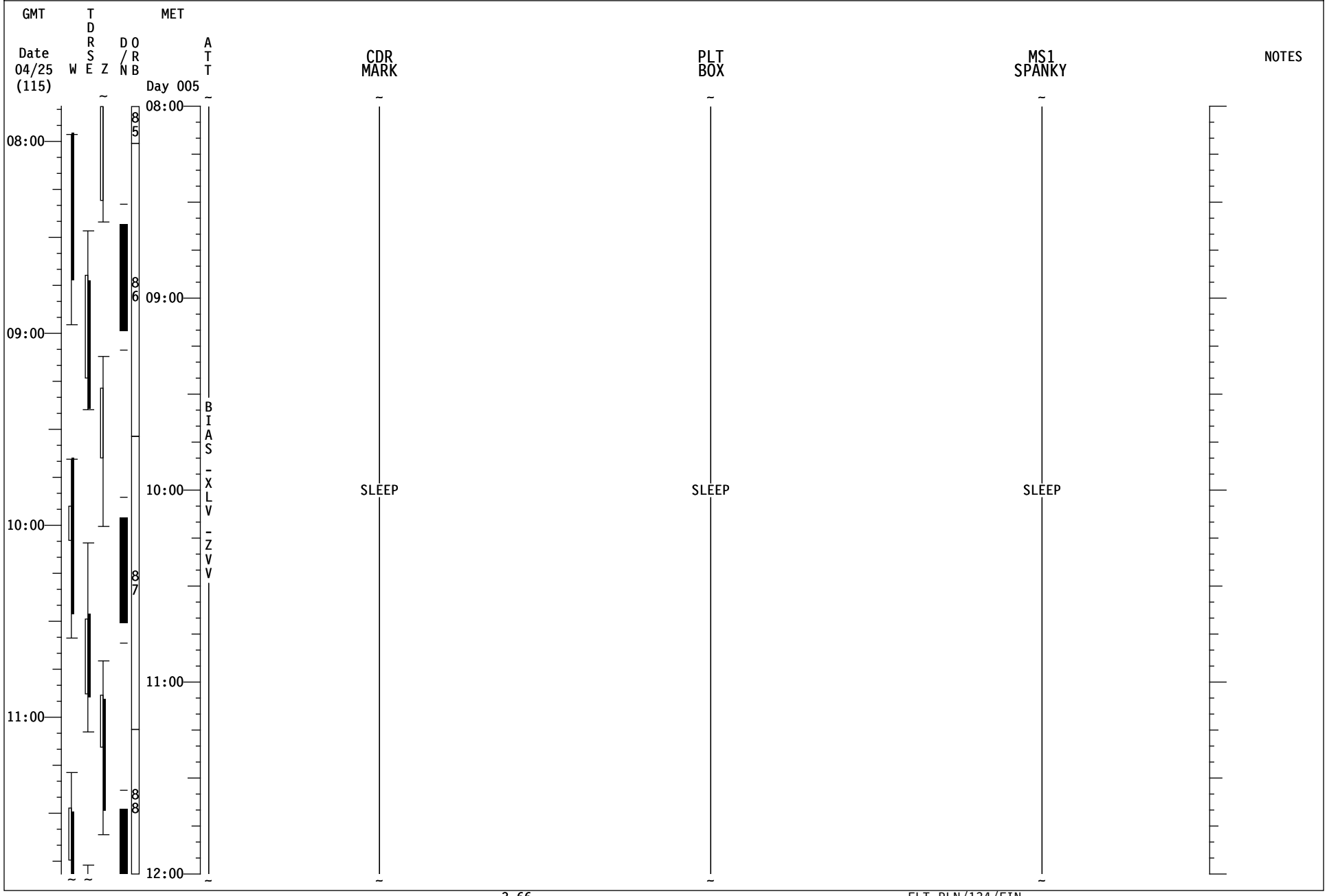
STS-134/ULF6 FD06



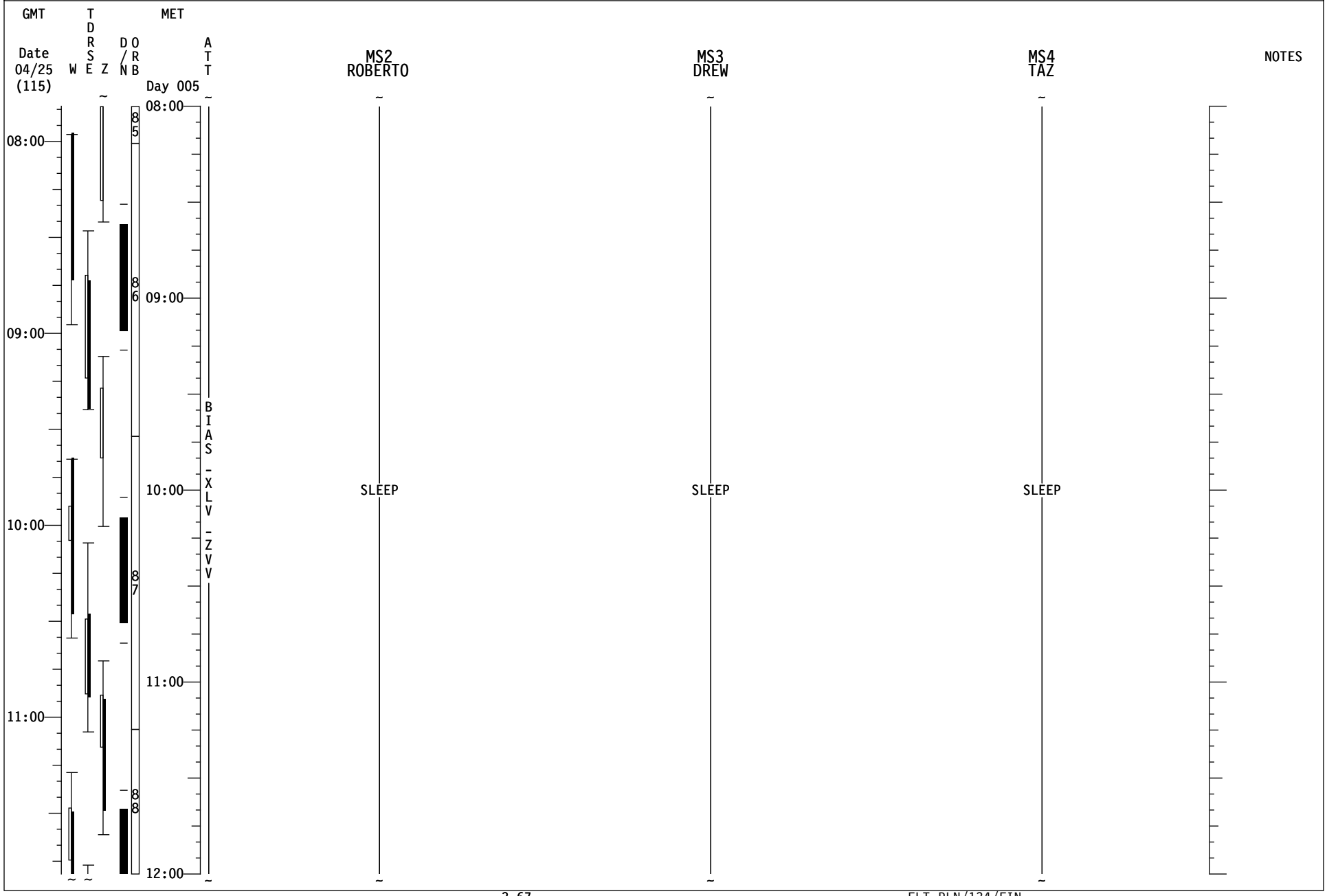
STS-134/ULF6 FD06



STS-134/ULF6 FD06



STS-134/ULF6 FD06



STS-134/ULF6 FD07

GMT Date 04/25 (115) | W | T D R S E | Z | D/N | O R B | MET Day 005 | A T T

FD07 EZ ACTIVITIES:
√OCAC FILTER
√MDDK DUCT SCREEN
HARD REBOOT: STS-2(WINDECOM), STS-3(KFX) & STS-4(RPOP)

CDR MARK	PLT BOX	MS1 SPANKY
SLEEP	SLEEP	SLEEP
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	SLEEP LOGBOOK (ORB OPS, SDBI) POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
		ISS EVA SYSTEMS: 1.211 HYGIENE BREAK MCC-H performs steps 1-4, 16-20, 23
L9 PS AUD A/G 1,2 (two) - OFF PRIVATE MEDICAL CONFERENCE Private Conference via A/G 2		
ISS EVA SYSTEMS: 1.211 HYGIENE BREAK Perform steps 21-22, 24-25 MCC-H performs step 23		
ISS EVA SYSTEMS: 1.216 EVA PREP MCC-H performs step 1		ISS EVA SYSTEMS: 1.216 EVA PREP MCC-H performs step 1
	EVA 2 INHIBIT PAD (EVA, TIMELINES) A7 √WIRELESS VID HTR - ON	
ISS EVA SYSTEMS: 1.220 EMU PURGE MCC-H performs steps 6 and 12	CWC-I FILL #9 (ORB OPS, CWC-I FILL) Perform Parts D & E Ref. MSG XXX	ISS EVA SYSTEMS: 1.220 EMU PURGE MCC-H performs steps 6 and 12

ATT: BIAS - XLV - ZVV

ORB: 88, 89, 90, 91

NOTES

STS-134/ULF6 FD07

GMT Date 04/25 (115) | W | T D R S E | Z | D/N | O R B | MET Day 005 | ATT

12:00 13:00 14:00 15:00

88 89 90 91

12:00 13:00 14:00 15:00 16:00

BIAS-XLV-ZVV

MS2 ROBERTO	MS3 DREW	MS4 TAZ	NOTES
SLEEP	SLEEP	SLEEP	
SLEEP LOGBOOK (ORB OPS, SDBI) POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	SLEEP LOGBOOK (ORB OPS, SDBI) POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
	ISS EVA SYSTEMS: 1.211 HYGIENE BREAK MCC-H performs steps 1-4, 16-20, 23		
	ISS EVA SYSTEMS: 1.216 EVA PREP MCC-H performs step 1		
IENOS OPS (ASSY OPS, PAYLOADS) Step 1.4 CGBA STATUS CHK; GLACIER STATUS CHK (CC) L17 Check MCIU filter screen DAILY TRANSFER LIST UPDATE Ref. Transfer List & MSG XXX			
P/TV07 EVA (PHOTO/TV, SCENES) SETUP	ISS EVA SYSTEMS: 1.220 EMU PURGE MCC-H performs steps 6 and 12	EXERCISE	

STS-134/ULF6 FD07

GMT Date 04/25 (115) | W | TDRS E | Z | D/N | ORB | MET Day 005 | ATT

CDR MARK

- 16:00 ISS EVA SYSTEMS: 1.225 EMU PREBREATHE
  Steps 3, 7, 10 not required
  MCC-H performs step 48
- 17:00 ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CC
  Perform CREWLOCK DEPRESS
- P/TV07 EVA
  (PHOTO/TV, SCENES)
  OPS

PLT BOX

- CWC-I FILL #9 See pg. 3-68
- CWC-I FILL #10
  (ORB OPS, CWC-I FILL)
  Perform Parts D & E
  Ref. MSG XXX
- CWC-I FILL #9
  (ORB OPS, CWC-I FILL)
  Perform Parts D & E, Ref. MSG XXX
- CWC-I TRANSFER
  Transfer 3 CWC-Is to ISS
- IMU STAR OF OPPORTUNITY ALIGN (ORB OPS,GNC)
- TRANSFER OPS
  Ref. Middeck Transfer List
- MEAL

MS1 SPANKY

- 16:00 ISS EVA SYSTEMS: 1.225 EMU PREBREATHE
  Steps 3, 7, 10 not required
  MCC-H performs step 48
- 17:00 ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CC
  Perform CREWLOCK DEPRESS
- ISS EVA SYS:C-LK DPRS/RPRS CC POST DEPRESS
- EGRESS/SETUP
- 18:00 P3-P4 REROUTE
- ATA TO FILL
- 19:00 PSARJ - REMOVE COVERS
- PSARJ - 1ST LUBE
- 20:00

NOTES

NO UNISOLATED EXERCISE [EVA CREW OUTSIDE OF SARJ]

STS-134/ULF6 FD07

GMT Date 04/25 (115) | TDRS W E Z | D/N | ORB 91 92 93 | MET Day 005 | ATT BIAS-XLV-ZVV

MET	MS2 ROBERTO	MS3 DREW	MS4 TAZ	NOTES
16:00	P/TV07 EVA (PHOTO/TV, SCENES)			
	SETUP	ISS EVA SYSTEMS: 1.225 EMU PREBREATHE Steps 3, 7, 10 not required MCC-H performs step 48		
	IFOAM OPERATIONS (ASSY OPS, PAYLOADS) Step 1		EXERCISE	
	EXERCISE	ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CC Perform CREWLOCK DEPRESS		
17:00	IFOAM OPERATIONS (ASSY OPS, PAYLOADS) Step 2	ISS EVA SYS:C-LK DPRS/RPRS CC POST DEPRESS		
	TRANSFER OPS Ref. Middeck Transfer List	EGRESS/SETUP		
18:00		P3-P4 REROUTE		NO UNISOLATED EXERCISE [EVA CREW OUTSIDE OF SARJ]
		P5/P6 NH3 FILL/VENT	IVA SUPPORT EVA 2	
19:00		PSARJ - REMOVE COVERS		
		EAS SETUP/VENT		
20:00				

STS-134/ULF6 FD07

GMT Date 04/25 (115) | W | TDRS E | Z | D/N | ORB | MET Day 005 | ATT

CDR MARK

- 20:00 MEAL
- 21:00 P/TV07 EVA (PHOTO/TV, SCENES) OPS
- 22:00 BIAS-XLV-ZVV
- 23:00 ISS EVA SYS: C-LK DPRS/RPRS CC PRE REPRESS
- 00:00 ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CC Perform CREWLOCK REPRESS

PLT BOX

- MEAL
- ROBO: 1.410 SSRMS EVA SUPPORT - SPDM LEE LUBE EXERCISE CONSTRAINT
- CSS: 1.111 CUPOLA CREW RESTRAINT OPS Step 6 TRANSFER OPS Ref. Middeck Transfer List
- EXERCISE

MS1 SPANKY

- PSARJ - 1ST LUBE
- P3-P4 NH3 JUMPER STOW
- S1 RADIATOR GRAPPLE BAR STOW BEAM
- PSARJ - 2ND LUBE
- PSARJ - INSTALL COVERS
- CLEANUP/INGRESS
- ISS EVA SYS: C-LK DPRS/RPRS CC PRE REPRESS
- ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CC Perform CREWLOCK REPRESS

NOTES

- NO UNISOLATED EXERCISE [EVA CREW OUTSIDE OF SARJ]
- NO UNISOLATED EXERCISE [APFR FOR SPDM LEE LUBE]

STS-134/ULF6 FD07

GMT Date 04/25 (115) | W | T D R S E | Z | D/N | O R B | MET Day 005 | A T T

MS2 ROBERTO | MS3 DREW | MS4 TAZ | NOTES

20:00 21:00 22:00 23:00

93 94 95 96

20:00 21:00 22:00 23:00 00:00

BIAS-XLV-ZVV

MS2 ROBERTO

- MEAL
- TRANSFER OPS
  Ref. Middeck Transfer List

MS3 DREW

- EAS SETUP/VENT
- NH3 VENT TOOL CLNUP
- P3-P4 NH3 JUMPER STOW
- ATA TO VENT
- SPDM CLA COVER INSTALL
- SPDM LEE LUBE
- PSARJ - 2ND LUBE
- PSARJ - INSTALL COVERS
- CLEANUP/INGRESS
- ISS EVA SYS: C-LK DPRS/RPRS CC PRE REPRESS
- ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CC
  Perform CREWLOCK REPRESS

MS4 TAZ

- IVA SUPPORT EVA 2

NOTES

- NO UNISOLATED EXERCISE [EVA CREW OUTSIDE OF SARJ]
- NO UNISOLATED EXERCISE [APFR FOR SPDM LEE LUBE]

STS-134/ULF6 FD07

GMT — Date 04/25 (115) — W T D R S E Z — D/N O R B — MET — ATT

Day 006

00:00 01:00 02:00 03:00 04:00

96 97 98

BIAS-XLV-ZVV

CDR MARK

ISS EVA SYSTEMS: CREWLOCK
DEPRESS/REPRESS CC
Perform CREWLOCK REPRESS

ISS EVA SYSTEMS: 1.240 POST EVA
With H2O RECHARGE
Steps 37, 39, 66 not required
MCC-H will perform Steps 43, 67-68
Ref. STS-134 CONSUMABLES TRACKING CC

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

L9 PS AUD A/G 1,2 (two) - OFF
POST EVA TAGUP
Private Conference via A/G 2

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

L9 PS AUD A/G 1,2 (two) - OFF
PRIVATE MEDICAL CONFERENCE
Private Conference via A/G 2

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

PLT BOX

EXERCISE

ILLUMINATOR OPS (CC,TV) ILLUMINATORS ON-A,D

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

MS1 SPANKY

ISS EVA SYSTEMS: CREWLOCK
DEPRESS/REPRESS CC
Perform CREWLOCK REPRESS

ISS EVA SYSTEMS: 1.240 POST EVA
With H2O RECHARGE
Steps 37, 39, 66 not required
MCC-H will perform Steps 43, 67-68
Ref. STS-134 CONSUMABLES TRACKING CC

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

L9 PS AUD A/G 1,2 (two) - OFF
POST EVA TAGUP
Private Conference via A/G 2

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

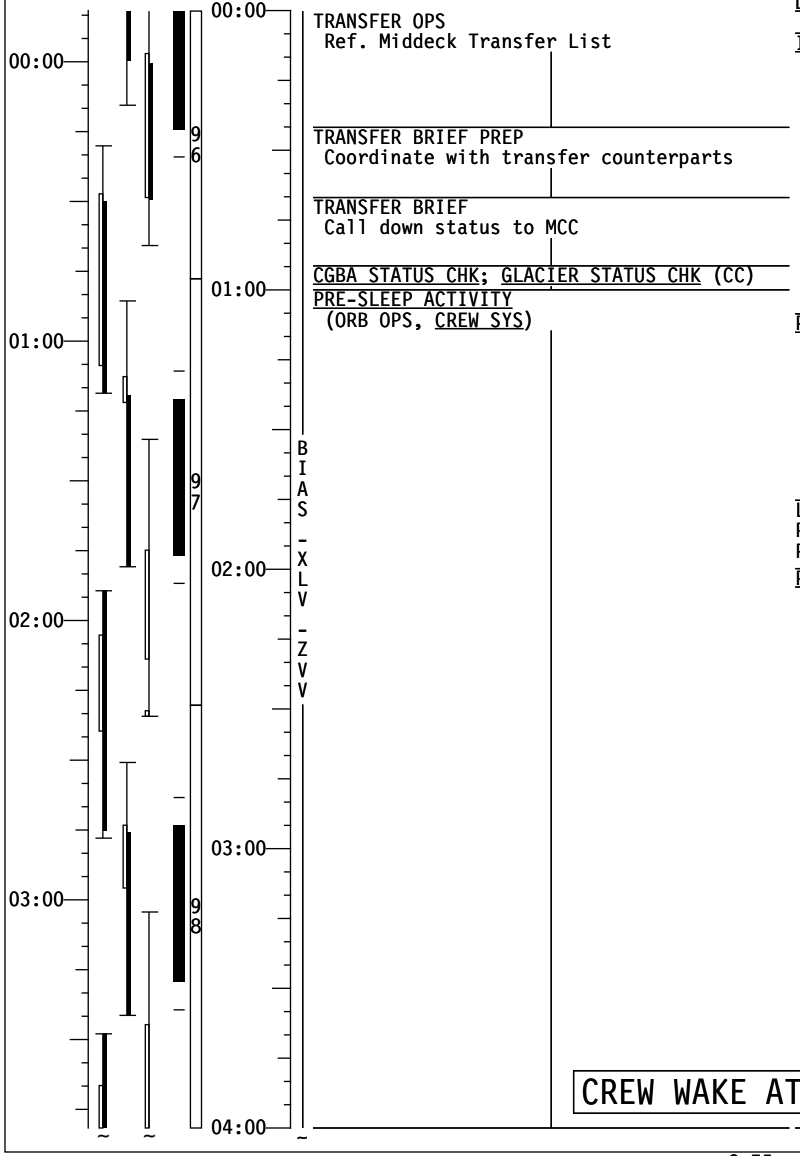
NOTES

UPLINK
β21+Mask
Box 40,41,47

CREW WAKE AT 06/12:00

STS-134/ULF6 FD07

GMT Date 04/25 (115) | W | T D R S E | Z | D/N | O R B | MET Day 006 | A T T



MS2 ROBERTO

- TRANSFER OPS
  Ref. Middeck Transfer List
- TRANSFER BRIEF PREP
  Coordinate with transfer counterparts
- TRANSFER BRIEF
  Call down status to MCC
- CGBA STATUS CHK; GLACIER STATUS CHK (CC)
- PRE-SLEEP ACTIVITY
  (ORB OPS, CREW SYS)

MS3 DREW

- ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CC
  Perform CREWLOCK REPRESS
- ISS EVA SYSTEMS: 1.240 POST EVA
  With H2O RECHARGE
  Steps 37, 39, 66 not required
  MCC-H will perform Steps 43, 67-68
  Ref. STS-134 CONSUMABLES TRACKING CC
- PRE-SLEEP ACTIVITY
  (ORB OPS, CREW SYS)
- L9 PS AUD A/G 1,2 (two) - OFF
  POST EVA TAGUP
  Private Conference via A/G 2
- PRE-SLEEP ACTIVITY
  (ORB OPS, CREW SYS)

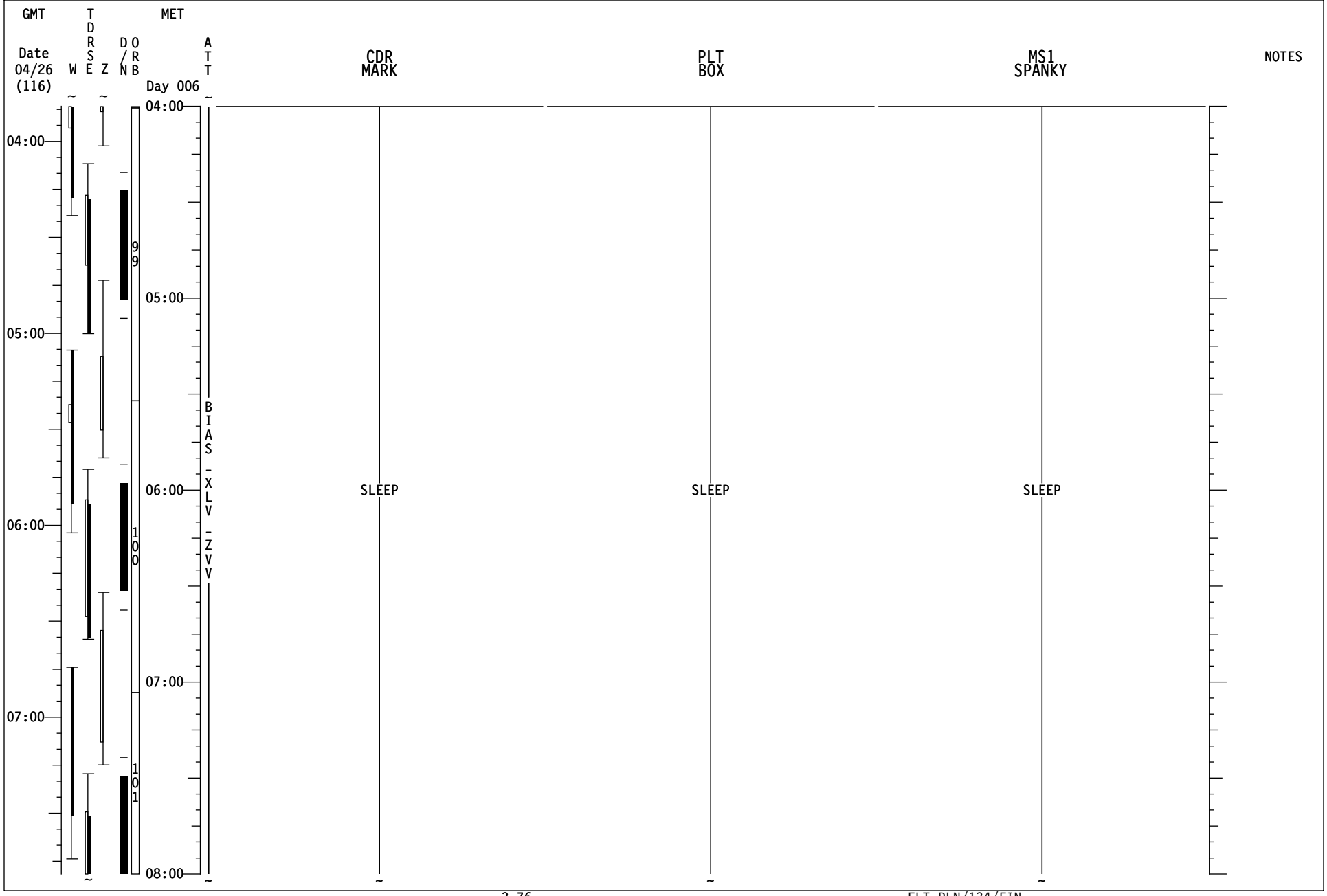
MS4 TAZ

- PRE-SLEEP ACTIVITY
  (ORB OPS, CREW SYS)
- L9 PS AUD A/G 1,2 (two) - OFF
  POST EVA TAGUP
  Private Conference via A/G 2
- PRE-SLEEP ACTIVITY
  (ORB OPS, CREW SYS)

