

Flight Plan

STS-115/12A (P3/P4 Truss)

(STS-115/12A Gen OCF (May 23, 2003)
Trajectory)

Mission Operations Directorate Operations Division

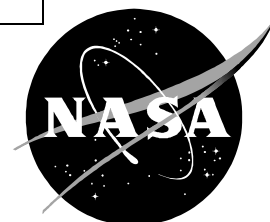
Basic, Rev. A
April 3, 2003

For the latest working copy of the Flight Plan, visit
<https://mod.jsc.nasa.gov/do4/flightplan/fp.cfm?id=115>

EVENT	MET	GMT	CDT
Launch	00/00:00	143/00:18	19:18 (05/22/03)
Ti	01/17:17	144/17:35	12:35 (05/24/03)
ISS Docking	01/19:38	144/19:56	14:56 (05/24/03)
P3/P4 Unberth	02/13:00	145/13:18	08:18 (05/25/03)
EVA 1	02/17:55	145/18:13	13:13 (05/25/03)
EVA 2	03/17:55	146/18:13	13:13 (05/26/03)
4A SAW Deploy	04/15:00	147/15:18	10:18 (05/27/03)
2A SAW Deploy	04/18:05	147/18:23	13:23 (05/27/03)
EVA 3	05/17:55	148/18:13	13:13 (05/28/03)
P6 4B Retract	05/21:40	148/21:58	16:58 (05/28/03)
EVA 4	06/17:55	149/18:13	13:13 (05/29/03)
Undock	08/20:50	151/21:08	16:08 (05/31/03)
Landing	10/18:39	153/18:58	13:58 (06/02/03)

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/dfd>

MISSION OPERATIONS DIRECTORATE

**FLIGHT PLAN
STS-115**

BASIC, REVISION A
April 3, 2003

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FLIGHT PLAN
STS-115

LIST OF EFFECTIVE PAGES

BASIC 03/07/03
REV A 04/03/03

Sign Off.....	*	115/BAS A	2-34.....	115/BAS A
ii.....	*	115/BAS A	2-35.....	115/BAS A
iii.....	*	115/BAS A	2-36.....	115/BAS A
iv.....	*	115/BAS A	2-37.....	115/BAS A
v.....	*	115/BAS A	2-38.....	115/BAS A
vi.....	*	115/BAS A	2-39.....	115/BAS A
vii.....	*	115/BAS A	2-40.....	115/BAS A
viii.....	*	115/BAS A	3-1.....	115/BAS A
ix.....	*	115/BAS A	3-2.....	115/BAS A
x.....	*	115/BAS A	3-3.....	115/BAS A
1-1.....		115/BAS A	3-4.....	115/BAS A
1-2.....		115/BAS A	3-5.....	115/BAS A
1-3.....		115/BAS A	3-6.....	115/BAS A
1-4.....		115/BAS A	3-7.....	115/BAS A
2-1.....		115/BAS A	3-8.....	115/BAS A
2-2.....		115/BAS A	3-9.....	115/BAS A
2-3.....		115/BAS A	3-10.....	115/BAS A
2-4.....		115/BAS A	3-11.....	115/BAS A
2-5.....		115/BAS A	3-12.....	115/BAS A
2-6.....		115/BAS A	3-13.....	115/BAS A
2-7.....		115/BAS A	3-14.....	115/BAS A
2-8.....		115/BAS A	3-15.....	115/BAS A
2-9.....		115/BAS A	3-16.....	115/BAS A
2-10.....		115/BAS A	3-17.....	115/BAS A
2-11.....		115/BAS A	3-18.....	115/BAS A
2-12.....		115/BAS A	3-19.....	115/BAS A
2-13.....		115/BAS A	3-20.....	115/BAS A
2-14.....		115/BAS A	3-21.....	115/BAS A
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2-33.....		115/BAS A	3-40.....	115/BAS A

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3-42.....	115/BAS A	3-96.....	115/BAS A
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3-51.....	115/BAS A	3-106.....	115/BAS A
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3-67.....	115/BAS A	3-122.....	115/BAS A
3-68.....	115/BAS A	3-123.....	115/BAS A
3-69.....	115/BAS A	3-124.....	115/BAS A
3-70.....	115/BAS A	3-125.....	115/BAS A
3-71.....	115/BAS A	3-126.....	115/BAS A
3-72.....	115/BAS A	3-127.....	115/BAS A
3-73.....	115/BAS A	3-128.....	115/BAS A
3-74.....	115/BAS A	3-129.....	115/BAS A
3-75.....	115/BAS A	3-130.....	115/BAS A
3-76.....	115/BAS A	4-1.....	115/BAS A
3-77.....	115/BAS A	4-2.....	115/BAS A
3-78.....	115/BAS A	4-3.....	115/BAS A
3-79.....	115/BAS A	4-4.....	115/BAS A
3-80.....	115/BAS A	4-5.....	115/BAS A
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3-87.....	115/BAS A	5-4.....	115/BAS A
3-88.....	115/BAS A	5-5.....	115/BAS A
3-89.....	115/BAS A	5-6.....	115/BAS A
3-90.....	115/BAS A	5-7.....	115/BAS A
3-91.....	115/BAS A	5-8.....	115/BAS A
3-92.....	115/BAS A	6-i.....*	115/BAS A
3-93.....	115/BAS A	6-ii.....*	115/BAS A
3-94.....	115/BAS A	6-1.....*	115/BAS A

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6-2.....	*	115/BAS A
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STS-115 FLIGHT PLAN FABRICATED ITEMS

<u>Title</u>	<u>Ref. Page</u>	<u>Card No.</u>
STS-115 DAP A1 – A8 CONFIGURATIONS (FRONT TOP).....	CC 8-2	FLT PLN-1a/115/O/A
STS-115 DAP B1 – B8 CONFIGURATIONS (FRONT BOTTOM).....	CC 8-3	FLT PLN-1aa/115/O/A
STS-115 DAP A9 – A15 CONFIGURATIONS (BACK TOP)	CC 8-4	FLT PLN-1b/115/O/B
STS-115 DAP B9 – B15 CONFIGURATIONS (BACK BOTTOM).....	CC 8-5	FLT PLN-1bb/115/O/A

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CONTENTS

PAGE

INTRODUCTION	x
OVERVIEW TIMELINE	1-1
SUMMARY TIMELINE AND ISS SHORT-TERM PLAN	2-1
DETAILED TIMELINE	3-1
DAP TABLE	4-1
ATTITUDE TIMELINE	5-1
FLIGHT PLAN NOTES.....	6-1
FLIGHT PLAN WALKTHROUGH (WITH RATIONALE).....	7-1
CUE CARD CONFIGURATION	8-1

INTRODUCTION

The STS-115 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-17462-115, STS-115 Flight Requirements Document

NSTS-37326, Shuttle Crew Scheduling Constraints

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-115 Flight Plan is based on a launch date of May 22, 2003 at 19:18 CDT (May 23, 2003 at 00:18 GMT). 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:

TBD

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

<http://mod.jsc.nasa.gov/do4/flightplan/fp.cfm?id=115>

OVERVIEW TIMELINE

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STS-115 ISS 12A

Overview Timeline 11+1+2 (4 EVAs)

Launch May 23, 2003 @ 00:18:46 GMT

FD 01	GMT	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8	9	10	11		
	MET	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	00/0	1	2	3	4	5	6	7	8	9	10	11		
	STS														ASC	Post Ins	FD1 CNFG										
	ISS															D	SLEEP										
Orb Att														-ZLV -XVV													

Launch ^

FD 02	GMT	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8	9	10	11
	MET	12	13	14	15	16	17	18	19	20	21	22	23	01/0	1	2	3	4	5	6	7	8	9	10	11
	STS	SLP					RMS, EMU c/o, Tool CNFG	Meal	P/TV Setup, RNDZ Prep																
	ISS	SLEEP						D	OFF DUTY				D	SLEEP											
Orb Att														-ZLV -XVV											

FD 03	GMT	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8	9	10	11					
	MET	12	13	14	15	16	17	18	19	20	21	22	23	02/0	1	2	3	4	5	6	7	8	9	10	11					
	STS														RNDZ	Hatch Open	Wel-Come	O2/N2 Setup	EVA 1 Prep	R V W										
	ISS	SLEEP		D	RNDZ				OFF DUTY				D	SLEEP																
Orb Att	DUMP		RNDZ										LVLH TEA																	

^ PMDIS/TRAC ^ DOCKING

FD 04	GMT	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8	9	10	11							
	MET	12	13	14	15	16	17	18	19	20	21	22	23	03/0	1	2	3	4	5	6	7	8	9	10	11							
	STS														P3/P4 Unberth/Handoff & Purge/Prebreathe	EMU	EVA 1				Post EVA	R V W										
	ISS	SLEEP		D	EVA 1				OFF DUTY				D	SLEEP																		
Orb Att														LVLH TEA																		

FD 05	GMT	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8	9	10	11						
	MET	12	13	14	15	16	17	18	19	20	21	22	23	04/0	1	2	3	4	5	6	7	8	9	10	11						
	STS														EMU Purge/Prebreathe	EVA 2				Post EVA	R V W										
	ISS	SLEEP		D	EVA 2				OFF DUTY				D	SLEEP																	
Orb Att														LVLH TEA																	

← Activate and Checkout SARJ →

FD 06	GMT	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8	9	10	11			
	MET	12	13	14	15	16	17	18	19	20	21	22	23	05/0	1	2	3	4	5	6	7	8	9	10	11			
	STS														Deploy Solar Array	Meal	EVA 3 Prep	R V W										
	ISS	SLEEP		D	Deploy Solar Array				Meal	Transfer		D	SLEEP															
Orb Att														LVLH TEA														

^ MT Translate to WS 4

FD 07	GMT	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8	9	10	11						
	MET	12	13	14	15	16	17	18	19	20	21	22	23	06/0	1	2	3	4	5	6	7	8	9	10	11						
	STS														EMU Purge/Prebreathe	EVA 3				Post EVA	R V W										
	ISS	SLEEP		D	EVA 3				OFF DUTY				D	SLEEP																	
Orb Att														LVLH TEA																	

^ PV Rad Deploy ^ P6 4B Retraction

FD 08	GMT	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8	9	10	11					
	MET	12	13	14	15	16	17	18	19	20	21	22	23	07/0	1	2	3	4	5	6	7	8	9	10	11					
	STS														EMU Purge/Prebreathe	EVA 4				Post EVA										
	ISS	SLEEP		D	EVA 4				OFF DUTY				D	SLEEP																
Orb Att														LVLH TEA																

FD 09	GMT	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8	9	10	11			
	MET	12	13	14	15	16	17	18	19	20	21	22	23	08/0	1	2	3	4	5	6	7	8	9	10	11			
	STS														OFF DUTY	Meal	Crew Conf & Photo	XFR/EVA Rcnfg										
	ISS	SLEEP		D	OFF DUTY				Meal	Transfer		D	SLEEP															
Orb Att														LVLH TEA														

^ WS8 C/O

FD 10	GMT	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8	9	10	11								
	MET	12	13	14	15	16	17	18	19	20	21	22	23	09/0	1	2	3	4	5	6	7	8	9	10	11								
	STS														XFR	O2 & N2 Stow	Meal	Hatch Close	UNDOCK	Simo/Cond Dump													
	ISS	SLEEP		D	Transfer		Meal	Hatch Close		UNDOCK		OFF DUTY		D	SLEEP																		
Orb Att														LVLH TEA				UNDOCK		DUMP		-ZLV -XVV											

^ UNDOCKING

FD 11	GMT	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8	9	10	11					
	MET	12	13	14	15	16	17	18	19	20	21	22	23	10/0	1	2	3	4	5	6	7	8	9	10	11					
	STS														FCS C/O	RCS PA	Meal	OFF DUTY	Mepsi	Cabin Stow										
	ISS	SLEEP		OFF DUTY				OFF DUTY				SLEEP																		
Orb Att														-ZLV -XVV																

* D/O Brief

FD 12	GMT	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8	9	10	11			
	MET	12	13	14	15	16	17	18	19	20	21	22	23	11/0	1	2	3	4	5	6	7	8	9	10	11			
	STS														IMU	Deorbit Prep		Entry										
	ISS														-XS/ENTRY													
Orb Att														-XS/ENTRY														

TIG ^ KSC LANDING 10/18:39

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SUMMARY TIMELINE AND ISS SHORT-TERM PLAN

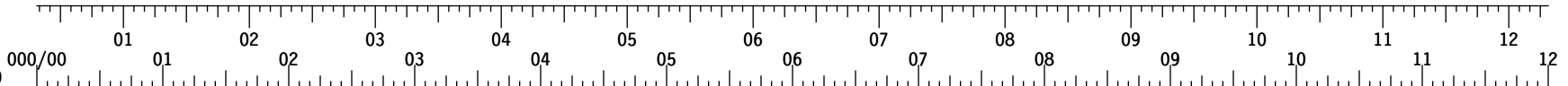
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FD01

GMT 05/23/03 (143)

β = 60.3

MET Day 000



STS-115	CDR JETT		POST INSERTION	IMU C/O	ELEVATION WATCH	NC1 OMS BURN	M-ZLV R/V	PMC A/G	PRE SLEEP	SLEEP						
	PLT FERGUSON	L	POST INSERTION	RMS*	LOAD DAPS	OMS BURN	GPWR PDBN		PRE SLEEP	SLEEP						
	MS1 TANNER	A	POST INSERTION	GIRA INSTALL			WATCH		PRE SLEEP	SLEEP						
	MS2 BURBANK	U	POST INSERTION	PGSC SETUP (PART I)			WATCH		PRE SLEEP	SLEEP						
	MS3 PIPER	N	POST INSERTION	TEW PRCON	OSCENTUMAC	BAOCTMHPG1	SC		PRE SLEEP	SLEEP						
	MS4 MACLEAN	C	POST INSERTION	SEE SETUP	PLBK ACT	PLBK OPS	WATCH		PRE SLEEP	SLEEP						
DAY/NIGHT																
ORBIT			2			3		4		5	6	7	8	9		
DAILY ORBIT			8			9		10		11		12		13	14	15
TDRS EAST 47																
TDRS WEST 171																
ORB ATT		ASCENT				NC1										
NOTES																

COMPLETED PRIOR TO STS ARRIVAL
 *MSS C/O at WS #7
 *SSRMS C/O
 *EMU C/O
 *SAFER C/O
 *SSAS C/O
 *P3/P4 DRY RUN
 *12A TIMELINE REVIEW

FD02

GMT 05/23/03 (143)

$\beta = 58.0$

MET Day 000



STS-115	CDR JETT	SLEEP	LOG	POST SLEEP		NC2 OMS BURN	M-NZ VLRV	ERGO SETUP	EXERCISE		NPC MULT AXIS RCS BURN	M-NZ VLRV	MEAL	P/TV17 VIDEO SETUP		PIS NET- T- VCU OAP 2B N	PE AV OEN T	
	PLT FERGUSON	SLEEP		POST SLEEP	FUEL CELL MNR	OMS BURN	RPMW SRUP	RMS C/O	RMS PLB SURVEY	RPMW SRDN	FC SPRG*	MULT AXIS RCS BURN	CRYO 02 SNSR CK	MEAL	H2O CWC S/U	RNDZ TOOLS C/O		EXER CISE
	MS1 TANNER	SLEEP	SAMPL	POST SLEEP (GIRA)	EMU C/O PREP		EMU C/O		SAFER C/O	PGT C/O		EXERCISE	MEAL	EVA PREP FOR XFR-ISS	P/TV17 VIDEO SETUP			
	MS2 BURBANK	SLEEP	LOG	POST SLEEP		OMS BURN	RPMW SRUP	RMS C/O	RMS PLB SURVEY	RPMW SRDN		PGSC SETUP (PART II)		MEAL	EVA PREP FOR XFR-ISS	RNDZ TOOLS C/O		EXERCISE
	MS3 PIPER	SLEEP	SAMPL	POST SLEEP	B M C K	EMU C/O PREP		EMU C/O		SAFER C/O	PGT C/O		MEAL	EVA PREP FOR XFR-ISS	EXERCISE			PE AV OEN T
	MS4 MACLEAN	SLEEP	LOG	POST SLEEP	FILTER CLEANING			ERGO SETUP		EXERCISE			MEAL	EVA PREP FOR XFR-ISS	XFER PREP		B R I E F	PE AV OEN T

STS	DAY/NIGHT	[Day/Night Cycle]														
	ORBIT	9	10	11	12	13	14	15	16	17						
	DAILY ORBIT	15	16	1	2	3	4	5	6	7						
TDRS	EAST 47	[TDRS Schedule]														
	WEST 171	[TDRS Schedule]														

ORB ATT	-ZLV -XVV														
	NC2														
	NPC														
	*HTR														
	*Manual														

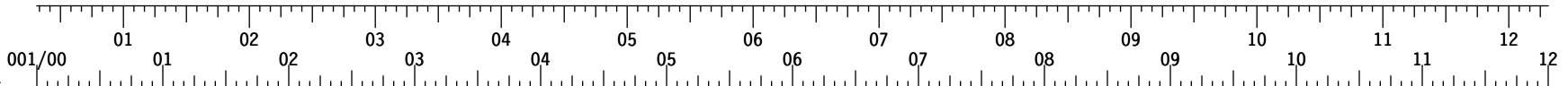
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FD02

GMT 05/24/03 (144)

$\beta = 55.7$

MET Day 001



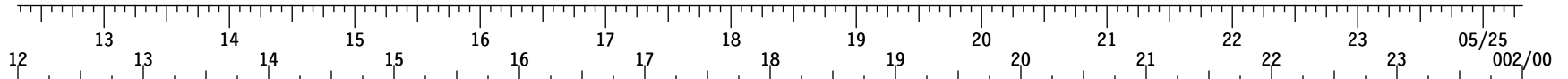
S T S - 1 1 5	CDR JETT	P/TV19 C/L CAMR INST	PRE SLEEP	PMC OCA	NC3 OMS BURN	M - N Z V L R V	PRE SLEEP	SLEEP		
	PLT FERGUSON	EXER CISE	PRE SLEEP		OMS BURN		PRE SLEEP	SLEEP		
	MS1 TANNER	P/TV19 C/L CAMR INST	ODS RING EXT	PRE SLEEP (GIRA)				SLEEP		
	MS2 BURBANK		PRE SLEEP		OMS BURN		PRE SLEEP	SLEEP		
	MS3 PIPER			PRE SLEEP				SLEEP		
	MS4 MACLEAN		ODS RING EXT	PRE SLEEP				SLEEP		
S T S	DAY/NIGHT	[Shaded bars indicating day/night cycle]								
	ORBIT	17	18	19	20	21	22	23	24	25
	DAILY ORBIT	7	8	9	10	11	12	13	14	15
T D R S	EAST 47	[Timeline with horizontal bars and diamonds]								
	WEST 171	[Timeline with horizontal bars and diamonds]								
ORB ATT		-ZLV -XVV		-NC3-		-ZLV -XVV				
NOTES										

FD03

GMT 05/24/03 (144)

β=53.4

MET Day 001



S T S - 1 1 5	CDR JETT	POST SLEEP	M-NZ VLRV	POST SLEEP	GP R R U P	NH	NC4	ISS RNDZ OPS	TI	APPROACH T/L	M-NZ VLRV	H/O	GP R P R D N	HATCH OPEN	SHA N D K E	SAFTY BRIEF	EXERCISE	PAL L B K	PO L P B S K	
	PLT FERGUSON	POST SLEEP			GP R R U P			ISS RNDZ OPS		APPROACH T/L	RMS H		GP R P R D N	FMS *	SHA N D K E	SAFTY BRIEF	XFER OPS	02 P/B CONFIG		
	MS1/EV1 TANNER	POST SLEEP (GIRA)				EMU RMVL	PMDIS OPS	EXERCISE	ISS RNDZ OPS	APPROACH T/L	Q C A R D	HATCH LEAK CHECK	ODS PREP FOR INGR	P/TV 21 S/U	SHA N D K E	SAFTY BRIEF	PST DK EVA XFR	EMU TO A/L IF CK	E_LK PREP	RE B A *
	MS2/EV3 BURBANK	POST SLEEP	SIMO INIT	POST SLEEP	STE M R O M	CWC COND S/U	PMDIS OPS	EXERCISE	ISS RNDZ OPS	APPROACH T/L	K I D M A T E	POST RNDZ PGSC CONFG		RP M S R U P	SHA N D K E	SAFTY BRIEF	PST DK EVA XFR/RCNFG	XFER OPS		
	MS3/EV2 PIPER	POST SLEEP					PMDIS OPS	EXERCISE	ISS RNDZ OPS	APPROACH T/L	N G	HATCH LEAK CHECK	ODS PREP FOR INGR	HATCH OPEN	SHA N D K E	SAFTY BRIEF	PST DK EVA XFR	EMU TO A/L IF CK	E_LK PREP	RE B A *
	MS4/EV4 MACLEAN	POST SLEEP			PS M E D I U S P	PMDIS OPS	PMDIS SUPPORT	PS M T D O I W S	P/TV 20 S/U (DOCK)	APPROACH T/L	* E	A C U N D I G O	EXERCISE	HATCH OPEN	SHA N D K E	SAFTY BRIEF	PST DK EVA XFR/RCNFG	XFER OPS		
E X P - 7	ISS CDR	SLEEP - ISS	POSTSLEEP-ISS	PREP WORK	DPC	EXERCISE TVIS	EXERCISE-RED	MIDDAY-MEAL	COFC AK 1M SMPL	PMA2 CFG	HATCH LK CK-ISS	HATCH OPEN	SHA N D K E	SAFTY BRIEF	COFC AK 1M SMPL	02 P/B CONFIG				
	FE-1	SLEEP - ISS	POSTSLEEP-ISS	PREP WORK	DPC	EMU *	EXERCISE TVIS	MIDDAY-MEAL		COM M	EXERCISE-RED		SHA N D K E	SAFTY BRIEF	COM *	E_LK PREP				
	FE-2	SLEEP - ISS	POSTSLEEP-ISS	PREP WORK	DPC	LAB C K	EXERCISE TVIS	MIDDAY-MEAL					SHA N D K E	SAFTY BRIEF		EXERCISE-RED				

S T S	DAY/NIGHT	[Timeline bars for Day/Night]										
	ORBIT	25	26	27	28	29	30	31	32	33		
	DAILY ORBIT	15	16	1	2	3	4	5	6	7		
S	TDRS EAST 47	[Timeline bars for TDRS EAST 47]										
	TDRS WEST 171	[Timeline bars for TDRS WEST 171]										
	ORB ATT	-ZLV -XVV, -ZLV +YVV, RNDZ, DOCKING, BIAS -XLV +ZVV										