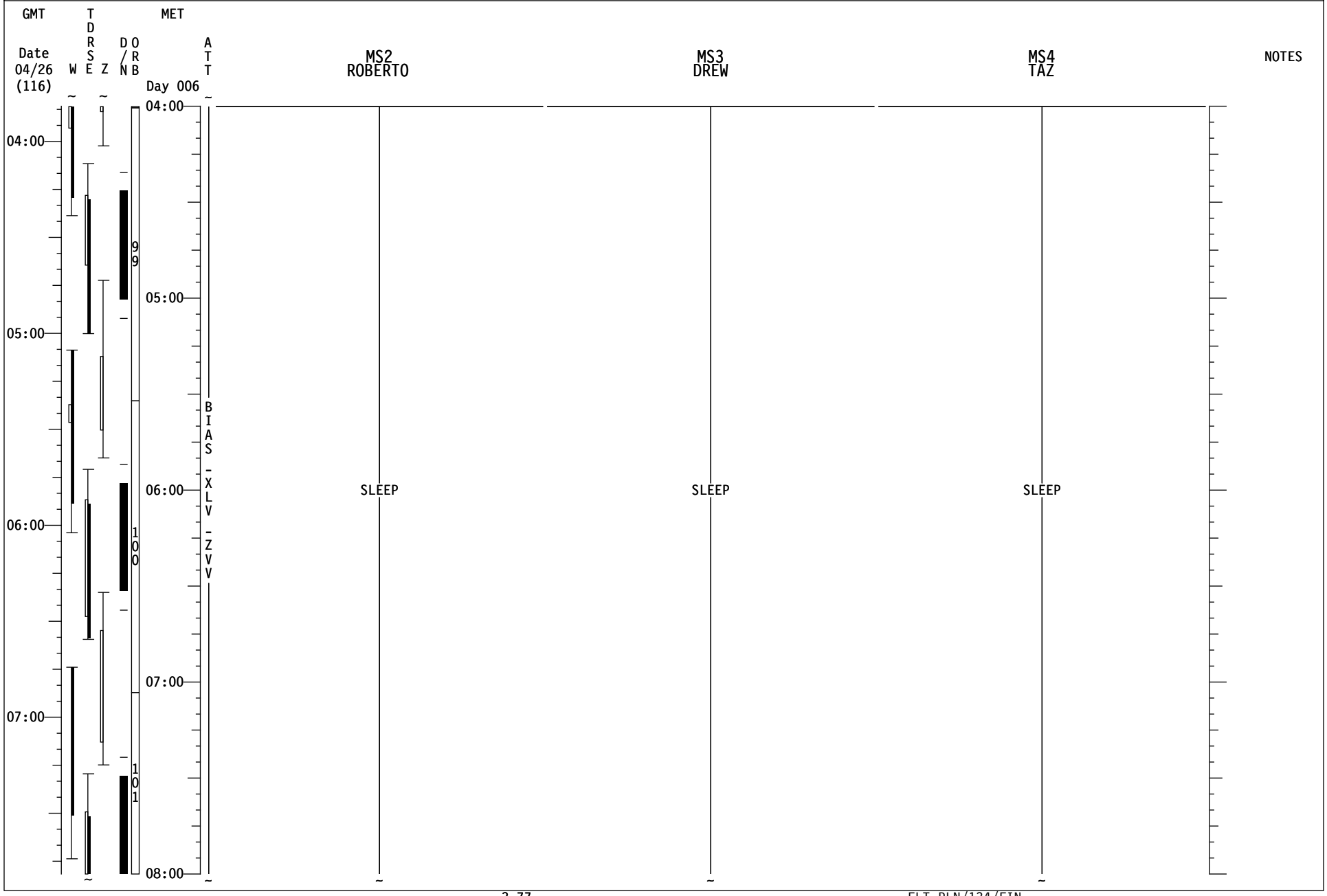
NOTES

CREW WAKE AT 06/12:00

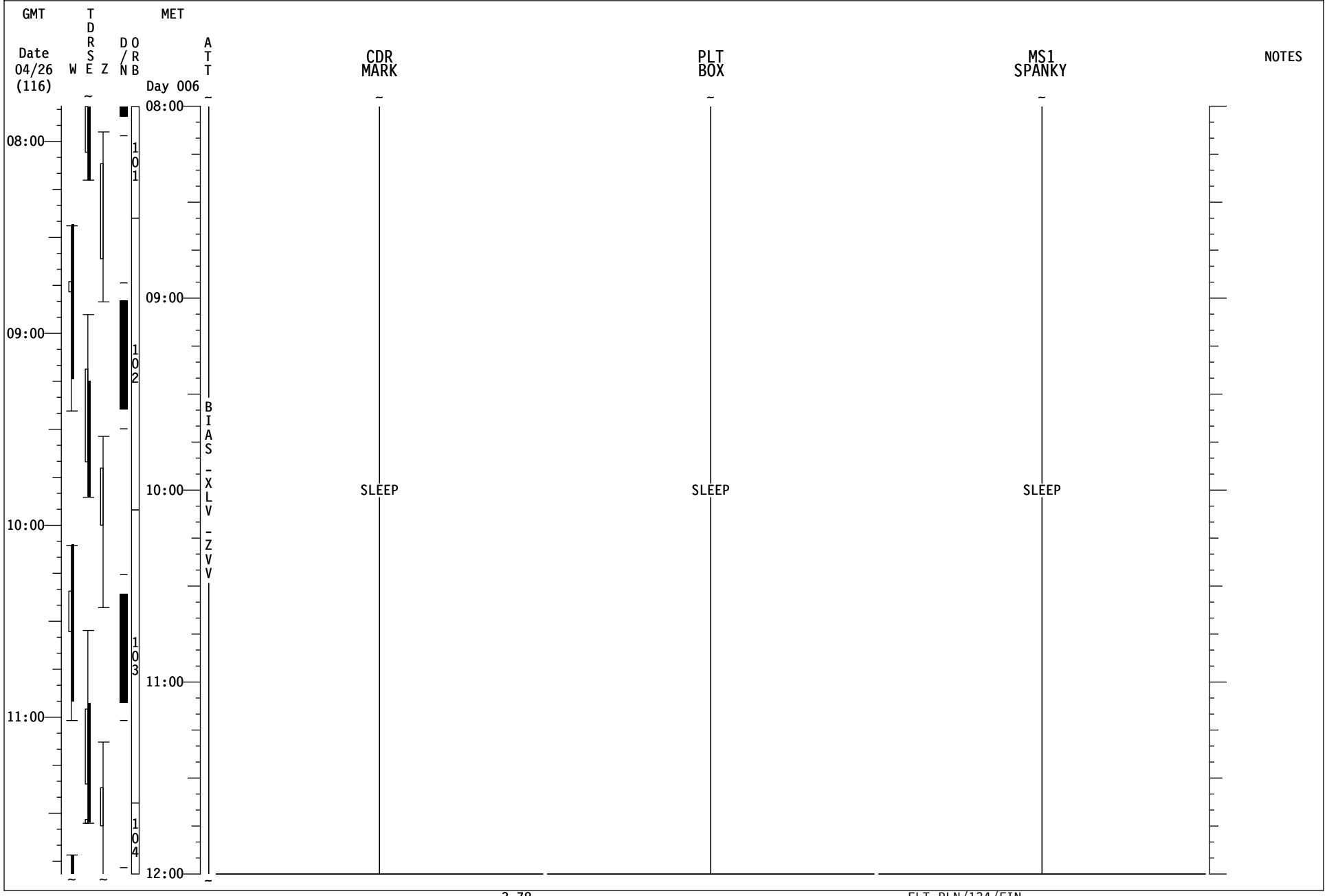
STS-134/ULF6 FD07



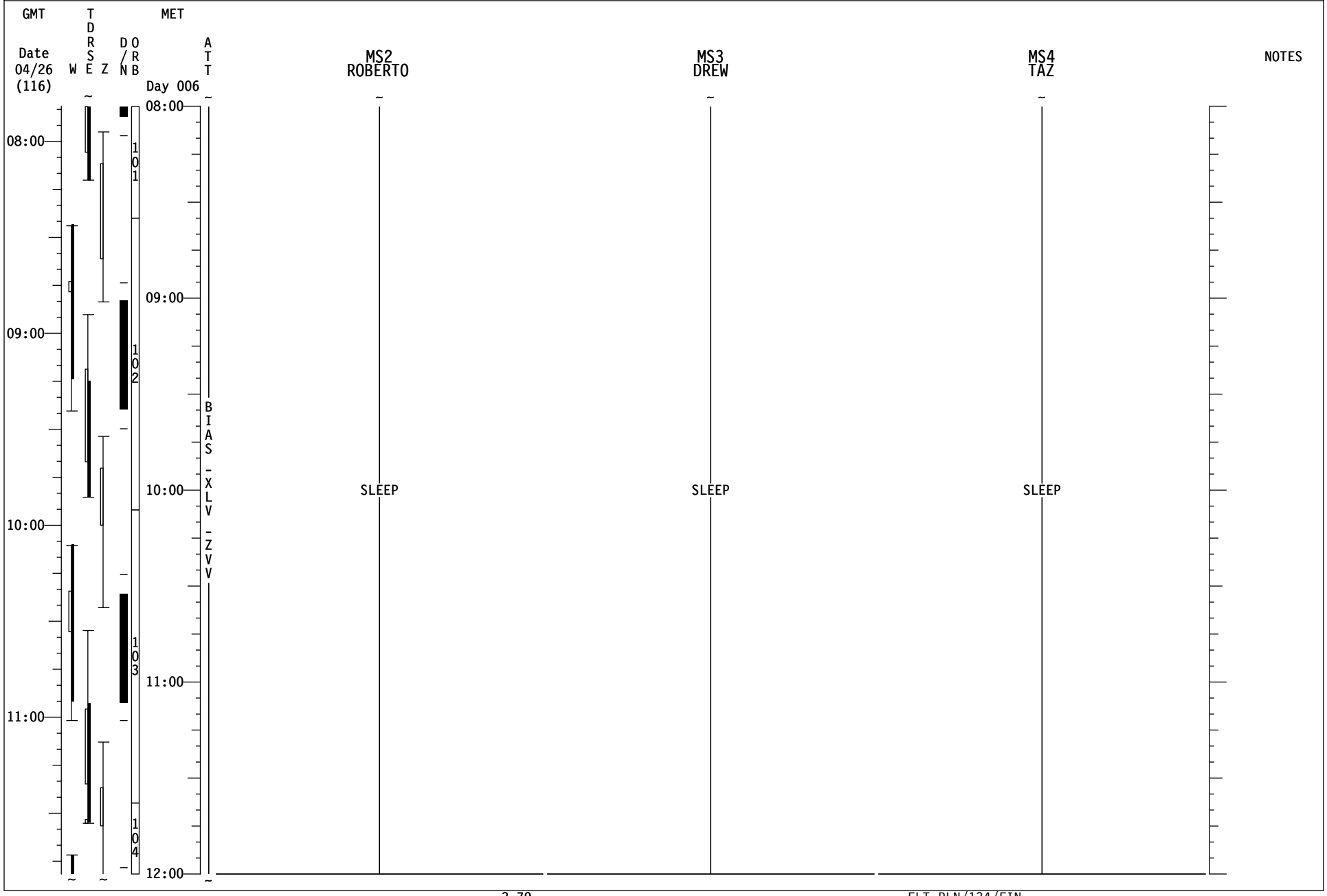
STS-134/ULF6 FD07



STS-134/ULF6 FD07



STS-134/ULF6 FD07



STS-134/ULF6 FD08

GMT Date 04/26 (116) | W | T D R S E | Z | D/N | O R B | MET Day 006 | ATT

12:00 — 13:00 — 14:00 — 15:00

104 — 105 — 106

BIAS-XLV-ZVV

CDR MARK

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

IMU STAR OF OPPORTUNITY ALIGN (ORB OPS,GNC)
POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

CWC OVERBOARD DUMP (Init)
(ORB OPS, ECLS)
Perform Parts A-D, Ref. MSG XXX

CWC OVERBOARD DUMP (Term)
(ORB OPS, ECLS)
Perform Parts E-H

PUBLIC AFFAIRS EVENT
ISS KU AVAIL: 15:48-16:25
NODE 2: Mark/Box/Taz

PLT BOX

SLEEP LOGBOOK (ORB OPS, SDBI)
POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

N2 REPRESS INIT A
SUPPLY/WASTE WATER DUMP
(ORB OPS, ECLS)
Init Supply Dump, Ref. MSG XXX

SUPPLY/WASTE WATER DUMP
(ORB OPS, ECLS)
Term Supply Dump, Ref. MSG XXX

PUBLIC AFFAIRS EVENT
ISS KU AVAIL: 15:48-16:25
NODE 2: Mark/Box/Taz

MS1 SPANKY

EVA CREW: TAKE 1 ASPIRIN (325mg)
POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

ISS EVA SYSTEMS: 1.305 EQUIPMENT LOCK PREP

EVA 3 TOOL CONFIGURATION
(EVA, TIMELINES)
Ref. CONSUMABLES TRACKING CUE CARD
Ref. MSG XXX

NOTES

FD08 EZ ACTIVITIES:
- √OCAC FILTER
- √MDDK DUCT SCREEN
- HARD REBOOT: STS-2(WINDECOM), STS-3(KFX) & STS-4(RPOP)

A N2 REPRESS USING PAYLOAD N2 VLVS
(ORB OPS, ECLS) Steps 1, 3-7
MCC will TMBU SM Limits

STS-134/ULF6 FD08

GMT Date 04/26 (116) | W | T D R S E | Z | D/N | O R B | MET Day 006 | ATT

12:00 13:00 14:00 15:00

104 105 106

BIAS-XLV-ZVV

12:00 13:00 14:00 15:00 16:00

MS2 ROBERTO	MS3 DREW	MS4 TAZ	NOTES
SLEEP LOGBOOK (ORB OPS, SDBI)	EVA CREW: TAKE 1 ASPIRIN (325mg)	SLEEP LOGBOOK (ORB OPS, SDBI)	
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
		ISS EVA SYSTEMS: 1.515 EMU METOX/LIOH/BATTERY REPLACEMENT Ref: STS-134 CONSUMABLES TRACKING CC	
	ISS EVA SYSTEMS: 1.305 EQUIPMENT LOCK PREP	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
IENOS OPS (ASSY OPS, PAYLOADS) Step 1.4			
CGBA STATUS CHK; GLACIER STATUS CHK (CC)			
L17 Check MCIU filter screen			
	EVA 3 TOOL CONFIGURATION (EVA, TIMELINES) Ref. CONSUMABLES TRACKING CUE CARD Ref. MSG XXX		
		PUBLIC AFFAIRS EVENT ISS KU AVAIL: 15:48-16:25 NODE 2: Mark/Box/Taz	

STS-134/ULF6 FD08

GMT Date 04/26 (116) | W | T D R S E | Z | D/N | ORB | MET Day 006 | ATT

CDR MARK | PLT BOX | MS1 SPANKY | NOTES

16:00 — 17:00 — 18:00 — 19:00 — 20:00

ORB: 107, 108, 109

ATT: BIAS-XLV-ZVV

16:00–17:00

CDR MARK: PUBLIC AFFAIRS EVENT
ISS KU AVAIL: 15:48-16:25
NODE 2: Mark/Box/Taz

PLT BOX: PUBLIC AFFAIRS EVENT
ISS KU AVAIL: 15:48-16:25
NODE 2: Mark/Box/Taz

MS1 SPANKY: EVA 3 TOOL CONFIGURATION
(EVA, TIMELINES)
Ref. CONSUMABLES TRACKING CUE CARD
Ref. MSG XXX

FILTER CLEANING
(IFM, SCHEDULED MAINTENANCE)
Inspect filters and clean as necessary

17:00–18:00

CDR MARK: PUBLIC AFFAIRS EVENT
ISS KU AVAIL: 17:24-18:03
NODE 2: Mark/Spanky/Taz

PLT BOX: N2 REPRESS TERM [B]

MS1 SPANKY: PUBLIC AFFAIRS EVENT
ISS KU AVAIL: 17:24-18:03
NODE 2: Mark/Spanky/Taz

[B] N2 REPRESS USING PAYLOAD N2 VLVS
(ORB OPS, ECLS) Steps 8-13
MCC will TMBU SM Limits

CDR MARK: MEAL

PLT BOX: MEAL

MS1 SPANKY: MEAL

18:00–20:00

CDR MARK: OFF DUTY

PLT BOX: OFF DUTY

MS1 SPANKY: OFF DUTY

STS-134/ULF6 FD08

GMT Date 04/26 (116) | W | T D R S E | Z | D/N | O R B | MET Day 006 | ATT

16:00 17:00 18:00 19:00

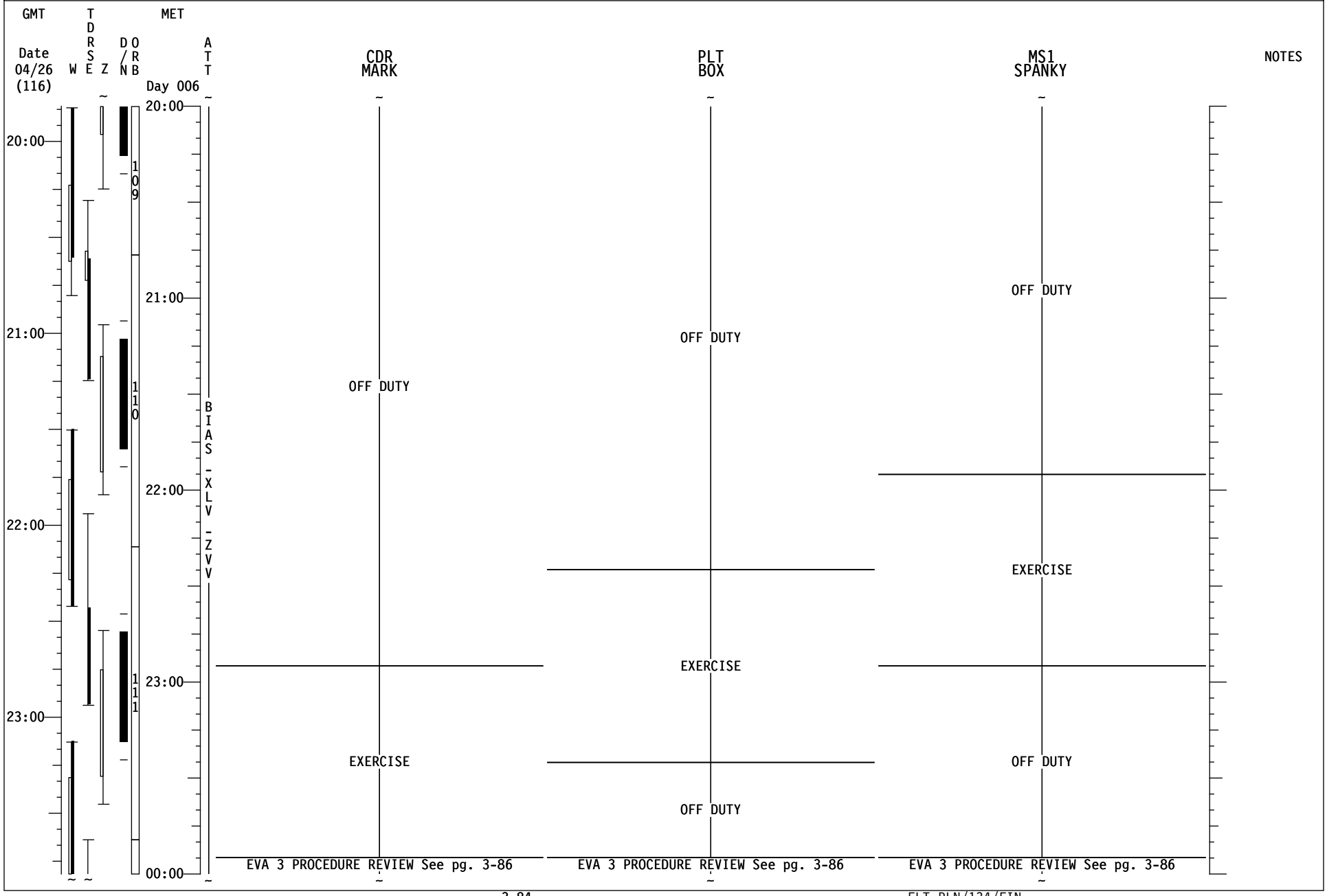
107 108 109

16:00 17:00 18:00 19:00 20:00

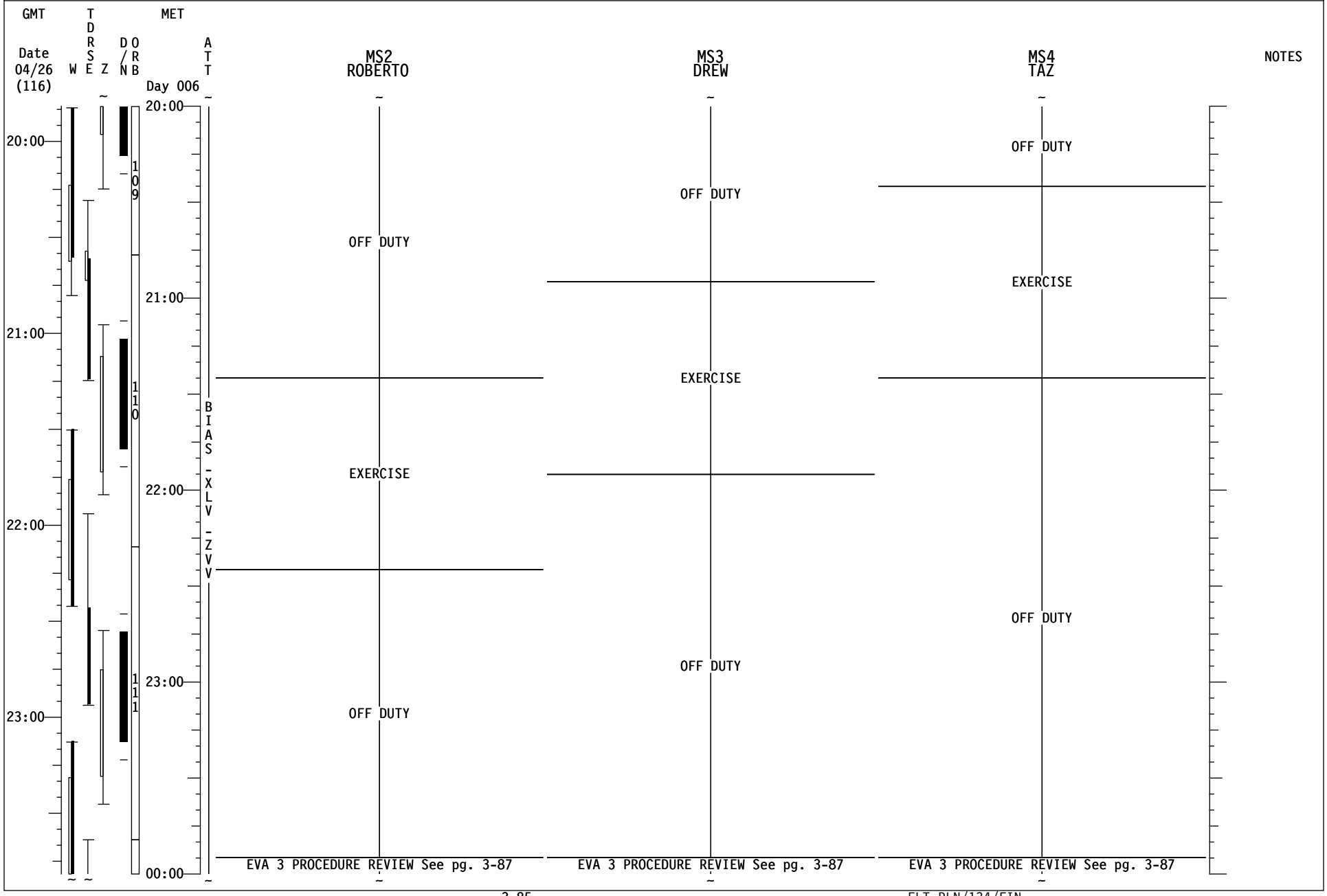
BIAS-XLV-ZVV

MS2 ROBERTO	MS3 DREW	MS4 TAZ	NOTES
	EVA 3 TOOL CONFIGURATION (EVA, TIMELINES) Ref. CONSUMABLES TRACKING CUE CARD Ref. MSG XXX	PUBLIC AFFAIRS EVENT ISS KU AVAIL: 15:48-16:25 NODE 2: Mark/Box/Taz	
		EVA 3 TOOL CONFIGURATION (EVA, TIMELINES) Ref. CONSUMABLES TRACKING CUE CARD Ref. MSG XXX	
		PUBLIC AFFAIRS EVENT ISS KU AVAIL: 17:24-18:03 NODE 2: Mark/Spanky/Taz	
MEAL	MEAL	MEAL	
OFF DUTY	OFF DUTY	OFF DUTY	

STS-134/ULF6 FD08



STS-134/ULF6 FD08



STS-134/ULF6 FD08

GMT Date 04/26 (116) | W | T D R S E | Z | D/N | O R B | MET Day 007 | ATT | CDR MARK | PLT BOX | MS1 SPANKY | NOTES

00:00 01:00 02:00 03:00

ORB: 112 113 114

ATT: BIAS_XLV_ZVV

00:00 01:00 02:00 03:00 04:00

CDR MARK

EVA 3 PROCEDURE REVIEW
Ref. EVA 3 BRIEFING CARD
(EVA, TIMELINES)
Ref. MSG XXX

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

L9 PS AUD A/G 1,2 (two) - OFF
PRIVATE MEDICAL CONFERENCE
Private Conference via A/G 2

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

SLEEP

PLT BOX

EVA 3 PROCEDURE REVIEW
Ref. EVA 3 BRIEFING CARD
(EVA, TIMELINES)
Ref. MSG XXX

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

SLEEP

MS1 SPANKY

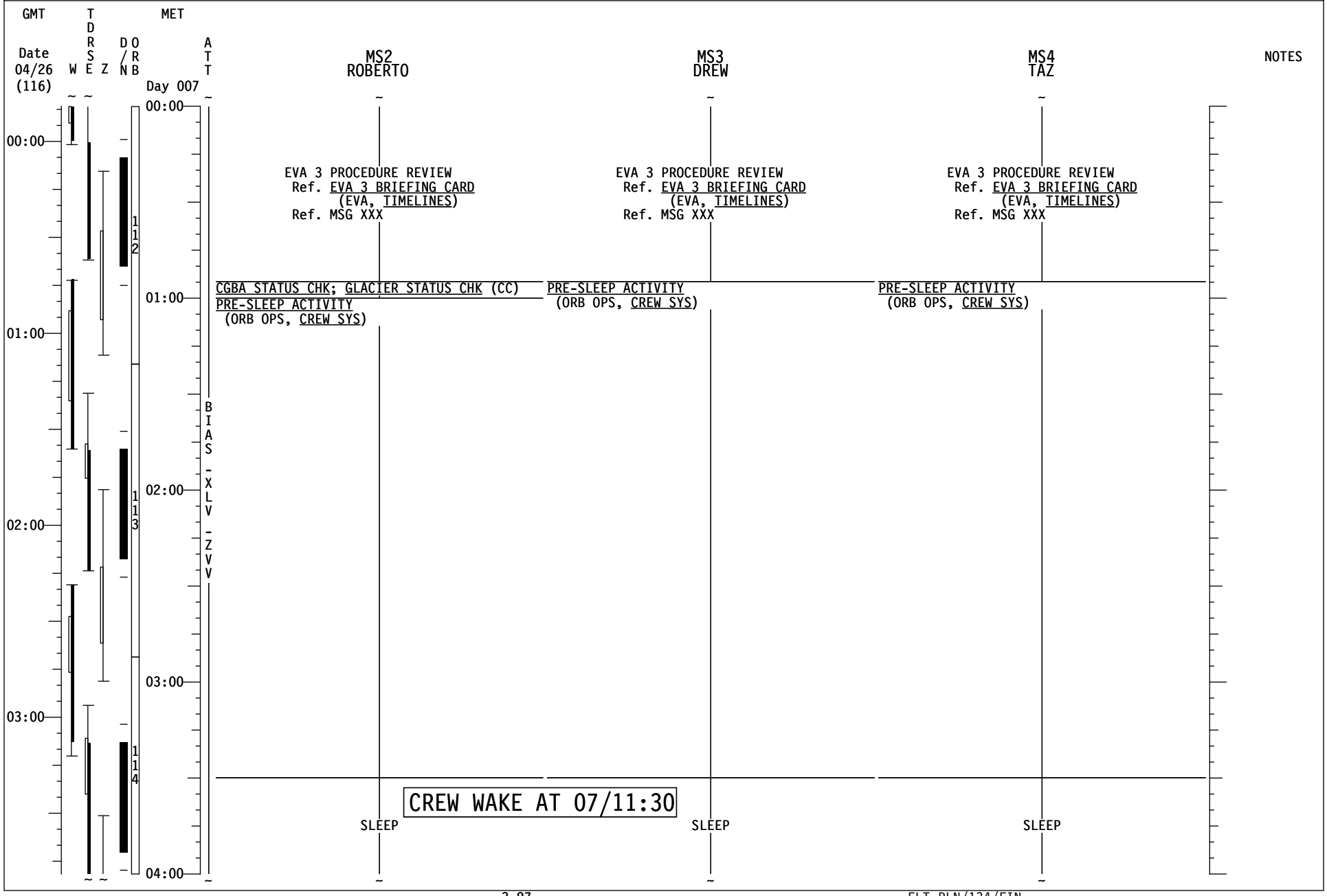
EVA 3 PROCEDURE REVIEW
Ref. EVA 3 BRIEFING CARD
(EVA, TIMELINES)
Ref. MSG XXX

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

SLEEP

CREW WAKE AT 07/11:30

STS-134/ULF6 FD08



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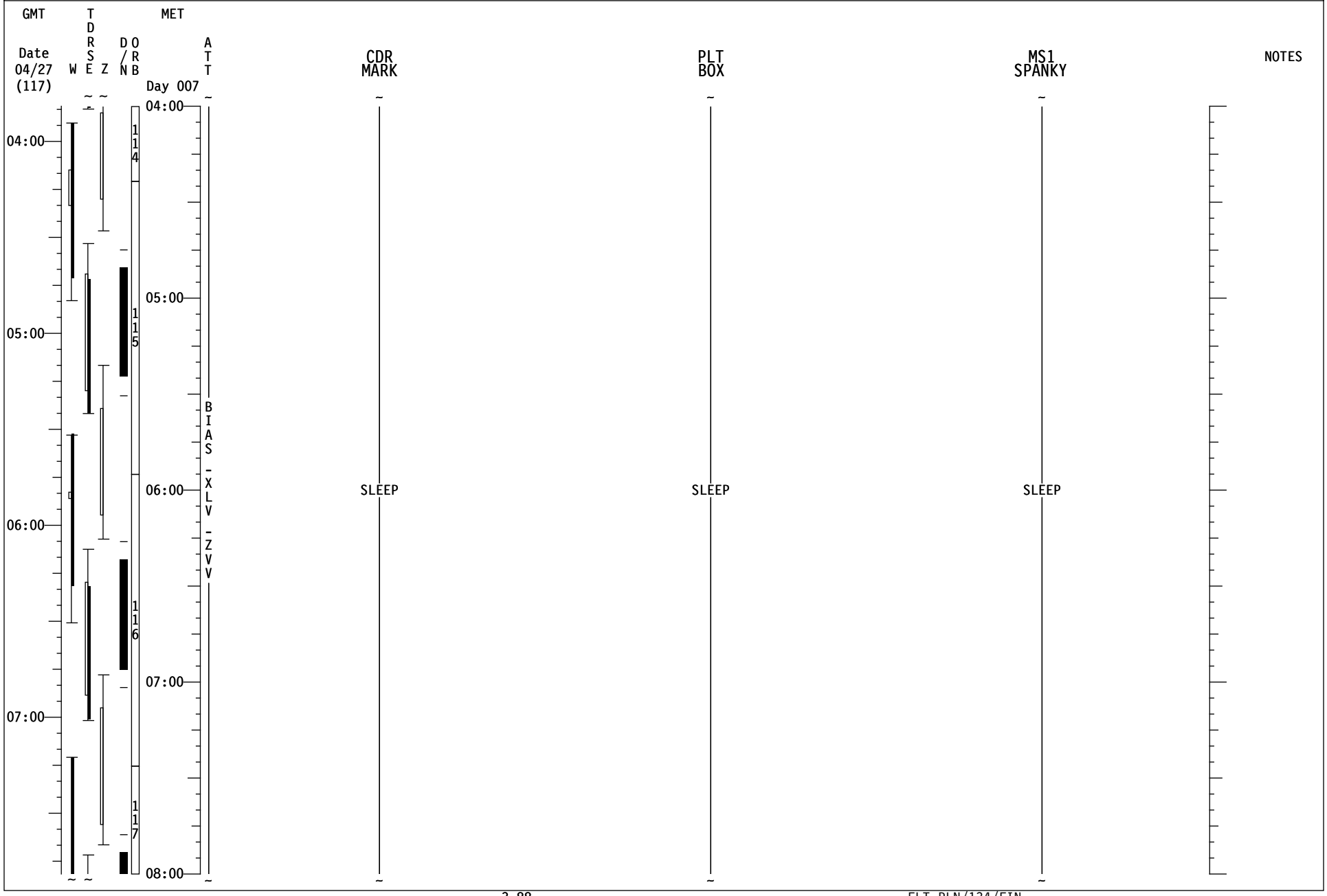

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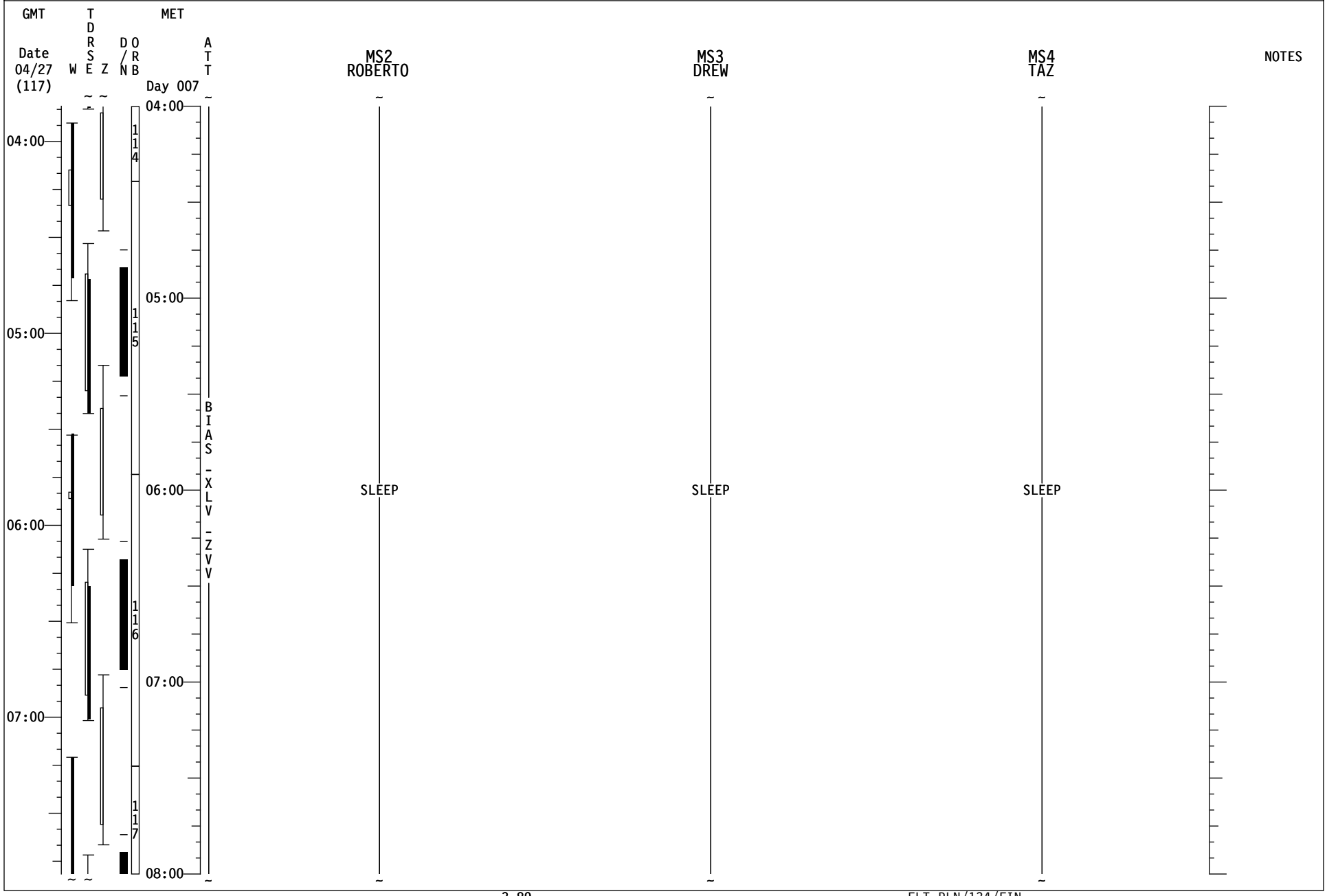
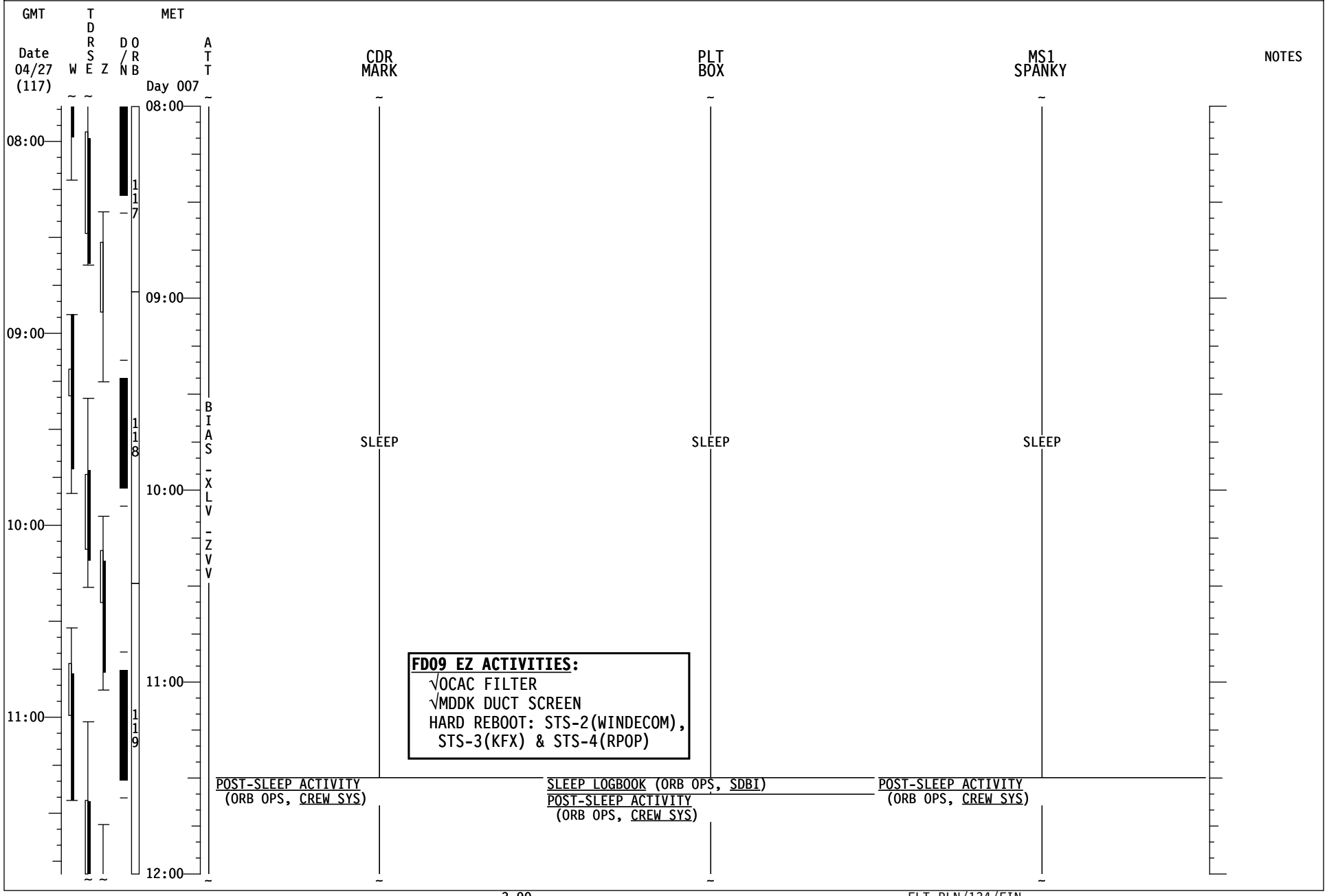
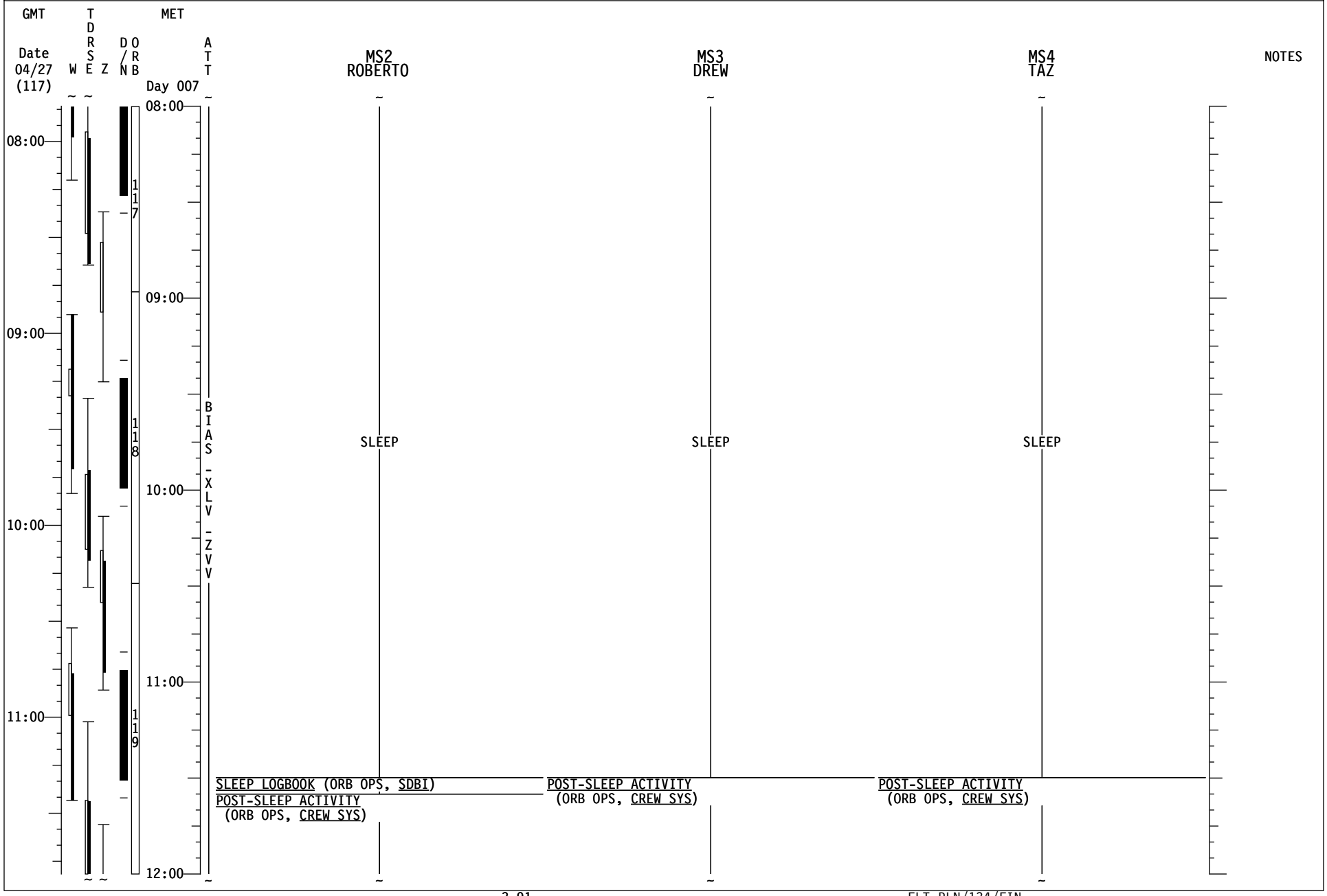


STS-134/ULF6 FD09

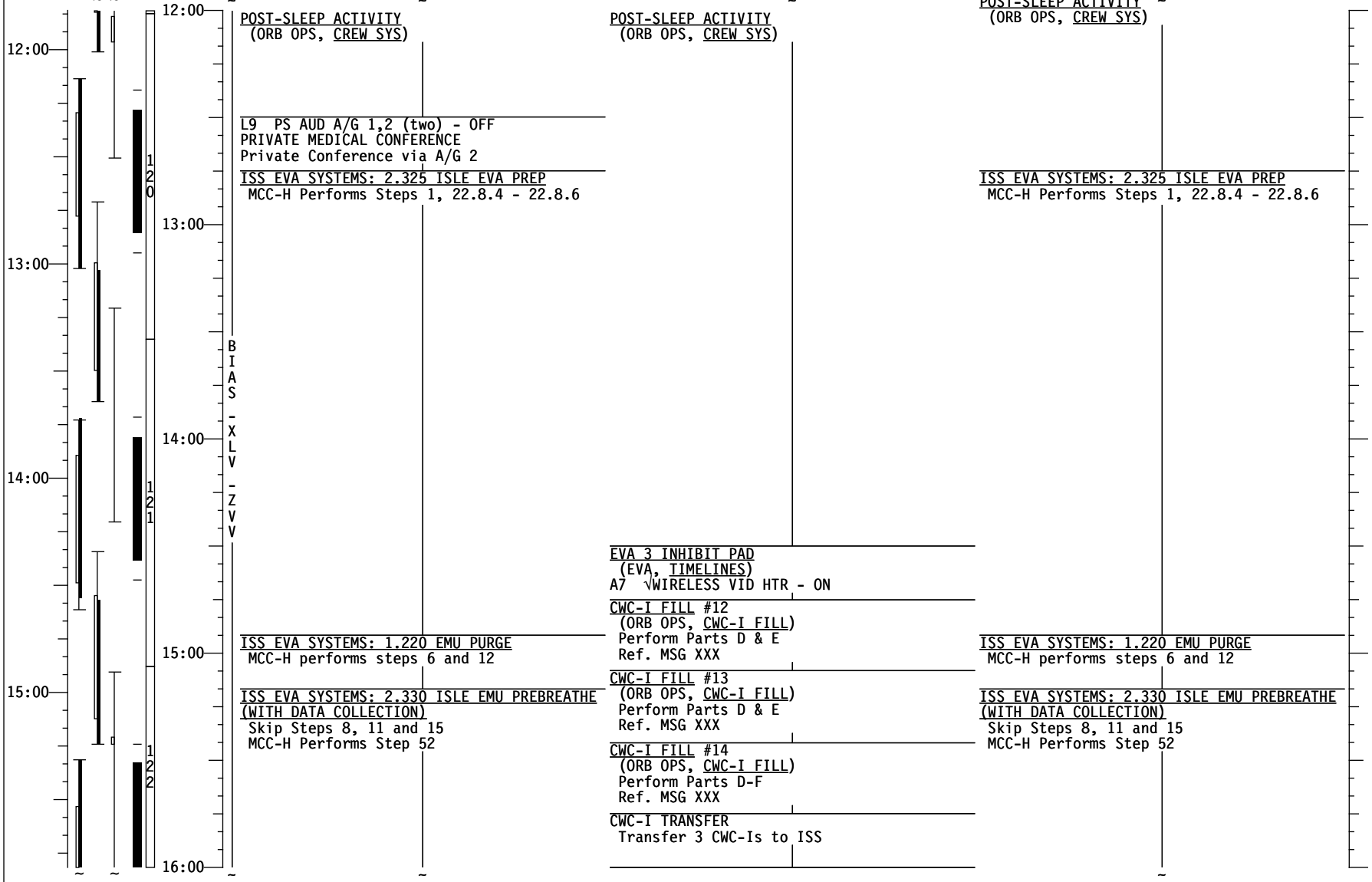


STS-134/ULF6 FD09



STS-134/ULF6 FD09

GMT Date 04/27 (117) | W | TDRS E | Z | D/N | ORB | MET Day 007 | ATT



CDR MARK

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

L9 PS AUD A/G 1,2 (two) - OFF
PRIVATE MEDICAL CONFERENCE
Private Conference via A/G 2

ISS EVA SYSTEMS: 2.325 ISLE EVA PREP
MCC-H Performs Steps 1, 22.8.4 - 22.8.6

ISS EVA SYSTEMS: 1.220 EMU PURGE
MCC-H performs steps 6 and 12

ISS EVA SYSTEMS: 2.330 ISLE EMU PREBREATHE
(WITH DATA COLLECTION)
Skip Steps 8, 11 and 15
MCC-H Performs Step 52

PLT BOX

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

EVA 3 INHIBIT PAD
(EVA, TIMELINES)
A7 √WIRELESS VID HTR - ON

CWC-I FILL #12
(ORB OPS, CWC-I FILL)
Perform Parts D & E
Ref. MSG XXX

CWC-I FILL #13
(ORB OPS, CWC-I FILL)
Perform Parts D & E
Ref. MSG XXX

CWC-I FILL #14
(ORB OPS, CWC-I FILL)
Perform Parts D-F
Ref. MSG XXX

CWC-I TRANSFER
Transfer 3 CWC-Is to ISS

MS1 SPANKY

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

ISS EVA SYSTEMS: 2.325 ISLE EVA PREP
MCC-H Performs Steps 1, 22.8.4 - 22.8.6

ISS EVA SYSTEMS: 1.220 EMU PURGE
MCC-H performs steps 6 and 12

ISS EVA SYSTEMS: 2.330 ISLE EMU PREBREATHE
(WITH DATA COLLECTION)
Skip Steps 8, 11 and 15
MCC-H Performs Step 52

NOTES

STS-134/ULF6 FD09

GMT Date 04/27 (117) | W | TDRS E | Z | D/N | ORB | MET Day 007 | ATT | MS2 ROBERTO | MS3 DREW | MS4 TAZ | NOTES

12:00
13:00
14:00
15:00

120
121
122

BIAS-XLV-ZVV

12:00

MS2 ROBERTO

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

CGBA STATUS CHK; GLACIER STATUS CHK (CC)

IENOS OPS (ASSY OPS, PAYLOADS) Step 1.4

DAILY TRANSFER LIST UPDATE
Ref. Transfer List & MSG XXX

P/TV07 EVA
(PHOTO/TV, SCENES)
SETUP

EXERCISE

MS3 DREW

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

ISS EVA SYSTEMS: 2.325 ISLE EVA PREP
MCC-H Performs Steps 1, 22.8.4 - 22.8.6

ISS EVA SYSTEMS: 1.220 EMU PURGE
MCC-H performs steps 6 and 12

ISS EVA SYSTEMS: 2.330 ISLE EMU PREBREATHE
(WITH DATA COLLECTION)
Skip Steps 8, 11 and 15
MCC-H Performs Step 52

MS4 TAZ

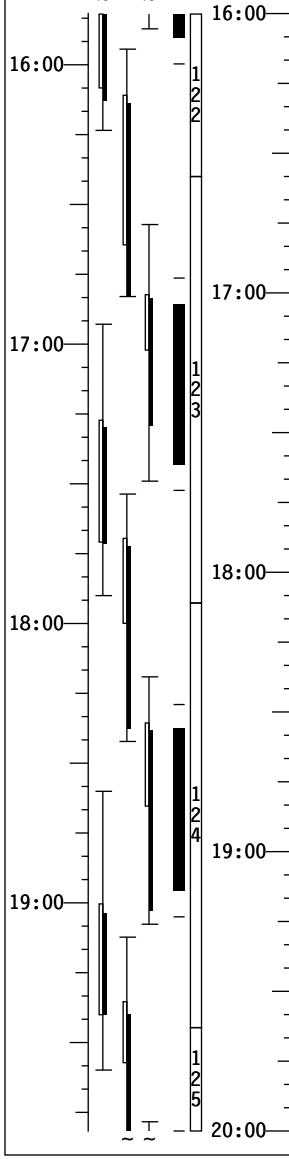
POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

L17 Check MCIU filter screen

EXERCISE

STS-134/ULF6 FD09

GMT Date 04/27 (117) | W | TDRSE | Z | D/N | ORB | MET Day 007 | ATT



MET	ATT	CDR MARK	PLT BOX	MS1 SPANKY	NOTES
16:00	BIAS-XLV-ZVV	ISS EVA SYSTEMS: 2.330 ISLE EMU PREBREATHE (WITH DATA COLLECTION) Skip Steps 8, 11 and 15 MCC-H Performs Step 52	IMU STAR OF OPPORTUNITY ALIGN (ORB OPS,GNC) TRANSFER OPS Ref. Middeck Transfer List	ISS EVA SYSTEMS: 2.330 ISLE EMU PREBREATHE (WITH DATA COLLECTION) Skip Steps 8, 11 and 15 MCC-H Performs Step 52	
17:00		ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CC Perform CREWLOCK DEPRESS		ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CC Perform CREWLOCK DEPRESS	
		ISS EVA SYS:C-LK DPRS/RPRS CC POST DEPRESS P/TV07 EVA (PHOTO/TV, SCENES) OPS		ISS EVA SYS:C-LK DPRS/RPRS CC POST DEPRESS	
				EGRESS/SETUP	
18:00				PDGF S/U	
				RETRIEVE PAMA/PDGF	
19:00			EXERCISE	FGB PDGF INSTALL	
				VSC INSTALL	
		MEAL	MEAL	FGB Y-JMPR CH 1/4	
20:00					

STS-134/ULF6 FD09

GMT Date 04/27 (117) | W | T D R S E | Z | D/N | O R B | MET Day 007 | A T T

MET: 16:00, 17:00, 18:00, 19:00, 20:00

ORB: 122, 123, 124, 125

ATT: BIAS-XLV-ZVV

MS2 ROBERTO	MS3 DREW	MS4 TAZ	NOTES
EXERCISE	ISS EVA SYSTEMS: 2.330 ISLE EMU PREBREATHE (WITH DATA COLLECTION) Skip Steps 8, 11 and 15 MCC-H Performs Step 52		
TRANSFER OPS Ref. Middeck Transfer List			
	ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CC Perform CREWLOCK DEPRESS		
	ISS EVA SYS:C-LK DPRS/RPRS CC POST DEPRESS		
	EGRESS/SETUP		
	PDGF S/U		
	RETRIEVE PAMA/PDGF	IVA SUPPORT EVA 3	
	FGB PDGF INSTALL		
MEAL	VSC INSTALL		
GLACIER SWAP - SHUTTLE (ASSY OPS, PAYLOADS)	FGB Y-JMPR CH 1/4		

STS-134/ULF6 FD09

GMT Date 04/27 (117) | W | TDRS E | Z | D/N | ORB | MET Day 007 | ATT

20:00 21:00 22:00 23:00

ORB: 125 126 127

ATT: BIAS-XLV-ZVV

MET	CDR MARK	PLT BOX	MS1 SPANKY	NOTES
20:00	MEAL	MEAL	FGB Y-JMPR CH 1/4	
	P/TV07 EVA (PHOTO/TV, SCENES) OPS	P/TV09 MIDDECK PAYLOADS (PHOTO/TV, SCENES) Perform SETUP, OPS Item 1		
		TRANSFER OPS Ref. Middeck Transfer List		
21:00			1553 DATA CABLE INST	
22:00			FGB Y-JMPR CH 2/3	
23:00			GET AHEAD	
			CLEANUP/INGRESS	
	ISS EVA SYS: C-LK DPRS/RPRS CC PRE REPRESS		ISS EVA SYS: C-LK DPRS/RPRS CC PRE REPRESS	
	ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CC Perform CREWLOCK REPRESS		ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CC Perform CREWLOCK REPRESS	
00:00				

STS-134/ULF6 FD09

GMT Date 04/27 (117)	MET Day 007	ATT	MS2 ROBERTO	MS3 DREW	MS4 TAZ	NOTES
20:00	20:00	BIAS-XLV-ZVV	GLACIER SWAP - SHUTTLE (ASSY OPS, PAYLOADS)	FGB Y-JMPR CH 1/4		
			TRANSFER OPS Ref. Middeck Transfer List			
21:00	21:00			1553 DATA CABLE INST		
					IVA SUPPORT EVA 3	
22:00	22:00			FGB Y-JMPR CH 2/3		
	23:00			PDGF/FGB THRUSTER PHOTOS		
23:00				CLEANUP/INGRESS		
				ISS EVA SYS: C-LK DPRS/RPRS CC PRE REPRESS		
	00:00		DIGITAL VIA VTR See pg. 3-99	ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CC Perform CREWLOCK REPRESS		

W E Z D/N ORB 125 126 127

STS-134/ULF6 FD09

GMT Date 04/27 (117) | W | T D R S E Z | D/N | O R B | MET Day 008 | ATT

CDR MARK

- ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CC
  - Perform CREWLOCK REPRESS
- ISS EVA SYSTEMS: 1.240 POST EVA
  - Without H2O RECHARGE
  - Skip Steps 37-39, 51, 66
  - MCC-H will perform Steps 43, 67-68
- PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- L9 PS AUD A/G 1,2 (two) - OFF
- POST EVA TAGUP
- Private Conference via A/G 2
- PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- L9 PS AUD A/G 1,2 (two) - OFF
- PRIVATE MEDICAL CONFERENCE
- Private Conference via A/G 2
- PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- SLEEP

PLT BOX

- WCS COMPACTOR OPS (DUAL-VANE) (ORB OPS, CUE CARD)
- PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- SLEEP

MS1 SPANKY

- ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CC
  - Perform CREWLOCK REPRESS
- ISS EVA SYSTEMS: 1.240 POST EVA
  - Without H2O RECHARGE
  - Skip Steps 37-39, 51, 66
  - MCC-H will perform Steps 43, 67-68
- PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- L9 PS AUD A/G 1,2 (two) - OFF
- POST EVA TAGUP
- Private Conference via A/G 2
- PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- SLEEP

NOTES

CREW WAKE AT 08/11:30

STS-134/ULF6 FD09

GMT Date 04/27 (117) | W | T D R S E | Z | D/N | O R B | MET Day 008 | ATT

00:00 01:00 02:00 03:00

128 129 130

BIAS-XLV-ZVV

00:00 01:00 02:00 03:00 04:00

MS2 ROBERTO

DIGITAL VIA VTR
(CUE CARD, DIGITAL PLAYBACK)
Glacier Transfer
KU TDRW (23:56-00:30)

TRANSFER BRIEF PREP
Coordinate with transfer counterparts

TRANSFER BRIEF
Call down status to MCC

CGBA STATUS CHK; GLACIER STATUS CHK (CC)

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

SLEEP

MS3 DREW

ISS EVA SYSTEMS: CREWLOCK
DEPRESS/REPRESS CC
Perform CREWLOCK REPRESS

ISS EVA SYSTEMS: 1.240 POST EVA
Without H2O RECHARGE
Skip Steps 37-39, 51, 66
MCC-H will perform Steps 43, 67-68

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

L9 PS AUD A/G 1,2 (two) - OFF
POST EVA TAGUP
Private Conference via A/G 2

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

SLEEP

MS4 TAZ

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

L9 PS AUD A/G 1,2 (two) - OFF
POST EVA TAGUP
Private Conference via A/G 2

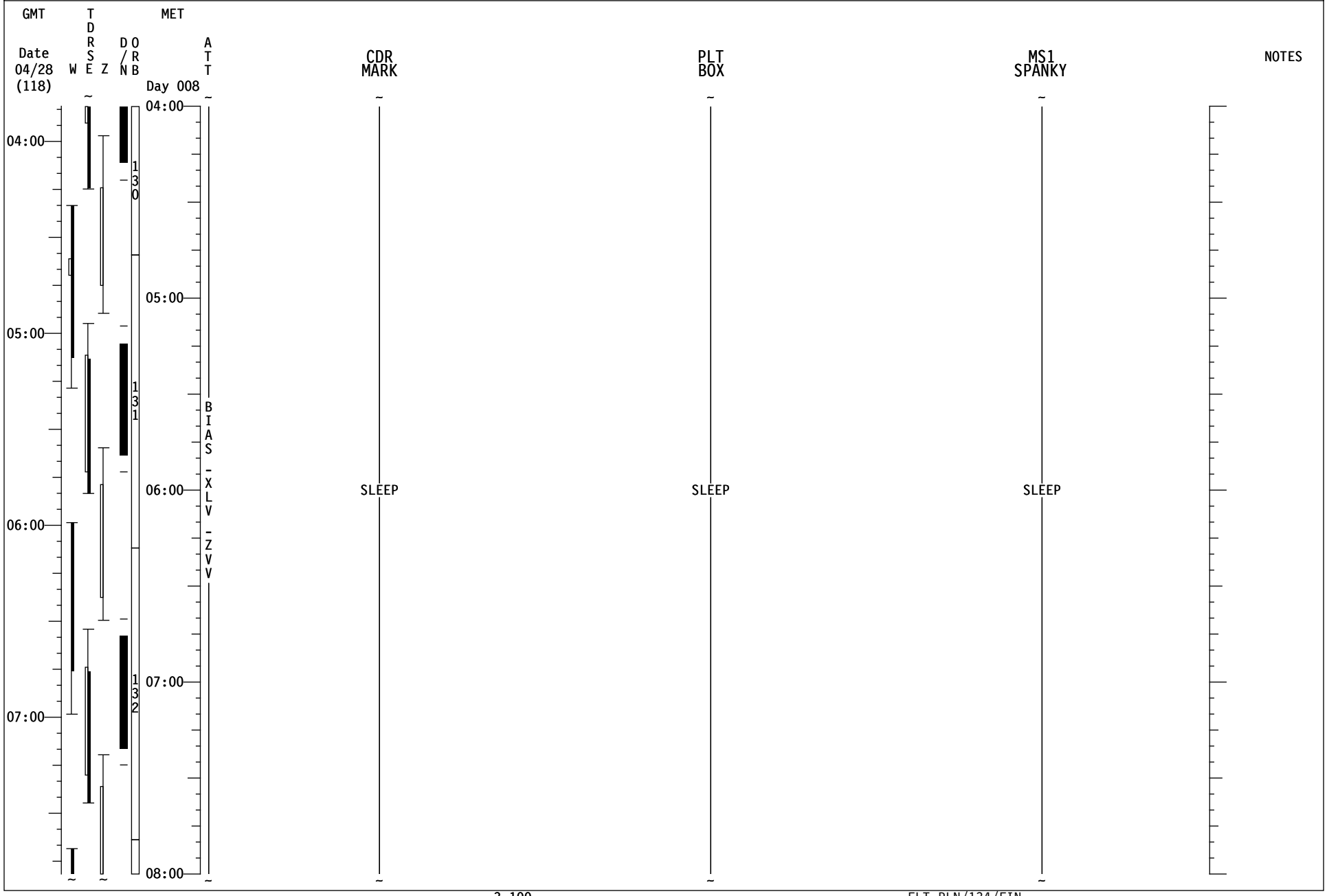
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