NOTES

*Removal

*HTR

*Off

*CDRA ACT SPPT

*VERIFY CONFIG 3B

*INSTALL

*1/19:37

FD03

STS-110/12A JOINT MISSION STP

β = 53.4

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

GMT 05/24/03 (144)

I S S	DAY/NIGHT	[Timeline with alternating shaded and unshaded blocks]											
	ORBIT	25	26	27	28	29	30	31	32	33			
	DAILY ORBIT	15	16	1	2	3	4	5	6	7			
TDRS S-BD AVAIL													
KU AVAIL													

D
O
C
K
I
N
G

*1/19:37

TCS-MANUAL HTR-OPS | TCS-MANUAL HTR-OPS

C&T-UHF1-ACT | C&T-UHF1-ACT

C&T-AUDIO-CNFG | C&T-AUDIO-CNFG

DPC-MORNING | DPC-MORNING

C&T-VIDEO-CNFG | C&T-VIDEO-CNFG

C&T-CVIU-P/U | C&T-CVIU-P/U

MSS-PWRUP | MSS-PWRUP

C&T-KU MASK-ENA | C&T-KU MASK-ENA

PPS-PWR DWN & RCVRY | PPS-PWR DWN & RCVRY

ISS-MODE PROX-XTION | ISS-MODE PROX-XTION

ACS-PRE-ARVL-CNFG | ACS-PRE-ARVL-CNFG

ACS-ATT-CCDB-INC | ACS-ATT-CCDB-INC

C&T-H/L AUDIO-CNFG | C&T-H/L AUDIO-CNFG

PPS-SA-FTHR | PPS-SA-FTHR

C&DH-INH VALID-CK | C&DH-INH VALID-CK

ACS-PMA2-ARVL-CNFG | ACS-PMA2-ARVL-CNFG

DOCKING | DOCKING

C&T-DOCKED COMM-CK | C&T-DOCKED COMM-CK

PPS-SA-AUTOTRACK | PPS-SA-AUTOTRACK

ACS-POST-ARVL-CNFG | ACS-POST-ARVL-CNFG

ACS-STG/CMG ATT-H/O | ACS-STG/CMG ATT-H/O

C&T-KU RNDZ MASK-DIS | C&T-KU RNDZ MASK-DIS

ISS-MODE STND-XTION | ISS-MODE STND-XTION

ACS-MOM MGMT-ACT | ACS-MOM MGMT-ACT

IATCS-LTL STPT-CHNG | IATCS-LTL STPT-CHNG

C&T-UHF1-DEACT | C&T-UHF1-DEACT

C&T-AUDIO-DCNFG | C&T-AUDIO-DCNFG

ISS-GPS-SHUTDOWN | ISS-GPS-SHUTDOWN

ISS-GPS-STARTUP | ISS-GPS-STARTUP

CDRA ACT | CDRA ACT

ACS-GNC-PPL-U/L | ACS-GNC-PPL-U/L

ACS-CCDB PARAM-U/D | ACS-CCDB PARAM-U/D

KU DOCKING | DOCKING

C-COCB-CHTP CM-ΦГБ | C-COCB-CHTP CM-ΦГБ

ISS-MODE PROX-XTION | ISS-MODE PROX-XTION

СУДН-ОГНИ-ОН | СУДН-ОГНИ-ОН

C-COCB-FTHR | C-COCB-FTHR

Φ-COCB-FTHR | Φ-COCB-FTHR

СУДН-ОГНИ-OFF | СУДН-ОГНИ-OFF

C-COCB-MODE | C-COCB-MODE

Φ-COCB-MODE | Φ-COCB-MODE

DOCKING | DOCKING

ISS-MODE STND-XTION | ISS-MODE STND-XTION

СЗП-АБ-PARTIAL CHRГ | СЗП-АБ-PARTIAL CHRГ

CPCG-H-CRYSTAL-GRTH | CPCG-H-CRYSTAL-GRTH

EXPRS1-SYS-PWR/THERM | EXPRS1-SYS-PWR/THERM

EXPRS4-SYS-PWR/THERM | EXPRS4-SYS-PWR/THERM

MAMS-P/L-NOM OPS | MAMS-P/L-NOM OPS

SAMS-ICU/D1-OPS | SAMS-ICU/D1-OPS

SAMS-RTS/D1-OPS | SAMS-RTS/D1-OPS

SAMS-RTS/D2-OPS | SAMS-RTS/D2-OPS

ADVASC-GROWTH-TERM | ADVASC-GROWTH-TERM

PCG STES-009-PWR | PCG STES-009-PWR

MAMS-STORED DATA-D/L | MAMS-STORED DATA-D/L

DPC-MORNING | DPC-MORNING

DOCKING | DOCKING

C&T-COMM CNFG-VERIFY | C&T-COMM CNFG-VERIFY

PL T PLN/115/BAS A

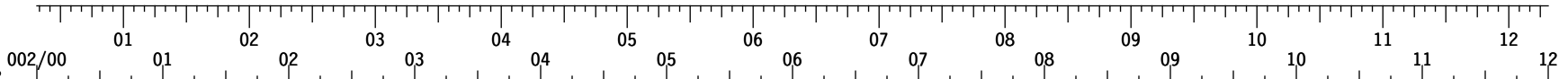
CPCG-H-CR
EXPRS1-S
EXPRS4-S
MAMS-P/L
SAMS-ICU
SAMS-RTS
SAMS-RTS
ADVASC-G
PCG STES

FD03

GMT 05/25/03 (145)

β=51.1

MET Day 002



S T S - 1 1 5	CDR JETT	N2 XFER INIT	I O L N L U M	EVA 1 PROC REVIEW	PRE SLEEP	PMC OCA	PRE SLEEP	SLEEP SVS		
	PLT FERGUSON	EXERCISE		EVA 1 PROC REVIEW			PRE SLEEP	SLEEP		
	MS1/EV1 TANNER	R C E/ B O A	EVA TOOL CNFG	EVA 1 PROC REVIEW			PRE SLEEP (GIRA)	SLEEP		
	MS2/EV3 BURBANK	XFER OPS	EVA CAM S/U	EVA 1 PROC REVIEW			PRE SLEEP	SLEEP		
	MS3/EV2 PIPER	R C E/ B O A	EVA TOOL CNFG	EVA 1 PROC REVIEW			PRE SLEEP	SLEEP		
	MS4/EV4 MACLEAN	SSRMS P3/P4 DRY RUN		EVA 1 PROC REVIEW	X T F A R E G I E R U P F		PRE SLEEP	SLEEP		
E X P - 7	ISS CDR	SSRMS P3/P4 DRY RUN		EVA 1 PROC REVIEW	PLAN REVV	DPC	PRESLEEP-ISS	SLEEP - ISS		
	FE-1	N2 XFER INIT		EVA 1 PROC REVIEW	PLAN REVV	DPC	PRESLEEP-ISS	SLEEP - ISS		
	FE-2		PREP WORK	EVA 1 PROC REVIEW	PLAN REVV	DPC	PRESLEEP-ISS	SLEEP - ISS		
S T S	DAY/NIGHT	[Timeline with alternating black and white bars]								
	ORBIT	33	34	35	36	37	38	39	40	41
S	DAILY ORBIT	7	8	9	10	11	12	13	14	15
	TDRS EAST 47 WEST 171	[Timeline with diamond markers and horizontal bars]								
ORB ATT		BIAS -XLV +ZVV								
NOTES										

FD03 **STS-115/12A JOINT MISSION STP**

$\beta = 51.1$
 MET Day 002 002/00 01 02 03 04 05 06 07 08 09 10 11 12

GMT 05/25/03 (145) 01 02 03 04 05 06 07 08 09 10 11 12

I S S	DAY/NIGHT	[Bar chart showing day/night cycle]													
	ORBIT	33	34	35	36	37	38	39	40	41					
	DAILY ORBIT	7	8	9	10	11	12	13	14	15					
TDRS S-BD AVAIL		[Bar chart showing TDRS availability]													

D P S	MSS-PWRDN	[Timeline bar]													
	DPC-EVENING	[Timeline bar]													
	PIP3 PREP FOR MATE	[Timeline bar]													
	SBD-KEY-CHG	[Timeline bar]													
	TCS-MANUAL HTR-OPS	[Timeline bar]													
	PPS-PCU-DISCHARGE	[Timeline bar]													

TCS-MANUA
MSS-PWRUP

M C C	DPC-EVENING	[Timeline bar]													
	PIP3 PREP FOR MATE	[Timeline bar]													

S P L	CPCG-H-CRYSTAL-GRTH	[Timeline bar]													
	EXPRS1-SYS-PWR/THERM	[Timeline bar]													
	EXPRS4-SYS-PWR/THERM	[Timeline bar]													
	MAMS-P/L-NOM OPS	[Timeline bar]													

CPCG-H-CR
EXPRS1-SY
EXPRS4-SY
MAMS-P/L
SAMS-ICU
SAMS-RTS
SAMS-RTS
ADVASC-GF
PCG STES-

P L	SAMS-ICU/D1-OPS	[Timeline bar]													
	SAMS-RTS/D1-OPS	[Timeline bar]													
ADVASC-GROWTH-TERM		[Timeline bar]													
PCG STES-009-PWR		[Timeline bar]													

ISS ATT		BIAS -XLV +ZVV													
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ISS	RS GND														
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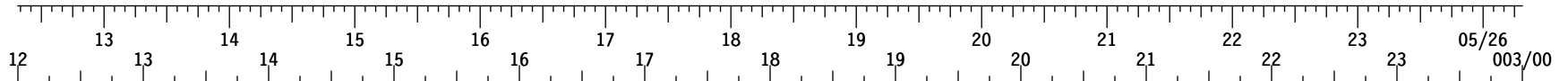
NOTES															
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FD04

GMT 05/25/03 (145)

β = 48.8

MET Day 002



S T S - 1 1 5	CDR JETT	POST SLEEP	PMC A/G	10.2 DPRS	STS P/B 02 EVA PREP	14.7 RPRS	IPNA HDI B	MBNCK	MUNDRAT	DP/TV23 EVA SETUP	EXERCISE	P/TV23 EVA OPS							
	PLT FERGUSON	POST SLEEP	MGRAPL	UNBERTH P3/4	PUG 3 NR / 4 PL	NO UNISOLATED EXERCISE SRMS EVA1 SUPPORT		EXERCISE		CINWICIT #1	SRMS EVA1 SUPPORT	CTWERM #2	SRMS EVA1 SUPPORT	CTWERM	SRMS EVA1 SUPPORT				
	MS1/EV1 TANNER	POST SLEEP (GIRA)	STS P/B 02 EVA PREP			EMURGE	EMU PREBREATHE	C_LK DPRS	PEGRDPSR	EVA 1 SETUP	CNCT P1/P3 UPR UTLY	RLS AFT BGA RSTRNT	ROTA	UNSTW AFT SABB	CNCT P1/P3 LWR UTLY	SARJ PREP	EVA 1 CLNUP		
	MS3/EV2 PIPER	POST SLEEP	STS P/B 02 EVA PREP			EMURGE	EMU PREBREATHE	C_LK DPRS	PEGRDPSR	EVA 1 SETUP	RLS AFT SABB RSTRNT	RLS FWD SABB RSTRNT	RLS FWD BGA RSTRNT	UNSTW FWD SABB	SARJ PREP	EVA 1 CLNUP			
	MS2/EV3 BURBANK	POST SLEEP	GGRAPL	UNBERTH P3/4	PUG 3 NR / 4 PL	SRMS EVA1 SUPPORT	STS P/B 02 EVA PREP			EVA1 IVA SUPPORT									
	MS4/EV4 MACLEAN	POST SLEEP	OIUACT	POST SLEEP	SHO SAF RNF MD S	SSRMS P3/P4 INSTL	SSAS	MNVR TO RTL	1-CAP	2-CAP	SSAS NORM MATE-3 BLT	UNRPL	SRFRMG S	EXERCISE		PST DK EVA XFR/RCNFG	E_LK PREP	SRSCRFMG S	SSRMS CAMERA VIEWS
E X P - 7	ISS CDR	SLEEP - ISS	POSTSLEEP-ISS		PREP WORK	SHO SAF RNF MD S	SSRMS P3/P4 INSTL	SSAS	MNVR TO RTL	1-CAP	2-CAP	SSAS NORM MATE-3 BLT	UNRPL	SRFRMG S	MIDDAY-MEAL		EXERCISE TVIS	EXERCISE-RED	
	FE-1	SLEEP - ISS	POST SLEEP ISS	LEH	STS P/B 02 EVA PREP							MIDDAY-MEAL		EXERCISE TVIS	SRSCRFMG S	EXERCISE-RED			
	FE-2	SLEEP - ISS	POSTSLEEP-ISS		PREP WORK	DPC	COM*		LABCK	EXERCISE-RED		MIDDAY-MEAL		EXERCISE TVIS					
S T S	DAY/NIGHT ORBIT	[Timeline bars for Day/Night Orbit]																	
	DAILY ORBIT	[Timeline bars for Daily Orbit]																	
T D R S	EAST 47	[Timeline bars for TDRS EAST 47]																	
	WEST 171	[Timeline bars for TDRS WEST 171]																	
ORB ATT		BIAS -XLV +ZVV																	
NOTES		*VERIFY CONFIG 2B																	

FD04

STS-115/12A JOINT MISSION STP

β = 48.8

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

GMT 05/25/03 (145)

I	DAY/NIGHT	[Day/Night Schedule]																			
S	ORBIT	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
S	DAILY ORBIT	15	16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
S	TDRS S-BD AVAIL	[TDRS S-BD AVAIL Schedule]																			

D	TCS-MANUAL HTR-OPS	[TCS-MANUAL HTR-OPS]																		
	IATCS-RFCA STPT-CHNG	[IATCS-RFCA STPT-CHNG]																		
D	ISS EVA-COMM-CNFG	[ISS EVA-COMM-CNFG]																		
	A/L-10.2 PSI OP-INIT	[A/L-10.2 PSI OP-INIT]																		
	C&T-VIDEO-CNFG	[C&T-VIDEO-CNFG]																		
	ZENITH 4B TRAY-PWRDN	[ZENITH 4B TRAY-PWRDN]																		
	DPC-MORNING	[DPC-MORNING]																		
	ISS-RAP DPRS-INH/ENA	[ISS-RAP DPRS-INH/ENA]																		
	C&T-WETA-ACT	[C&T-WETA-ACT]																		
	A/L-10.2 PSI OP-TERM	[A/L-10.2 PSI OP-TERM]																		
	ACS-MP-PPL-INC	[ACS-MP-PPL-INC]																		
	ACS-CCDB PARAM-U/D	[ACS-CCDB PARAM-U/D]																		
D	EVA1 INHIBIT PAD	[EVA1 INHIBIT PAD]																		
	ISS-MODE EXT-XTION	[ISS-MODE EXT-XTION]																		
	PIP3 SSAS NOM MATE	[PIP3 SSAS NOM MATE]																		
	ZENITH 4B TRAY-PWRUP	[ZENITH 4B TRAY-PWRUP]																		
	EPS-SARJ DLA-NEUTRAL	[EPS-SARJ DLA-NEUTRAL]																		
	NADIR 2B TRAY-PWRDN	[NADIR 2B TRAY-PWRDN]																		
	PVCU-4A-ACT	[PVCU-4A-ACT]																		
	PPS-4A INITIAL-ACT	[PPS-4A INITIAL-ACT]																		
	PVTCS-4A-ACT	[PVTCS-4A-ACT]																		
	NADIR 2B TRAY-PWRUP	[NADIR 2B TRAY-PWRUP]																		
D	PPS-4A BATT-C/O	[PPS-4A BATT-C/O]																		
	EPS-SARJ DLA-ENGAGE	[EPS-SARJ DLA-ENGAGE]																		
	PVCU-2A-ACT	[PVCU-2A-ACT]																		
	PPS-4A2 BATT-W/U	[PPS-4A2 BATT-W/U]																		
	PPS-2A INITIAL-ACT	[PPS-2A INITIAL-ACT]																		
	PVTCS-2A-ACT	[PVTCS-2A-ACT]																		
	ZENITH 4B TRAY-PWRDN	[ZENITH 4B TRAY-PWRDN]																		
	DPC-MORNING	[DPC-MORNING]																		
	C&T-COMM CNFG-VERIFY	[C&T-COMM CNFG-VERIFY]																		
	EVA1 INHIBIT PAD	[EVA1 INHIBIT PAD]																		
D	PIP3 SSAS NOM MATE	[PIP3 SSAS NOM MATE]																		
	ZENITH 4B TRAY-PWRUP	[ZENITH 4B TRAY-PWRUP]																		
	NADIR 2B TRAY-PWRDN	[NADIR 2B TRAY-PWRDN]																		
	NADIR 2B TRAY-PWRUP	[NADIR 2B TRAY-PWRUP]																		
	CPCG-H-CRYSTAL-GRTH	[CPCG-H-CRYSTAL-GRTH]																		
	EXPRS1-SYS-PWR/THERM	[EXPRS1-SYS-PWR/THERM]																		
	EXPRS4-SYS-PWR/THERM	[EXPRS4-SYS-PWR/THERM]																		
	MAMS-P/L-NOM OPS	[MAMS-P/L-NOM OPS]																		
	SAMS-ICU/D1-OPS	[SAMS-ICU/D1-OPS]																		
	SAMS-RTS/D1-OPS	[SAMS-RTS/D1-OPS]																		
SAMS-RTS/D2-OPS	[SAMS-RTS/D2-OPS]																			
ADVASC-GROWTH-TERM	[ADVASC-GROWTH-TERM]																			
PCG STES-009-PWR	[PCG STES-009-PWR]																			
MAMS-STORED DATA-D/L	[MAMS-STORED DATA-D/L]																			

K																					
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C	ZENITH 4B TRAY-PWRDN	[ZENITH 4B TRAY-PWRDN]																				
	DPC-MORNING	[DPC-MORNING]																				
	C&T-COMM CNFG-VERIFY	[C&T-COMM CNFG-VERIFY]																				
	EVA1 INHIBIT PAD	[EVA1 INHIBIT PAD]																				
	PIP3 SSAS NOM MATE	[PIP3 SSAS NOM MATE]																				
	ZENITH 4B TRAY-PWRUP	[ZENITH 4B TRAY-PWRUP]																				
	NADIR 2B TRAY-PWRDN	[NADIR 2B TRAY-PWRDN]																				
	NADIR 2B TRAY-PWRUP	[NADIR 2B TRAY-PWRUP]																				
	S																					
	S																					

P	CPCG-H-CRYSTAL-GRTH	[CPCG-H-CRYSTAL-GRTH]																		
	EXPRS1-SYS-PWR/THERM	[EXPRS1-SYS-PWR/THERM]																		
	EXPRS4-SYS-PWR/THERM	[EXPRS4-SYS-PWR/THERM]																		
	MAMS-P/L-NOM OPS	[MAMS-P/L-NOM OPS]																		
	SAMS-ICU/D1-OPS	[SAMS-ICU/D1-OPS]																		
	SAMS-RTS/D1-OPS	[SAMS-RTS/D1-OPS]																		
	SAMS-RTS/D2-OPS	[SAMS-RTS/D2-OPS]																		
	ADVASC-GROWTH-TERM	[ADVASC-GROWTH-TERM]																		
	PCG STES-009-PWR	[PCG STES-009-PWR]																		
	MAMS-STORED DATA-D/L	[MAMS-STORED DATA-D/L]																		

ISS ATT	BIAS -XLV +ZVV	[BIAS -XLV +ZVV]																		
		[BIAS -XLV +ZVV]																		
ISS	RS GND	[RS GND]																		
		[RS GND]																		

		2-11																		
		FLT PLN/115/BAS A																		

NOTES	*VERIFY CONFIG 2B																			
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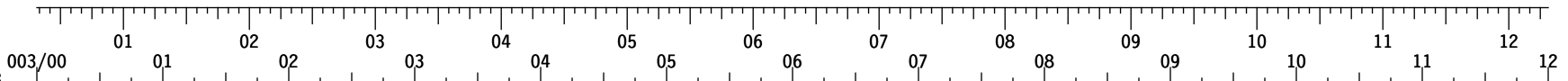
PPS-4A2 BATT-W/U
2A INITIAL-ACT
PVTCS-2A-ACT
CPCG-H-CRYSTAL-GRTH
EXPRS1-SYS-PWR/THERM
EXPRS4-SYS-PWR/THERM
MAMS-P/L-NOM OPS
SAMS-ICU/D1-OPS
SAMS-RTS/D1-OPS
SAMS-RTS/D2-OPS
ADVASC-GROWTH-TERM
PCG STES-009-PWR

FD04

GMT 05/26/03 (146)

β = 46.5

MET Day 003



S T S - 1 1 5	CDR JETT		COM M *	PMC OCA	PRE SLEEP	EVA 2 PROC REVIEW	PRE SLEEP	SLEEP SVS	
	PLT FERGUSON	R P M W S R D N	CWC XFER (2)		PRE SLEEP	EVA 2 PROC REVIEW	PRE SLEEP	SLEEP	
	MS1/EV1 TANNER	I P N - G R P S R	POST EVA W/O H2O	SNACK	POST EVA W/O H2O	EVA 2 PROC REVIEW	PRE SLEEP (GIRA)	SLEEP	
	MS3/EV2 PIPER	I P N - G R P S R	POST EVA W/O H2O	SNACK	POST EVA W/O H2O	EVA 2 PROC REVIEW	PRE SLEEP	SLEEP	
	MS2/EV3 BURBANK		POST EVA W/O H2O	EMU SWAP	E P R T E K P	EVA TOOL CNFG	EVA 2 PROC REVIEW	PRE SLEEP	SLEEP
	MS4/EV4 MACLEAN		POST EVA W/O H2O	EMU SWAP	E P R T E K P	EVA TOOL CNFG	EVA 2 PROC REVIEW	PRE SLEEP	SLEEP
E X P - 7	ISS CDR		PLAN REVW	PREP WORK	DPC	EVA 2 PROC REVIEW	PRE SLEEP ISS	SLEEP - ISS	
	FE-1	*	PLAN REVW	PREP WORK	DPC	EVA 2 PROC REVIEW	PRE SLEEP ISS	SLEEP - ISS	
	FE-2		COM M *	PREP WORK	DPC	EVA 2 PROC REVIEW	PRE SLEEP ISS	SLEEP - ISS	
S T S	DAY/NIGHT	[Timeline with shaded day/night periods]							
	ORBIT	[Timeline with orbit data]							
S T S	DAILY ORBIT	[Timeline with daily orbit data]							
	TDRS EAST 47 WEST 171	[Timeline with TDRS data]							
ORB ATT		BIAS -XLV +ZVV							
NOTES		*EXERCISE-RED *Deconfig *VERIFY CONFIG 3B							