SLEEP

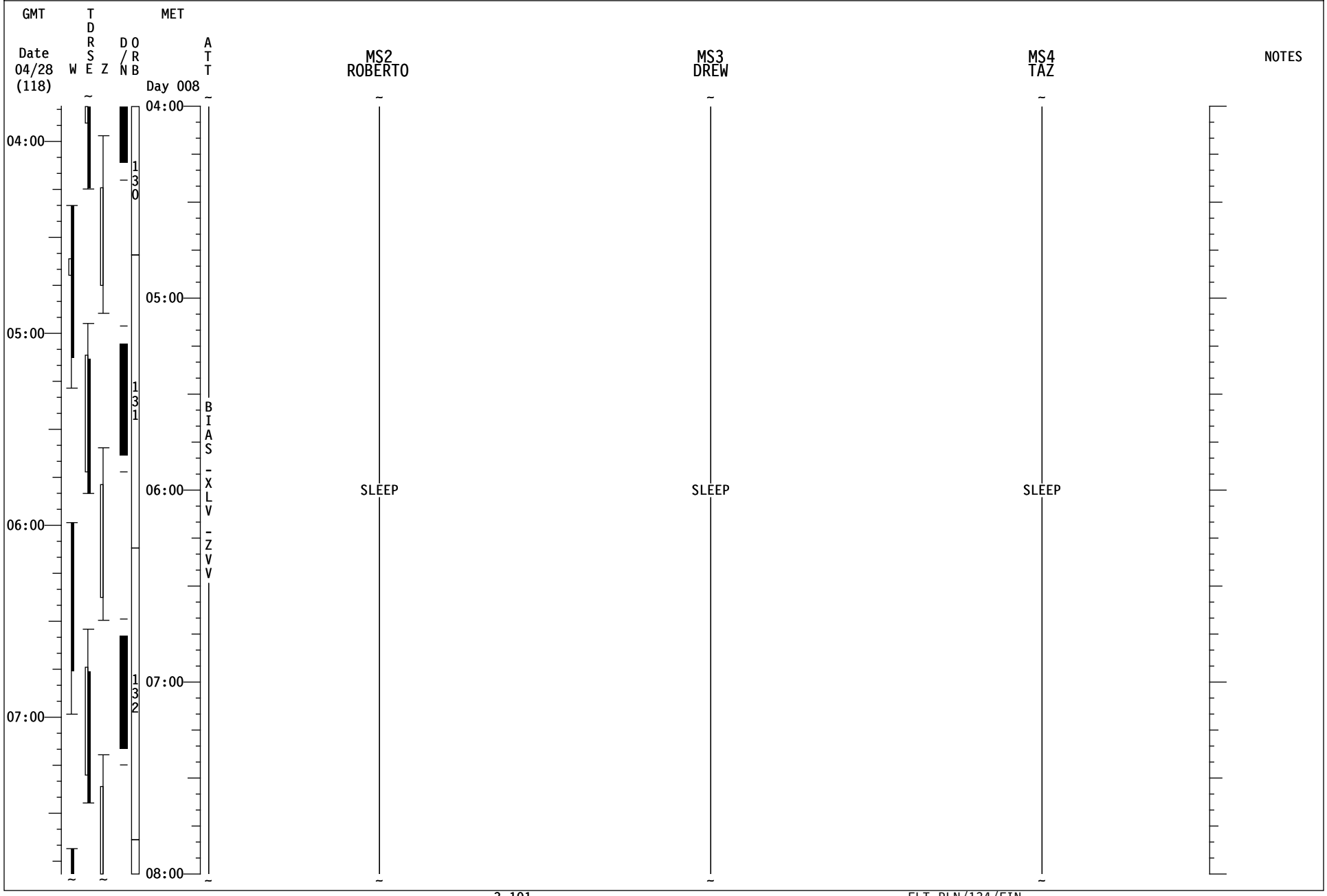
NOTES

CREW WAKE AT 08/11:30

STS-134/ULF6 FD09



STS-134/ULF6 FD09



STS-134/ULF6 FD10

GMT Date 04/28 (118) | W | T D R S E | Z | D/N | O R B | MET Day 008 | ATT

08:00 09:00 10:00 11:00

133 134 135

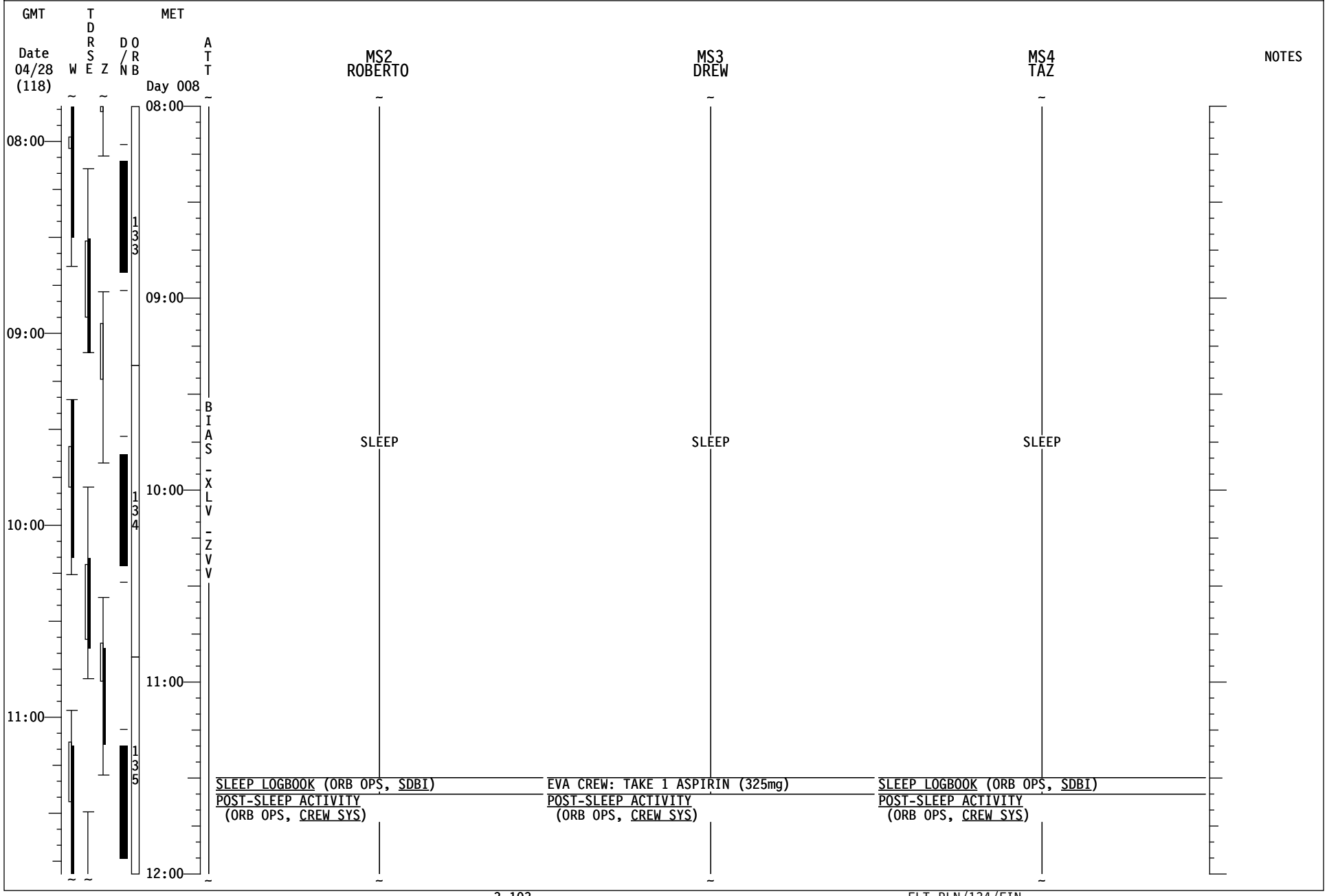
08:00 09:00 10:00 11:00 12:00

BIAS-XLV-ZVV

CDR MARK	PLT BOX	MS1 SPANKY	NOTES
SLEEP	SLEEP	SLEEP	
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	SLEEP LOGBOOK (ORB OPS, SDBI) POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	EVA CREW: TAKE 1 ASPIRIN (325mg) POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	

FD10 EZ ACTIVITIES:
- √OCAC FILTER
- √MDDK DUCT SCREEN
- HARD REBOOT: STS-2(WINDECOM), STS-3(KFX) & STS-4(RPOP)

STS-134/ULF6 FD10



STS-134/ULF6 FD10

GMT Date 04/28 (118) | W | TDRS E | Z | D/N | ORB | MET Day 008 | ATT | CDR MARK | PLT BOX | MS1 SPANKY | NOTES

12:00 — 13:00 — 14:00 — 15:00

ORB: 135, 136, 137, 138

ATT: BIAS-XLV-ZVV

CDR MARK

- 12:00 POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- 14:00 EXERCISE
- POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- 15:00 IMU STAR OF OPPORTUNITY ALIGN (ORB OPS,GNC)
- N2 REPRESS INIT A
- DAILY TRANSFER LIST UPDATE Ref. Transfer List & MSG XXX
- TRANSFER OPS Ref. Middeck Transfer List

PLT BOX

- POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- A N2 REPRESS USING PAYLOAD N2 VLVS (ORB OPS, ECLS) Steps 1, 3-7 MCC will TMBU SM Limits
- OBSS DOCKED LDRI RCC SURVEY - STBD (PDRS, LATE INSPECTION) R1: Box, R2: Drew, R3: Spanky

MS1 SPANKY

- POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- OBSS DOCKED LDRI RCC SURVEY - STBD (PDRS, LATE INSPECTION) R1: Box, R2: Drew, R3: Spanky

STS-134/ULF6 FD10

GMT Date 04/28 (118) | W | T D R S E | Z | D / N | O R B | MET Day 008 | A T T | MS2 ROBERTO | MS3 DREW | MS4 TAZ | NOTES

12:00 13:00 14:00 15:00

ORB: 135 136 137 138

ATT: BIAS-XLV-ZVV

12:00

MS2 ROBERTO
- POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- CGBA STATUS CHK; GLACIER STATUS CHK (CC)
- IENOS OPS (ASSY OPS, PAYLOADS) Step 1.4
- SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Perform EQUIP PREP and WATER TRANSFER HOSE PURGE
- SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Init Fill #1 Ref MSG XXX
- EXERCISE

MS3 DREW
- POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- L17 Check MCIU filter screen
- OBSS DOCKED LDRI RCC SURVEY - STBD (PDRS, LATE INSPECTION) R1: Box, R2: Drew, R3: Spanky

MS4 TAZ
- POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- 2.110 CUBE LAB MODULE-7 TRANSFER TO ISS (ASSY OPS, TRANSFER)

STS-134/ULF6 FD10

GMT Date 04/28 (118) | W | TDRS E | Z | D/N | ORB | MET Day 008 | ATT

MET	CDR MARK	PLT BOX	MS1 SPANKY	NOTES
16:00	TRANSFER OPS Ref. Middeck Transfer List	OBSS DOCKED LDRI RCC SURVEY - STBD (PDRS, LATE INSPECTION) R1: Box, R2: Drew, R3: Spanky	OBSS DOCKED LDRI RCC SURVEY - STBD (PDRS, LATE INSPECTION) R1: Box, R2: Drew, R3: Spanky	
17:00				
	BIAS-XLV-ZVV			
	PUBLIC AFFAIRS EVENT ISS KU AVAIL: 17:44-18:16 NODE 2: Mark/Cady		MEAL	
18:00	SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Init Fill #2 Ref MSG XXX	OBSS DOCKED LDRI RCC SURVEY - PORT (PDRS, LATE INSPECTION) R1: Taz, R2: Roberto, R3: Box	EMU SWAP FOR EVA 4 (EVA, AIRLOCK CONFIG) Ref. STS-134 CONSUMABLES TRACKING CC	
			ISS EVA SYSTEMS: 1.515 EMU METOX/LIOH/BATTERY REPLACEMENT Ref: STS-134 CONSUMABLES TRACKING CC	
19:00	MEAL			
	SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Perform FILL TERMINATION			
	CWC TRANSFER Transfer 2 CWCs to ISS	ILLUMINATOR OPS (CC,TV) ILLUMINATORS OFF-ALL		
20:00				

STS-134/ULF6 FD10

GMT Date 04/28 (118) | W | TDRS E | Z | D/N | ORB | MET Day 008 | ATT

MS2 ROBERTO

- 16:00 EXERCISE
- SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Perform FILL TERMINATION
- 17:00 OBSS DOCKED LDRI RCC SURVEY - NOSE CAP (PDRS, LATE INSPECTION) R1: Drew, R2: Taz, R3: Roberto
- 18:00 OBSS DOCKED LDRI RCC SURVEY - PORT (PDRS, LATE INSPECTION) R1: Taz, R2: Roberto, R3: Box
- 20:00 MEAL

MS3 DREW

- OBSS DOCKED LDRI RCC SURVEY - STBD (PDRS, LATE INSPECTION) R1: Box, R2: Drew, R3: Spanky
- OBSS DOCKED LDRI RCC SURVEY - NOSE CAP (PDRS, LATE INSPECTION) R1: Drew, R2: Taz, R3: Roberto
- EMU SWAP FOR EVA 4 (EVA, AIRLOCK CONFIG) Ref. STS-134 CONSUMABLES TRACKING CC
- ISS EVA SYSTEMS: 1.515 EMU METOX/LIOH/BATTERY REPLACEMENT Ref: STS-134 CONSUMABLES TRACKING CC
- EXERCISE

MS4 TAZ

- EXERCISE
- OBSS DOCKED LDRI RCC SURVEY - NOSE CAP (PDRS, LATE INSPECTION) R1: Drew, R2: Taz, R3: Roberto
- OBSS DOCKED LDRI RCC SURVEY - PORT (PDRS, LATE INSPECTION) R1: Taz, R2: Roberto, R3: Box
- MEAL

NOTES

STS-134/ULF6 FD10

GMT Date 04/28 (118) | W | T D R S E | Z | D/N | O R B | MET Day 008 | ATT | CDR MARK | PLT BOX | MS1 SPANKY | NOTES

20:00 | 21:00 | 22:00 | 23:00

141 | 142 | 143

20:00 | 21:00 | 22:00 | 23:00 | 00:00

BIAS-XLV-ZVV

CDR MARK

PUBLIC AFFAIRS EVENT
ISS KU AVAIL: 19:51-20:29
NODE 2: Mark

N2 REPRESS TERM B

B N2 REPRESS USING PAYLOAD N2 VLVS
(ORB OPS, ECLS) Steps 8-13
MCC will TMBU SM Limits

PUBLIC AFFAIRS EVENT
ISS KU AVAIL: 21:31-22:09
NODE 2: Mark/Box/Drew/Ron

SPINAL ELONGATION OPERATOR PROCEDURE
(ASSY OPS, PAYLOADS)

TRANSFER BRIEF PREP
Coordinate with transfer counterparts

TRANSFER BRIEF
Call down status to MCC

EVA 4 PROCEDURE REVIEW
Ref. EVA 4 BRIEFING CARD
(EVA, TIMELINES)
Ref. MSG XXX

PLT BOX

MYCO BODY SAMPLE COLLECTION
(ASSY OPS, PAYLOADS) Review Only

MEAL

PUBLIC AFFAIRS EVENT
ISS KU AVAIL: 21:31-22:09
NODE 2: Mark/Box/Drew/Ron

SPINAL ELONGATION OPERATOR PROCEDURE
(ASSY OPS, PAYLOADS)

EXERCISE

EVA 4 PROCEDURE REVIEW
Ref. EVA 4 BRIEFING CARD
(EVA, TIMELINES)
Ref. MSG XXX

MS1 SPANKY

EXERCISE

ISS EVA SYSTEMS: 1.305 EQUIPMENT LOCK PREP

EVA 4 TOOL CONFIGURATION
(EVA, TIMELINES)
Ref. CONSUMABLES TRACKING CUE CARD
Ref. MSG XXX

EVA 4 PROCEDURE REVIEW
Ref. EVA 4 BRIEFING CARD
(EVA, TIMELINES)
Ref. MSG XXX

STS-134/ULF6 FD10

GMT Date 04/28 (118) | W | TDRS E | Z | D/N | ORB | MET Day 008 | ATT

20:00 — 21:00 — 22:00 — 23:00 — 00:00

ORB: 141, 142, 143

ATT: BIAS-XLV-ZVV

MS2 ROBERTO

20:00 MEAL

21:00 DIGITAL VIA VTR
(CUE CARD, DIGITAL PLAYBACK)
LDRI SURVEYS
KU TDRW (21:13-21:42)

23:00 EVA 4 PROCEDURE REVIEW
Ref. EVA 4 BRIEFING CARD
(EVA, TIMELINES)
Ref. MSG XXX

MS3 DREW

20:00 EXERCISE

21:00 MEAL

22:00 PUBLIC AFFAIRS EVENT
ISS KU AVAIL: 21:31-22:09
NODE 2: Mark/Box/Drew/Ron

23:00 EVA 4 TOOL CONFIGURATION
(EVA, TIMELINES)
Ref. CONSUMABLES TRACKING CUE CARD
Ref. MSG XXX

23:00 EVA 4 PROCEDURE REVIEW
Ref. EVA 4 BRIEFING CARD
(EVA, TIMELINES)
Ref. MSG XXX

MS4 TAZ

20:00 MEAL

21:00 ISS EVA SYSTEMS: 1.305 EQUIPMENT LOCK PREP

22:00 EVA 4 TOOL CONFIGURATION
(EVA, TIMELINES)
Ref. CONSUMABLES TRACKING CUE CARD
Ref. MSG XXX

23:00 EVA 4 PROCEDURE REVIEW
Ref. EVA 4 BRIEFING CARD
(EVA, TIMELINES)
Ref. MSG XXX

NOTES

STS-134/ULF6 FD10

GMT — Date 04/28 (118) — W T D R S E Z — D/N O R B — MET Day 009 — ATT

00:00 01:00 02:00 03:00

143 144 145 146

RBST — BIAS -XLV -ZVV

00:00 — 01:00 — 02:00 — 03:00 — 04:00

CDR MARK

EVA 4 PROCEDURE REVIEW
Ref. EVA 4 BRIEFING CARD
(EVA, TIMELINES)
Ref. MSG XXX

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

L9 PS AUD A/G 1,2 (two) - OFF
PRIVATE MEDICAL CONFERENCE
Private Conference via A/G 2

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

ISS EVA SYSTEMS: 1.206 10.2 PSIA CAMPOUT
MASK PREBREATHE
MCC-H performs steps 1, 19

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

SLEEP

PLT BOX

EVA 4 PROCEDURE REVIEW
Ref. EVA 4 BRIEFING CARD
(EVA, TIMELINES)
Ref. MSG XXX

H/O ATT CNTRL CMG TA TO ORB: √MCC for DAP
MNVR (TRK) REBOOST [C]
AUTO REBOOST
(ORB OPS, REBOOST/DAP)
EXERCISE CONSTRAINT

MNVR (TRK) BIAS -XLV -ZVV [D]
When ISS is GO for deadband collapse, DAP: B13
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

DAP RECONFIG [E]
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

SLEEP

MS1 SPANKY

EVA 4 PROCEDURE REVIEW
Ref. EVA 4 BRIEFING CARD
(EVA, TIMELINES)
Ref. MSG XXX

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

ISS EVA SYSTEMS: 1.206 10.2 PSIA CAMPOUT
MASK PREBREATHE
MCC-H performs steps 1, 19

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

SLEEP

NOTES

NO EXERCISE [REBOOST]

UPLINK
β21+Mask
Box 40,41,48

[C] MNVR (TRK) REBOOST
TG=2 BV=5 P=176 Y=0 OM=176
A12/AUTO/VERN Init TRK

[D] MNVR (TRK) BIAS -XLV -ZVV
TG=2 BV=5 P=195.1 Y=0.0 OM=193.0
A12/AUTO/VERN Init TRK

[E] When ISS is GO for attitude control, DAP: FREE
DAP A12/FREE/VERN
Reload DAP B12

CREW WAKE AT 09/11:30

STS-134/ULF6 FD10

GMT Date 04/28 (118) | W | TDRS E | Z | D/N | ORB | MET Day 009 | ATT

00:00 01:00 02:00 03:00

143 144 145 146

00:00 01:00 02:00 03:00 04:00

RBST

BIAS-XLV-ZVV

MS2 ROBERTO

EVA 4 PROCEDURE REVIEW
Ref. EVA 4 BRIEFING CARD
(EVA, TIMELINES)
Ref. MSG XXX

CGBA STATUS CHK; GLACIER STATUS CHK (CC)

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

SLEEP

MS3 DREW

EVA 4 PROCEDURE REVIEW
Ref. EVA 4 BRIEFING CARD
(EVA, TIMELINES)
Ref. MSG XXX

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

SLEEP

MS4 TAZ

EVA 4 PROCEDURE REVIEW
Ref. EVA 4 BRIEFING CARD
(EVA, TIMELINES)
Ref. MSG XXX

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

ISS EVA SYSTEMS: 1.206 10.2 PSIA CAMPOUT MASK PREBREATHE
MCC-H performs steps 1, 19

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

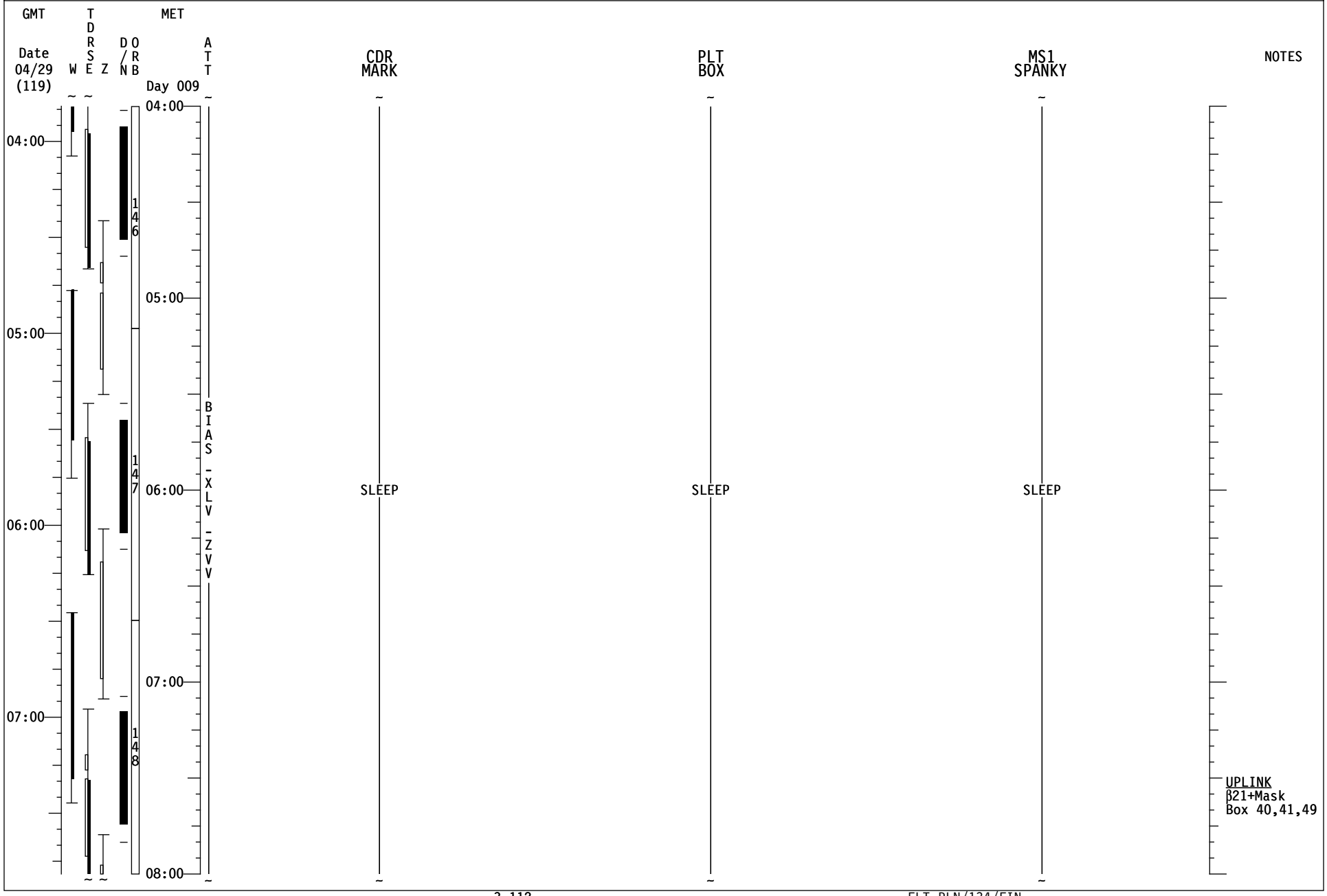
SLEEP

NOTES

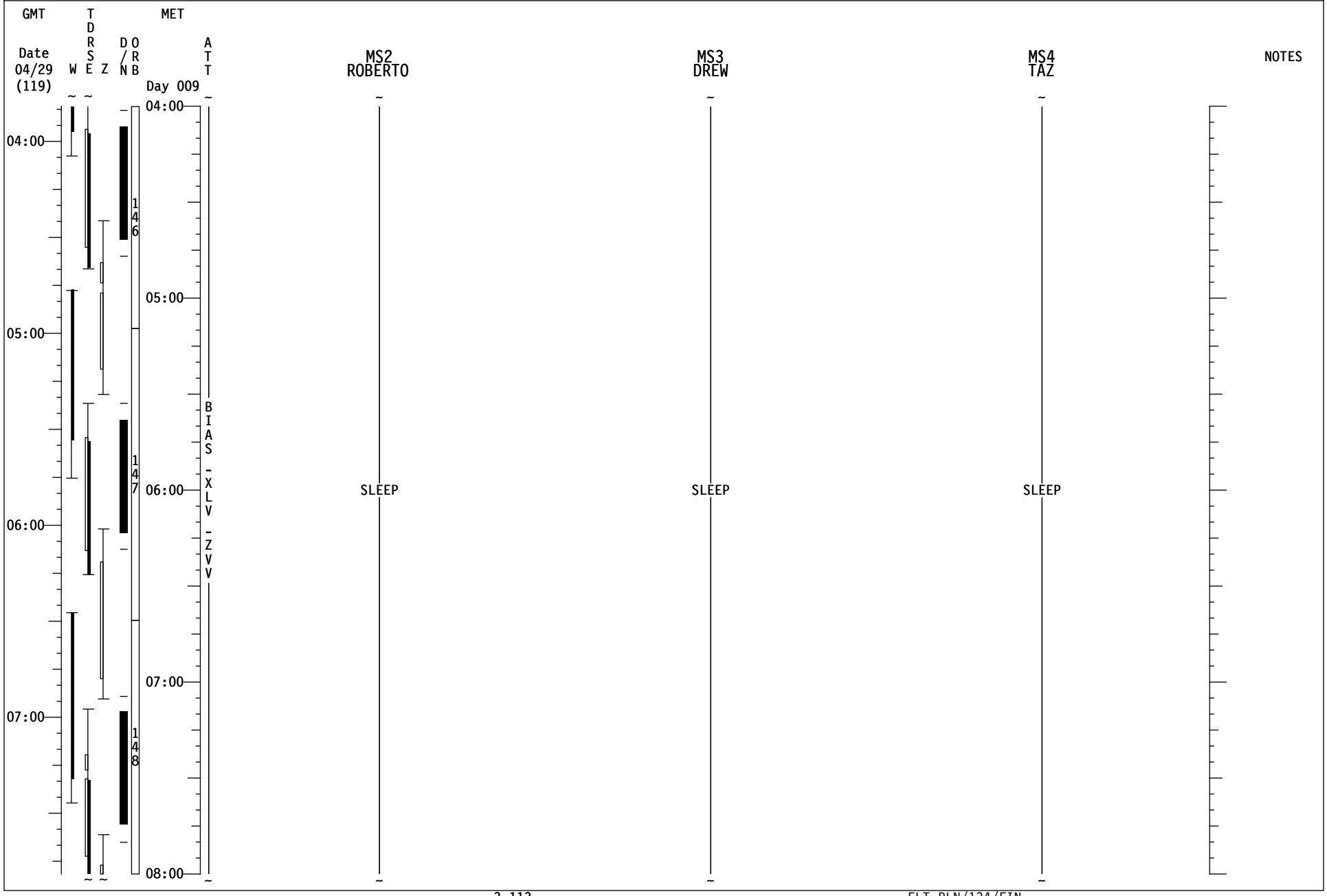
NO EXERCISE [REBOOST]

CREW WAKE AT 09/11:30

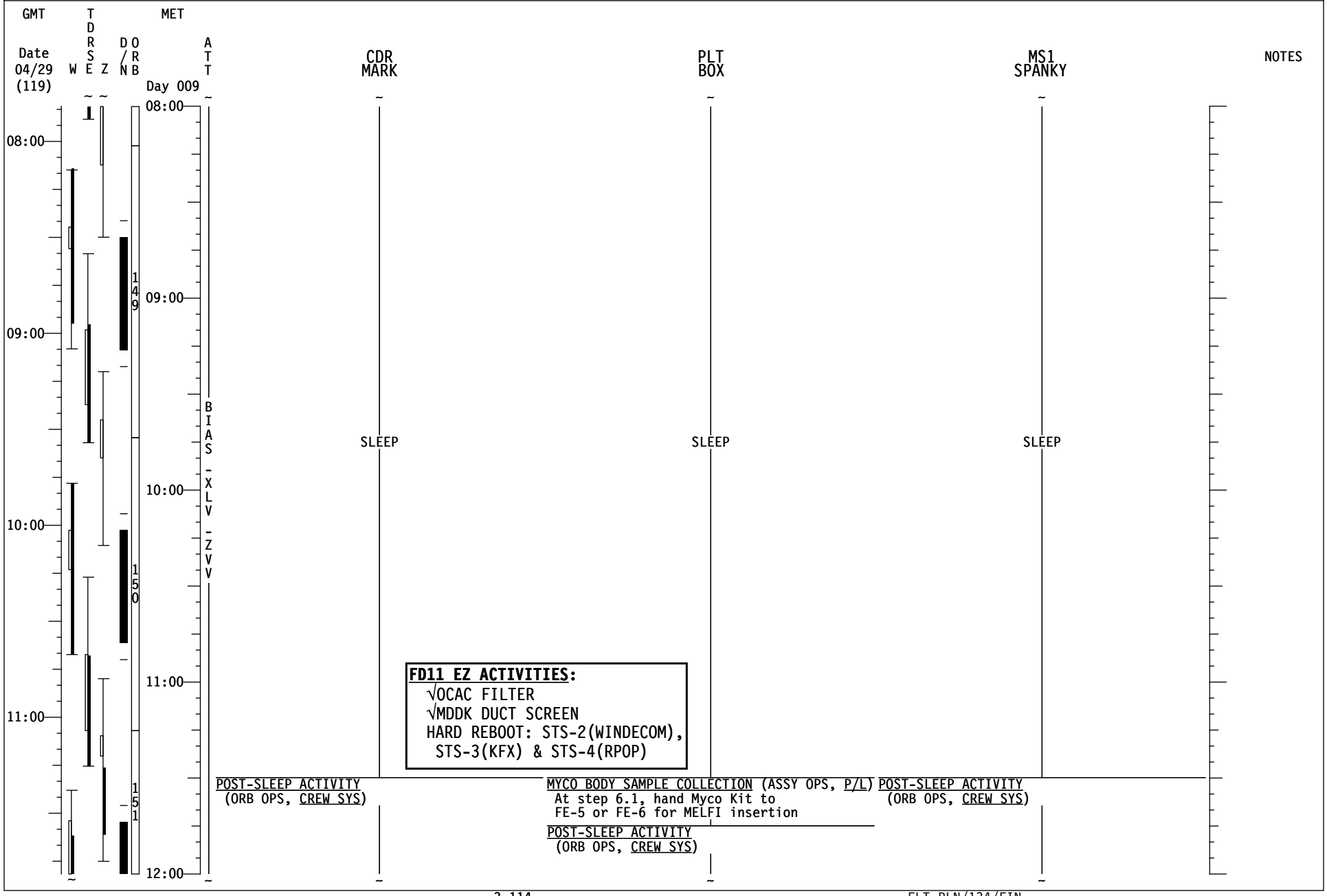
STS-134/ULF6 FD10



STS-134/ULF6 FD10



STS-134/ULF6 FD11



STS-134/ULF6 FD11

STS-134/ULF6 FD11

GMT Date 04/29 (119) | W | TDRS E | Z | D/N | ORB | MET Day 009 | ATT

CDR MARK

12:00 POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

L9 PS AUD A/G 1,2 (two) - OFF
PRIVATE MEDICAL CONFERENCE
Private Conference via A/G 2

ISS EVA SYSTEMS: 1.211 HYGIENE BREAK
Perform steps 21-22, 24-25
MCC-H performs step 23

ISS EVA SYSTEMS: 1.216 EVA PREP
MCC-H performs step 1

ISS EVA SYSTEMS: 1.220 EMU PURGE
MCC-H performs steps 6 and 12

15:00 ISS EVA SYSTEMS: 1.225 EMU PREBREATHE
Steps 3, 7, 10 not required
MCC-H performs step 48

ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CC
Perform CREWLOCK DEPRESS

PLT BOX

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

EVA 4 INHIBIT PAD (EVA, TIMELINES)
A7 √WIRELESS VID HTR - ON

EXERCISE

MS1 SPANKY

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

ISS EVA SYSTEMS: 1.211 HYGIENE BREAK
MCC-H performs steps 1-4, 16-20, 23

ISS EVA SYSTEMS: 1.216 EVA PREP
MCC-H performs step 1

ISS EVA SYSTEMS: 1.220 EMU PURGE
MCC-H performs steps 6 and 12

ISS EVA SYSTEMS: 1.225 EMU PREBREATHE
Steps 3, 7, 10 not required
MCC-H performs step 48

ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CC
Perform CREWLOCK DEPRESS

NOTES

STS-134/ULF6 FD11

GMT Date 04/29 (119) | W | T D R S E | Z | D/N | O R B | MET Day 009 | A T T

MS2 ROBERTO | MS3 DREW | MS4 TAZ | NOTES

12:00 — 13:00 — 14:00 — 15:00 — 16:00

ORB: 151 — 152 — 153

ATT: BIAS-XLV-Z VV

MS2 ROBERTO

- POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- IENOS OPS (ASSY OPS, PAYLOADS) Step 1.4
- CGBA STATUS CHK; GLACIER STATUS CHK (CC)
- L17 Check MCIU filter screen
- DAILY TRANSFER LIST UPDATE
  Ref. Transfer List & MSG XXX
- P/TV07 EVA (PHOTO/TV, SCENES) SETUP
- EXERCISE

MS3 DREW

- POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

MS4 TAZ

- POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- ISS EVA SYSTEMS: 1.211 HYGIENE BREAK
  MCC-H performs steps 1-4, 16-20, 23
- ISS EVA SYSTEMS: 1.216 EVA PREP
  MCC-H performs step 1
- ISS EVA SYSTEMS: 1.220 EMU PURGE
  MCC-H performs steps 6 and 12
- ISS EVA SYSTEMS: 1.225 EMU PREBREATHE
  Steps 3, 7, 10 not required
  MCC-H performs step 48
- ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CC
  Perform CREWLOCK DEPRESS

STS-134/ULF6 FD11

GMT Date 04/29 (119) | W | T D R S E | Z | D/N | O R B | MET Day 009 | ATT

CDR MARK

- 16:00 ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CC
  Perform CREWLOCK DEPRESS
- ISS EVA SYS:C-LK DPRS/RPRS CC POST DEPRESS
- OBSS UNGRAPPLE FOR STOW
  (PDRS, OBSS HANDOFF)
  EXERCISE CONSTRAINT
- P/TV07 EVA
  (PHOTO/TV, SCENES)
  OPS
- 17:00 N2 REPRESS INIT [A]
- P/TV07 EVA
  (PHOTO/TV, SCENES)
  OPS
- BIAS_XLV_ZVV
- FILTER CLEANING
  (IFM, SCHEDULED MAINTENANCE)
  Inspect filters and clean
  as necessary
- 18:00 SHUTTLE/ISS H2O CNTR FILL
  (ORB OPS, ECLS) Init Fill #3
  Ref MSG XXX
- 19:00 MEAL
- SHUTTLE/ISS H2O CNTR FILL
  (ORB OPS, ECLS)
  Perform FILL TERMINATION
- 20:00

PLT BOX

- IMU STAR OF OPPORTUNITY ALIGN (ORB OPS,GNC)
- CSS: 1.111 CUPOLA CREW RESTRAINT OPS Step 5
- ROBO: 1.610 SSRMS EVA SUPPORT - OBSS HANDOFF AND STOW ON S1
  Steps 1-4
  EXERCISE CONSTRAINT
- ROBO: 1.610 SSRMS EVA SUPPORT - OBSS HANDOFF AND STOW ON S1
  Steps 5-12
  EXERCISE CONSTRAINT
- ROBO: 1.620 SSRMS EVA SUPPORT - OBSS GF SWAP

[A] N2 REPRESS USING PAYLOAD N2 VLVS
(ORB OPS, ECLS) Steps 1, 3-7
MCC will TMBU SM Limits

MS1 SPANKY

- ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CC
  Perform CREWLOCK DEPRESS
- ISS EVA SYS:C-LK DPRS/RPRS CC POST DEPRESS
- EGRESS/SETUP
- OBSS STOW
- P6 PDGF RETRIEVE
- OBSS EFGF/PDFG SWAP

NOTES

- UPLINK β21+Mask Box 40,41,44
- NO EXERCISE [OBSS DOUBLE GRAPPLED THRU H/O TO STOW POSITION]
- NO UNISOLATED EXERCISE [CREW OUTBOARD OF SARJ FOR P6 PDGF RETRIEVE]

STS-134/ULF6 FD11

GMT Date 04/29 (119) | W | T D R S E | Z | D / N | O R B | MET Day 009 | A T T

MS2 ROBERTO | MS3 DREW | MS4 TAZ | NOTES

16:00
17:00
18:00
19:00
20:00

154
155
156

BIAS-XLV-ZVV

MS2 ROBERTO

EXERCISE

OBSS UNGRAPPLE FOR STOW
(PDRS, OBSS HANDOFF)
EXERCISE CONSTRAINT

TRANSFER OPS
Ref. Middeck Transfer List

MEAL

MS3 DREW

IVA SUPPORT EVA 4

MS4 TAZ

ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CC
Perform CREWLOCK DEPRESS

ISS EVA SYS:C-LK DPRS/RPRS CC POST DEPRESS

EGRESS/SETUP

OBSS STOW

P6 PDGF RETRIEVE

OBSS EFGF/PDFG SWAP

NOTES

NO EXERCISE [OBSS DOUBLE GRAPPLED THRU H/O TO STOW POSITION]

NO UNISOLATED EXERCISE [CREW OUTBOARD OF SARJ FOR P6 PDGF RETRIEVE]

STS-134/ULF6 FD11

GMT Date 04/29 (119) | W | T D R S E | Z | D/N | O R B | MET Day 009 | ATT

20:00 — 21:00 — 22:00 — 23:00

156 — 157 — 158 — 159

BIAS-XLV-ZVV

CDR MARK	PLT BOX	MS1 SPANKY	NOTES
SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Init Fill #4 Ref MSG XXX	CSS: 1.111 CUPOLA CREW RESTRAINT OPS Step 6		
N2 REPRESS TERM B		OBSS EFGF/PDFG SWAP	
O2 REPRESS INIT C			
P/TV07 EVA (PHOTO/TV, SCENES) OPS	MEAL		UPLINK β21+Mask Box 40,41,45
B N2 REPRESS USING PAYLOAD N2 VLVS (ORB OPS, ECLS) Steps 8-13 MCC will TMBU SM Limits			
C OCAC PWR - OFF C5 DIRECT O2 vlv - OP		STOW EFGF IN TSA	
	TRANSFER OPS Ref. Middeck Transfer List		
SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Perform FILL TERMINATION			NO UNISOLATED EXERCISE [SPDM EDF RELEASE]
P/TV07 EVA (PHOTO/TV, SCENES) OPS		ELC3 SPDM ARM RLS	
D C5 DIRECT O2 vlv - CL OCAC PWR - ON			
O2 REPRESS TERM (On MCC GO) D			
CWC TRANSFER Transfer 2 CWCs to ISS		CLEANUP/INGRESS	
ISS EVA SYS: C-LK DPRS/RPRS CC PRE REPRESS		ISS EVA SYS: C-LK DPRS/RPRS CC PRE REPRESS	
ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CC Perform CREWLOCK REPRESS		ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CC Perform CREWLOCK REPRESS	
ISS EVA SYSTEMS: 1.240 POST EVA With H2O RECHARGE Steps 37, 39, 66 not required MCC-H will perform Steps 43, 67-68 Ref. STS-134 CONSUMABLES TRACKING CC	POST OBSS TRANSFER PWRDN (PDRS, OBSS HANDOFF)	ISS EVA SYSTEMS: 1.240 POST EVA With H2O RECHARGE Steps 37, 39, 66 not required MCC-H will perform Steps 43, 67-68 Ref. STS-134 CONSUMABLES TRACKING CC	
	JOINT OPS: 3.123 O2 TRANSFER SETUP (POST PREBREATHE USING SHUTTLE O2)		

STS-134/ULF6 FD11

GMT Date 04/29 (119) | W | T D R S E | Z | D/N | O R B | MET Day 009 | ATT

20:00 21:00 22:00 23:00

156 157 158 159

20:00 21:00 22:00 23:00 00:00

BIAS-XLV-ZVV

MS2 ROBERTO	MS3 DREW	MS4 TAZ	NOTES
MEAL			
TRANSFER OPS Ref. Middeck Transfer List		OBSS EFGF/PDFG SWAP	
		OTP INSPECT	
	IVA SUPPORT EVA 4	ELC3 SPDM ARM RLS	NO UNISOLATED EXERCISE [SPDM EDF RELEASE]
		HPGT FRGF MLI INSTALL	
		CLEANUP/INGRESS	
		ISS EVA SYS: C-LK DPRS/RPRS CC PRE REPRESS ISS EVA SYSTEMS: CREWLOCK DEPRESS/REPRESS CC Perform CREWLOCK REPRESS	
POST OBSS TRANSFER PWRDN (PDRS, OBSS HANDOFF)	EXERCISE	ISS EVA SYSTEMS: 1.240 POST EVA With H2O RECHARGE Steps 37, 39, 66 not required MCC-H will perform Steps 43, 67-68 Ref. STS-134 CONSUMABLES TRACKING CC	
TRANSFER BRIEF PREP Coordinate with transfer counterparts			
TRANSFER BRIEF Call down status to MCC	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)		

STS-134/ULF6 FD11

GMT Date 04/29 (119) | TDRS W E Z | D/N | ORB 159 160 161 | MET Day 010 | ATT BIAS_XLV_ZVV

MET	CDR MARK	PLT BOX	MS1 SPANKY	NOTES
00:00	ISS EVA SYSTEMS: 1.240 POST EVA With H2O RECHARGE Steps 37, 39, 66 not required MCC-H will perform Steps 43, 67-68 Ref. STS-134 CONSUMABLES TRACKING CC	JOINT OPS: 3.123 O2 TRANSFER SETUP (POST PREBREATHE USING SHUTTLE O2)	POST EVA See pg. 3-120	
	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	JOINT OPS: 3.116 HIGH PRESSURE TANK O2 XFER Step 2	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
		ILLUMINATOR OPS (CC,TV) ILLUMINATORS ON-A,D PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)		
01:00	L9 PS AUD A/G 1,2 (two) - OFF POST EVA TAGUP Private Conference via A/G 2		L9 PS AUD A/G 1,2 (two) - OFF POST EVA TAGUP Private Conference via A/G 2	
	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)		PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
	L9 PS AUD A/G 1,2 (two) - OFF PRIVATE MEDICAL CONFERENCE Private Conference via A/G 2			
	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)			
02:00				
03:00	CREW WAKE AT 10/11:00			
	SLEEP	SLEEP	SLEEP	
04:00				

STS-134/ULF6 FD11

GMT Date 04/29 (119) | W | T D R S E | Z | D/N | O R B | MET Day 010 | A T T

MS2 ROBERTO | MS3 DREW | MS4 TAZ | NOTES

00:00 — 01:00 — 02:00 — 03:00

159 — 160 — 161

BIAS-XLV-ZVV

00:00 — 04:00

MS2 ROBERTO

CGBA STATUS CHK; GLACIER STATUS CHK (CC)
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

SLEEP

MS3 DREW

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

L9 PS AUD A/G 1,2 (two) - OFF
POST EVA TAGUP
Private Conference via A/G 2

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

SLEEP

MS4 TAZ

POST EVA See pg. 3-121
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

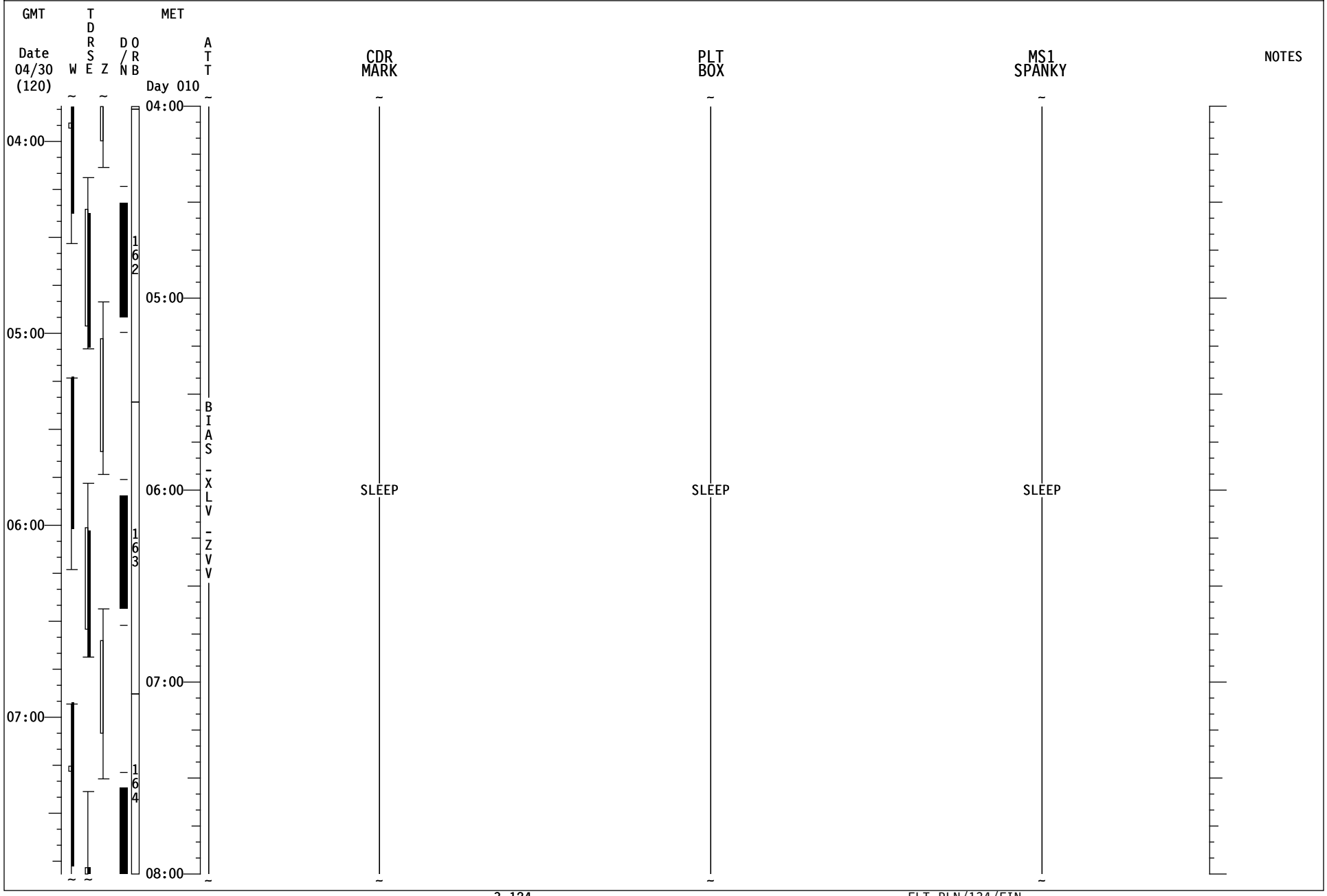
L9 PS AUD A/G 1,2 (two) - OFF
POST EVA TAGUP
Private Conference via A/G 2

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

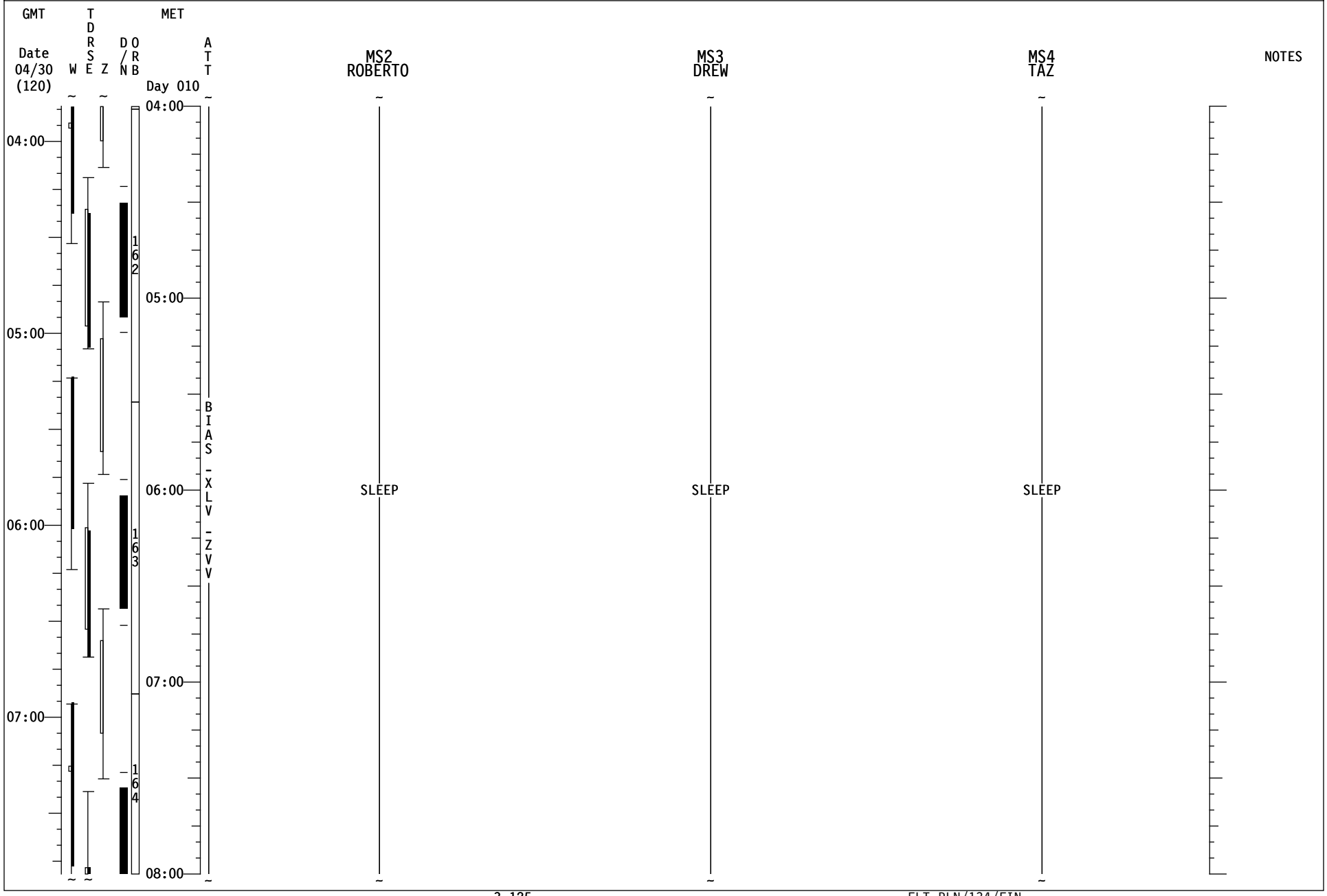
SLEEP

CREW WAKE AT 10/11:00

STS-134/ULF6 FD11



STS-134/ULF6 FD11



STS-134/ULF6 FD12

GMT Date 04/30 (120) | W | T D R S E | Z | D/N | O R B | MET Day 010 | ATT

08:00 09:00 10:00 11:00

08:00 09:00 10:00 11:00 12:00

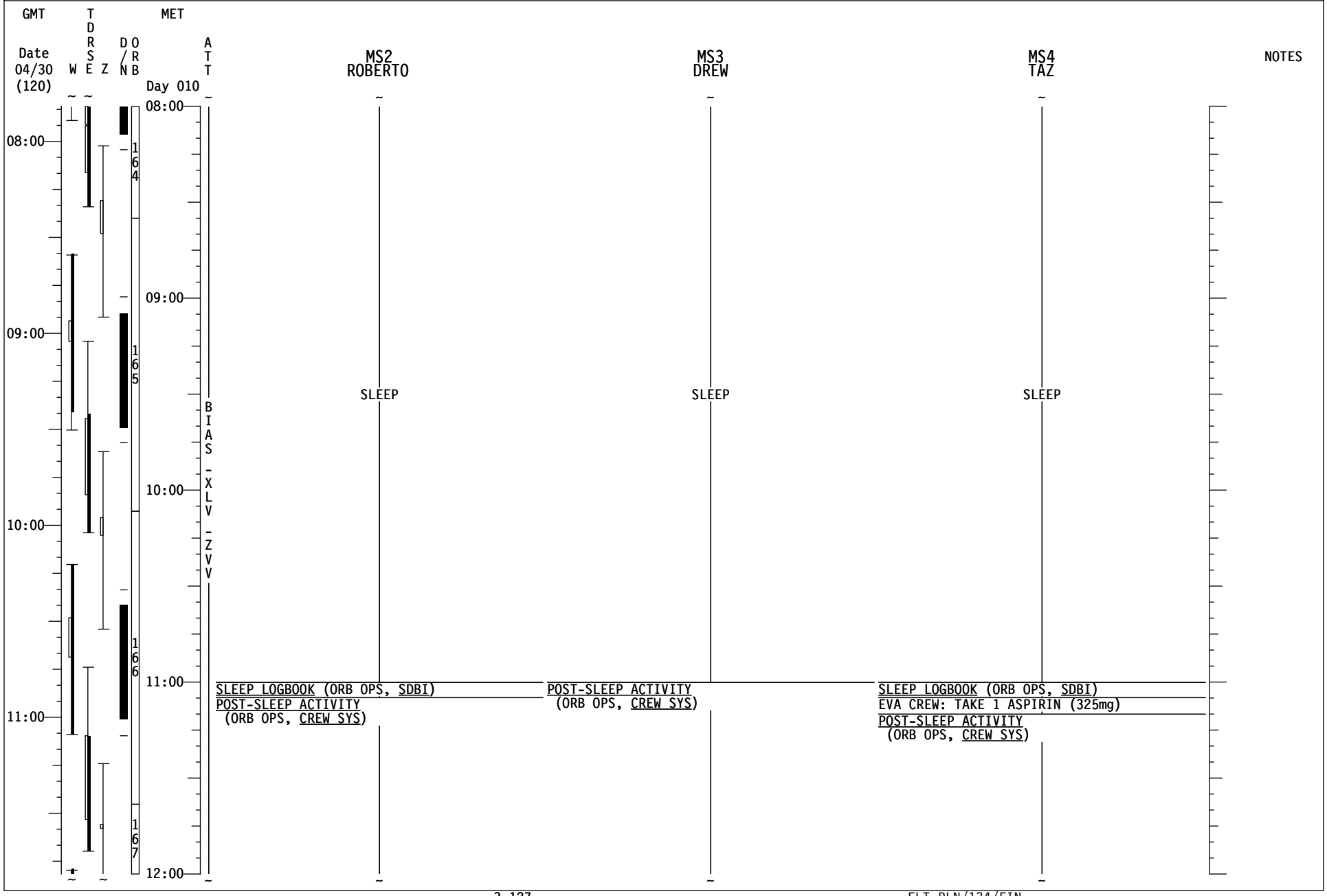
164 165 166 167

BIAS-XLV-ZVV

CDR MARK	PLT BOX	MS1 SPANKY	NOTES
SLEEP	SLEEP	SLEEP	
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	SLEEP LOGBOOK (ORB OPS, SDBI) POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	EVA CREW: TAKE 1 ASPIRIN (325mg) POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	

FD12 EZ ACTIVITIES:
- √OCAC FILTER
- √MDDK DUCT SCREEN
- HARD REBOOT: STS-2(WINDECOM), STS-3(KFX) & STS-4(RPOP)

STS-134/ULF6 FD12



STS-134/ULF6 FD12

GMT Date 04/30 (120) | W | TDRS E | Z | D/N | ORB | MET Day 010 | ATT

CDR MARK

- 12:00 POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- BIAS-XLV
- PUBLIC AFFAIRS EVENT ISS KU AVAIL: 13:38-14:14 NODE 2: Mark
- 14:00 POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- ZVV
- 15:00 PWR FILL (ORB OPS, ECLS) Init Fill #1 Ref. MSG XXX
- PWR FILL (ORB OPS, ECLS) Init Fill #2 Ref. MSG XXX
- 16:00 NOMINAL H2O CONFIG (ORB OPS, ECLS) √MCC for FES PRI A

PLT BOX

- POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- ILLUMINATOR OPS (CC,TV) ILLUMINATORS OFF-ALL
- IMU STAR OF OPPORTUNITY ALIGN (ORB OPS,GNC)
- EXERCISE
- TRANSFER OPS Ref. Middeck Transfer List

MS1 SPANKY

- POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- POST EVA EMU RECONFIGURATION (EVA, AIRLOCK CONFIG)

NOTES

STS-134/ULF6 FD12

GMT Date 04/30 (120) | W | T D R S E | Z | D/N | O R B | MET Day 010 | A T T

MS2 ROBERTO | MS3 DREW | MS4 TAZ | NOTES

12:00 — 13:00 — 14:00 — 15:00 — 16:00

ORB: 167 — 168 — 169

ATT: BIAS-XLV-ZVV

MS2 ROBERTO

- POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- L17 Check MCIU filter screen
- CGBA STATUS CHK; GLACIER STATUS CHK (CC)
- IENOS OPS (ASSY OPS, PAYLOADS) Step 1.4
- DAILY TRANSFER LIST UPDATE Ref. Transfer List & MSG XXX
- TRANSFER OPS Ref. Middeck Transfer List
- EXERCISE

MS3 DREW

- POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- POST EVA EMU RECONFIGURATION (EVA, AIRLOCK CONFIG)

MS4 TAZ

- POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- TRANSFER OPS Ref. Middeck Transfer List