FD04 **STS-115/12A JOINT MISSION STP**

β = 46.5
 MET Day 003 003/00 01 02 03 04 05 06 07 08 09 10 11 12

GMT 05/26/03 (146) 01 02 03 04 05 06 07 08 09 10 11 12

I	DAY/NIGHT	
S	ORBIT	49 50 51 52 53 54 55 56
S	DAILY ORBIT	7 8 9 10 11 12 13 14
S	TDRS S-BD AVAIL	

S	PPS-4A2 BATT-W/U PVTCS-2A-ACT PPS-2A BATT-C/O C&T-WETA-DEACT MSS-PWRDN PPS-2A2 BATT-W/U C&DH-INH VALID-CK DPC-EVENING ISS-MODE STND-XTION PPS-4A2 BATT-CHARGE PPS-BGA 4A(2A)-REPOS PPS-2A2 BATT-CHARGE SBD-KEY-CHG C&T-S-BAND-1-DEACT MSS-PWRUP	<p>PPS-4A2 BATT-W/U</p> <p>PPVTCS-2A-ACT</p> <p>PPS-2A BATT-C/O</p> <p>C&T-WETA-DEACT</p> <p>MSS-PWRDN</p> <p>PPS-2A2 BATT-W/U</p> <p>C&DH-INH VALID-CK</p> <p>DPC-EVENING</p> <p>ISS-MODE STND-XTION</p> <p>PPS-BGA 4A(2A)-REPOS</p> <p>HSBD-KEY-CHG</p> <p>C&T-S-BAND-1-DEACT</p> <p>MSS-PWRUP</p>	
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PPS-4A2 E
PPS-2A2 E

K	C&T-COMM CNFG-VERIFY	HC&T-COMM CNFG-VERIFY
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S	CPCG-H-CRYSTAL-GRTH EXPRS1-SYS-PWR/THERM EXPRS4-SYS-PWR/THERM MAMS-P/L-NOM OPS SAMS-ICU/D1-OPS SAMS-RTS/D1-OPS SAMS-RTS/D2-OPS ADVASC-GROWTH-TERM PCG STES-009-PWR		
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CPCG-H-CR
EXPRS1-S
EXPRS4-S
MAMS-P/L
SAMS-ICU
SAMS-RTS
SAMS-RTS
ADVASC-G
PCG STES-

ISS	ISS ATT	BIAS -XLV +ZVV
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ISS	RS GND	
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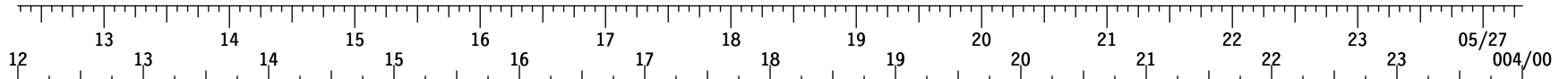
NOTES	*VERIFY CONFIG 3B
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FD05

GMT 05/26/03 (146)

β = 44.2

MET Day 003



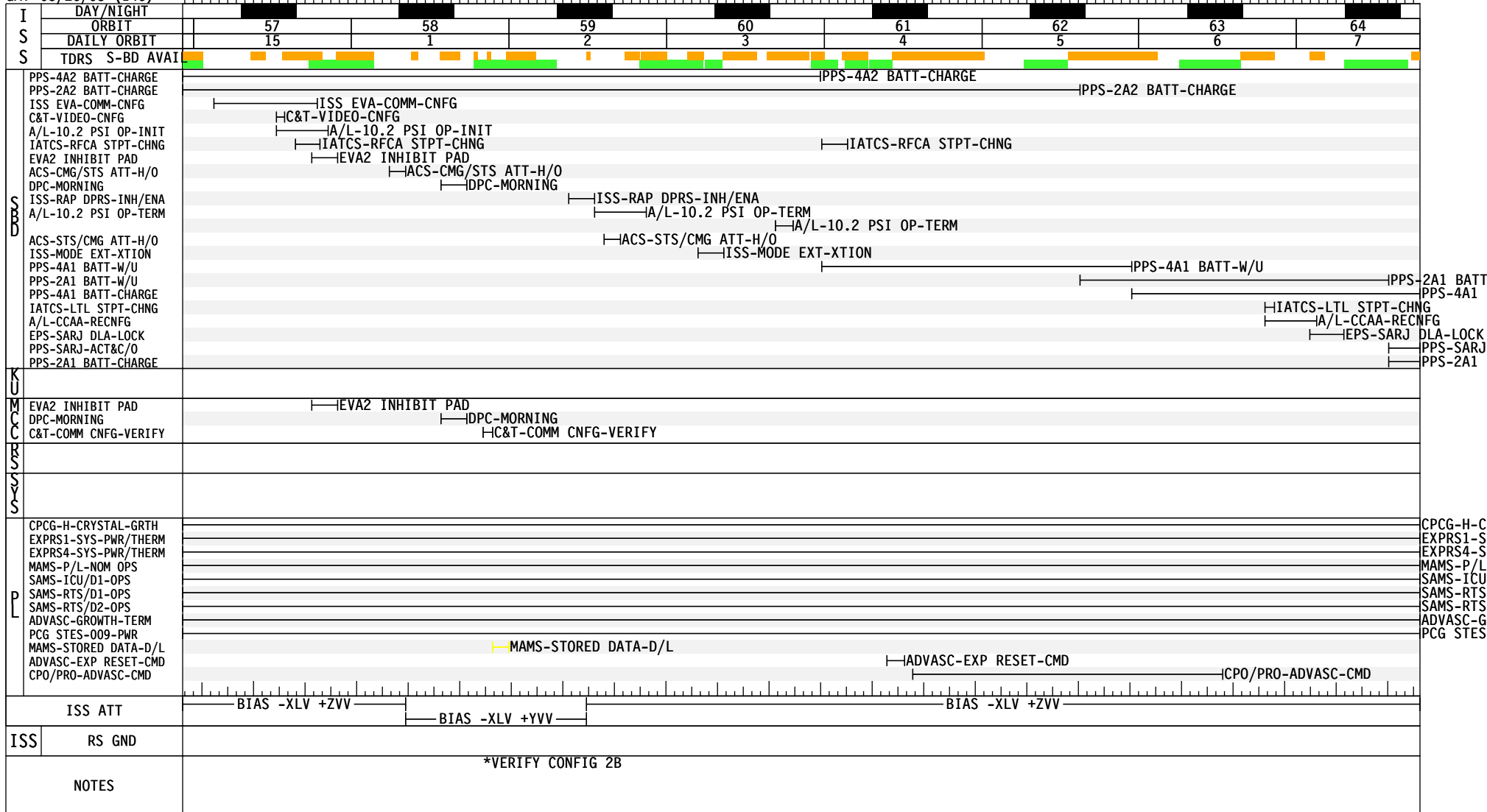
S T S - 1 1 5	CDR JETT	POST SLEEP	PMCA/G	INHDAIB	POST SLEEP	H/O	M-NXVLRV	SIPNLYT	POST SLEEP	SPLY*	M-NXVLRV	H/O	EXERCISE	P/TV23 EVA OPS	MEAL	P/TV23 EVA OPS	P/TV24 S/U		
	PLT FERGUSON	POST SLEEP								MCIU	EXERCISE			MEAL					
	MS1/EV1 TANNER	POST SLEEP (GIRA)	ASPRN	10.2 DPRS	STS P/B 02 EVA PREP					14.7 RPRS	EVA2 IVA SUPPORT								
	MS3/EV2 PIPER	SAMPL POST SLEEP	ASPRN	POST SLEEP				BMC	EVA CAM S/U	EXERCISE	SSRMS DRY RUN			SSRMS CAMERA VIEWS				SSRMS 4A SAW RCNFG	
	MS2/EV3 BURBANK	POST SLEEP	STS P/B 02 EVA PREP						EMURGE	EMU PREBREATHE	C_LK DPRS	PEGDRPS	EVA 2 SETUP	SARJ PREP					ECLANUP
	MS4/EV4 MACLEAN	POST SLEEP	STS P/B 02 EVA PREP						EMURGE	EMU PREBREATHE	C_LK DPRS	PEGDRPS	EVA 2 SETUP	SARJ PREP					ECLANUP
E X P - 7	ISS CDR	SLEEP - ISS	POST SLEEP ISS	STS P/B 02 EVA PREP					SSRMS DRY RUN		MIDDAY-MEAL		EXERCISE TVIS		EXERCISE-RED				
	FE-1	SLEEP - ISS	POSTSLEEP-ISS	PREP WORK	DPC	EXERCISE-RED				MIDDAY-MEAL		⊕	◆	Ⓞ	♥	EXERCISE TVIS	SSRMS 4A SAW RCNFG		
	FE-2	SLEEP - ISS	POSTSLEEP-ISS	PREP WORK	DPC	LABCK	COM*	EXERCISE TVIS		MIDDAY-MEAL		EXERCISE-RED							
S T S	DAY/NIGHT	[Timeline with shaded blocks]																	
	ORBIT	[Timeline with shaded blocks]																	
	DAILY ORBIT	[Timeline with shaded blocks]																	
T D R S	EAST 47	[Timeline with shaded blocks]																	
	WEST 171	[Timeline with shaded blocks]																	
ORB ATT	BIAS -XLV +ZVV																		
N O T E S	*TERM																		
	*VERIFY CONFIG 2B																		
*ADVASC-FIN STAT-MON ⊕ADVASC-EXP-DEACT ◆ADVASC-DISCNCT-FAM ⓄADVASC-GAS-SAMPLE ♥ADVASC-CABLE-DISCNCT																			

FD05

STS-115/12A JOINT MISSION STP

$\beta = 44.2$

MET Day 003 12 13 14 15 16 17 18 19 20 21 22 23 004/00
GMT 05/26/03 (146) 13 14 15 16 17 18 19 20 21 22 23 05/27

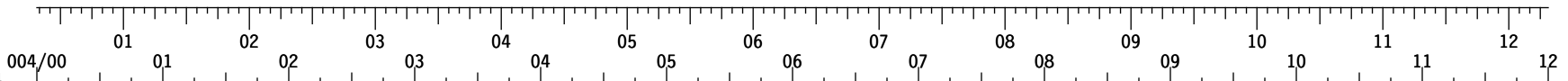


FD05

GMT 05/27/03 (147)

β=41.9

MET Day 004



S T S - 1 1 5	CDR JETT	P/TV 24 EXT OPS	C O M M *	P/TV 25 S/U	PRE SLEEP	PMC OCA	PRE SLEEP	SLEEP		
	PLT FERGUSON						PRE SLEEP	SLEEP		
	MS1/EV1 TANNER			POST EVA W/H2O,METOX	EMU SWAP		PRE SLEEP (GIRA)	SLEEP		
	MS3/EV2 PIPER			POST EVA W/H2O,METOX	EMU SWAP		PRE SLEEP	SLEEP		
	MS2/EV3 BURBANK	E C I P V L N - A N G R - U R P - 2 P S R	R P R S	POST EVA W/H2O,METOX			PRE SLEEP	SLEEP		
	MS4/EV4 MACLEAN	E C I P V L N - A N G R - U R P - 2 P S R	R P R S	POST EVA W/H2O,METOX			PRE SLEEP	SLEEP		
E X P - 7	ISS CDR			PLAN REVW	PREP WORK	DPC	PRE SLEEP ISS	SLEEP - ISS		
	FE-1	M E T X *	B I S N A I T *	PLAN REVW	PREP WORK	DPC	PRE SLEEP ISS	SLEEP - ISS		
	FE-2	C O M M *		P/TV S/U	PLAN REVW	PREP WORK	DPC	PRE SLEEP ISS	SLEEP - ISS	
S T S	DAY/NIGHT	[Shaded bars indicating day/night cycle]								
	ORBIT	64	65	66	67	68	69	70	71	72
S	DAILY ORBIT	7	8	9	10	11	12	13	14	15
	TDRS EAST 47 WEST 171	[Timeline with diamond markers and horizontal bars]								
ORB ATT		BIAS -XLV +ZVV								
NOTES		*Deconfig *Init *(Recharge PGT and Helmet Light only) *VERIFY CONFIG 3B								

FD05 **STS-115/12A JOINT MISSION STP**

β = 41.9
 MET Day 004 004/00 01 02 03 04 05 06 07 08 09 10 11 12

GMT 05/27/03 (147) 01 02 03 04 05 06 07 08 09 10 11 12

I S S	DAY/NIGHT	[Bar chart showing day/night cycle]											
	ORBIT	64	65	66	67	68	69	70	71	72			
	DAILY ORBIT	7	8	9	10	11	12	13	14	15			

S B D	TDRS S-BD AVAIL	[Bar chart showing TDRS availability]											
	PPS-4A1 BATT-CHARGE												
	PPS-SARJ-ACT&C/O	----- PPS-SARJ-ACT&C/O											
	PPS-2A1 BATT-CHARGE												
	C&DH-INH VALID-CK	----- C&DH-INH VALID-CK											
	ISS-MODE STND-XTION	----- ISS-MODE STND-XTION											

D K	DPC-EVENING	----- DPC-EVENING											
	SBD-KEY-CHG	----- SBD-KEY-CHG											

M C S	C&T-COMM CNFG-VERIFY	----- C&T-COMM CNFG-VERIFY											
	DPC-EVENING	----- DPC-EVENING											

P L	CPCG-H-CRYSTAL-GRTH												
	EXPRS1-SYS-PWR/THERM												
	EXPRS4-SYS-PWR/THERM												
	MAMS-P/L-NOM OPS												
	SAMS-ICU/D1-OPS												
	SAMS-RTS/D1-OPS												
	SAMS-RTS/D2-OPS												
	ADVASC-GROWTH-TERM												

	ISS ATT	----- BIAS -XLV +ZVV											
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ISS	RS GND												
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NOTES	*VERIFY CONFIG 3B												
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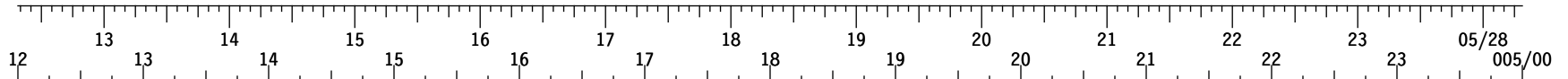
PPS-4A1 E
 PPS-2A1 E
 TCS-MANUA
 CPCG-H-CF
 EXPRS1-SY
 EXPRS4-SY
 MAMS-P/L
 SAMS-ICU
 SAMS-RTS
 SAMS-RTS
 ADVASC-GF
 PCG STES

FD06

GMT 05/27/03 (147)

β=39.5

MET Day 004



S T S - 1 1 5	CDR JETT	LOG	M-NX LV	POST SLEEP		M-NZ LV	H/O	NO UNISOLATED EXERCISE				4A BGA ACT& SAW DPLY		2A BGA ACT& SAW DPLY		MEAL		PWR FILL #1	P/TV 21 S/U	PEAV OENT	
	PLT FERGUSON	PS O S E T E P	S W A P	SIMO INIT	POST SLEEP	STE M R O M	COND C W C D U M P	POST SLEEP	FILTER I N S P E C T	XFER OPS	C A B I T	H T R I B	R W C C S	XFER OPS		MEAL	XFER OPS		EXERCISE		
	MS1/EV1 TANNER	L O G	S A M P L	POST SLEEP (GIRA)			4A BGA ACT& SAW DPLY			2A BGA ACT& SAW DPLY			MEAL	EMU*	EMU H2O RCHRG	E_LK PREP	EVA T O O L C N F G	XFER O P S			
	MS2/EV3 BURBANK	L O G	POST SLEEP			A S P R N	4A BGA ACT& SAW DPLY			2A BGA ACT& SAW DPLY			MEAL	XFER OPS			EXER CISE				
	MS3/EV2 PIPER	S A M P L	POST SLEEP			B M C K	S 3 M P H G	XFER OPS					MEAL	EMU*	EMU H2O RCHRG	E_LK PREP	EVA T O O L C N F G	XFER O P S			
	MS4/EV4 MACLEAN	L O G	POST SLEEP			A S P R N	4A BGA ACT& SAW DPLY			SSRMS 2A SAW RCNFG	2A BGA ACT& SAW DPLY			MEAL	EMU*	MT T R A N S P R E P	EXERCISE		PEAV OENT		
E X P - 7	ISS CDR	SLEEP - ISS	POSTSLEEP-ISS		PREP W O R K	D P C	NTXN	EXERCISE-RED			SSRMS 2A SAW RCNFG	EXERCISE T V I S		MIDDAY-MEAL							
	FE-1	SLEEP - ISS	POSTSLEEP-ISS		PREP W O R K	D P C	4A BGA ACT& SAW DPLY			2A BGA ACT& SAW DPLY			MIDDAY-MEAL	MT T R A N S P R E P	EXERCISE T V I S						
	FE-2	SLEEP - ISS	POSTSLEEP-ISS		PREP W O R K	D P C	E M U - T	M E T X *	L A B C K	EXERCISE T V I S		P/TV S/U	EXERCISE-RED		MIDDAY-MEAL	B S A - T	E_LK PREP	NTXN B K U P			
S T S	DAY/NIGHT																				
	ORBIT	72	73		74		75		76		77		78		79		80				
S	DAILY ORBIT	15	16		1		2		3		4		5		6		7				
	TDRS EAST 47 WEST 171	[Timeline with diamond markers]																			
ORB ATT		BIAS -XLV +YVV					BIAS -ZLV +ZVV														
NOTES		*Term *Init										*Battery/Metox Install									

FD06

STS-115/12A JOINT MISSION STP

β=39.5
 MET Day 004 12 13 14 15 16 17 18 19 20 21 22 23 005/00
 GMT 05/27/03 (147) 13 14 15 16 17 18 19 20 21 22 23 05/28

I	DAY/NIGHT	[Day/Night Cycle]											
S	ORBIT	72	73	74	75	76	77	78	79	80			
S	DAILY ORBIT	15	16	1	2	3	4	5	6	7			
S	TDRS S-BD AVAIL	[TDRS S-BD AVAIL]											

S D B	PPS-4A1 BATT-CHARGE	-----											
	PPS-2A1 BATT-CHARGE	-----											
	PPS-4B/2B-PWRDN	-----											
	ACS-CMG/STS ATT-H/O	-----											
	ACS-CCDB PARAM-U/D	-----											
	ISS/STS-VIDEO-ROUTE	-----											
	PPS-SAW DPLY-PREP	-----											
	DPC-MORNING	-----											
	ACS-STS/CMG ATT-H/O	-----											
	PPS-SAW 4A-DPLY	-----											
TCS-MANUAL HTR-OPS	-----												
PPS-SAW 2A-DPLY	-----												
ACS-ATT-CCDB-INC	-----												
PPS-4A3 BATT-W/U	-----												
PPS-4B/2B-PWRUP	-----												
PPS-2A3 BATT-W/U	-----												
PPS-BGA CNFG-TRACK	-----												
ACS-MOM MGMT-ACT	-----												
PPS-4A3 BATT-CHARGE	-----												

D M C S S	DPC-MORNING	-----											

P	CPCG-H-CRYSTAL-GRTH	-----											
	EXPRS1-SYS-PWR/THERM	-----											
	EXPRS4-SYS-PWR/THERM	-----											
	MAMS-P/L-NOM OPS	-----											
	SAMS-ICU/D1-OPS	-----											
	SAMS-RTS/D1-OPS	-----											
	SAMS-RTS/D2-OPS	-----											
ADVASC-GROWTH-TERM	-----												
PCG STES-009-PWR	-----												
MAMS-STORED DATA-D/L	-----												

ISS ATT	-----											
	BIAS -XLV +YVV ----- BIAS -ZLV +ZVV -----											

ISS	RS GND												
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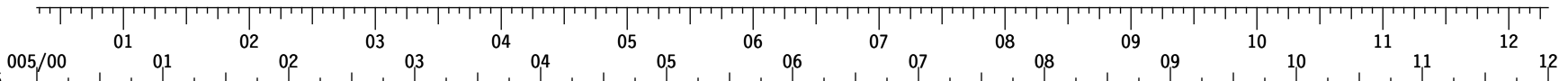
NOTES												
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FD06

GMT 05/28/03 (148)

β = 37.2

MET Day 005



S T S - 1 1 5	CDR JETT	EXERCISE	EVA 3 PROC REVIEW	PRE SLEEP	PMC OCA	PRE SLEEP	SLEEP			
	PLT FERGUSON	CINW C I T # 3	PRE SLEEP	EVA 3 PROC REVIEW	CTW E C R M	CX F C E R	PRE SLEEP	SLEEP		
	MS1/EV1 TANNER	XFER OPS	EVA CAM S/U	EVA 3 PROC REVIEW	PRE SLEEP (GIRA)		SLEEP			
	MS2/EV3 BURBANK	EXER CISE	XFER OPS	EVA 3 PROC REVIEW	PRE SLEEP		SLEEP			
	MS3/EV2 PIPER	XFER OPS		EVA 3 PROC REVIEW	PRE SLEEP		SLEEP			
	MS4/EV4 MACLEAN	XFER OPS	X T F A R E G I R U P	EVA 3 PROC REVIEW	PRE SLEEP		SLEEP			
E X P - 7	ISS CDR		PREP WORK	EVA 3 PROC REVIEW	PLAN REVW	DPC	PRESLEEP-ISS	SLEEP - ISS		
	FE-1		PREP WORK	EVA 3 PROC REVIEW	PLAN REVW	DPC	PRESLEEP-ISS	SLEEP - ISS		
	FE-2		PREP WORK	EVA 3 PROC REVIEW	PLAN REVW	DPC	PRESLEEP-ISS	SLEEP - ISS		
S T S	DAY/NIGHT	[Timeline with alternating black and white bars]								
	ORBIT	80	81	82	83	84	85	86	87	88
S	DAILY ORBIT	7	8	9	10	11	12	13	14	15
	TDRS EAST 47 WEST 171	[Timeline with horizontal bars and diamond markers]								
ORB ATT		BIAS -ZLV +ZVV								
NOTES										