STS-134/ULF6 FD12

GMT Date 04/30 (120) | W | TDRS E | Z | D/N | ORB | MET Day 010 | ATT

CDR MARK	PLT BOX	MS1 SPANKY	NOTES
PWR TRANSFER Transfer 1 PWR to ISS	TRANSFER OPS Ref. Middeck Transfer List	POST EVA EMU RECONFIGURATION (EVA, AIRLOCK CONFIG) POST EVA TRANSFER TO SHUTTLE (EVA, AIRLOCK CONFIG)	
CREW CHOICE DOWNLINK (NODE 2: All Crew) ISS KU AVAIL: 15:52-16:35	CREW CHOICE DOWNLINK (NODE 2: All Crew) ISS KU AVAIL: 15:52-16:35	CREW CHOICE DOWNLINK (NODE 2: All Crew) ISS KU AVAIL: 15:52-16:35	
MEAL	MEAL	MEAL	
CREW CONFERENCE ISS KU AVAIL: 17:27-18:07 NODE 2: All Crew	CREW CONFERENCE ISS KU AVAIL: 17:27-18:07 NODE 2: All Crew	CREW CONFERENCE ISS KU AVAIL: 17:27-18:07 NODE 2: All Crew	
CREW PHOTO	CREW PHOTO	CREW PHOTO	
	TRANSFER OPS Ref. Middeck Transfer List		
O2 REPRESS INIT [A]			
[A] OCAC PWR - OFF C5 DIRECT O2 vlv - OP			
FACE IN SPACE DOWNLINK (Node 2: Mark) ISS KU AVAIL: 19:06-19:44			

Time scale: 16:00, 17:00, 18:00, 19:00, 20:00

170 171 172

BIAS-XLV-ZVV

STS-134/ULF6 FD12

GMT Date 04/30 (120) | W | TDRS E | Z | D/N | ORB | MET Day 010 | ATT

MS2 ROBERTO | MS3 DREW | MS4 TAZ | NOTES

16:00

EXERCISE

POST EVA EMU RECONFIGURATION (EVA, AIRLOCK CONFIG)

POST EVA TRANSFER TO SHUTTLE (EVA, AIRLOCK CONFIG)

TRANSFER OPS
Ref. Middeck Transfer List

CREW CHOICE DOWNLINK (NODE 2: All Crew)
ISS KU AVAIL: 15:52-16:35

170

17:00

MEAL

BIAS-XLV-ZVV

CREW CONFERENCE
ISS KU AVAIL: 17:27-18:07
NODE 2: All Crew

18:00

CREW PHOTO

171

TRANSFER OPS
Ref. Middeck Transfer List

19:00

172

20:00

STS-134/ULF6 FD12

GMT Date 04/30 (120) | W | TDRS E | Z | D/N | ORB | MET Day 010 | ATT

CDR MARK | PLT BOX | MS1 SPANKY | NOTES

20:00 — 21:00 — 22:00 — 23:00 — 00:00

ORB: 172, 173, 174

ATT: BIAS-XLV-ZVV

20:00–21:00

TRANSFER OPS
Ref. Middeck Transfer List

EXERCISE

[B] C5 DIRECT O2 vlv - CL
OCAC PWR - ON

21:00–22:00

O2 REPRESS TERM (On MCC GO) [B]

JOINT OPS: 3.116 HIGH PRESSURE TANK O2 XFER
Steps 3.2-3.3

JOINT OPS: 3.118 OXYGEN TRANSFER TEARDOWN
Steps 1-6, MCC-H will perform steps 1.6 and 5.5

SHUTTLE CONDENSATE COLLECTION
(ORB OPS, ECLS) Perform CHANGEOUT
Ref. MSG XXX

1.103 DISCONNECT ORBITER SSC
(ASSY OPS, ACT & C/O)

POC: 2.303 PCS DEACTIVATION

22:00–23:00

FAREWELL | FAREWELL | FAREWELL

1.101 SHUTTLE/ISS DUCT REMOVAL, STORRM DTO & HATCH CLOSING
(ASSY OPS, ACT & C/O)

1.101 SHUTTLE/ISS DUCT REMOVAL, STORRM DTO & HATCH CLOSING
(ASSY OPS, ACT & C/O)

WLES RNDZ TOOLS C/O PREP (ORB OPS, WLES)

TFL 192

EXERCISE

23:00–00:00

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

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

TFL 184

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

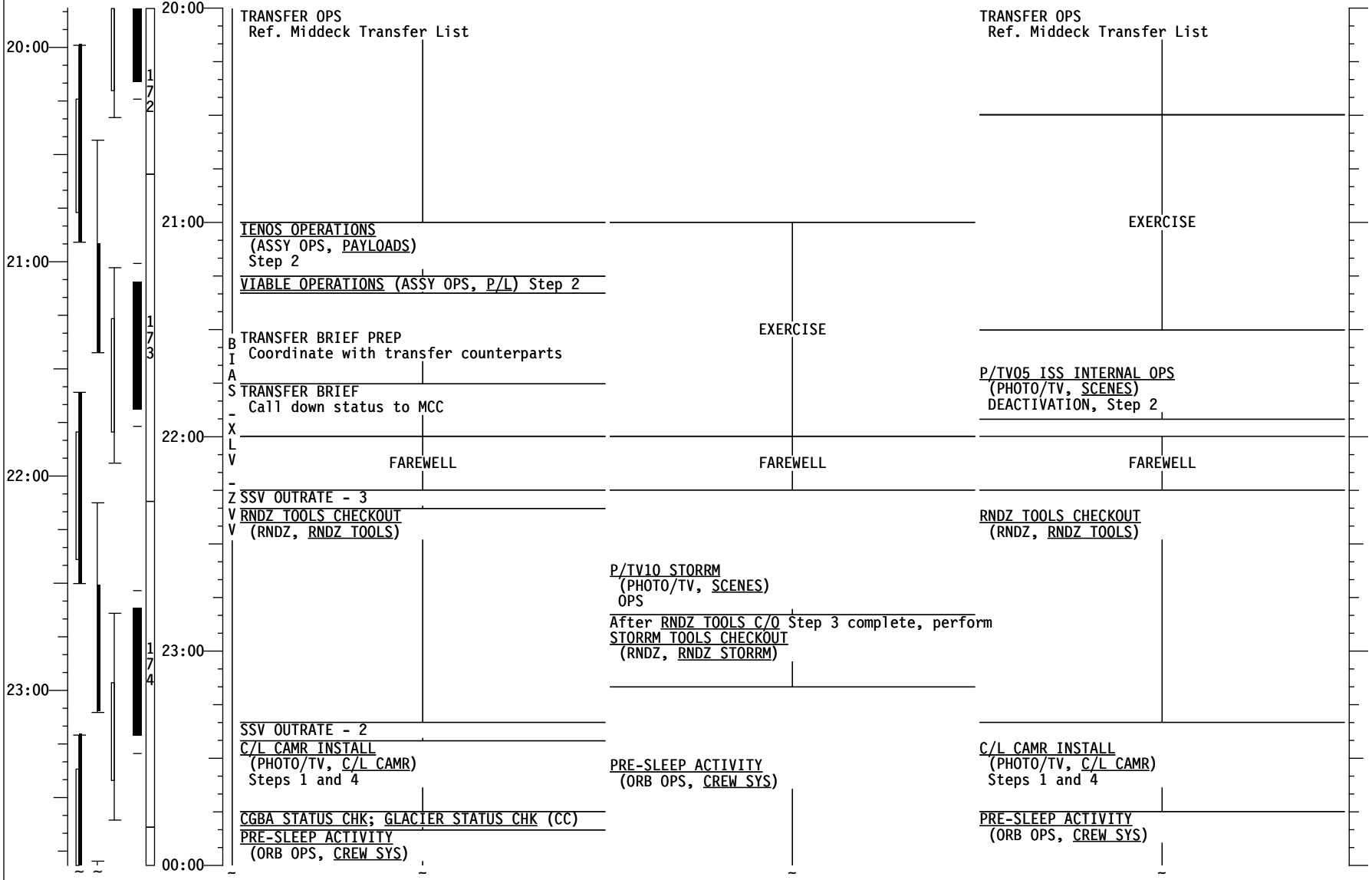
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

PCS ACTIVATION [C]
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

[C] On MCC GO:
PCS ACTIVATION
MO10W 14.7 CAB REG INLET SYS 1 VLV - OP

STS-134/ULF6 FD12

GMT Date 04/30 (120) | W | TDRS E | Z | D/N | ORB | MET Day 010 | ATT



MS2 ROBERTO

TRANSFER OPS
Ref. Middeck Transfer List

IENOS OPERATIONS
(ASSY OPS, PAYLOADS)
Step 2

VIABLE OPERATIONS (ASSY OPS, P/L) Step 2

TRANSFER BRIEF PREP
Coordinate with transfer counterparts

TRANSFER BRIEF
Call down status to MCC

FAREWELL

SSV OUTRATE - 3

RNDZ TOOLS CHECKOUT
(RNDZ, RNDZ TOOLS)

SSV OUTRATE - 2

C/L CAMR INSTALL
(PHOTO/TV, C/L CAMR)
Steps 1 and 4

CGBA STATUS CHK; GLACIER STATUS CHK (CC)

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

MS3 DREW

EXERCISE

FAREWELL

P/TV10 STORRM
(PHOTO/TV, SCENES)
OPS

After RNDZ TOOLS C/O Step 3 complete, perform STORRM TOOLS CHECKOUT
(RNDZ, RNDZ STORRM)

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

MS4 TAZ

TRANSFER OPS
Ref. Middeck Transfer List

EXERCISE

P/TV05 ISS INTERNAL OPS
(PHOTO/TV, SCENES)
DEACTIVATION, Step 2

FAREWELL

RNDZ TOOLS CHECKOUT
(RNDZ, RNDZ TOOLS)

C/L CAMR INSTALL
(PHOTO/TV, C/L CAMR)
Steps 1 and 4

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

NOTES

STS-134/ULF6 FD12

GMT Date 04/30 (120) | W | T D R S E | Z | D/N | O R B | MET Day 011 | A T T

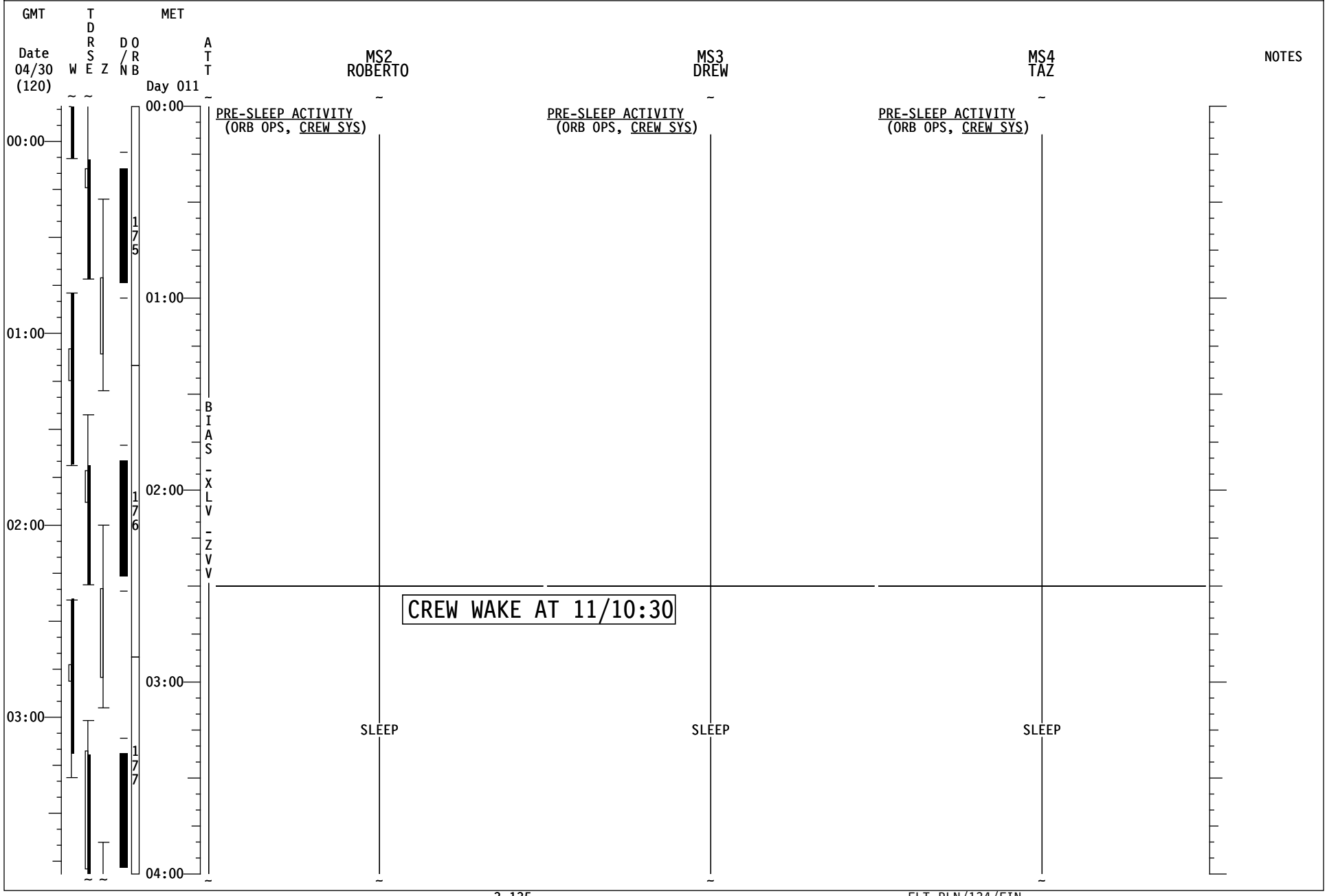
CDR MARK	PLT BOX	MS1 SPANKY	NOTES
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
L9 PS AUD A/G 1,2 (two) - OFF PRIVATE MEDICAL CONFERENCE Private Conference via A/G 2			
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)			
CREW WAKE AT 11/10:30			
SLEEP	SLEEP	SLEEP	

Time scale: 00:00, 01:00, 02:00, 03:00, 04:00

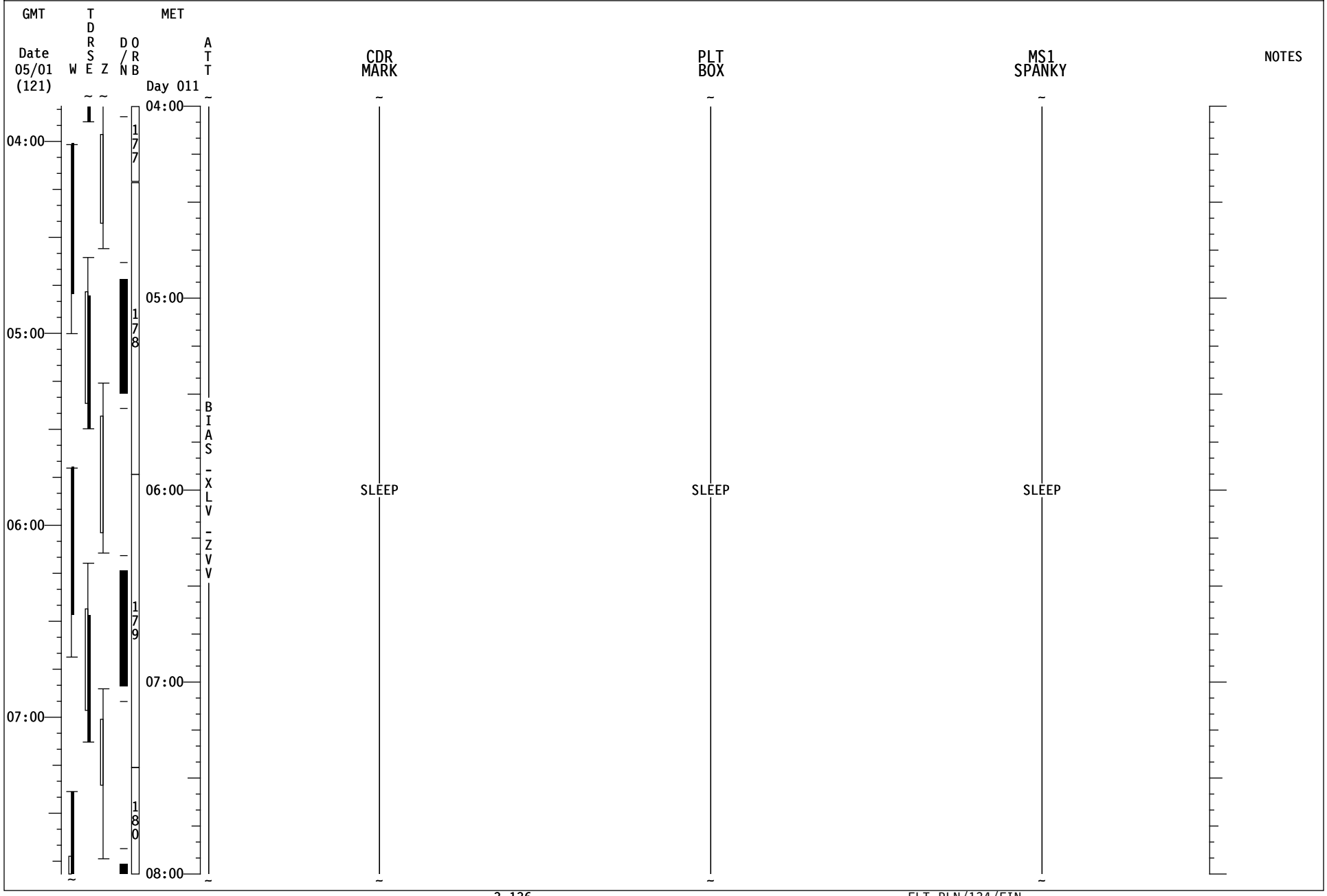
ORB: 175, 176, 177

ATT: BIAS-XLV-ZVV

STS-134/ULF6 FD12



STS-134/ULF6 FD12



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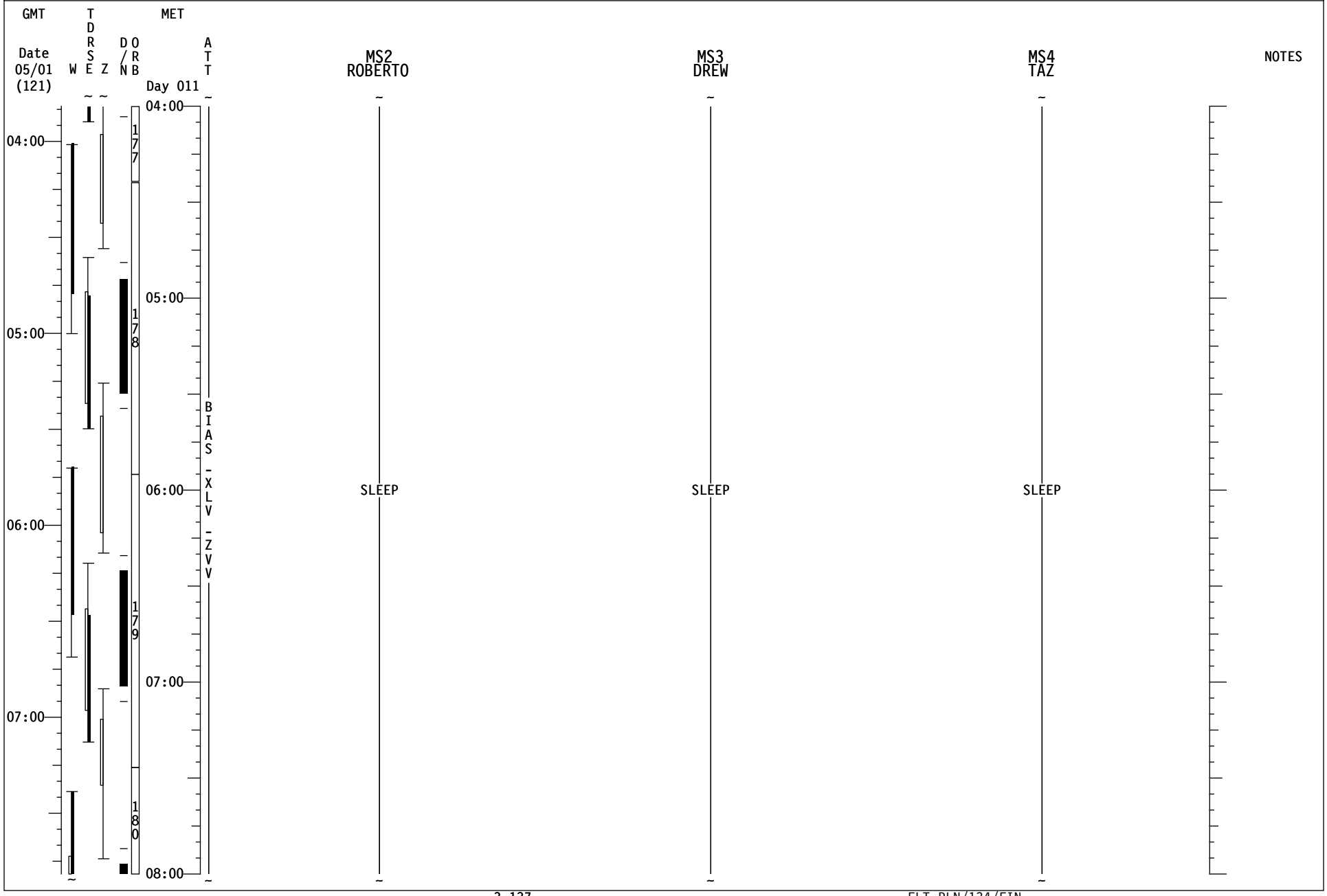
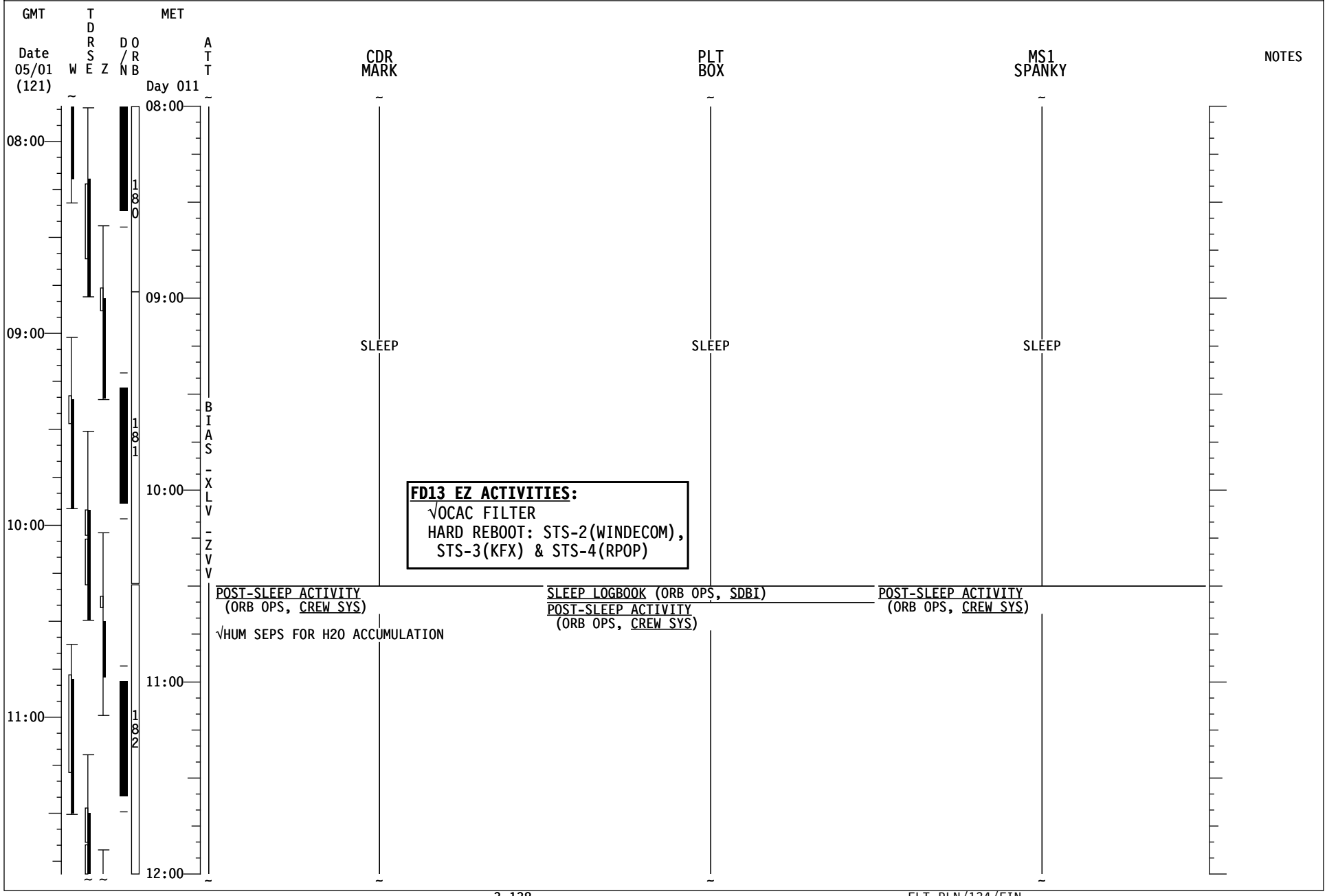
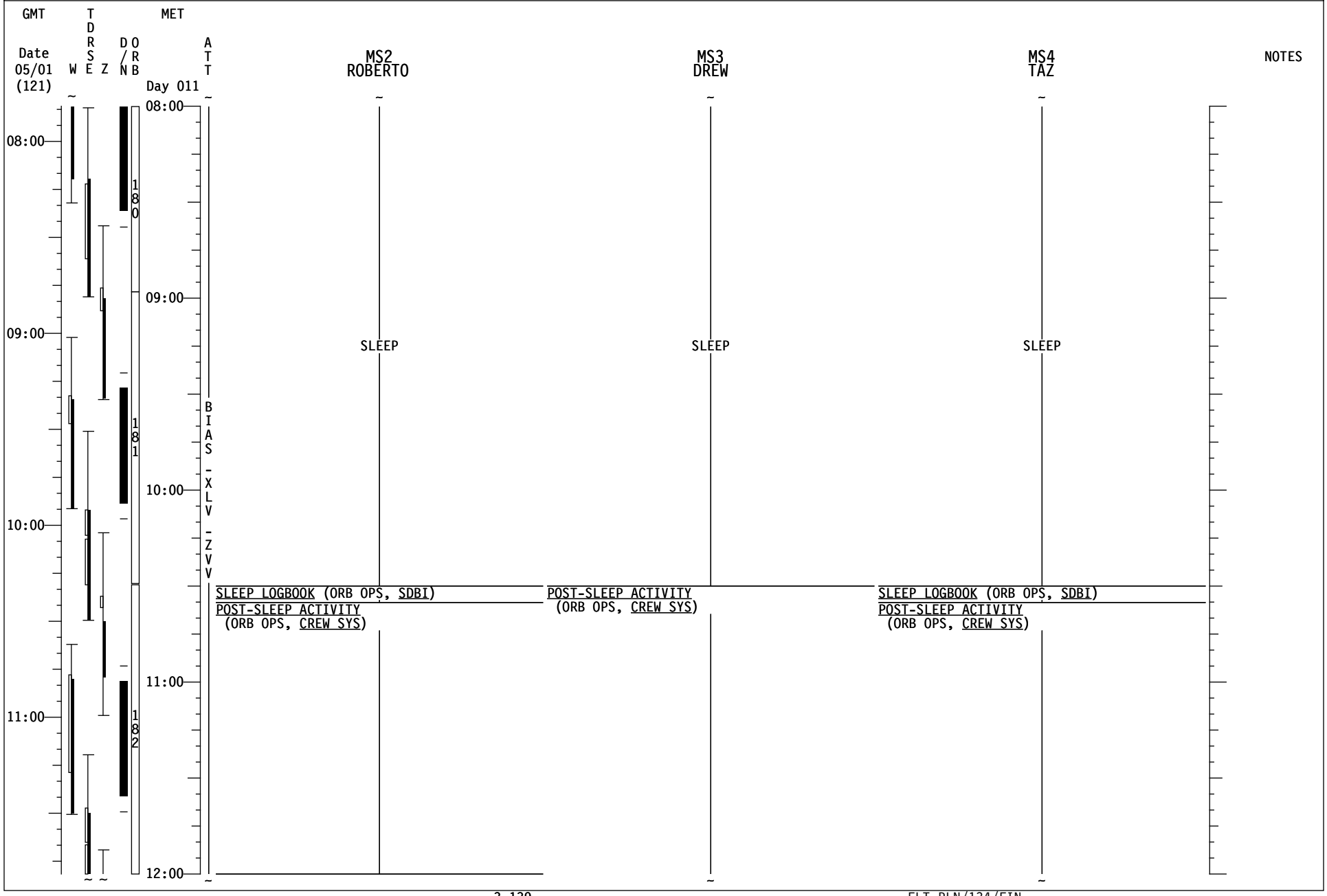