FD06 **STS-115/12A JOINT MISSION STP**

β = 37.2
 MET Day 005 005/00 01 02 03 04 05 06 07 08 09 10 11 12

GMT 05/28/03 (148) 01 02 03 04 05 06 07 08 09 10 11 12

I S S	DAY/NIGHT	[Day/Night Cycle]											
	ORBIT	80	81	82	83	84	85	86	87	88			
	DAILY ORBIT	7	8	9	10	11	12	13	14	15			

TDRS S-BD AVAIL [Color-coded availability bars]

DBS	PPS-2A3 BATT-W/U	-----											
	PPS-4A3 BATT-CHARGE	-----											
	PPS-2A3 BATT-CHARGE	-----											
	MT-WS7-WS4-TRANSLATE	-----											
	DPC-EVENING	-----											
	PPS-4A(2A) BAT-CHG	-----											

A/L-CCAA-RECNGF |-----| HSB-D-KEY-CHG

MT	MT-WS7-WS4-TRANSLATE	-----											

S		-----											

P	CPCG-H-CRYSTAL-GRTH	-----											
	EXPRS1-SYS-PWR/THERM	-----											
	EXPRS4-SYS-PWR/THERM	-----											
	MAMS-P/L-NOM OPS	-----											
	SAMS-ICU/D1-OPS	-----											
	SAMS-RTS/D1-OPS	-----											
	PCG STES-009-PWR	-----											

ISS ATT BIAS -ZLV +ZVV

ISS	RS GND	-----											
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NOTES

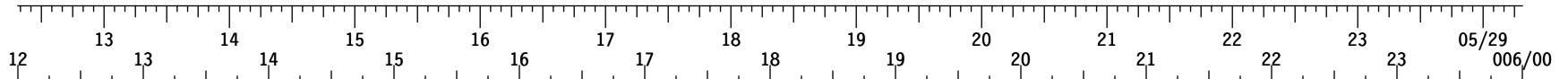
CPCG-H-CR
 EXPRS1-S
 EXPRS4-S
 MAMS-P/L
 SAMS-ICU
 SAMS-RTS
 PCG STES

FD07

GMT 05/28/03 (148)

β=34.8

MET Day 005



S T S - 1 1 5	CDR JETT	POST SLEEP	POST SLEEP	P/TV 26 S/U	P/TV26 REBOOST OPS	POST SLEEP	EXERCISE	P/TV23 EVA SETUP	NO UNISOLATED EXERCISE				MEAL	P/TV23 EVA OPS	P/TV 25 S/U	P6 4B RETRACTION	P/TV23 EVA OPS				
	PLT FERGUSON	POST SLEEP	H/O	M-NXLRV	P/TV 26 S/U	REBOOST CONFIG 3	MNVR BIAS -XLV	H/O	MR CM ISU*	EXERCISE		CIWN CI#4	MEAL	CTWFCR	CM	EXERCISE	SRMS VIEW 4B RTRCT	P6 4B RETRACTION	CIWN CI#5	RPMSRDN	
	MS1/EV1 TANNER	POST SLEEP (GIRA)	STS P/B 02 EVA PREP				EMURGE	EMU PREBREATHE	C_LK DPRS	PEGRDPSR	EVA 3 SETUP	RLS CNCH/WNCH	RMV&STW P3 KEEL PIN	RGDZ SARJ STRTS	DPLY SARJ BRACE	EAS H/O TO SSRMS	P6 4-BAR LOCK	SFTIBL	MT RPCM 3A R&R	SFTIBL	EVA 3 CLNUP
	MS3/EV2 PIPER	POST SLEEP	STS P/B 02 EVA PREP				EMURGE	EMU PREBREATHE	C_LK DPRS	PEGRDPSR	EVA 3 SETUP	RLS CNCH/WNCH	RMV&STW P3 KEEL PIN	RGDZ SARJ STRTS	DPLY SARJ BRACE	EAS H/O TO SSRMS	EAS-SO STBD FILL		EVA 3 CLNUP		
	MS2/EV3 BURBANK	POST SLEEP	10.2 DPRS	STS P/B 02 EVA PREP				14.7 RPRS	EVA3 IVA SUPPORT												
	MS4/EV4 MACLEAN	POST SLEEP	EXERCISE				SRSCRFMGS	PV RAD DEPLOY	SSRMS RCFG	SSRMS EVA3 SUPPORT											
E X P - 7	ISS CDR	SLEEP - ISS	POST SLEEP ISS	STS P/B 02 EVA PREP				MIDDAY-MEAL	EXERCISE-RED				EXERCISE TVIS								
	FE-1	SLEEP - ISS	POST SLP ISS	MELTEX*	POST SLEEP ISS	PREP WORK	DPC	EXERCISE TVIS	EXERCISE-RED	SRSCRFMGS	MIDDAY-MEAL	PV RAD DEPLOY	SSRMS RCFG	SSRMS EVA3 SUPPORT		E_LK PREP					
	FE-2	SLEEP - ISS	POSTSLEEP-ISS		PREP WORK	DPC	LABCK	COM*	EXERCISE TVIS	MIDDAY-MEAL	EXERCISE-RED										
S T S	DAY/NIGHT	[Timeline bars for Day/Night]																			
	ORBIT	88	89		90		91		92		93		94		95		96				
S T S	DAILY ORBIT	15	1		2		3		4		5		6		7		8				
	TDRS EAST 47 WEST 171	[Timeline bars for TDRS]																			
ORB ATT		BIAS -ZLV +ZVV				REBOOST				BIAS -XLV +ZVV											
NOTES		*Term *VERIFY CONFIG 2B *HTR																			

FD07 **STS-115/12A JOINT MISSION STP**

β = 34.8
 MET Day 005 12 13 14 15 16 17 18 19 20 21 22 23 006/00
 GMT 05/28/03 (148) 13 14 15 16 17 18 19 20 21 22 23 05/29

I	DAY/NIGHT										
S	ORBIT	88	89	90	91	92	93	94	95	96	
S	DAILY ORBIT	15	1	2	3	4	5	6	7	8	
S	TDRS S-BD AVAIL	[Color-coded bars representing TDRS S-BD AVAIL]									

ISS	ISS EVA-COMM-CNFG	ISS EVA-COMM-CNFG									
	C&T-VIDEO-CNFG	C&T-VIDEO-CNFG									
D	A/L-10.2 PSI OP-INIT	A/L-10.2 PSI OP-INIT									
	IATCS-RFCA STPT-CHNG	IATCS-RFCA STPT-CHNG									
S	EVA3 INHIBIT PAD	EVA3 INHIBIT PAD									
	ACS-CMG/STS ATT-H/O	ACS-CMG/STS ATT-H/O									
B	ETCS-EAS LPA-PREP	ETCS-EAS LPA-PREP									
	DPC-MORNING	DPC-MORNING									
D	ACS-STC/CMG ATT-H/O	ACS-STC/CMG ATT-H/O									
	ISS-RAP DPRS-INH/ENA	ISS-RAP DPRS-INH/ENA									
S	A/L-10.2 PSI OP-TERM	A/L-10.2 PSI OP-TERM									
	ISS-MODE EXT-XTION	ISS-MODE EXT-XTION									
D	PPS-PVR-DPLY	PPS-PVR-DPLY									
	PPS-SAW 4B-RTRCT	PPS-SAW 4B-RTRCT									
S	ETCS-EAS LPA-FILL	ETCS-EAS LPA-FILL									
	ETCS-EAS LPA-PSTFILL	ETCS-EAS LPA-PSTFILL									
C	C&DH-INH VALID-CK	C&DH-INH VALID-CK									

M	EVA3 INHIBIT PAD	EVA3 INHIBIT PAD									
	DPC-MORNING	DPC-MORNING									
C	C&T-COMM CNFG-VERIFY	C&T-COMM CNFG-VERIFY									

P	CPCG-H-CRYSTAL-GRTH										
	EXPRS1-SYS-PWR/THERM										
L	EXPRS4-SYS-PWR/THERM										
	MAMS-P/L-NOM OPS										
S	SAMS-ICU/D1-OPS										
	SAMS-RTS/D1-OPS										
P	SAMS-RTS/D2-OPS										
	PCG STES-009-PWR										
L	MAMS-STORED DATA-D/L	MAMS-STORED DATA-D/L									

ISS ATT	BIAS -ZLV +ZVV	REBOOST	BIAS -XLV +ZVV
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ISS	RS GND
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NOTES *VERIFY CONFIG 2B

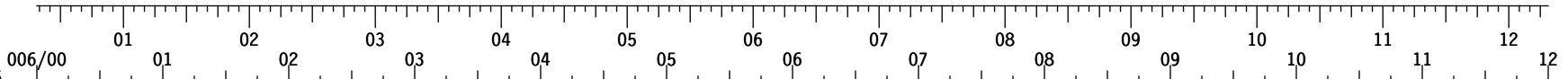
PA-FILL
 ETCS-EAS LPA-PSTFILL
 C&DH-INH
 CPCG-H-CR
 EXPRS1-SY
 EXPRS4-SY
 MAMS-P/L-
 SAMS-ICU/
 SAMS-RTS/
 SAMS-RTS/
 PCG STES

FD07

GMT 05/29/03 (149)

β=32.5

MET Day 006



S T S - 1 1 5	CDR JETT		COM M *	PRE SLEEP	PMC OCA	EVA 4 PROC REVIEW	PRE SLEEP	SLEEP									
	PLT FERGUSON	CT W E R C M	C X F E R	PRE SLEEP		EVA 4 PROC REVIEW	PRE SLEEP	SLEEP									
	MS1/EV1 TANNER	I P N - G R P R S	R P R S	POST EVA W/O H2O	SNACK	POST EVA W/O H2O	EVA 4 PROC REVIEW	PRE SLEEP (GIRA)	SLEEP								
	MS3/EV2 PIPER	I P N - G R P R S	R P R S	POST EVA W/O H2O	SNACK	POST EVA W/O H2O	EVA 4 PROC REVIEW	PRE SLEEP	SLEEP								
	MS2/EV3 BURBANK			POST EVA W/O H2O	EMU SWAP	E P R T E K P	EVA TOOL CNFG	EVA 4 PROC REVIEW	PRE SLEEP	SLEEP							
	MS4/EV4 MACLEAN			POST EVA W/O H2O	EMU SWAP	E P R T E K P	EVA TOOL CNFG	EVA 4 PROC REVIEW	PRE SLEEP	SLEEP							
E X P - 7	ISS CDR			PLAN REVW	PREP WORK	DPC	EVA 4 PROC REVIEW	PRE SLEEP ISS	SLEEP - ISS								
	FE-1			PLAN REVW	PREP WORK	DPC	EVA 4 PROC REVIEW	PRE SLEEP ISS	SLEEP - ISS								
	FE-2	E M U - T		PLAN REVW	PREP WORK	DPC	EVA 4 PROC REVIEW	PRE SLEEP ISS	SLEEP - ISS								
S T S	DAY/NIGHT ORBIT	96		97		98		99		100		101		102		103	
	DAILY ORBIT	8		9		10		11		12		13		14		15	
S T S	TDRS EAST 47	[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]	
	TDRS WEST 171	[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]		[Bar]	
ORB ATT		BIAS -XLV +ZVV															
NOTES		*Deconfig *VERIFY CONFIG 3B															

FD07 **STS-115/12A JOINT MISSION STP**

$\beta = 32.5$
 MET Day 006 006/00 01 02 03 04 05 06 07 08 09 10 11 12

GMT 05/29/03 (149) 01 02 03 04 05 06 07 08 09 10 11 12

I S S	DAY/NIGHT	[Day/Night Cycle: 01-12]											
	ORBIT	96	97	98	99	100	101	102	103				
	DAILY ORBIT	8	9	10	11	12	13	14	15				
	TDRS S-BD AVAIL	[TDRS S-BD AVAIL: Green and Orange bars]											

S D S	ISS-MODE STND-XTION	ISS-MODE STND-XTION											
	DPC-EVENING	DPC-EVENING											
	MSS-PWRDN	MSS-PWRDN											
	MSS-PWRUP	MSS-PWRUP											
	TCS-MANUAL HTR-OPS	TCS-MANUAL HTR-OPS											

M C S	C&T-COMM CNFG-VERIFY	C&T-COMM CNFG-VERIFY											
	DPC-EVENING	DPC-EVENING											

P L	CPCG-H-CRYSTAL-GRTH												
	EXPRS1-SYS-PWR/THERM												
	EXPRS4-SYS-PWR/THERM												
	MAMS-P/L-NOM OPS												
	SAMS-ICU/D1-OPS												
	SAMS-RTS/D1-OPS												
	PCG STES-009-PWR												

ISS ATT BIAS -XLV +ZVV

ISS RS GND

NOTES *VERIFY CONFIG 3B

TCS-MANUA

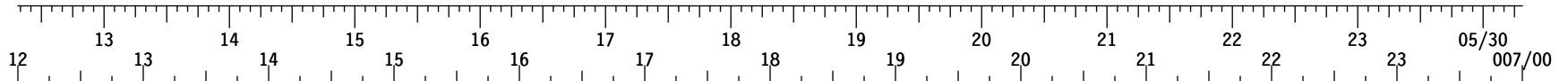
CPCG-H-C
 EXPRS1-S
 EXPRS4-S
 MAMS-P/L
 SAMS-ICU
 SAMS-RTS
 SAMS-RTS
 PCG STES

FD08

GMT 05/29/03 (149)

β=30.1

MET Day 006



S T S - 1 1 5	CDR JETT	LOG	POST SLEEP	IPNAH A/GIB	POST SLEEP	P/TV 26 S/U	P/TV26 REBOOST OPS	POST SLEEP		EXERCISE		P/TV23 EVA OPS								
	PLT FERGUSON		POST SLEEP		H/O	M-NX VLRV	PSOL SETP	REBOOST CONFIG 3	MNVR BIAS -XLV	H/O	MR COM ISU*	CIN WCIT #7	EXERCISE	CTE CRM	CWC XFER (2)	RP MWR SRU P	SRMS EVA4 SUPPORT		RP MWR SRD N	
	MS1/EV1 TANNER		POST SLEEP (GIRA)	ASPRN		10.2 DPRS	STS P/B 02 EVA PREP			14.7 RPRS			EVA4 IVA SUPPORT							
	MS3/EV2 PIPER	SAMP L	POST SLEEP	ASPRN				BMC CK	CIN WCIT #6	EXERCISE	CTE CRM	EVA CAM S/U	SSRMS RCFG	SSRMS EVA4 SUPPORT						
	MS2/EV3 BURBANK		POST SLEEP						EMU MURGE	EMU PREBREATHE	C_LK DPRS	PE GRS R	EVA 4 SETUP	WETA STANCHION INSTL	PF OIR LTL	SRMS SETUP	P1 CAMERA INSTALL		MATE EAS TO P6	EVA 4 CLNUP
	MS4/EV4 MACLEAN		POST SLEEP						EMU MURGE	EMU PREBREATHE	C_LK DPRS	PE GRS R	EVA 4 SETUP	WETA STANCHION INSTL	FP IRLEP	EAS-S0 PORT FILL		P1 CAMERA INSTALL	SRMS CLEAN UP	MATE EAS TO P6
E X P - 7	ISS CDR	SLEEP - ISS	POSTSLEEP-ISS	PREP WORK	DPC				EXERCISE-RED			SSRMS RCFG	MIDDAY-MEAL	SSRMS EVA4 SUPPORT				EXER CISE TVIS		
	FE-1	SLEEP - ISS	POST SLEEP ISS	STS P/B 02 EVA PREP									MIDDAY-MEAL		EXERCISE TVIS	EXERCISE-RED				
	FE-2	SLEEP - ISS	POSTSLEEP-ISS	PREP WORK	DPC		LAB CK		EXERCISE-RED			MIDDAY-MEAL		EXERCISE TVIS						
S T S	DAY/NIGHT	[Shaded blocks indicating day/night cycle]																		
	ORBIT	[Shaded blocks indicating orbit cycles]																		
	DAILY ORBIT	104	105	106	107	108	109	110	111											
TDRS	EAST 47	[Timeline with diamond markers]																		
	WEST 171	[Timeline with diamond markers]																		
ORB ATT	BIAS -XLV +ZVV REBOOST BIAS -XLV +ZVV																			
NOTES	*HTR *VERIFY CONFIG 2B																			

FD08

STS-115/12A JOINT MISSION STP

β = 30.1
 MET Day 006 12 13 14 15 16 17 18 19 20 21 22 23 007/00

GMT 05/29/03 (149)

I	DAY/NIGHT	[Day/Night Cycle]							
S	ORBIT	104	105	106	107	108	109	110	111
S	DAILY ORBIT	1	2	3	4	5	6	7	8
S	TDRS S-BD AVAIL	[TDRS S-BD AVAIL Schedule]							

D	TCS-MANUAL HTR-OPS ISS EVA-COMM-CNFG A/L-10.2 PSI OP-INIT C&T-VIDEO-CNFG IATCS-RFCA STPT-CHNG	ISS EVA-COMM-CNFG A/L-10.2 PSI OP-INIT HC&T-VIDEO-CNFG IATCS-RFCA STPT-CHNG IATCS-RFCA STPT-CHNG IATCS-RFCA STPT-CHNG TCS-MANUAL HTR-OPS							
	EVA4 INHIBIT PAD ACS-CMG/STS ATT-H/O ETCS-EAS LPB-PREP DPC-MORNING ISS-RAP DPRS-INH/ENA A/L-10.2 PSI OP-TERM	EVA4 INHIBIT PAD IACS-CMG/STS ATT-H/O ETCS-EAS LPB-PREP DPC-MORNING ISS-RAP DPRS-INH/ENA A/L-10.2 PSI OP-TERM A/L-10.2 PSI OP-TERM							
P	ACS-STS/CMG ATT-H/O ISS-MODE EXT-XTION PPS-CH2A-CH2/3-CNFG ETCS-EAS LPB-FILL ETCS-EAS LPB-PSTFILL VDS-ETVCG-C/O PPS-CH4A-CH1/4-CNFG C&DH-INH VALID-CK	IACS-STS/CMG ATT-H/O ISS-MODE EXT-XTION PPS-CH2A-CH2/3-CNFG ETCS-EAS LPB-FILL ETCS-EAS LPB-PSTFILL VDS-ETVCG-C/O PPS-CH4A-CH1/4-CNFG C&DH-INH VALID-CK							
		PPS-CH2A-CH2/3-CNFG ETCS-EAS LPB-FILL ETCS-EAS LPB-PSTFILL VDS-ETVCG-C/O PPS-CH4A-CH1/4-CNFG C&DH-INH VALID-CK							

M	EVA4 INHIBIT PAD DPC-MORNING C&T-COMM CNFG-VERIFY	EVA4 INHIBIT PAD DPC-MORNING HC&T-COMM CNFG-VERIFY							

P	CPCG-H-CRYSTAL-GRTH EXPRS1-SYS-PWR/THERM EXPRS4-SYS-PWR/THERM MAMS-P/L-NOM OPS SAMS-ICU/D1-OPS SAMS-RTS/D1-OPS SAMS-RTS/D2-OPS PCG STES-009-PWR MAMS-STORED DATA-D/L	MAMS-STORED DATA-D/L							

ISS ATT	BIAS -XLV +ZVV		REBOOST		BIAS -XLV +ZVV			
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ISS	RS GND	*VERIFY CONFIG 2B							
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NOTES									
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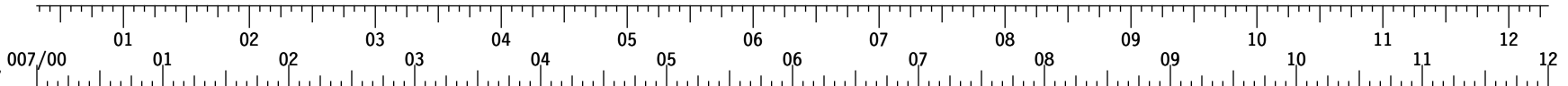
VDS-ETVCG
PPS-CH4A-CH
C&DH-INH
CPCG-H-CR
EXPRS1-SY
EXPRS4-S
MAMS-P/L
SAMS-ICU
SAMS-RTS
SAMS-RTS
PCG STES

FD08

GMT 05/30/03 (150)

β=27.8

MET Day 007



S T S - 1 1 5	CDR JETT	COLN MUM*	02 RECONFIG TO XFER	02 INIT	PRE SLEEP	PMCA	PRE SLEEP	SLEEP ISS EXTERNAL SURVEY				
	PLT FERGUSON	CIN CIT#8	OD IUA ACT	RP RS	CT WRM	CIN CIT#9	PRE SLEEP	CT WRM	PRE SLEEP	SLEEP		
	MS1/EV1 TANNER		POST EVA W/H2O,METOX				PRE SLEEP (GIRA)	SLEEP				
	MS3/EV2 PIPER		POST EVA W/H2O,METOX				PRE SLEEP	SLEEP				
	MS2/EV3 BURBANK	IP- GR RPS		POST EVA W/H2O,METOX			PRE SLEEP	SLEEP				
	MS4/EV4 MACLEAN	IP- GR RPS		POST EVA W/H2O,METOX			PRE SLEEP	SLEEP				
E X P - 7	ISS CDR	EXER CISE TVIS	02 RECONFIG TO XFER	02 INIT	DPC	PRESLEEP-ISS	SLEEP - ISS					
	FE-1	COM*	B S A*	PLAN REVW	PREP WORK	DPC	PRESLEEP-ISS	SLEEP - ISS				
	FE-2			PLAN REVW	PREP WORK	DPC	PRESLEEP-ISS	SLEEP - ISS				
S T S	DAY/NIGHT	[Shaded bars indicating day/night cycle]										
	ORBIT	[Shaded bars indicating orbit cycle]										
T D R S	DAILY ORBIT	8	112 9	113 10	114 11	115 12	116 13	117 14	118 15	119 16		
	EAST 47 WEST 171	[Timeline with diamond markers and horizontal bars]										
ORB ATT		BIAS -XLV +ZVV										
NOTES		*Deconfig *Open *VERIFY CONFIG 3B *Init (Includes recharge of REBA, PGT, Helmet Light)										

FD08 **STS-115/12A JOINT MISSION STP**

$\beta = 27.8$
 MET Day 007 007/00 01 01 02 03 04 05 06 07 08 09 10 11 12

GMT 05/30/03 (150) 01 02 03 04 05 06 07 08 09 10 11 12

I S S	DAY/NIGHT	[Day/Night Cycle: 01-02, 03-04, 05-06, 07-08, 09-10, 11-12]															
	ORBIT	112		113		114		115		116		117		118		119	
	DAILY ORBIT	8	9	10	11	12	13	14	15	16							

S D B	TDRS S-BD AVAIL	[TDRS S-BD AVAIL: Green and Orange bars across days 01-12]											
	VDS-ETVCG-C/O	[VDS-ETVCG-C/O: Horizontal line across days 01-12]											
	ISS-MODE STND-XTION	[ISS-MODE STND-XTION: Horizontal line across days 01-12]											
	MSS-PWRDN	[MSS-PWRDN: Horizontal line across days 01-12]											
	DPC-EVENING	[DPC-EVENING: Horizontal line across days 01-12]											

	SBD-P1(S1)-CNFG	[SBD-P1(S1)-CNFG: Horizontal line across days 01-12]											
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	SBD-KEY-CHG	[SBD-KEY-CHG: Horizontal line across days 01-12]											
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	HSBD-KEY-CHG	[HSBD-KEY-CHG: Horizontal line across days 01-12]											
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	C&T-COMM CNFG-VERIFY	[C&T-COMM CNFG-VERIFY: Horizontal line across days 01-12]											
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	DPC-EVENING	[DPC-EVENING: Horizontal line across days 01-12]											
--	-------------	--	--	--	--	--	--	--	--	--	--	--	--

	IDPC-EVENING	[IDPC-EVENING: Horizontal line across days 01-12]											
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P	CPCG-H-CRYSTAL-GRTH	[CPCG-H-CRYSTAL-GRTH: Horizontal line across days 01-12]											
	EXPRS1-SYS-PWR/THERM	[EXPRS1-SYS-PWR/THERM: Horizontal line across days 01-12]											
	EXPRS4-SYS-PWR/THERM	[EXPRS4-SYS-PWR/THERM: Horizontal line across days 01-12]											
	MAMS-P/L-NOM OPS	[MAMS-P/L-NOM OPS: Horizontal line across days 01-12]											
	SAMS-ICU/D1-OPS	[SAMS-ICU/D1-OPS: Horizontal line across days 01-12]											
	SAMS-RTS/D1-OPS	[SAMS-RTS/D1-OPS: Horizontal line across days 01-12]											
	SAMS-RTS/D2-OPS	[SAMS-RTS/D2-OPS: Horizontal line across days 01-12]											
	PCG STES-009-PWR	[PCG STES-009-PWR: Horizontal line across days 01-12]											

	ISS ATT	[ISS ATT: Horizontal line across days 01-12]											
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	BIAS -XLV +ZVV	[BIAS -XLV +ZVV: Horizontal line across days 01-12]											
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	RS GND	[RS GND: Horizontal line across days 01-12]											
--	--------	---	--	--	--	--	--	--	--	--	--	--	--

	NOTES	[NOTES: *VERIFY CONFIG 3B]											
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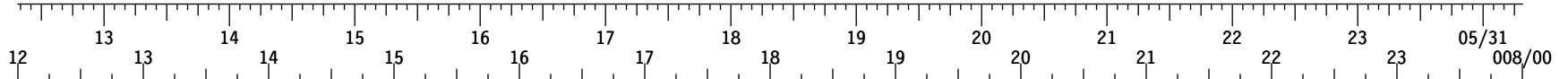
CPCG-H-CR
 EXPRS1-SY
 EXPRS4-SY
 MAMS-P/L
 MAMS-P/L
 SAMS-ICU
 SAMS-RTS
 SAMS-RTS
 PCG STES

FD09

GMT 05/30/03 (150)

β=25.4

MET Day 007



STS-115	CDR JETT	LOG	POST SLEEP	PFC OCA	NO UNISOLATED EXERCISE				OFF DUTY	MEAL	CREW CONF	PHREO W T O	EXERCISE	H/O	MNVR BIAS -XLV	REBOOST CONFIG 3	*			
	PLT FERGUSON		POST SLEEP	I O M L F L U M	C I U	OFF DUTY				PFC OCA	OFF DUTY	MEAL	CREW CONF	PHREO W T O	CWC XFER (2)	PWR FILL #2	C I W N C I T O	EXERCISE	C T W E C R M	RNDZ TOOLS C/O
	MS1/EV1 TANNER	S L A M P L	POST SLEEP (GIRA)	O D U F T Y	PFC OCA	OFF DUTY				P/TV 21 S/U	MEAL	CREW CONF	PHREO W T O	XFER OPS	EXERCISE	P/TV 26 S/U	P/TV26 REBOOST OPS	X O F P E S R		
	MS2/EV3 BURBANK	LOG	POST SLEEP	A S P R N	OFF DUTY	PFC OCA	OFF DUTY				MEAL	CREW CONF	PHREO W T O	R E B A *	EVA PREP FOR STS XFR	PRE UNDK EVA RCNFG	RNDZ TOOLS C/O			
	MS3/EV2 PIPER	S A M P L	POST SLEEP	B M C K	OFF DUTY	PFC OCA	OFF DUTY				MEAL	CREW CONF	PHREO W T O	XFER OPS	CPCG H XFER	EXERCISE				
	MS4/EV4 MACLEAN	LOG	POST SLEEP	PFC OCA	POST SLEEP	A S P R N	OFF DUTY				MEAL	CREW CONF	PHREO W T O	R E B A *	EVA PREP FOR STS XFR	PRE UNDK EVA RCNFG	EXER CISE			
EXP-7	ISS CDR	S L E E P - I S S	POSTSLEEP-ISS	PREP WORK	D P C	L A B C K	OFF DUTY				MIDDAY-MEAL	CREW CONF	PHREO W T O	C H D E A C T	EXERCISE TVIS					
	FE-1	S L E E P - I S S	POSTSLEEP-ISS	PREP WORK	D P C		OFF DUTY				MIDDAY-MEAL	CREW CONF	PHREO W T O	C P C G H XFER	B I M M S E T X - T * * *	EXER CISE TVIS				
	FE-2	S L E E P - I S S	POSTSLEEP-ISS	PREP WORK	D P C		OFF DUTY				MIDDAY-MEAL	CREW CONF	PHREO W T O		EXERCISE-RED					
STS	DAY/NIGHT ORBIT	119	120	121	122	123	124	125	126	127										
	DAILY ORBIT	16	1	2	3	4	5	6	7	8										
STS	TDRS EAST 47 WEST 171																			
	ORB ATT																			
NOTES																				

*Removal *Term *Init *MNVR BIAS

FD09 STS-115/12A JOINT MISSION STP

β = 25.4
 MET Day 007 12 13 14 15 16 17 18 19 20 21 22 23 008/00

GMT 05/30/03 (150) 13 14 15 16 17 18 19 20 21 22 23 05/31

I S S	DAY/NIGHT	[Day/Night Cycle]								
	ORBIT	119	120	121	122	123	124	125	126	127
	DAILY ORBIT	16	1	2	3	4	5	6	7	8

TDRS S-BD AVAIL [Color-coded bars]

D B S	DPC-MORNING	[Timeline]							
	ACS-MOM MGMT-ACT	[Timeline]							
C K	MSS-PWRUP	[Timeline]							
	MT-WS4-WS8-TRANSLATE	[Timeline]							
M C S	MBS-PWRUP	[Timeline]							
	MT-WS8-WS4-TRANSLATE	[Timeline]							
P L	MSS-PWRDN	[Timeline]							
	ACS-CMG/STS ATT-H/O	[Timeline]							

C K	DPC-MORNING	[Timeline]							
	MT-WS4-WS8-TRANSLATE	[Timeline]							
M C S	MT-WS8-WS4-TRANSLATE	[Timeline]							
		[Timeline]							

P L	CPCG-H-CRYSTAL-GRTH	[Timeline]							
	EXPRS1-SYS-PWR/THERM	[Timeline]							
P L	EXPRS4-SYS-PWR/THERM	[Timeline]							
	MAMS-P/L-NOM OPS	[Timeline]							
P L	SAMS-ICU/D1-OPS	[Timeline]							
	SAMS-RTS/D1-OPS	[Timeline]							
P L	SAMS-RTS/D2-OPS	[Timeline]							
	PCG STES-009-PWR	[Timeline]							
P L	CPO/PRO-CPCG-H-CMD	[Timeline]							
		[Timeline]							

ISS	ISS ATT	BIAS -XLV +ZVV							
	RS GND	BIAS -XLV +ZVV REBOOST							

NOTES

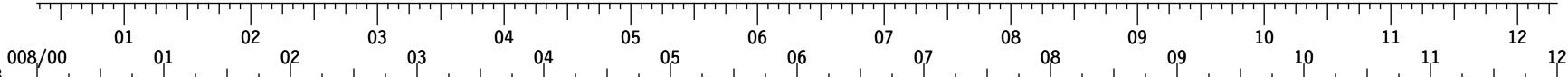
EXPRS1-S
 EXPRS4-S
 MAMS-P/L
 SAMS-ICU
 SAMS-RTS
 SAMS-RTS
 PCG STES
 CPCG-H-C

FD09

GMT 05/31/03 (151)

β=23.1

MET Day 008



S T S - 1 1 5	CDR JETT	MNVR BIAS -XLV	H/ O		PMC OCA	PRE SLEEP	SLEEP ISS EXTERNAL SURVEY				
	PLT FERGUSON	C I W N C I T 1	I O L N L U M	PRE SLEEP	C T W E C R M	PRE SLEEP	SLEEP				
	MS1/EV1 TANNER	XFER OPS				PRE SLEEP (GIRA)	SLEEP				
	MS2/EV3 BURBANK	EXERCISE				PRE SLEEP	SLEEP				
	MS3/EV2 PIPER	PCG STES XFER		M D C K		PRE SLEEP	SLEEP				
	MS4/EV4 MACLEAN	EXER CISE	X T F A I R E G U P			PRE SLEEP	SLEEP				
E X P - 7	ISS CDR			PLAN REVW	PREP WORK	DPC	PRESLEEP-ISS	SLEEP - ISS			
	FE-1	EXER CISE TVIS		PLAN REVW	PREP WORK	DPC	PRESLEEP-ISS	SLEEP - ISS			
	FE-2	PCG STES XFER			PREP WORK	DPC	PRESLEEP-ISS	SLEEP - ISS			
S T S	DAY/NIGHT	[Shaded bars indicating day/night cycle]									
	ORBIT	127	128	129	130	131	132	133	134	135	
S	DAILY ORBIT	8	9	10	11	12	13	14	15	1	
	TDRS EAST 47 WEST 171	[Timeline with diamond markers and horizontal bars]									
ORB ATT		BIAS -XLV +ZVV									
NOTES											

FD09

STS-115/12A JOINT MISSION STP

β=23.1

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

GMT 05/31/03 (151)

I S S	DAY/NIGHT	[Day/Night Cycle]											
	ORBIT	127	128	129	130	131	132	133	134	135			
	DAILY ORBIT	8	9	10	11	12	13	14	15	1			
	TDRS S-BD AVAIL	[TDRS S-BD AVAIL]											
D S	ACS-STG/CMG ATT-H/O	IACS-STG/CMG ATT-H/O											
	DPC-EVENING	DPC-EVENING											
K M C S S	SBD-KEY-CHG	HSBG-KEY-CHG											
	ACS-ATT-CCDB-U/D	IACS-ATT-CCDB-U/D											
	ACS-GNC-PPL-U/D	IACS-GNC-PPL-U/D											
P L	EXPRS1-SYS-PWR/THERM												
	EXPRS4-SYS-PWR/THERM												
	MAMS-P/L-NOM OPS												
	SAMS-ICU/D1-OPS												
	SAMS-RTS/D1-OPS												
	SAMS-RTS/D2-OPS												
	CPO/PRO-PCG-CMD	CPO/PRO-PCG-CMD											
	ISS ATT	BIAS -XLV +ZVV											
ISS	RS GND												
	NOTES												

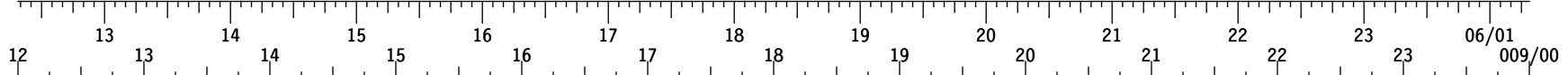
EXPRS1-S
EXPRS4-S
MAMS-P/L-
SAMS-ICU
SAMS-RTS/
SAMS-RTS/

FD10

GMT 05/31/03 (151)

β=20.8

MET Day 008



S T S - 1 1 5	CDR JETT	LOG	POST SLEEP	CLUM	IOFL	OXFER	02 TEAR DOWN	N2 XFER TERM	MEAL	FAREWELL	HATCH CLOSE		UNDOCK OPS	H/O	M-NXVLR	FLYAROUND	SEP	MZNLVLR	SINIMOT	EXERCISE
	PLT FERGUSON		POST SLEEP	CIN		CFER		CTWC	CXFER	MEAL	FAREWELL	RNFUS		UNDOCK OPS			FLYAROUND		MP	EXERCISE
	MS1/EV1 TANNER	SAMPL	POST SLEEP (GIRA)					XFER OPS	P/TV 21 S/U	MEAL	FAREWELL	HATCH CLOSE	ODS LEAK CK	P/TV 19 C/L CAMR	UNDOCK OPS		FLYAROUND	C/L CAMRMV	PST ISS EVA ENT PREP	
	MS2/EV3 BURBANK	LOG	POST SLEEP		CWC	CFER	(2)		XFER OPS	MEAL	FAREWELL		EXERCISE	GP RP RUBUP	UNDOCK OPS		FLYAROUND	CTON	POST RNDZ PGSC	COMMI
	MS3/EV2 PIPER	SAMPL	POST SLEEP		MDCK	BMCK	SMP	CHG		EXERCISE	MEAL	FAREWELL	HATCH CLOSE	ODS LEAK CK	EMU INSTL	UNDOCK OPS	FLYAROUND		PST ISS EVA ENT PREP	MDCK
	MS4/EV4 MACLEAN	LOG	POST SLEEP						XFER OPS	XTB	FAREWELL	FAREWELL		ABU/DOIO	P/TV 20 S/U		FLYAROUND		EXERCISE	PLBK ACT
E X P - 7	ISS CDR	SLEEP - ISS	POSTSLEEP-ISS	PREP WORK	DPC			OXFER	02 TEAR DOWN	N2 XFER TERM	MIDDAY-MEAL	FAREWELL	HATCH CLOSE		PMA2 DEPART CONFIG		EXERCISE-RED		EXERCISE TVIS	
	FE-1	SLEEP - ISS	POSTSLEEP-ISS	PREP WORK	DPC	ITCS SAMP LTL	ITCS SAMP MTL	ME	ME	TX		MIDDAY-MEAL	FAREWELL			EXERCISE-RED	EXERCISE TVIS			
	FE-2	SLEEP - ISS	POSTSLEEP-ISS	PREP WORK	DPC					EXERCISE-RED	MIDDAY-MEAL	FAREWELL				EXERCISE TVIS				
S T S	DAY/NIGHT																			
	ORBIT	135	136	137	138	139	140	141	142	143										
S T S	DAILY ORBIT	1	2	3	4	5	6	7	8	9										
	TDRS EAST 47 WEST 171																			
ORB ATT																				
NOTES																				

UNDOCKING*

*Term *Init *Heater Act *SUPPLY H20 *ON *CDRA DEACT SPPT *Stow

*8/20:50

FD10 **STS-110/12A JOINT MISSION STP**

β=20.8
 MET Day 008 12 13 14 15 16 17 18 19 20 21 22 23 009/00
 GMT 05/31/03 (151) 13 14 15 16 17 18 19 20 21 22 23 06/01

ISS	DAY/NIGHT									
	ORBIT	135	136	137	138	139	140	141	142	143
	DAILY ORBIT	1	2	3	4	5	6	7	8	9

TDRS S-BD AVAIL
 KU AVAIL

ISS	DPC-MORNING									
	TCS-MANUAL HTR-OPS									
ISS	ISS-MODE PROX-XTION									
	CDRA DEACT									
	MSS-PWRUP									
	IATCS-LTL STPT-CHNG									
	C&T-H/L AUDIO-BCKOUT									
	ACS-GNC-PPL-INC									
	ACS-CCDB PARAM-U/D									
	PPS-PWR DWN & RCVRY									
	ACS-PRE-DPRT-CNFG									
	ACS-CMG/STS ATT-H/O									
	ACS-PMA2-DPRT-CNFG									
	C&DH-INH VALID-CK									
	PPS-SA-FTHR									
	UNDOCKING									
	C&DH-UNDOCK-CNFG									
PPS-SA-AUTOTRACK										
ACS-POST-DPRT-CNFG										
ACS-MOM MGMT-ACT										
ISS-MODE STND-XTION										
ISS-GPS-SHUTDOWN										
ISS-GPS-STARTUP										

UNDOCKING*

ISS	UNDOCKING									
	СУДН-ОГНИ-ОН									
ISS	СУДН-ОГНИ-OFF									
	C-COСБ-FTHR									
	Φ-COСБ-FTHR									
	UNDOCKING									
ISS	C3П-АБ-PARTIAL CHRГ									

ISS ATT

ISS	DPC-MORNING									
	UNDOCKING									

ISS ATT BIAS -XLV +ZVV -XLV +ZVV UNDOCK/FLYAROUND -ZLV +YVV

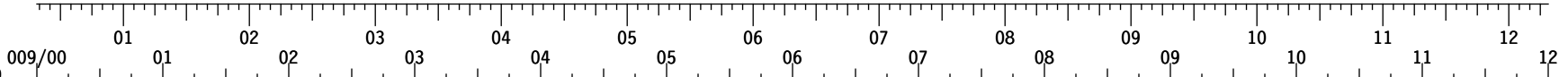
NOTES *8/20:50

FD10

GMT 06/01/03 (152)

β = 18.5

MET Day 009



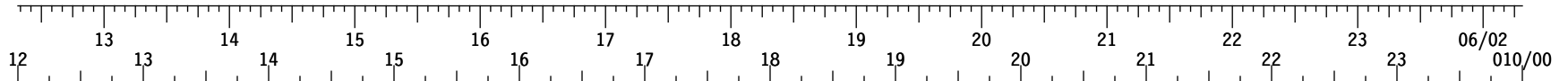
STS-115	CDR JETT	EXERCISE	PMC OCA	PRE SLEEP	MZLV	PSLEEP	SLEEP	LOG	POST SLEEP	
	PLT FERGUSON	*STIRDOM	CINNTD#1	PRE SLEEP	CTNDRDM#1	PRE SLEEP	SLEEP	LOG	POST SLEEP	
	MS1 TANNER	PRE SLEEP (GIRA)					SLEEP	SAMPL	POST SLEEP (GIRA)	
	MS2 BURBANK	PRE SLEEP	CINNTD#2	PRE SLEEP	CTNDRDM#2	PRE SLEEP	SLEEP	LOG	POST SLEEP	
	MS3 PIPER	PRE SLEEP					SLEEP	SAMPL	POST SLEEP	
	MS4 MACLEAN	POPLBSK	PRE SLEEP					SLEEP	LOG	POST SLEEP
STS	DAY/NIGHT	[Shaded bar from 00 to 12]								
	ORBIT	143	144	145	146	147	148	149	150	151
	DAILY ORBIT	9	10	11	12	13	14	15	16	1
TDRS	EAST 47	[Timeline with horizontal bars]								
	WEST 171	[Timeline with horizontal bars]								
ORB ATT		-ZLV +YVV			-ZLV -XVV					
NOTES		*EXERCISE								

FD11

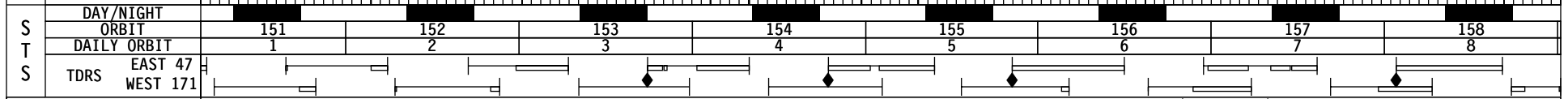
GMT 06/01/03 (152)

β=16.2

MET Day 009



STS-115	CDR JETT	POST SLEEP	A P U H T R CABIN STOW	FCS C/O	R F I S R E H O T	CABIN STOW	P E A V O E N T	MEAL	D/O BRIEF	OFF DUTY	C S T A T E B O I W N	M N Y L R V	M E P S I D E P L O Y	M - N Z L R V	C S T A T E B O I W N	EXERCISE	PILOT OPS
	PLT FERGUSON	POST SLEEP	CABIN STOW	FCS C/O	R F I S R E H O T	CABIN STOW	P E A V O E N T	MEAL	D/O BRIEF	OFF DUTY	CABIN STOW	M E P S I D E P L O Y	EXERCISE	CABIN STOW	PILOT OPS		
	MS1 TANNER	POST SLEEP (GIRA)	CABIN STOW	EXERCISE	CABIN STOW	P I S T - T U C U P O A P 2 B N	P E A V O E N T	MEAL	D/O BRIEF	OFF DUTY	P S T V 0 7	P T V 0 7 M E P S I D E P L O Y	P T V 0 5 E N T R Y S E T U P	P S D E T V 0 6	CABIN STOW	ERG STOW	
	MS2 BURBANK	POST SLEEP	M C I U F I L T E R C L E A N I N G	FCS C/O	R F I S R E H O T	CABIN STOW	P E A V O E N T	MEAL	D/O BRIEF	OFF DUTY	CABIN STOW	EXERCISE	CABIN STOW	P G S C S T O W P A R T I	K S U T - O M F X B W A C T		
	MS3 PIPER	POST SLEEP	M D C K B M C K	CABIN STOW	P E A V O E N T	MEAL	D/O BRIEF	OFF DUTY	EXERCISE	L C O M M 1	CABIN STOW	L C O M M 2	C O M M 2	CABIN STOW	M D C K		
	MS4 MACLEAN	POST SLEEP	CABIN STOW	EXERCISE	CABIN STOW	P E A V O E N T	MEAL	D/O BRIEF	OFF DUTY	CABIN STOW	ERG STOW						