STS-134/ULF6 FD13

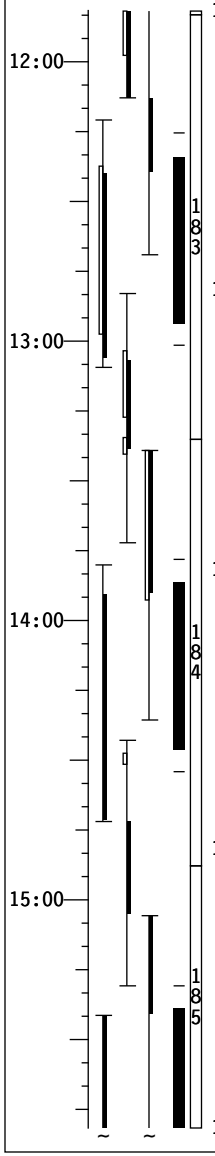


STS-134/ULF6 FD13



STS-134/ULF6 FD13

GMT Date 05/01 (121) | W | TDRS E | Z | D/N | ORB | MET Day 011 | ATT



BIAS-XLV-ZVV

UNDK/FLYAROUND/SEP

MET	CDR MARK	PLT BOX	MS1 SPANKY	NOTES
12:00	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
		A A15 OPCU 1,2 CONV (two) - OFF R1 MN BUS TIE B,C (two) - OFF (tb-OFF)		
		IMU STAR OF OPPORTUNITY ALIGN (ORB OPS,GNC)		
	O6 S TRK PWR -Z - ON PRIORITY PWRUP GRP B (ORB PKT, PRIOR PWRDN) Step 12 (IMU 2),6 (Triple G2)	O6 S TRK PWR -Z - ON PRIORITY PWRUP GRP B (ORB PKT, PRIOR PWRDN) Step 12 (IMU 2),6 (Triple G2)		
		SSPTS OPCU DEACT A		
13:00	H/O ATT CNTRL CMG TA TO ORB: √MCC for DAP	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	L17 Check MCIU filter screen	
	MNVR (TRK) UNDOCK TG=2 BV=5 P=180 Y=0 OM=0 A12/AUTO/VERN Init TRK			
		GPS PWRUP (ORB OPS, GNC) Perform for GPS 1,3		
	UNDOCKING/SEPARATION TIMELINE (RNDZ, UNDOCK/SEP T/L)	UNDOCKING/SEPARATION TIMELINE (RNDZ, UNDOCK/SEP T/L)	UNDOCKING/SEPARATION TIMELINE (RNDZ, UNDOCK/SEP T/L)	
14:00				UPLINK β21 + Mask Box 30,40
	< UNDOCK (11/14:21)			
	SEP/FLYAROUND FLYAROUND SEP 1 BURN (RNDZ, UNDOCK/SEP T/L)	SEP/FLYAROUND FLYAROUND SEP 1 BURN (RNDZ, UNDOCK/SEP T/L)	SEP/FLYAROUND FLYAROUND SEP 1 BURN (RNDZ, UNDOCK/SEP T/L)	
15:00				
	< SEP1 TIG (15:34)			
	RE-RENDEZVOUS TIMELINE (RNDZ, UNDOCK/SEP T/L)	RE-RENDEZVOUS TIMELINE (RNDZ, UNDOCK/SEP T/L)	RE-RENDEZVOUS TIMELINE (RNDZ, UNDOCK/SEP T/L)	
16:00				

STS-134/ULF6 FD13

GMT Date 05/01 (121) | W | TDRS E | TDRS Z | D/N | ORB | MET Day 011 | ATT

MET	ATT	MS2 ROBERTO	MS3 DREW	MS4 TAZ	NOTES
12:00	BIAS-XLV-ZVV	CGBA STATUS CHK; GLACIER STATUS CHK (CC) POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
			EXERCISE		
13:00		P/TV03 UNDOCK (PHOTO/TV, SCENES) Setup	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	EXERCISE	
	UNDK/FLYAROUND/SEP	P/TV03 UNDOCK (PHOTO/TV, SCENES) OPS	UNDOCKING/SEPARATION TIMELINE (RNDZ, UNDOCK/SEP T/L)	UNDOCKING/SEPARATION TIMELINE (RNDZ, UNDOCK/SEP T/L)	
14:00		< UNDOCK (11/14:21)	SEP/FLYAROUND FLYAROUND SEP 1 BURN (RNDZ, UNDOCK/SEP T/L)	SEP/FLYAROUND FLYAROUND SEP 1 BURN (RNDZ, UNDOCK/SEP T/L)	
15:00		RE-RENDEZVOUS TIMELINE (RNDZ, UNDOCK/SEP T/L)	RE-RENDEZVOUS TIMELINE (RNDZ, UNDOCK/SEP T/L)	RE-RENDEZVOUS TIMELINE (RNDZ, UNDOCK/SEP T/L)	
16:00					

ORB: 183, 184, 185

STS-134/ULF6 FD13

GMT Date 05/01 (121) | W | T D R S E | Z | D/N | O R B | MET Day 011 | A T T

CDR MARK | PLT BOX | MS1 SPANKY | NOTES

16:00 — 17:00 — 18:00 — 19:00

ORB: 185, 186, 187, 188

ATT: STORRM

16:00 — 17:00 — 18:00 — 19:00 — 20:00

RE-RENDEZVOUS TIMELINE (RNDZ, UNDOCK/SEP T/L)

^ SEP2 TIG (16:02)

< NH2 TIG (17:02)

< NSR TIG (17:50)

< TPI TIG (18:24)

< SEP3 TIG (19:05)

MNVR (TRK) BIAS -ZLV +YVV (DUMP)
TG=2 BV=3 OM=230
A1/AUTO/VERN Init TRK

PRIORITY PWRDN GRP B
(ORB PKT, PRIOR PWRDN)
Steps 5,6 (Single G2),9,10 & 12 (IU 2)

SUPPLY/WASTE WATER DUMP See pg. 3-144

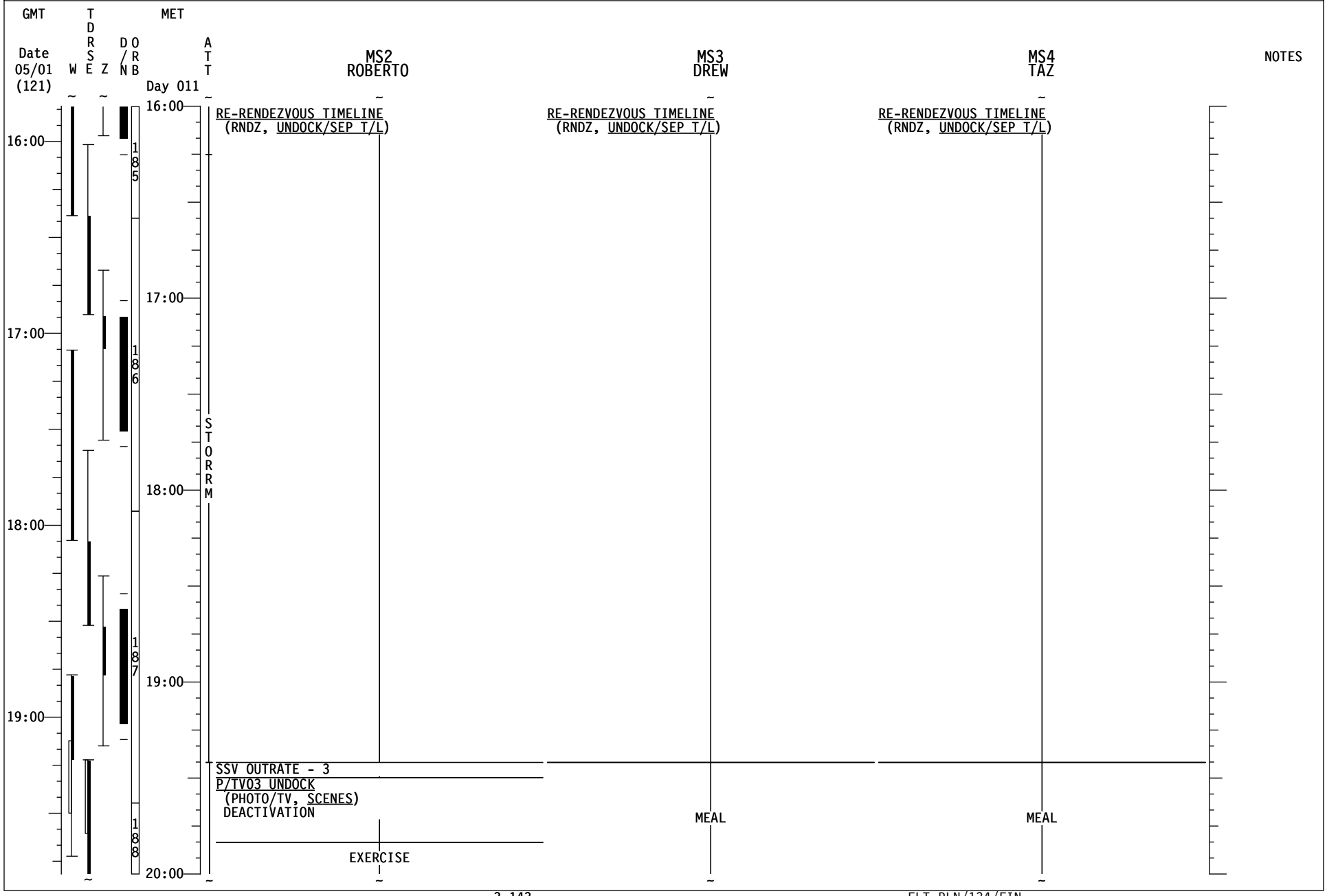
GPS PWRDN (ORB OPS, GNC) Perform for GPS 1,3

L12 OIU PWR - OFF (tb-bp)

MEAL

TFL 199
UPLINK
β21 + Mask

STS-134/ULF6 FD13



STS-134/ULF6 FD13

GMT Date 05/01 (121) | TDRS W E Z | D/N | ORB 188 189 190 | MET Day 011 | ATT -ZLV +YVV -ZLV -XVV

CDR MARK

20:00 SUPPLY/WASTE WATER DUMP
(ORB OPS, ECLS)
Initiate Supply/Waste Dump
Ref. MSG XXX

MEAL

21:00

EXERCISE

22:00

23:00 PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

00:00

PLT BOX

MEAL

SUPPLY/WASTE WATER DUMP
(ORB OPS, ECLS)
Terminate Supply/Waste Dump
Ref. MSG XXX

MNVR (TRK) -ZLV -XVV
TG=2 BV=3 OM=0
A1/AUTO/VERN Init TRK

HEATER RECONFIG-CONFIG B (ORB OPS, EPS)
RCS REGULATOR RECONFIG (ORB OPS, RCS)
COMM STRING 1 C/O (PART A)
(ORB OPS, COMM/INST)
CABIN TEMP CONTROLLER RECNFG - 2(1)
(ORB OPS, ECLS)

EXERCISE

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

MS1 SPANKY

MEAL

JOINT OPS: 6.106 SSOR DEACTIVATION

WLES DOCK/UNDOCK RECOVERY (ORB OPS, WLES)
POST UNDOCK PGSC CONFIG
Configure PGSCs per usage chart

EXERCISE

RMS PWRDN (PDRS, RMS PWRDN)
Steps 3, 5-7

DIGITAL VIA VTR
(CUE CARD, DIGITAL PLAYBACK)
Undocking
KU TDRE (22:47-23:42)

OCA RATE RECONFIG (48Mbps) B
PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

B RECONFIGURE OCA DOWNLINK RATE (48Mbps)
(ORB OPS, PGSC) Part C, Omit step 4

NOTES

STS-134/ULF6 FD13

GMT Date 05/01 (121) | W | TDRS E | Z | D/N | ORB 188 189 190 | MET Day 011 | ATT -ZLV +YVV -ZLV -XVV

MS2 ROBERTO	MS3 DREW	MS4 TAZ	NOTES
EXERCISE	MEAL	MEAL	
MEAL	EVA UNPACK AND STOW (EVA, AIRLOCK CONFIG)	EVA UNPACK AND STOW (EVA, AIRLOCK CONFIG)	
RMS PWRDN (PDRS, RMS PWRDN) Steps 3, 5-7	POST ISS EVA ENTRY PREP (EVA, POST EVA ENTRY PREP)	POST ISS EVA ENTRY PREP (EVA, POST EVA ENTRY PREP)	
CGBA STATUS CHK; GLACIER STATUS CHK (CC) PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	

STS-134/ULF6 FD13

GMT Date 05/01 (121) | W | T D R S E | Z | D/N | O R B | MET Day 012 | ATT | CDR MARK | PLT BOX | MS1 SPANKY | NOTES

00:00 — 01:00 — 02:00 — 03:00

191 — 192 — 193

ATT: -ZLV- -XVV-

00:00 — 01:00 — 02:00 — 03:00 — 04:00

06 √UHF MODE - OFF
L9 PS AUD A/G 1,2 (two) - OFF
PRIVATE MEDICAL CONFERENCE, via A/G 2

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

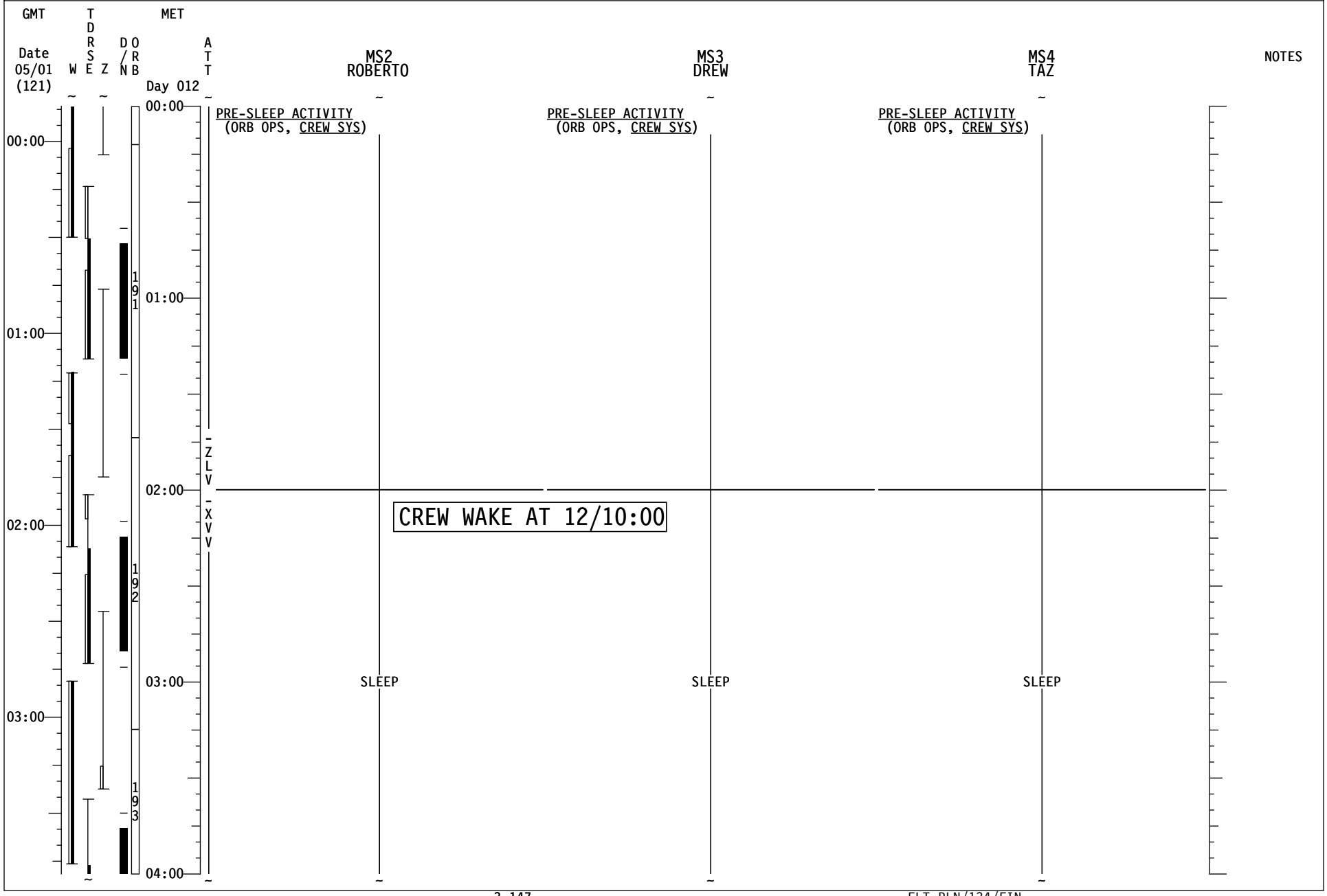
CREW WAKE AT 12/10:00

SLEEP

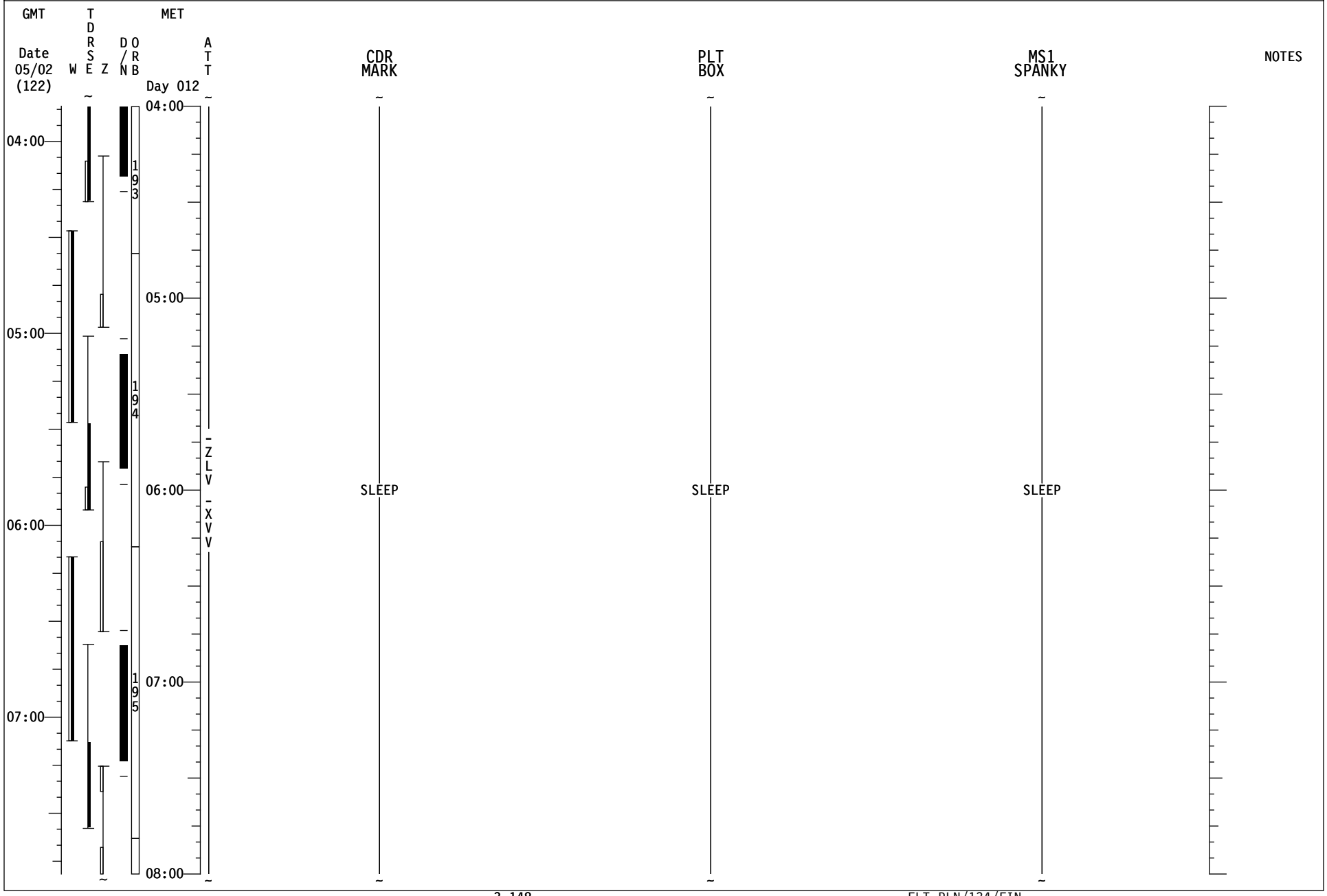
SLEEP

SLEEP

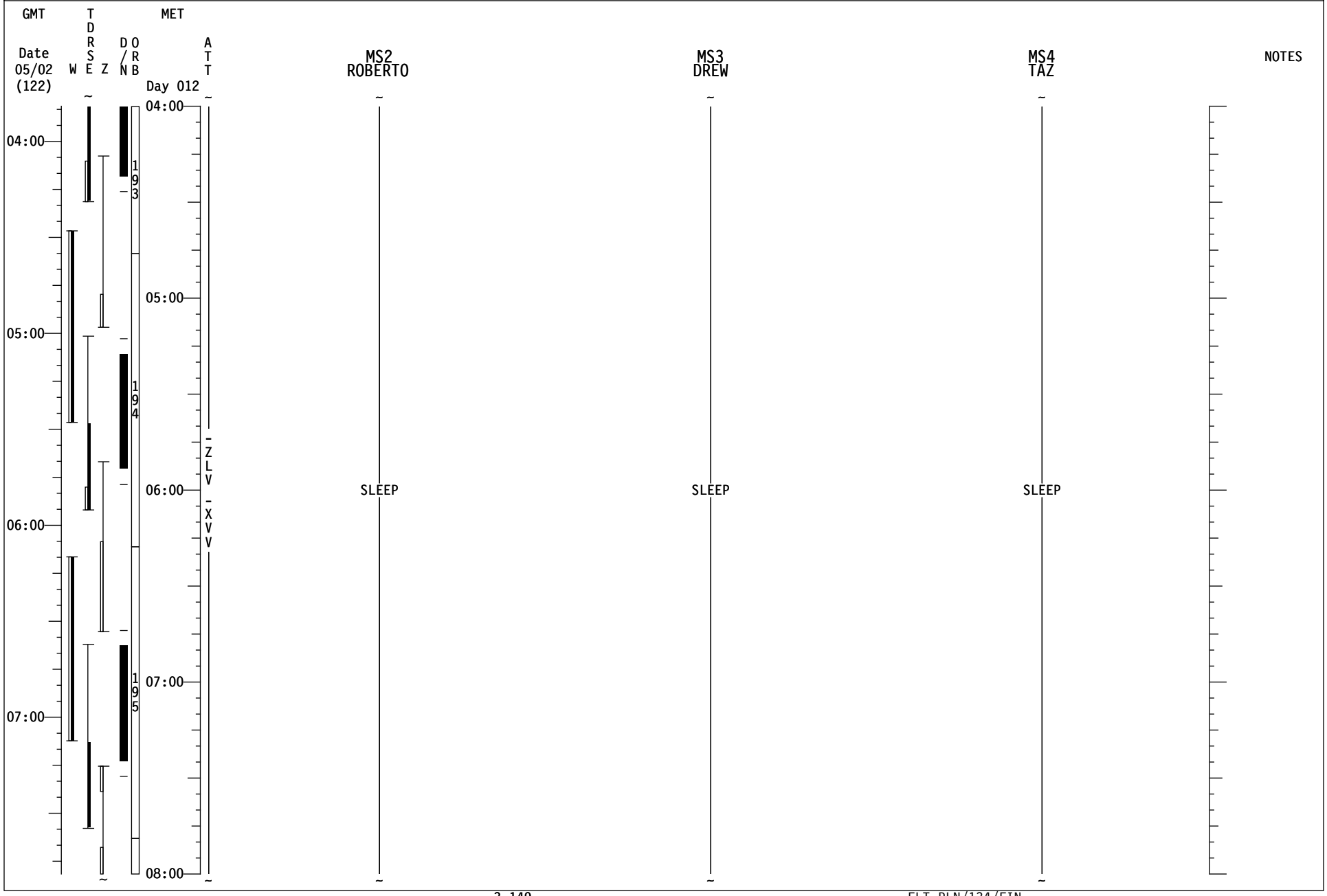
STS-134/ULF6 FD13



STS-134/ULF6 FD13



STS-134/ULF6 FD13



STS-134/ULF6 FD14

GMT Date 05/02 (122) | W | T D R S E | Z | D/N | O R B | MET Day 012 | ATT

08:00 09:00 10:00 11:00

196 197 198

ZLV XVV

CDR MARK	PLT BOX	MS1 SPANKY	NOTES
SLEEP	SLEEP	SLEEP	

FD14 CABIN STOW ACTIVITIES:
Remove loose items stored in A/L
Perform MS Seat Installation
Perform FLIGHTS WITH RETENTION NET
(REF DATA, ENTRY STOW)

FD14 EZ ACTIVITIES:
√OCAC FILTER
FLUID LOADING PREP
Fill drink containers per MSG XXX
HARD REBOOT: STS-2(WINDECOM),
STS-3(KFX) & STS-4(RPOP)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
√HUM SEPS FOR H2O ACCUMULATION

SLEEP LOGBOOK (ORB OPS, SDBI)
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

A W/B STEAM VENT HTR ACT
R2 √BLR CNTLR/HTR(three) -B
PWR (three) -ON

W/B STEAM VENT HTR ACT A

PUBLIC AFFAIRS EVENT
KU AVAIL: 11:37-12:05
FD: All Crew

PUBLIC AFFAIRS EVENT
KU AVAIL: 11:37-12:05
FD: All Crew

PUBLIC AFFAIRS EVENT
KU AVAIL: 11:37-12:05
FD: All Crew

STS-134/ULF6 FD14

GMT Date 05/02 (122) | W | TDRS E | TDRS Z | D/N | ORB 196 197 198 | MET Day 012 | ATT ZLV XVV

MS2 ROBERTO | MS3 DREW | MS4 TAZ | NOTES

08:00 — 09:00 — 10:00 — 11:00 — 12:00

MS2 ROBERTO

- 09:00 SLEEP
- 10:00 SLEEP LOGBOOK (ORB OPS, SDBI)
- POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- PUBLIC AFFAIRS EVENT KU AVAIL: 11:37-12:05 FD: All Crew

MS3 DREW

- 09:00 SLEEP
- 10:00 POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- 11:00 B RECONFIGURE OCA DOWNLINK RATE (2 Mbps) (ORB OPS, PGSC) Part D then A, Omit step 4
- OCA RATE RECONFIG (2 Mbps) B
- PUBLIC AFFAIRS EVENT KU AVAIL: 11:37-12:05 FD: All Crew

MS4 TAZ

- 09:00 SLEEP
- 10:00 SLEEP LOGBOOK (ORB OPS, SDBI)
- POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- HD DIGITAL CC DLNLK (PHOTO/TV, CANON G1)
- PUBLIC AFFAIRS EVENT KU AVAIL: 11:37-12:05 FD: All Crew

STS-134/ULF6 FD14

GMT Date 05/02 (122) | W | T D R S E | Z | D/N | O R B | MET Day 012 | ATT

12:00 13:00 14:00 15:00

198 199 200 201

12:00 13:00 14:00 15:00 16:00

-ZLV -XVV -ZLV R -ZLV -XVV

CDR MARK	PLT BOX	MS1 SPANKY	NOTES
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
		FILTER CLEANING (IFM, SCHEDULED MAINTENANCE)	
IMU STAR OF OPPORTUNITY ALIGN (ORB OPS,GNC)			TFL 161
FCS CHECKOUT (ORB OPS, GNC)	FCS CHECKOUT (ORB OPS, GNC)		
		EXERCISE	
RCS HOT FIRE TEST (ORB OPS, RCS)	RCS HOT FIRE TEST (ORB OPS, RCS)		
PILOT WITH RHC (ORB OPS, PGSC)	PILOT WITH RHC (ORB OPS, PGSC)		
		SHUTTLE CONDENSATE COLLECTION (ORB OPS, ECLS) TEARDOWN	
DEORBIT PREP BRIEFING	DEORBIT PREP BRIEFING	DEORBIT PREP BRIEFING	

STS-134/ULF6 FD14

GMT Date 05/02 (122) | W | T D R S E | Z | D/N | ORB 198 199 200 201 | MET Day 012 | ATT -ZLV -XVV -ZLV R -ZLV -XVV

MS2 ROBERTO	MS3 DREW	MS4 TAZ	NOTES
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
CGBA STATUS CHK; GLACIER STATUS CHK (CC)			
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)		SSV DEACTIVATION (PHOTO/TV, SSV)	
FCS CHECKOUT (ORB OPS, GNC)	EXERCISE	FCS C/O CAMR SETUP (PHOTO/TV, REF PROC)	
RCS HOT FIRE TEST (ORB OPS, RCS)	STORRM DEACT (RNDZ, RNDZ STORRM)		
	WLES RNDZ TOOLS C/O PREP (ORB OPS, WLES)	EXERCISE	
EXERCISE			
DEORBIT PREP BRIEFING	DEORBIT PREP BRIEFING	DEORBIT PREP BRIEFING	

STS-134/ULF6 FD14

GMT Date 05/02 (122) | W | TDRS E | Z | D/N | ORB | MET Day 012 | ATT

16:00 — 17:00 — 18:00 — 19:00

ORB: 201, 202, 203

ATT: -ZLV, -XVV, -ZLV +YVV

CDR MARK	PLT BOX	MS1 SPANKY	NOTES
MEAL	MEAL	MEAL	
PUBLIC AFFAIRS EVENT KU AVAIL: 17:02-17:30 FD: All Crew	PUBLIC AFFAIRS EVENT KU AVAIL: 17:02-17:30 FD: All Crew	PUBLIC AFFAIRS EVENT KU AVAIL: 17:02-17:30 FD: All Crew	
NLP TERMINATION (ASSY OPS, PAYLOADS) Terminate GAP 1 only SUPPLY WATER DUMP USING FES (ORB OPS, ECLS) Perform DUMP INITIATION using FES PRI A LANDING-1 COMM C/O (ORB OPS, COMM/INST) MLA AOS 18:34-18:42	MNVR (TRK) BIAS -ZLV +YVV (DUMP) TG=2 BV=3 OM=270 A1/AUTO/VERN Init TRK SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS) Initiate Waste Dump, Ref. MSG XXX		
EXERCISE	EXERCISE	CABIN CONFIG/STOW	
CABIN CONFIG/STOW	SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS) Terminate Waste Dump, Ref. MSG XXX CWC OVERBOARD DUMP (Init) (ORB OPS, ECLS) Perform Parts A-D, Ref. MSG XXX		