ORB ATT -ZLV -XVV -MEPSI -ZLV -XVV

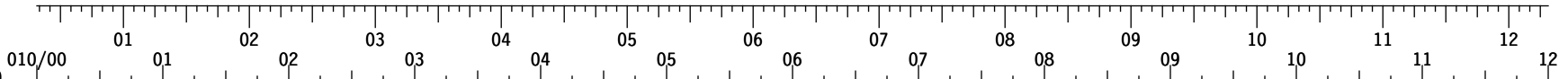
NOTES

FD11

GMT 06/02/03 (153)

β = 14.0

MET Day 010



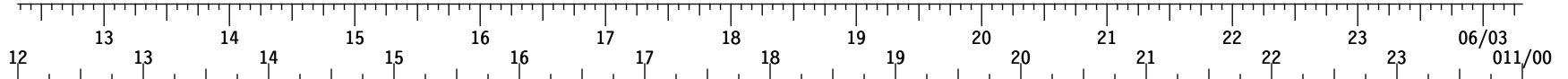
STS-115	CDR JETT	PMC A/G	PRE SLEEP	SLEEP					WATCH	POST SLEEP	
	PLT FERGUSON		PRE SLEEP	SLEEP						POST SLEEP	
	MS1 TANNER		PRE SLEEP (GIRA)	SLEEP					WATCH	POST SLEEP (GIRA)	
	MS2 BURBANK		PRE SLEEP	SLEEP					WATCH	POST SLEEP	
	MS3 PIPER		PRE SLEEP	SLEEP					SAMPL	POST SLEEP	OSTAOCW
	MS4 MACLEAN		PRE SLEEP	SLEEP					WATCH	POST SLEEP	
STS	DAY/NIGHT	[Shaded bars indicating day/night cycle]									
	ORBIT	159	160	161	162	163	164	165	166		
	DAILY ORBIT	9	10	11	12	13	14	15	1		
TDRS	EAST 47	[Horizontal bars indicating TDRS coverage]									
	WEST 171	[Horizontal bars indicating TDRS coverage]									
ORB ATT		-ZLV -XVV-									
NOTES											

FD12

GMT 06/02/03 (153)

β=11.7

MET Day 010



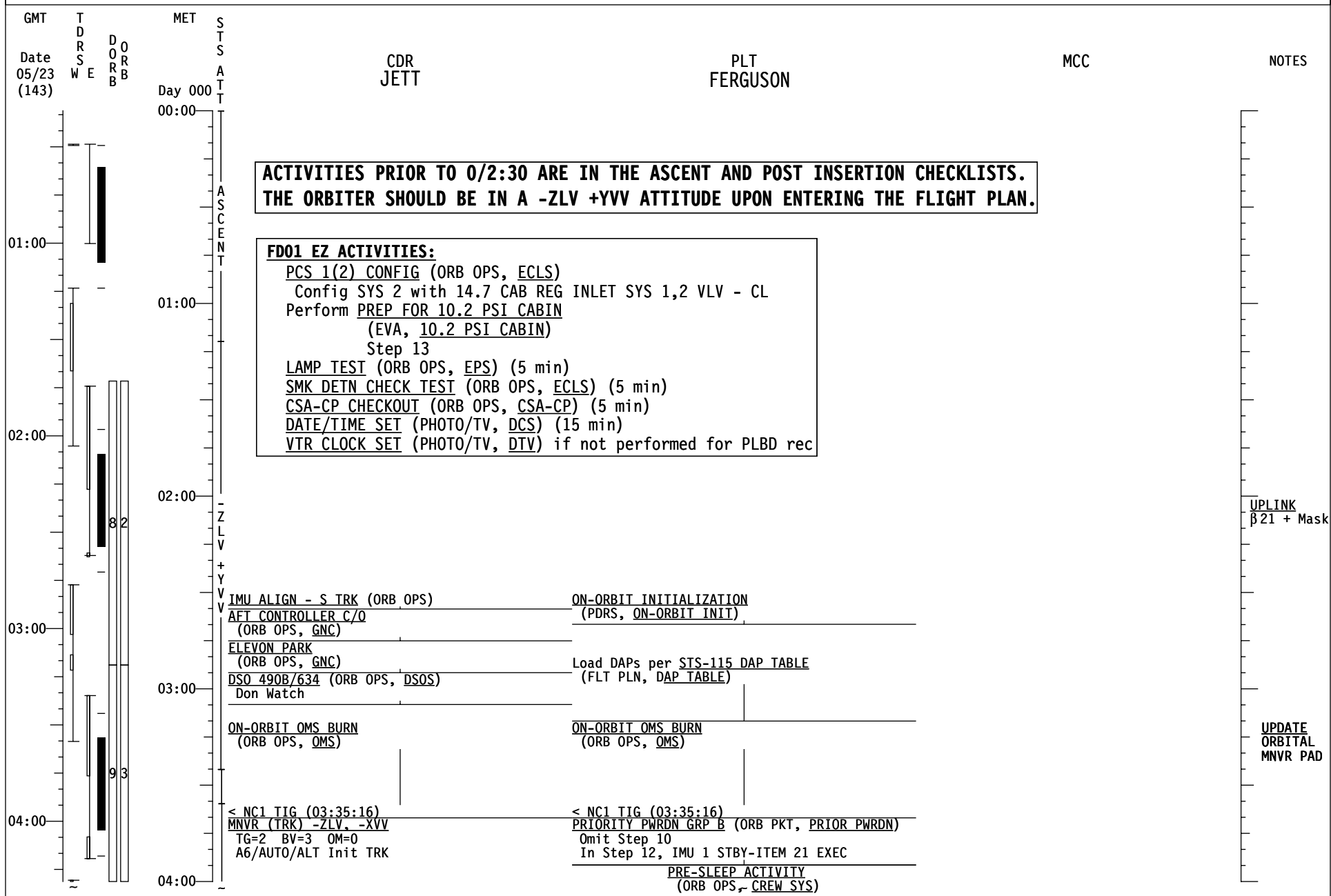
STS-115	CDR JETT	POST SLEEP	P M C A / G	IMU ALIGN & VERIF	M- N X V S I	DEORBIT PREP				
	PLT FERGUSON	POST SLEEP	G P R P R U P	F C P R U G *	POST SLEEP	DEORBIT PREP	D E O R B I T *			
	MS1 TANNER	POST SLEEP (GIRA)			G S I T R O A W	DEORBIT PREP	L A N D I N G *			
	MS2 BURBANK	POST SLEEP	G P R P R U P	P S O L E T E P	P G S C S T O W P A R T I I	DEORBIT PREP				
	MS3 PIPER	POST SLEEP	A I R	M D C K	B E N T L E Y A C	DEORBIT PREP				
	MS4 MACLEAN	POST SLEEP			T E P C *	DEORBIT PREP				
STS	DAY/NIGHT	[Shaded bar from 12:00 to 17:00]								
	ORBIT	[Shaded bar from 16:00 to 17:00]								
S	DAILY ORBIT	1	2	3	4	5	6	7	8	9
	TDRS EAST 47	-----		-----		-----		-----		-----
S	TDRS WEST 171	-----		-----		-----		-----		-----
	ORB ATT		IMU	-XSI	COMM	ENTRY				
			*AUTO	*OFF						
NOTES						*KSC TIG 10/17:36	*KSC LANDING 10/18:39			

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DETAILED TIMELINE

DETAILED
TIMELINE

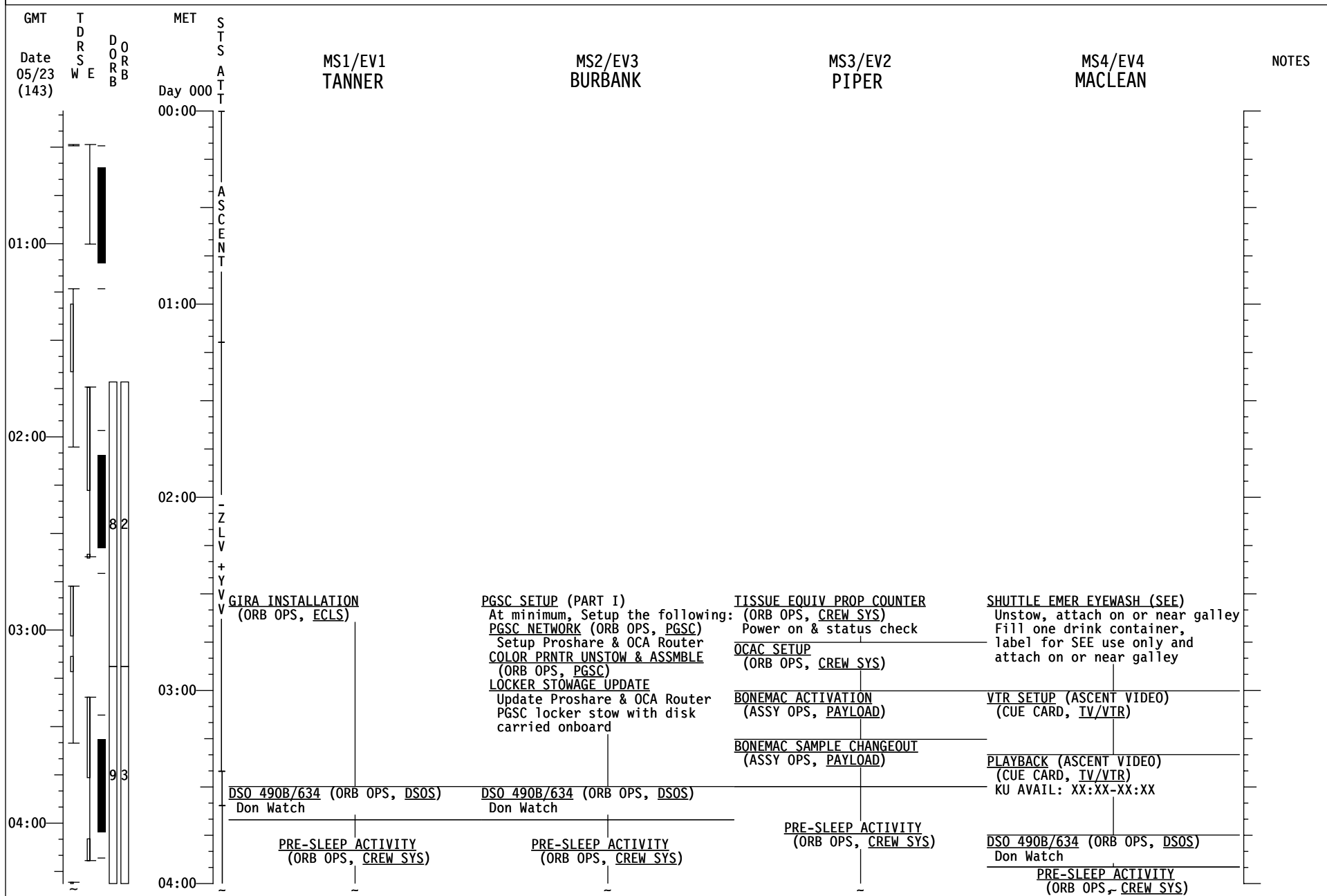
STS-115 (FD01)



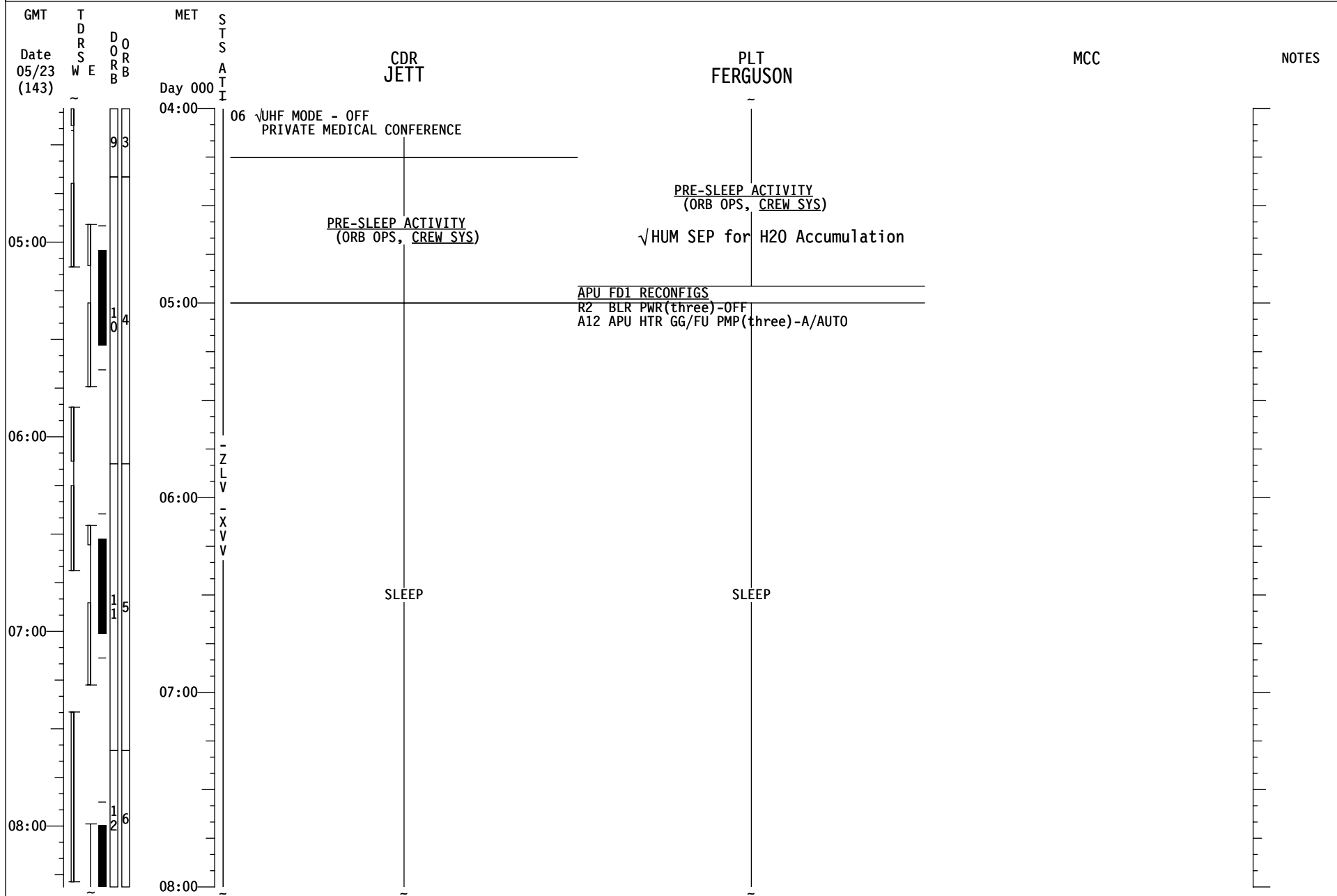
UPLINK
β 21 + Mask

UPDATE
ORBITAL
MNVR PAD

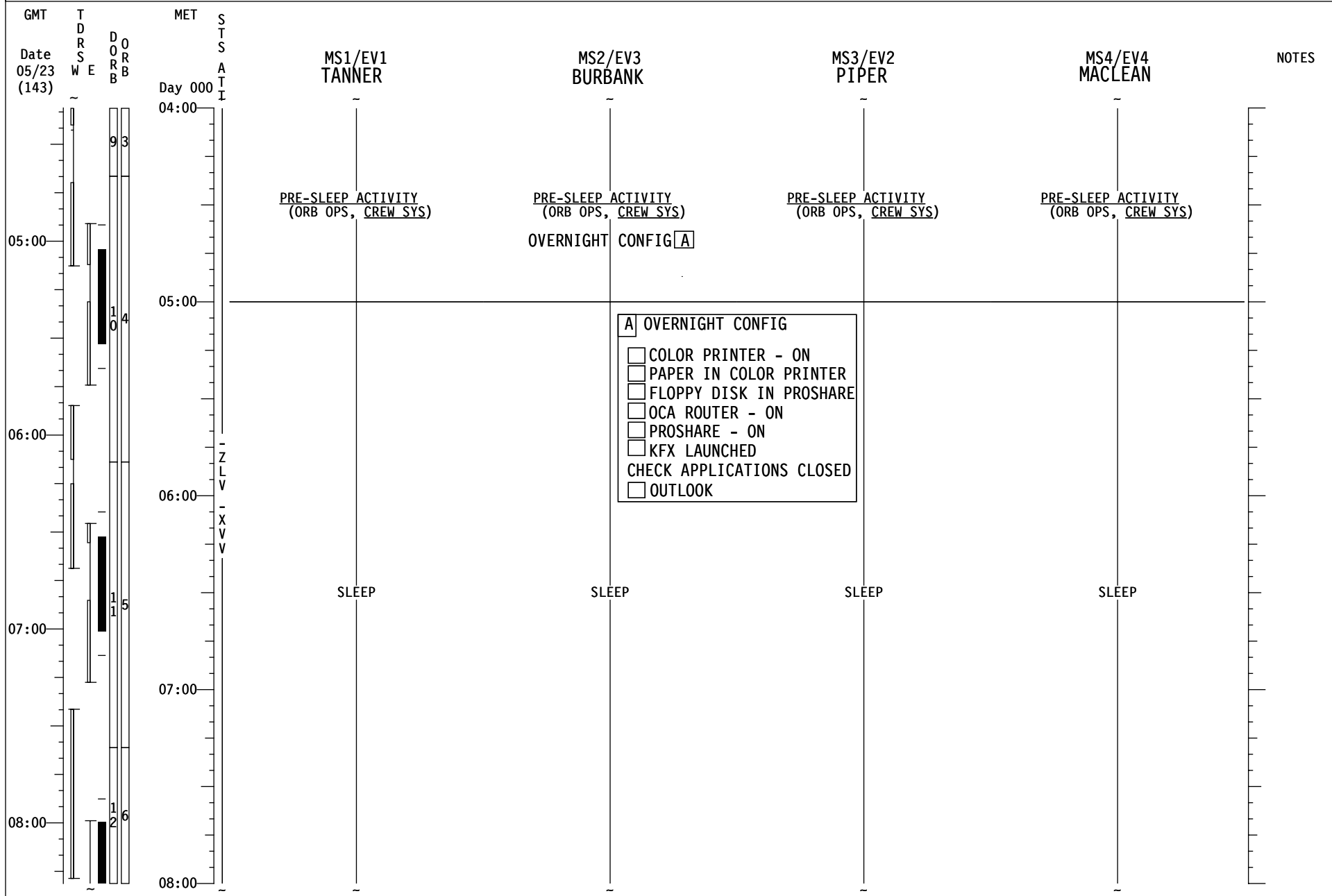
STS-115 (FD01)



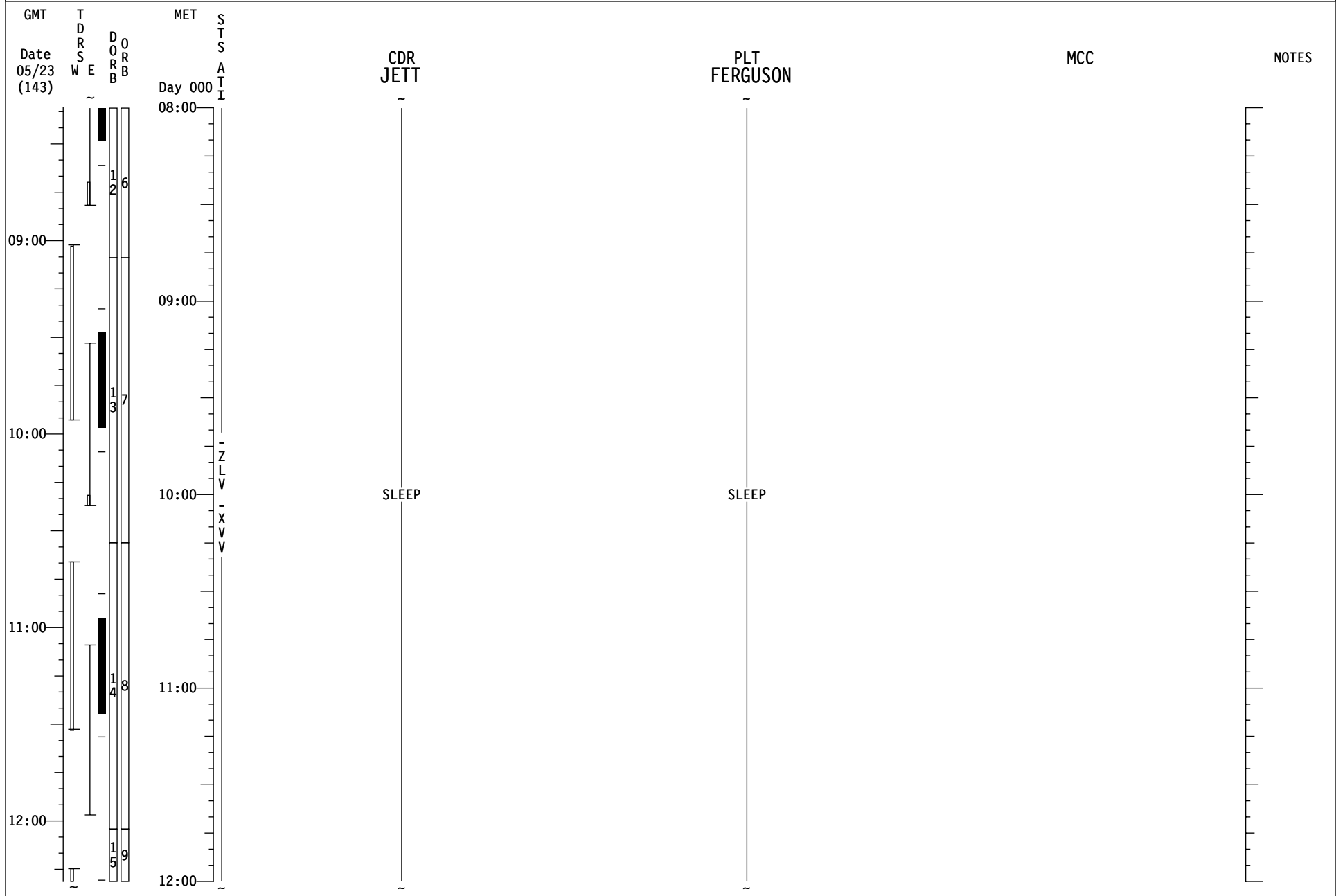
STS-115 (FD01)