STS-134/ULF6 FD14

GMT Date 05/02 (122) | TDRS W E Z | D/N | ORB 201 202 203 | MET Day 012 | ATT -ZLV -XVV -ZLV +YVV

MS2 ROBERTO	MS3 DREW	MS4 TAZ	NOTES
MEAL	MEAL	MEAL	
PUBLIC AFFAIRS EVENT KU AVAIL: 17:02-17:30 FD: All Crew	PUBLIC AFFAIRS EVENT KU AVAIL: 17:02-17:30 FD: All Crew	PUBLIC AFFAIRS EVENT KU AVAIL: 17:02-17:30 FD: All Crew	
	OCA RATE RECONFIG (48Mbps) C	ENTRY VIDEO SETUP (PHOTO/TV, REFERENCED PROCEDURES)	
	C RECONFIGURE OCA DOWNLINK RATE (48Mbps) (ORB OPS, PGSC) Part C, Omit step 4		
CABIN CONFIG/STOW	CABIN CONFIG/STOW	CABIN CONFIG/STOW	

STS-134/ULF6 FD14

GMT Date 05/02 (122) | W | T D R S E | Z | D/N | O R B | MET Day 012 | ATT

20:00 — 21:00 — 22:00 — 23:00

ORB: 204, 205, 206

ATT: -ZLV +YVV; -ZLV -XVV

CDR MARK

CABIN CONFIG/STOW

LANDING-1 COMM C/O
(ORB OPS, COMM/INST)
DFR AOS 21:39-21:48

CABIN CONFIG/STOW

COMM STRING 1 C/O (PART B)
(ORB OPS, COMM/INST)

ENTRY COOLING CONFIG D

FES DUMP TERMINATION E

CGBA MUFFLER STOW Stow in LiOH Box

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

O6 √UHF MODE - OFF
L9 PS AUD A/G 1,2 (two) - OFF
PRIVATE MEDICAL CONFERENCE, via A/G 2

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

PLT BOX

CABIN CONFIG/STOW

CWC OVERBOARD DUMP (Term)
(ORB OPS, ECLS)
Perform Parts E-H

CWC OVERBOARD DUMP (Init)
(ORB OPS, ECLS)
Perform Parts A-D, Ref. MSG XXX

CABIN CONFIG/STOW

CWC OVERBOARD DUMP (Term)
(ORB OPS, ECLS)
Perform Parts E-H

MNVR (TRK) -ZLV -XVV
TG=2 BV=3 OM=0
A1/AUTO/VERN Init TRK

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

MS1 SPANKY

CABIN CONFIG/STOW

A6L MADS STRAIN GAGE - ON

KU-BD ANT STOW (ORB OPS, COMM/INST)
Deactivate CCTV

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

NOTES

D R12 √VPU PWR - OFF(LED-off)
Minimize use of P/TV equipment
Dim cabin lighting to 25%

E SUPPLY WATER DUMP USING FES
(ORB OPS, ECLS)
Perform DUMP TERMINATION
√MCC for FES PRI A

STS-134/ULF6 FD14

GMT Date 05/02 (122) | W | T D R S E | Z | D/N | O R B | MET Day 012 | ATT

20:00 — 21:00 — 22:00 — 23:00 — 00:00

ORB: 204, 205, 206

ATT: -ZLV +YVV; -ZLV -XVV

MS2 ROBERTO

CABIN CONFIG/STOW

P/TV09 MIDDECK PAYLOADS
(PHOTO/TV, SCENES) Item 7 Video

BIOKIS OPERATIONS
(ASSY OPS, PAYLOADS) Steps 4-6

CGBA STATUS CHK; GLACIER STATUS CHK (CC)

KU-BD ANT STOW (ORB OPS, COMM/INST)
Deactivate CCTV

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

MS3 DREW

CABIN CONFIG/STOW

ENTRY AIRLOCK CONFIG
(DEORBIT PREP, NOMINAL DEORBIT PREP)
Perform Block 3A, pg. 1-32

CYCLE ERGOMETER OPS
(ORB OPS, CREW SYS)
Perform RECONFIG/STOW

WLES DEACTIVATION AND TEARDOWN
(ORB OPS, WLE SENSORS)

PGSC STOW
Stow all STS PGSCs except WINDECOM
Stow COLOR PRINTER and WAP

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

MS4 TAZ

CABIN CONFIG/STOW

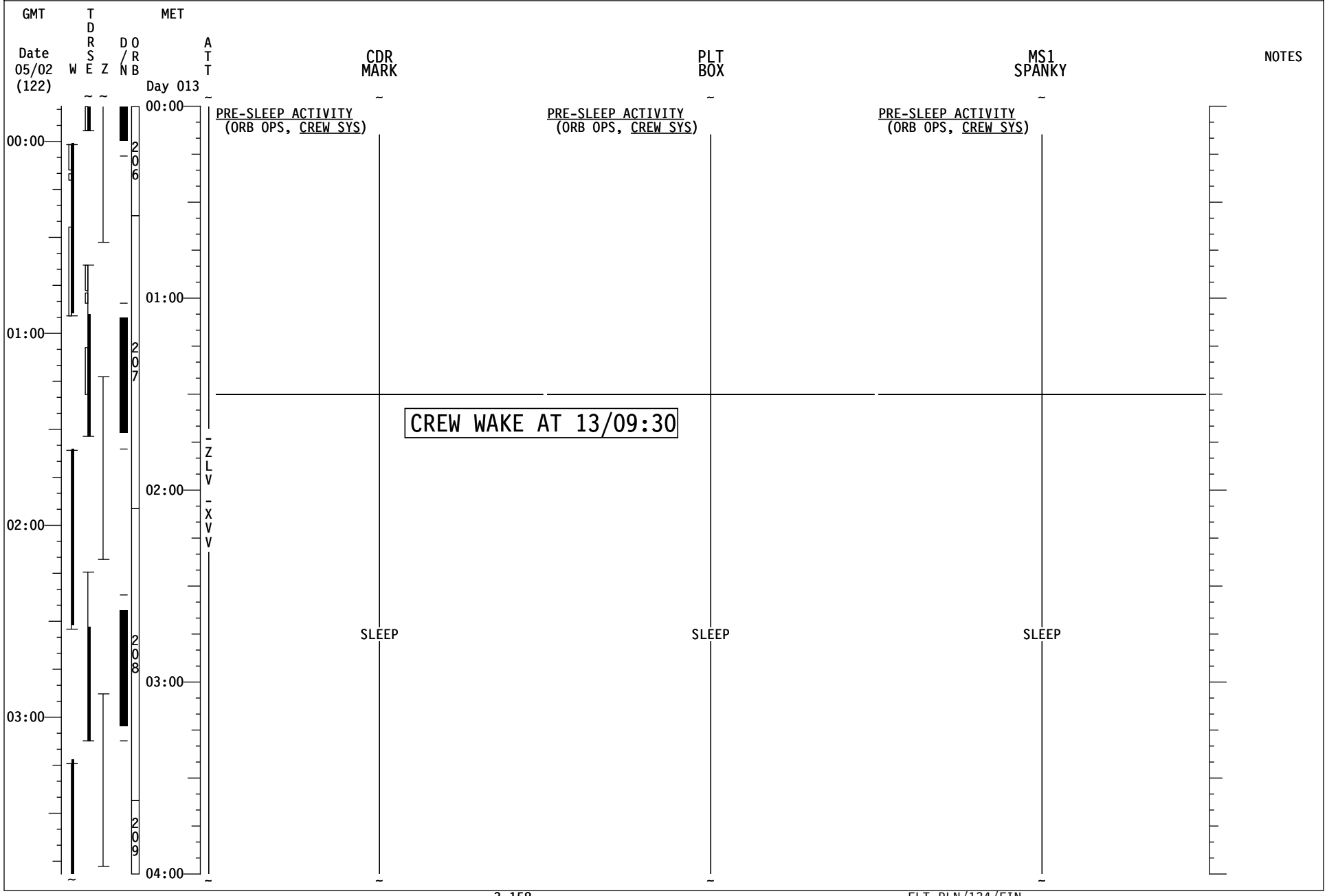
CYCLE ERGOMETER OPS
(ORB OPS, CREW SYS)
Perform RECONFIG/STOW

CUBE LAB MODULE-7 DEACTIVATION
(ASSY OPS, PAYLOADS)

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

NOTES

STS-134/ULF6 FD14



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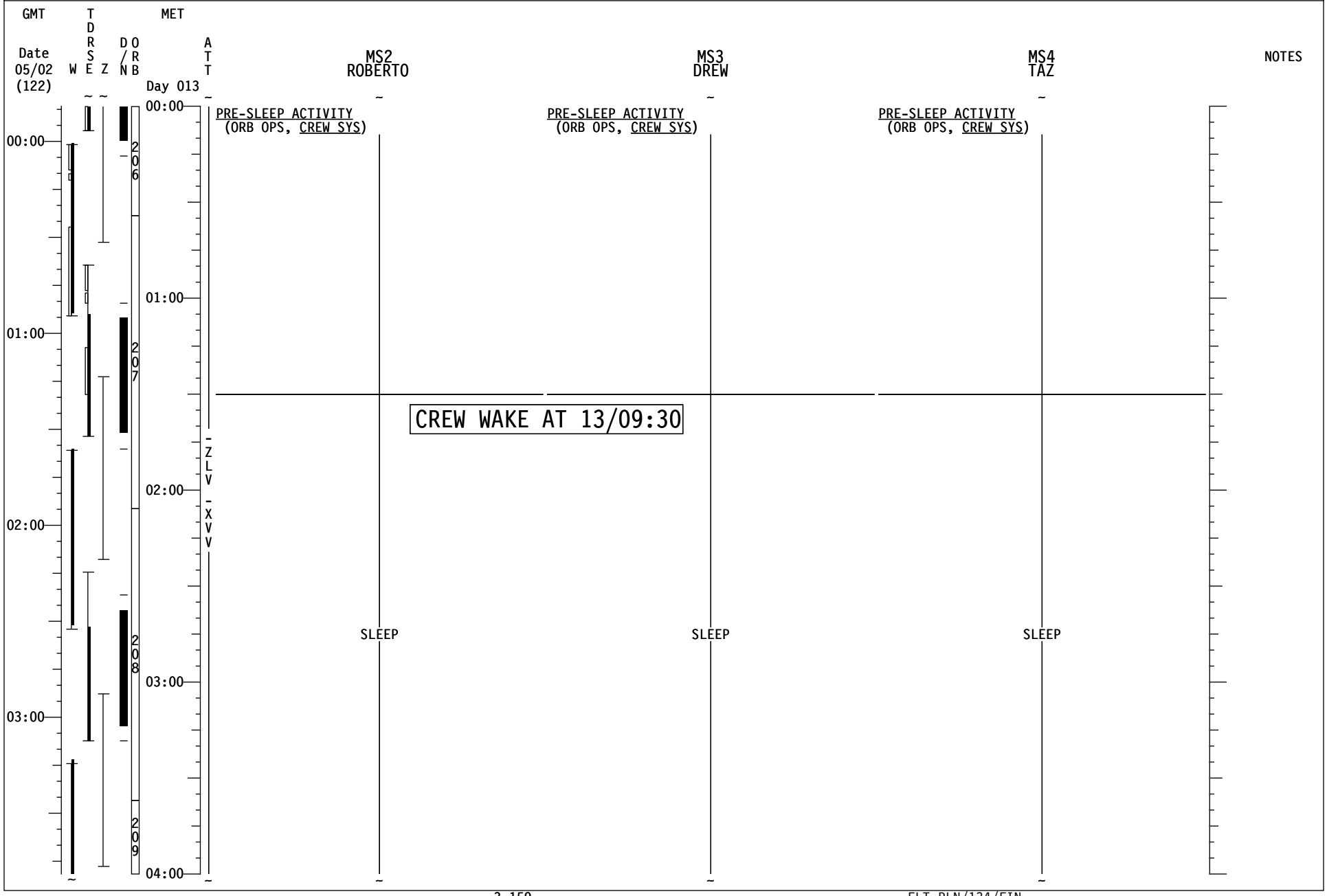

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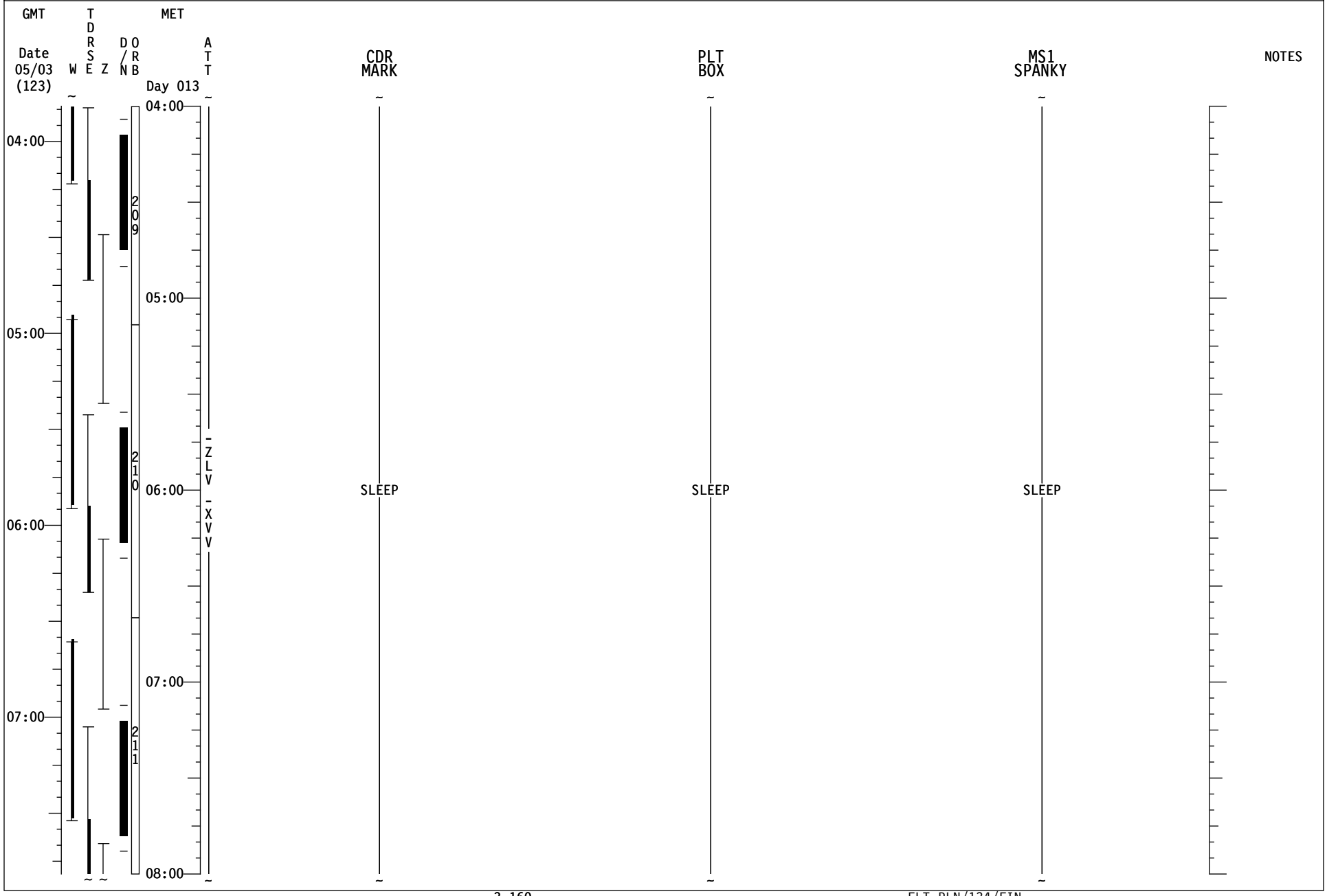

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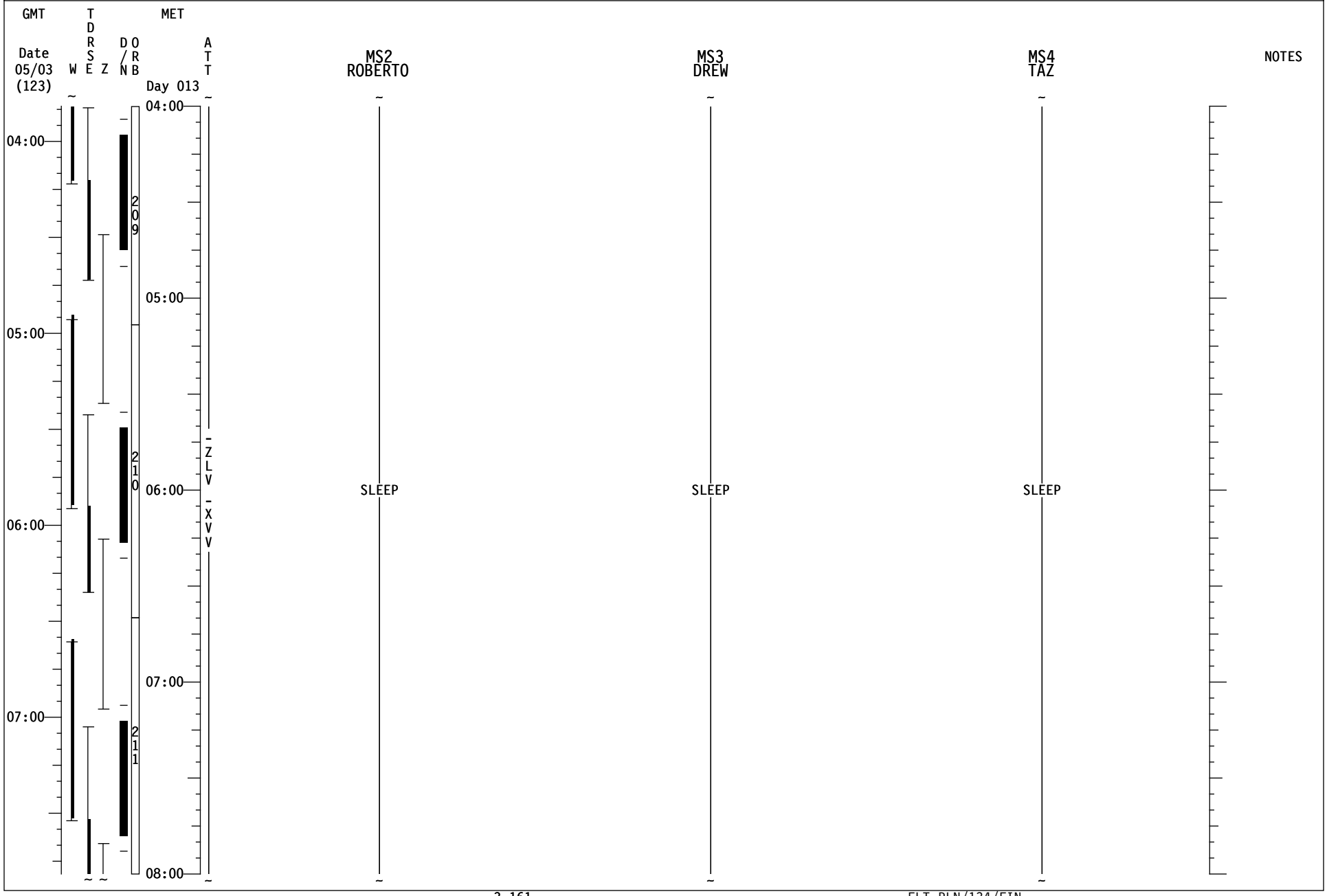


STS-134/ULF6 FD15

GMT Date 05/03 (123) | W | TDRS E | Z | D/N | ORB | MET Day 013 | ATT

CDR MARK | PLT BOX | MS1 SPANKY | NOTES

08:00 09:00 10:00 11:00 12:00

212 213 214

-ZLV -XVV

SLEEP (CDR MARK, PLT BOX, MS1 SPANKY)

FD15 EZ ACTIVITIES:
√OCAC FILTER
Stow CSA-CP

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS) — CDR MARK

SLEEP LOGBOOK (ORB OPS, SDBI)
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS) — PLT BOX

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS) — MS1 SPANKY

O6 √UHF MODE - OFF
L9 PS AUD A/G 1,2 (two) - OFF
PRIVATE MEDICAL CONFERENCE, via A/G 2

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS) — CDR MARK

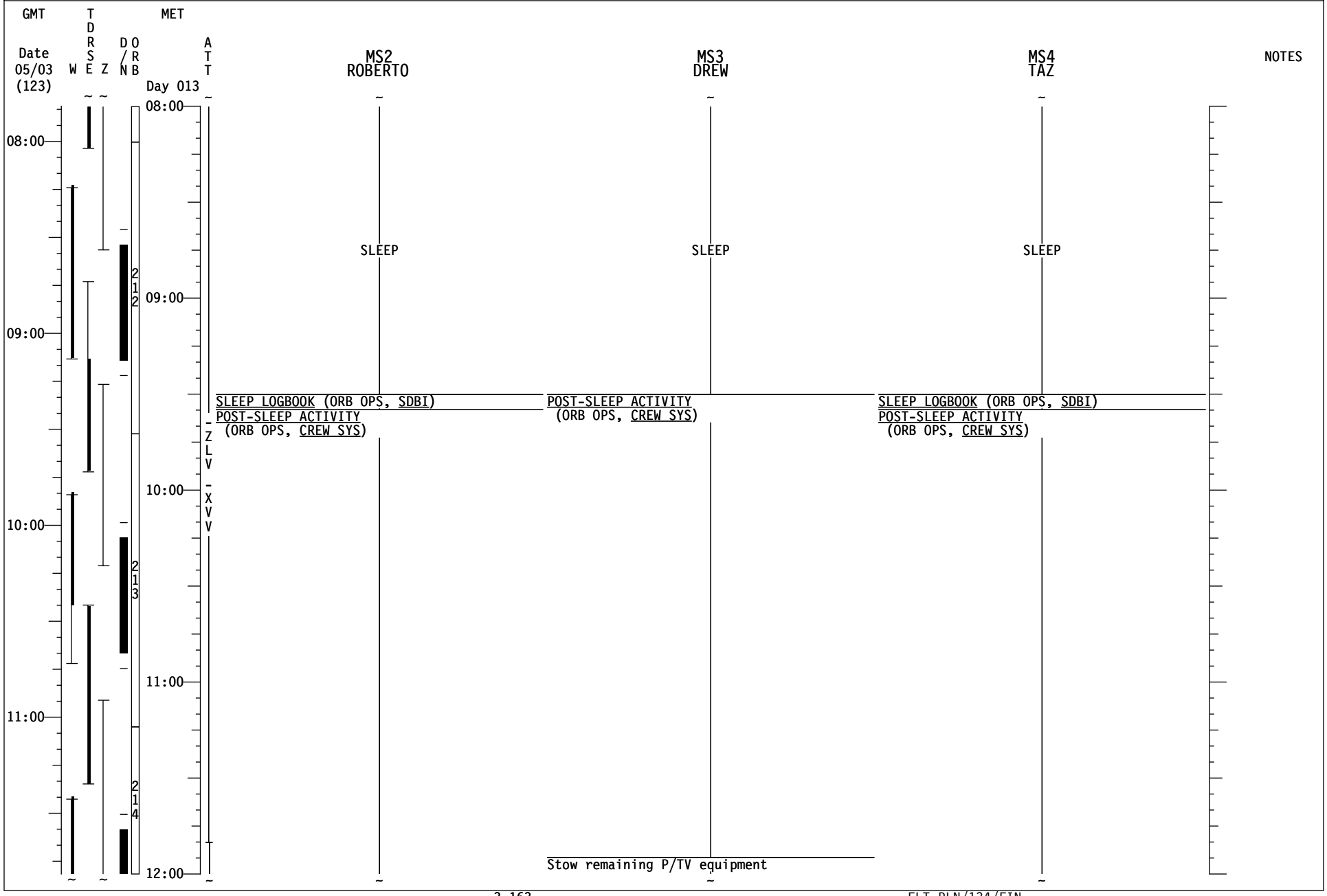
PRIORITY PWRUP GRP B (ORB PKT, PRIOR PWRDN)
Step 12 (IMU 2),10,9,7,6 (Dual G2),5,2 — CDR MARK

PRIORITY PWRUP GRP B (ORB PKT, PRIOR PWRDN)
Step 12 (IMU 2),10,9,7,6 (Dual G2),5,2 — PLT BOX

IMU ALIGN See pg. 3-164

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS) — PLT BOX

STS-134/ULF6 FD15



STS-134/ULF6 FD15

GMT Date 05/03 (123) | W | TDRS E | Z | D/N | ORB | MET Day 013 | ATT | CDR MARK | PLT BOX | MS1 SPANKY | NOTES

12:00 13:00 14:00 15:00

214 215 216

12:00 13:00 14:00 15:00 16:00

IMU -XSI COMM

IMU ALIGN See below

MNVR (TRK) -XSI ATT
TG=4 BV=5 P=180 Y=35 OM=270
A1/AUTO/VERN (13/12:23), Init TRK

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

DOFF ACTIWATCH (ORB OPS, SDBI)

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

AIR SAMPLE Rcd MET and location on bottle
Bottle located in MF430
A6L MADS STRAIN GAGE - PCM ENA

GO TO DEORBIT PREP AT 13/12:35

IMU ALIGN

MNVR IMU STAR ALIGN ATT A (pg. 3-166)
A1/AUTO/VERN (13/11:50), Init MNVR
IMU ALIGN - S TRK (ORB OPS, GNC)
MNVR IMU VERIF ATT B (pg. 3-166)
A1/AUTO/VERN Init MNVR
IMU ALING - S TRK (ORB OPS, GNC)

STS-134/ULF6 FD15

GMT Date 05/03 (123) | W | TDRS E | Z | D/N | ORB | MET Day 013 | ATT | MS2 ROBERTO | MS3 DREW | MS4 TAZ | NOTES

12:00 — 13:00 — 14:00 — 15:00 — 16:00

ORB: 214, 215, 216

ATT: IMU, -XSI, COMM

MS2 ROBERTO

- POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- CGBA STATUS CHK; GLACIER STATUS CHK (CC)
- DOFF ACTIWATCH (ORB OPS, SDBI)
- OCAC STOWAGE (ORB OPS, CREW SYS)

MS3 DREW

- Stow remaining P/TV equipment
- PGSC STOW
- Stow remaining PGSCs

MS4 TAZ

- POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
- DOFF ACTIWATCH (ORB OPS, SDBI)
- GIRA STOWAGE (ORB OPS, ECLS)

GO TO DEORBIT PREP AT 13/12:35

A IMU STAR ALIGN PAD

ID: -Y: 36 KAUS AUSTRALIS
MET (13/11:51 TO 13/12:40)

ID: -Z: 50 AVIOR
MET (13/11:47 TO 13/12:42)

ANG DIFF: 83.0

DUAL S TRKR ALIGNMENT		2nd ATTITUDE (SINGLE S TRKR) -Z: 36 -Y: 50		
R	29	R	306	119
P	20	P	340	39
Y	5	Y	349	344

REQD ID:

-Y: ____, -Z: ____, ANG ERR ____,____ ____

ANG:	1	2	3
ΔX	( )__,__ __	( )__,__ __	( )__,__ __
ΔY	( )__,__ __	( )__,__ __	( )__,__ __
ΔZ	( )__,__ __	( )__,__ __	( )__,__ __

EXECUTION TIME: ___/___:___:___ MET

B IMU VERIFICATION STAR ALIGN PAD

ID: -Y: 60 ENIF
MET (13/12:05 TO 13/12:56)

ID: -Z: 16 ACHERNAR
MET (13/12:05 TO 13/12:54)

ANG DIFF: 82.2

DUAL S TRKR ALIGNMENT		2nd ATTITUDE (SINGLE S TRKR) -Z: 60 -Y: 16		
R	19	R	308	97
P	322	P	303	330
Y	42	Y	43	55

REQD ID:

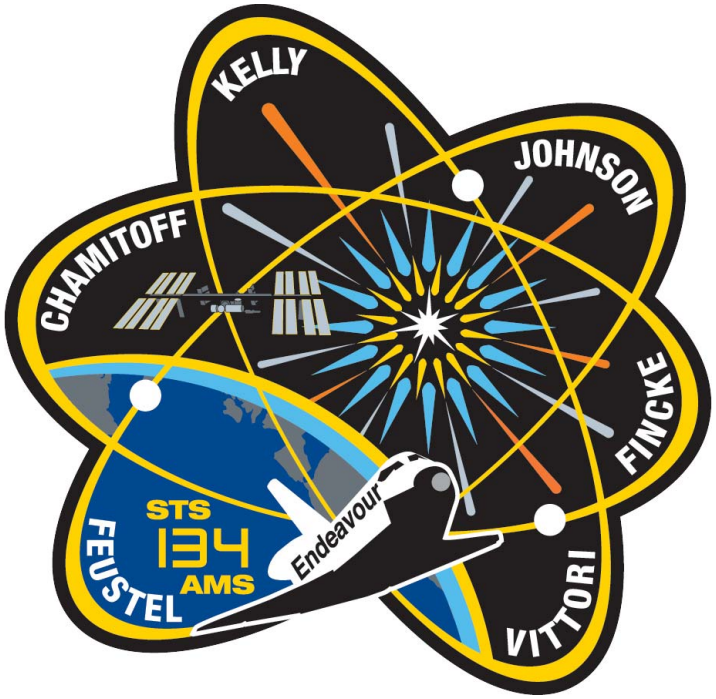
-Y: ____, -Z: ____, ANG ERR ____,____ ____

ANG:	1	2	3
ΔX	( )__,__ __	( )__,__ __	( )__,__ __
ΔY	( )__,__ __	( )__,__ __	( )__,__ __
ΔZ	( )__,__ __	( )__,__ __	( )__,__ __

EXECUTION TIME: ___/___:___:___ MET

Space Shuttle Program
FLIGHT DATA FILE

JSC-48000-134
FINAL



FLIGHT PLAN

STS
134

Flight Cover (trim bottom to expose tabs)