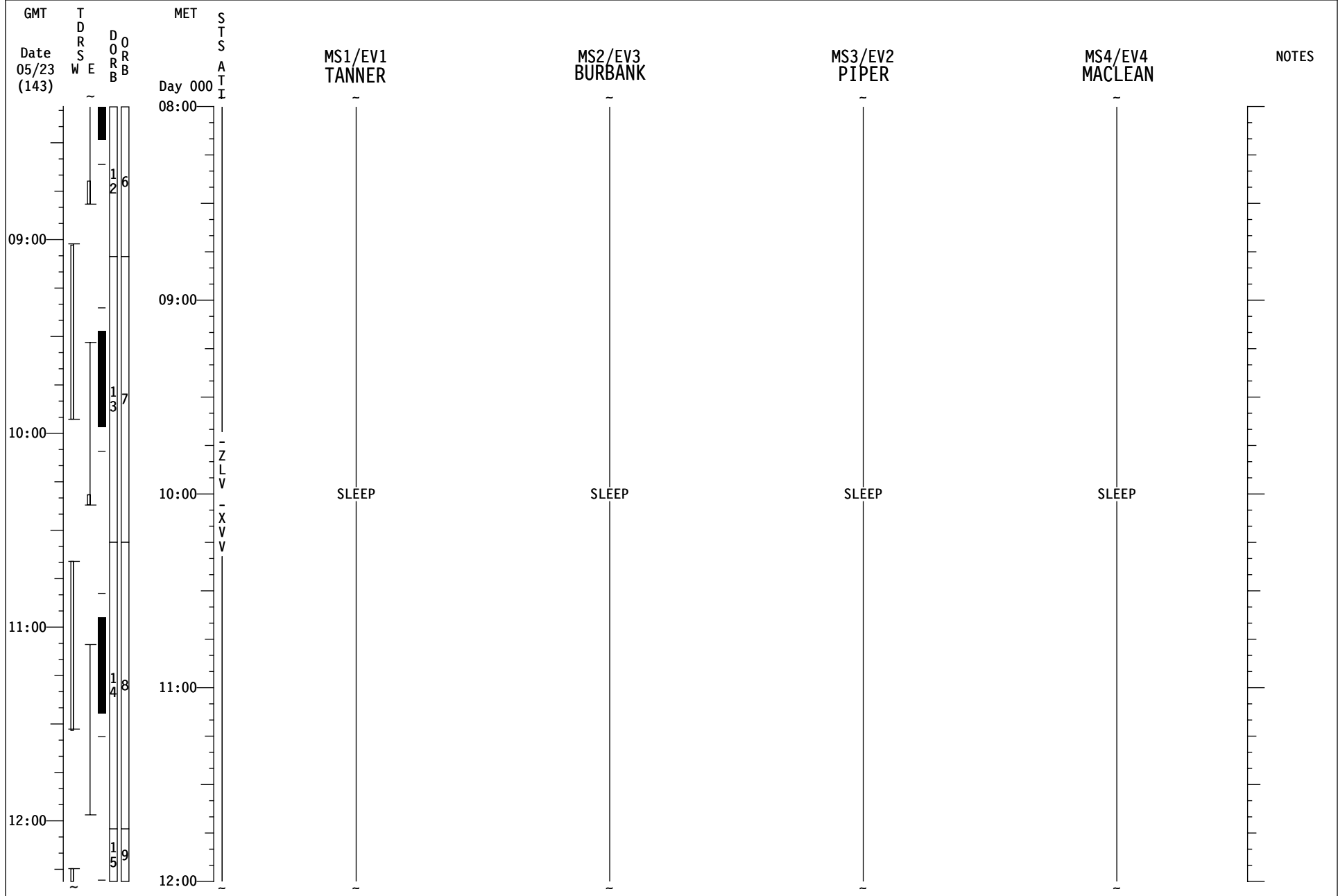
STS-115 (FD01)



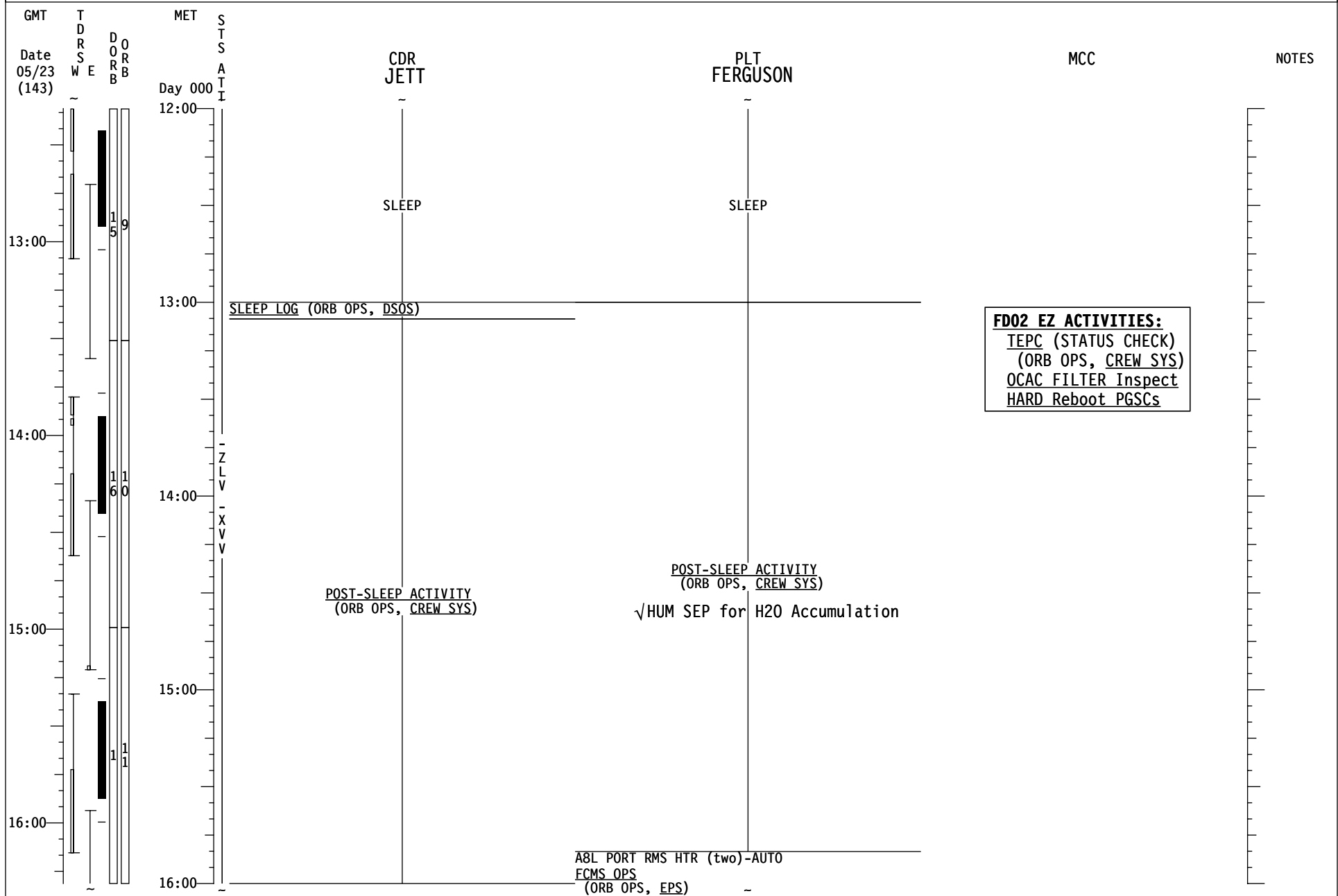
STS-115 (FD01)



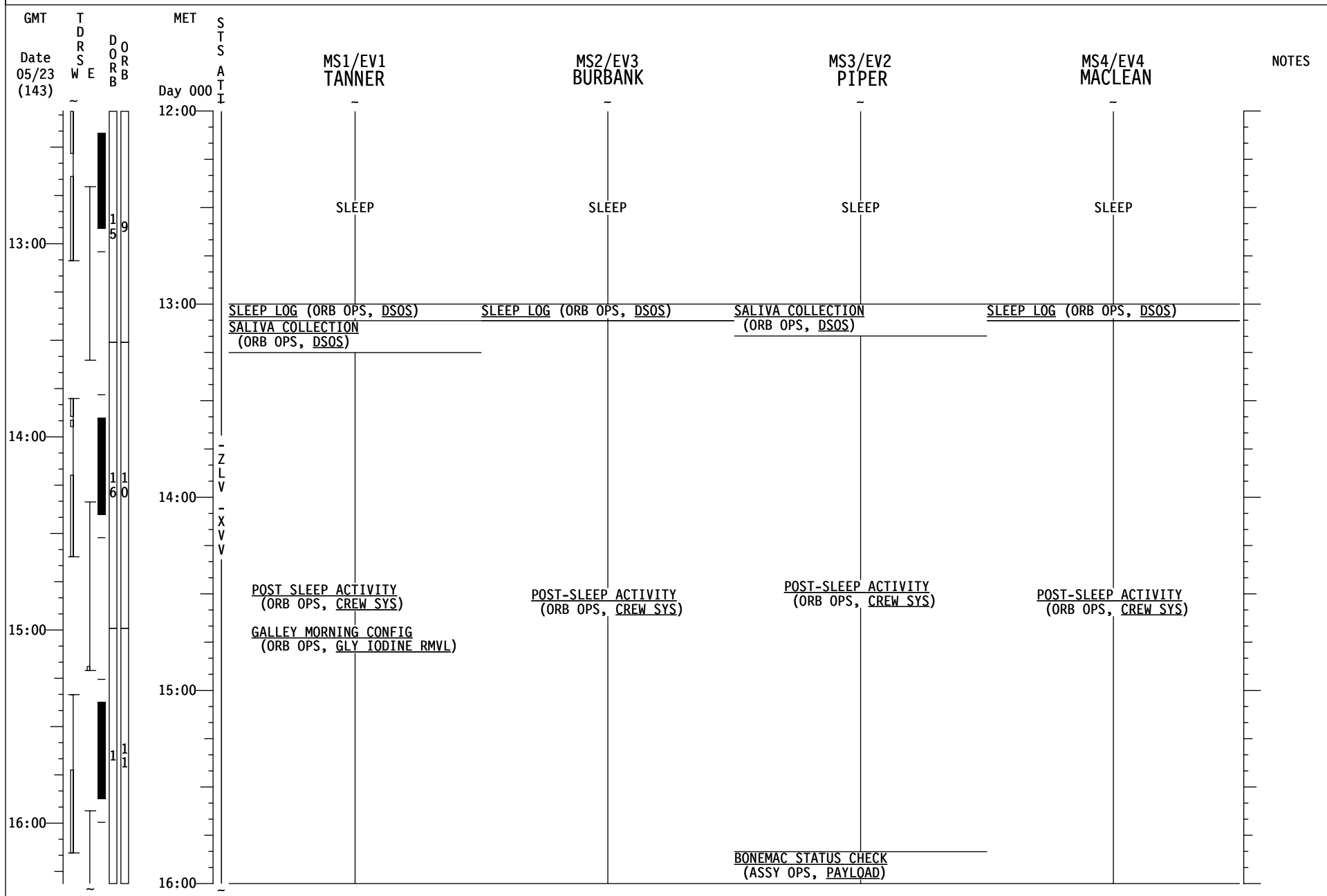
STS-115 (FD01)



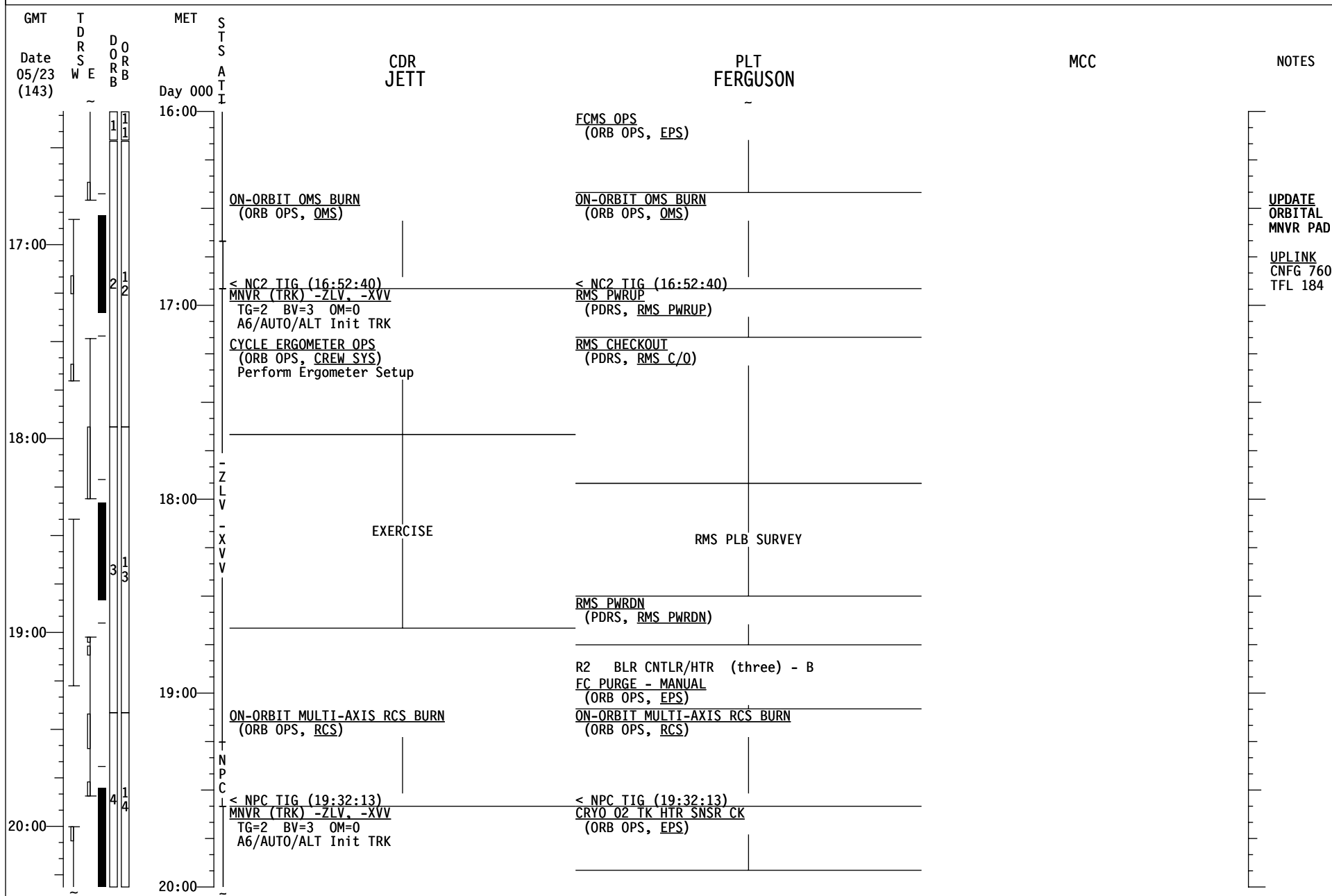
STS-115 (FD02)



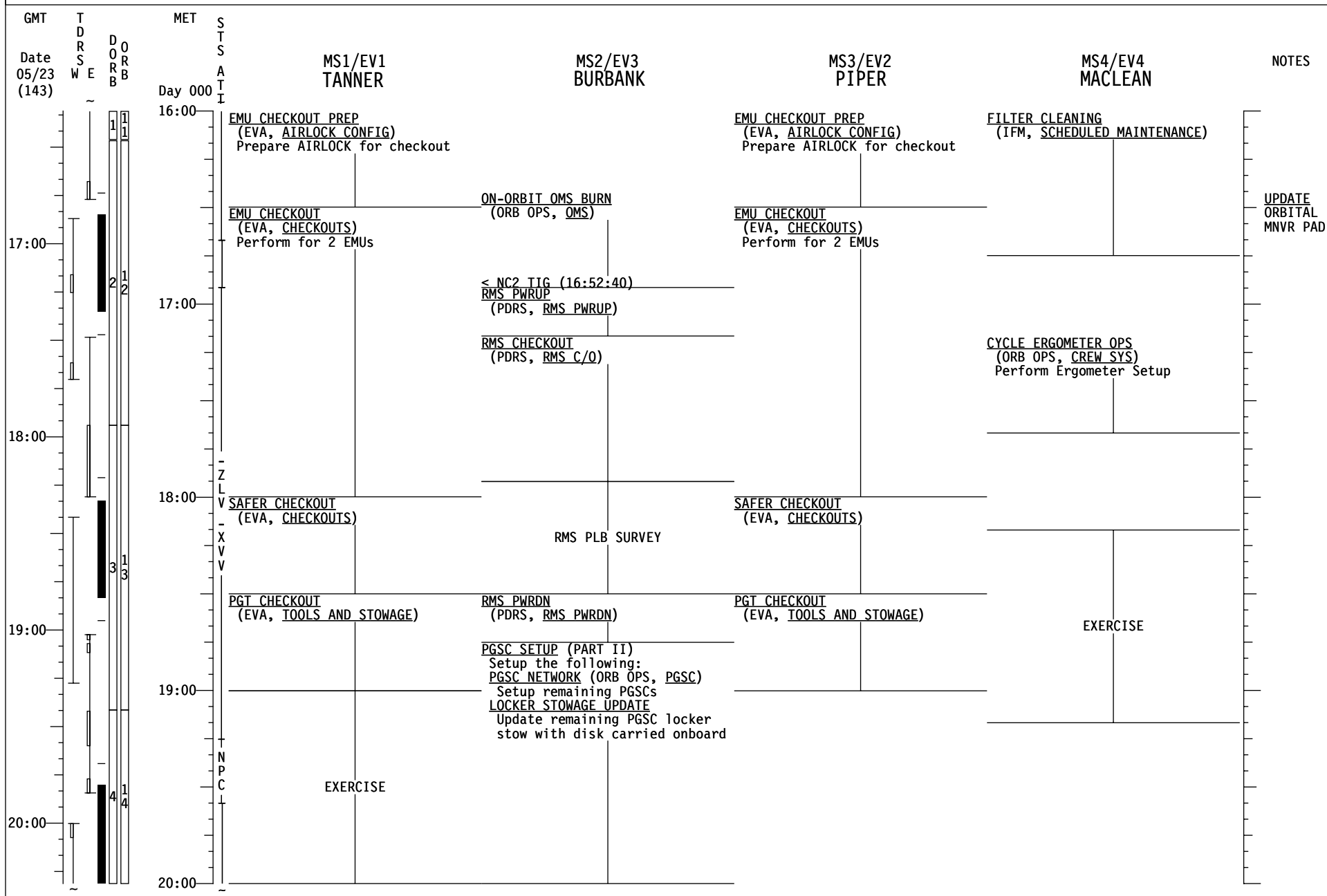
STS-115 (FD02)



STS-115 (FD02)



STS-115 (FD02)



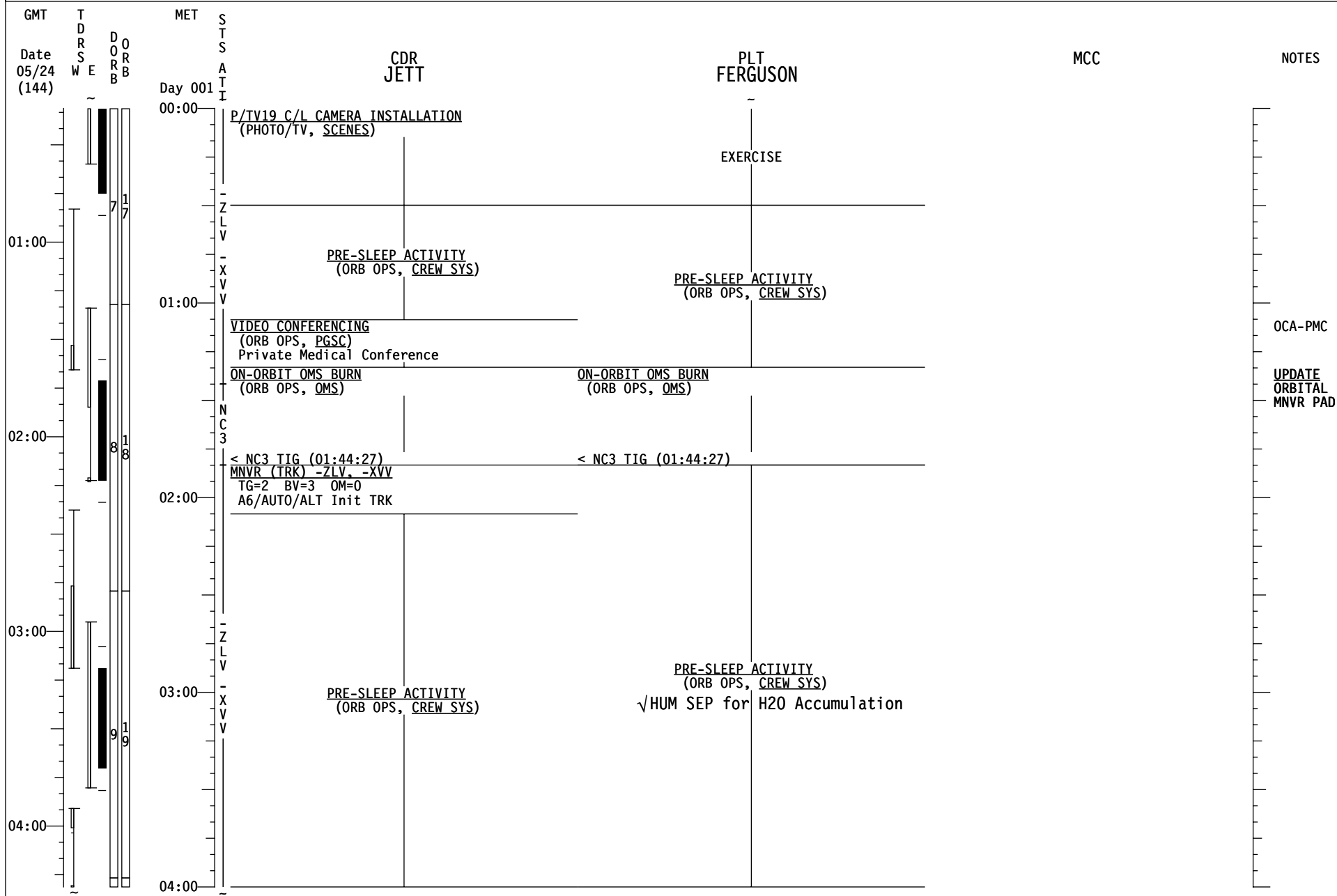
STS-115 (FD02)

GMT	T D R S W E	D O R B	MET	S T S	CDR JETT	PLT FERGUSON	MCC	NOTES
Date 05/23 (143)			Day 000	A T T I				
20:00		4 1/4						
21:00		5 1/5			MEAL	MEAL		
21:00					<u>P/TV17 VIDEO SETUP</u> (PHOTO/TV, SCENES)	<u>SHUTTLE/ISS H2O CNTR FILL</u> (ORB OPS, ECLS) Perform <u>EQUIP PREP</u> and <u>TEE/HOSE ASSEMBLY PURGE</u> Do not perform CWC fill.		
22:00				Z L V				
22:00				X V V				
23:00		6 1/6						
23:00								
00:00		7 1/7			<u>P/TV02 IN-CABIN ACTIVITIES</u> (PHOTO/TV, SCENES) Setup			
00:00					PUBLIC AFFAIRS EVENT KU AVAIL: 23:40-00:00	EXERCISE		
00:00								<u>UPLINK</u> TGT SV

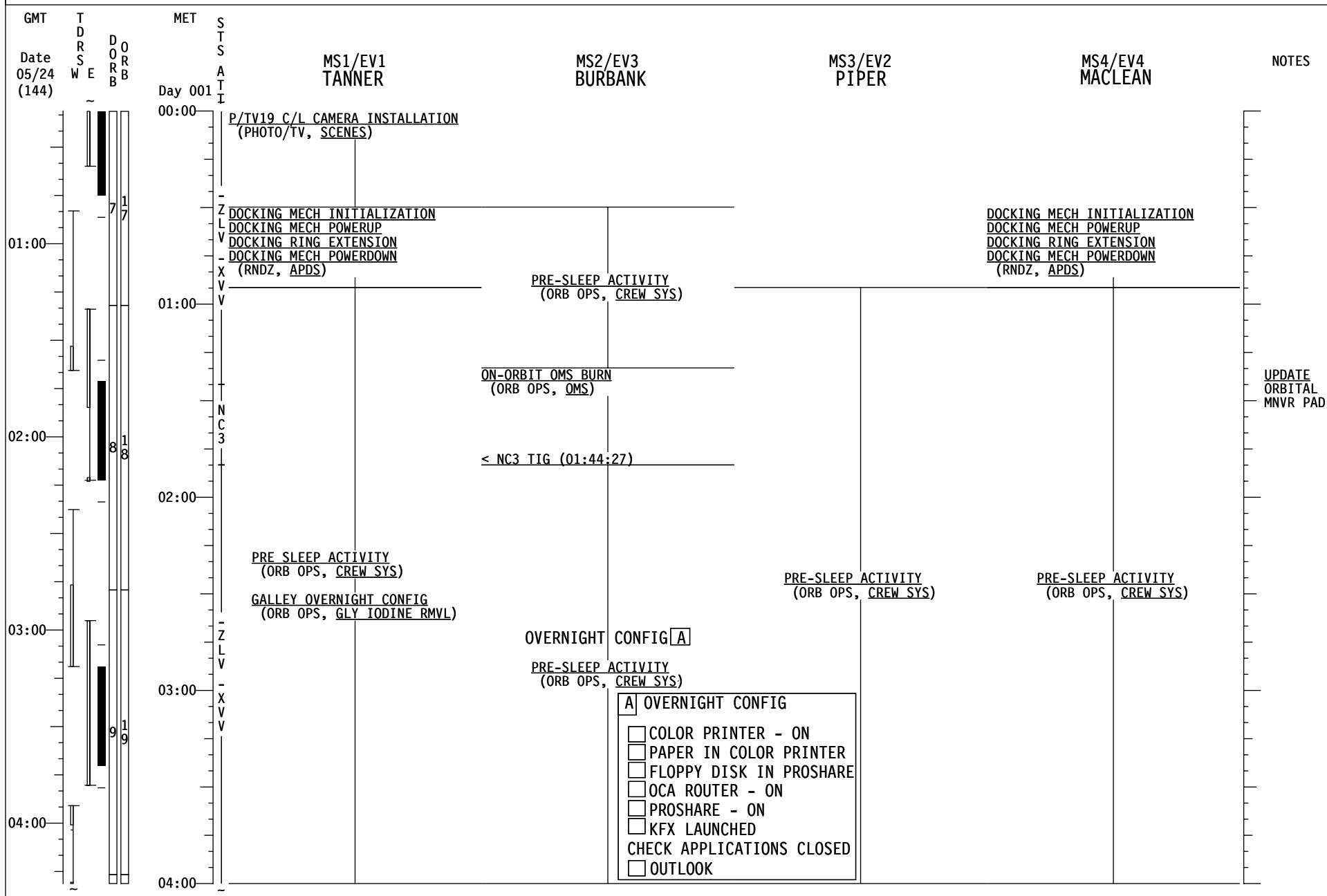
STS-115 (FD02)

GMT	T D R S W E	D O R B	MET	S T S A T T I	MS1/EV1 TANNER	MS2/EV3 BURBANK	MS3/EV2 PIPER	MS4/EV4 MACLEAN	NOTES
Date 05/23 (143)			Day 000						
20:00		4 1/4			MEAL	MEAL	MEAL	MEAL	
21:00		5 1/5			<u>EVA PREP FOR TRANSFER TO ISS</u> (EVA, AIRLOCK CONFIG) Prepare EMU for Transfer and packing EVA bags.	<u>EVA PREP FOR TRANSFER TO ISS</u> (EVA, AIRLOCK CONFIG) Prepare EMU for Transfer and packing EVA bags.	<u>EVA PREP FOR TRANSFER TO ISS</u> (EVA, AIRLOCK CONFIG) Prepare EMU for Transfer and packing EVA bags.	<u>EVA PREP FOR TRANSFER TO ISS</u> (EVA, AIRLOCK CONFIG) Prepare EMU for Transfer and packing EVA bags.	
22:00				Z L V	<u>P/TV17 VIDEO SETUP</u> (PHOTO/TV, SCENES)	<u>RNDZ TOOLS CHECKOUT</u> (RNDZ, RNDZ TOOLS)		<u>TRANSFER OPS</u> Ref. Transfer List and MSG XXX	<u>UPLINK</u> TGT SV
23:00		6 1/6		X V V			EXERCISE		
00:00		7 1/7			EXERCISE			<u>TRANSFER BRIEF</u> Call down status to MCC	
00:00							PUBLIC AFFAIRS EVENT KU AVAIL: 23:40-00:00	PUBLIC AFFAIRS EVENT KU AVAIL: 23:40-00:00	

STS-115 (FD02)



STS-115 (FD02)



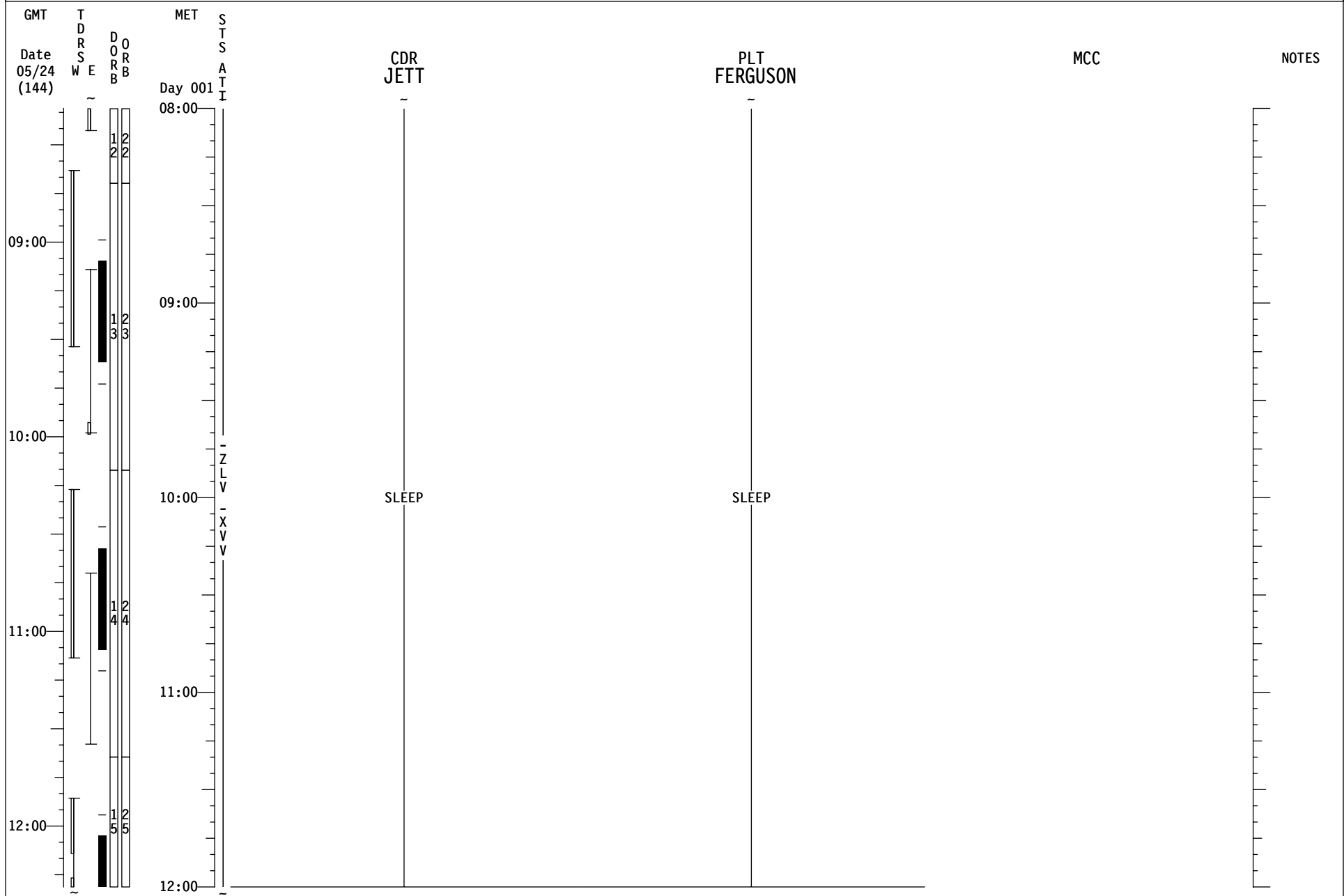
STS-115 (FD02)

GMT	T D R S W E	D O R B B	MET	S T S A T T	CDR JETT	PLT FERGUSON	MCC	NOTES
Date 05/24 (144)			Day 001					
04:00								
05:00		1200						
06:00		1211						
07:00								
08:00		1222						
				Z L V	SLEEP	SLEEP		
				X V V				

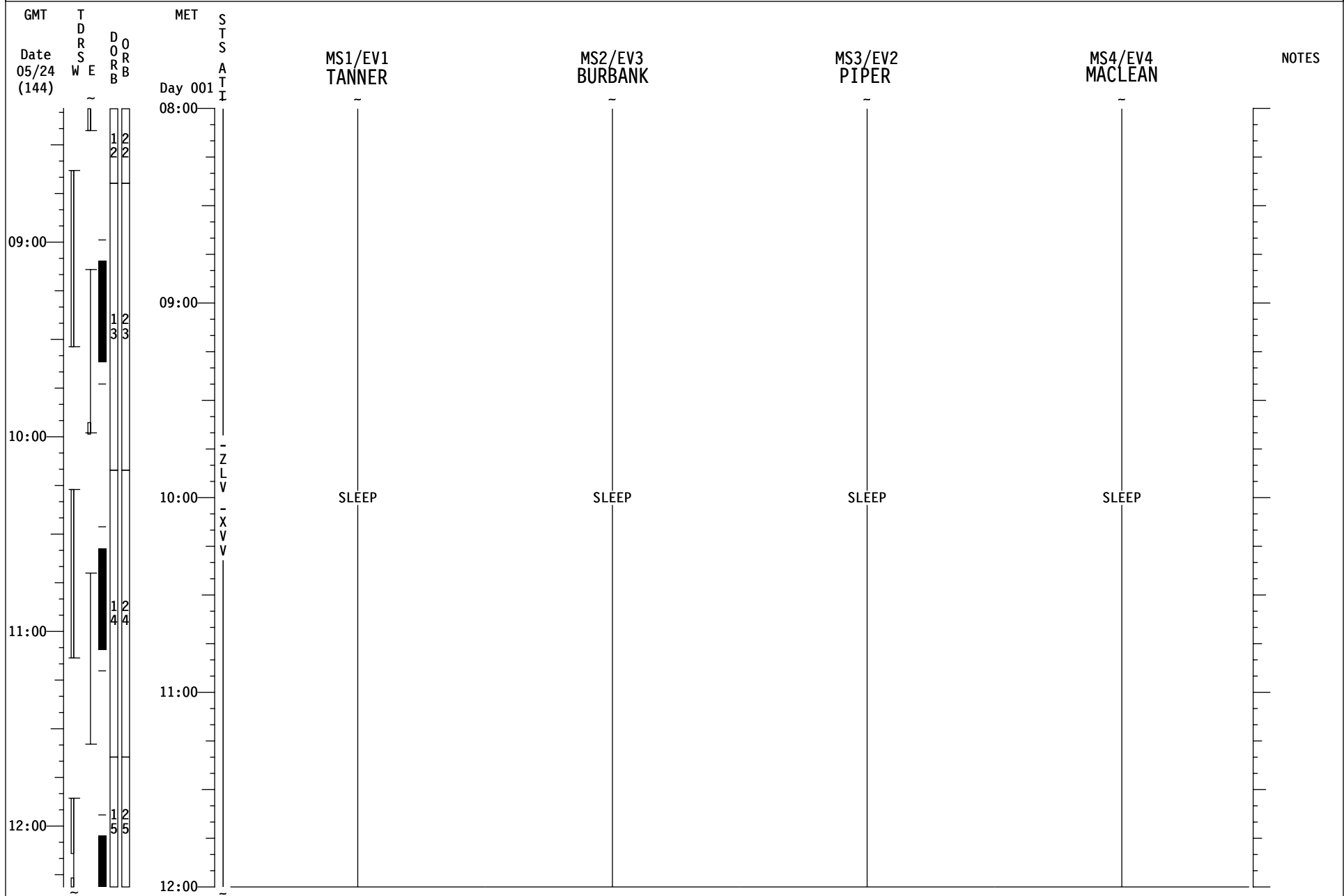
STS-115 (FD02)

GMT	T D R S W E	D O R B B	MET Day 001	S T S A T T I	MS1/EV1 TANNER	MS2/EV3 BURBANK	MS3/EV2 PIPER	MS4/EV4 MACLEAN	NOTES
04:00									
05:00		1200							
06:00		1211		Z L V	SLEEP	SLEEP	SLEEP	SLEEP	
07:00				X V V					
08:00		1222							

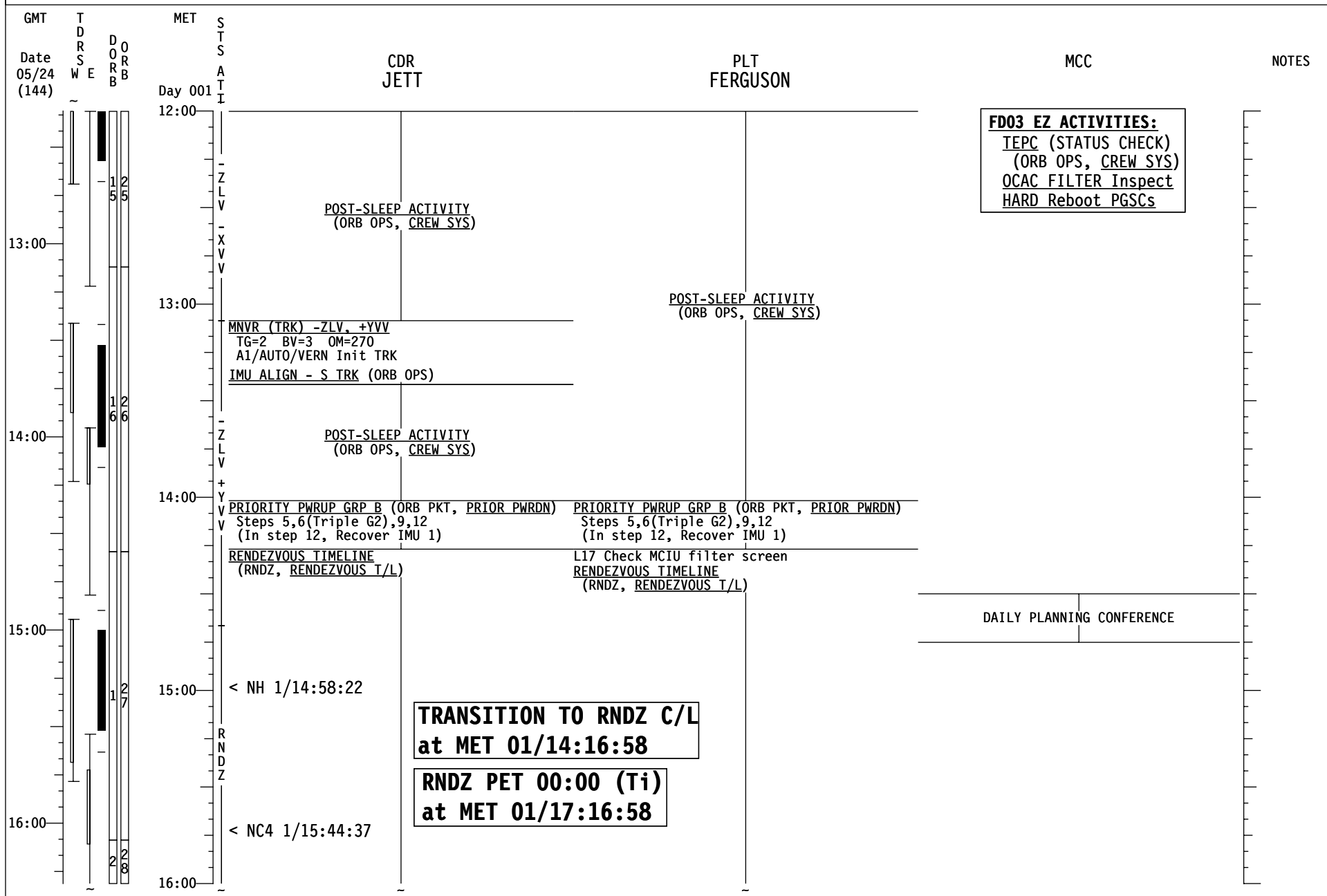
STS-115 (FD02)



STS-115 (FD02)



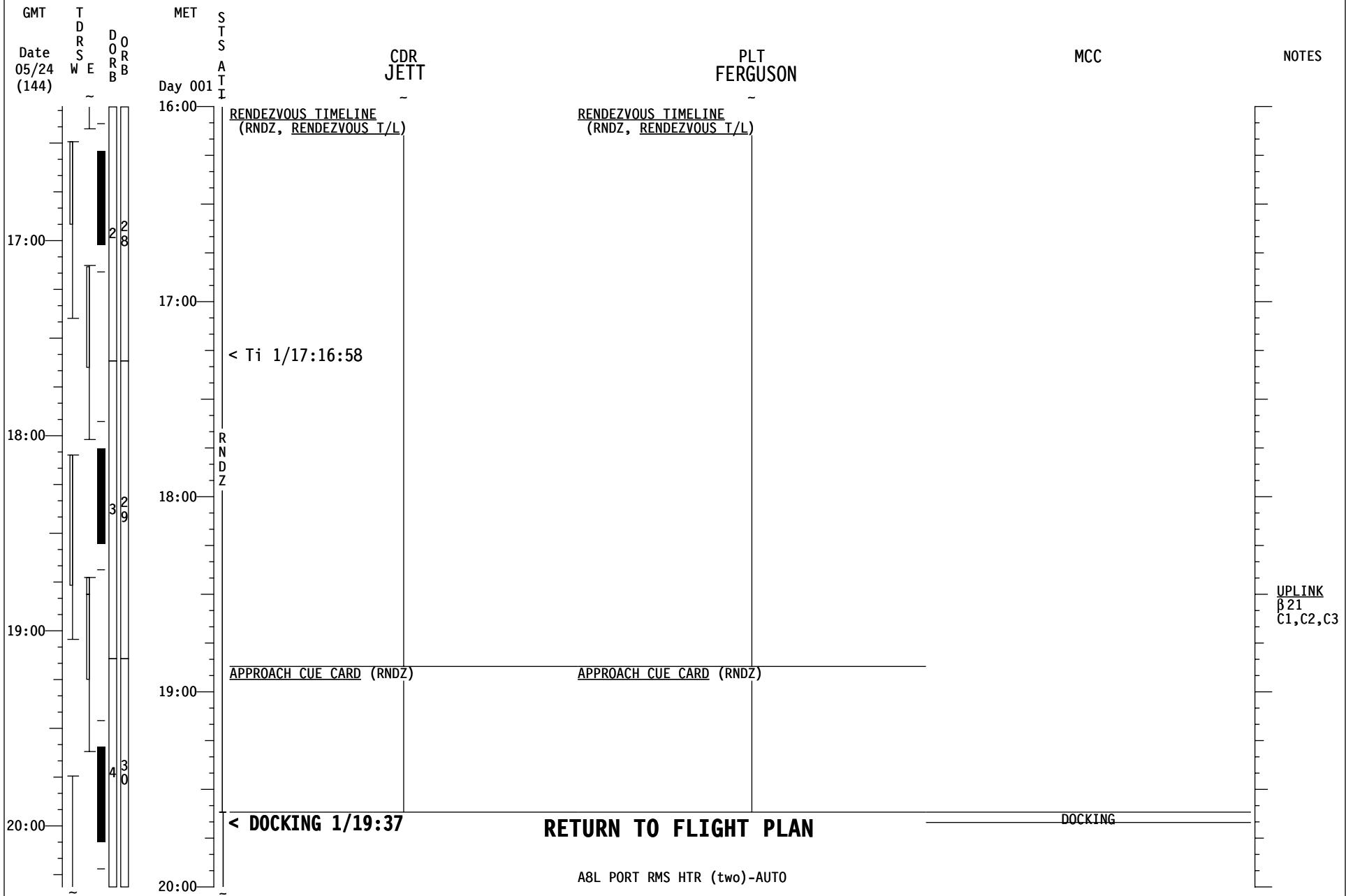
STS-115 (FD03)



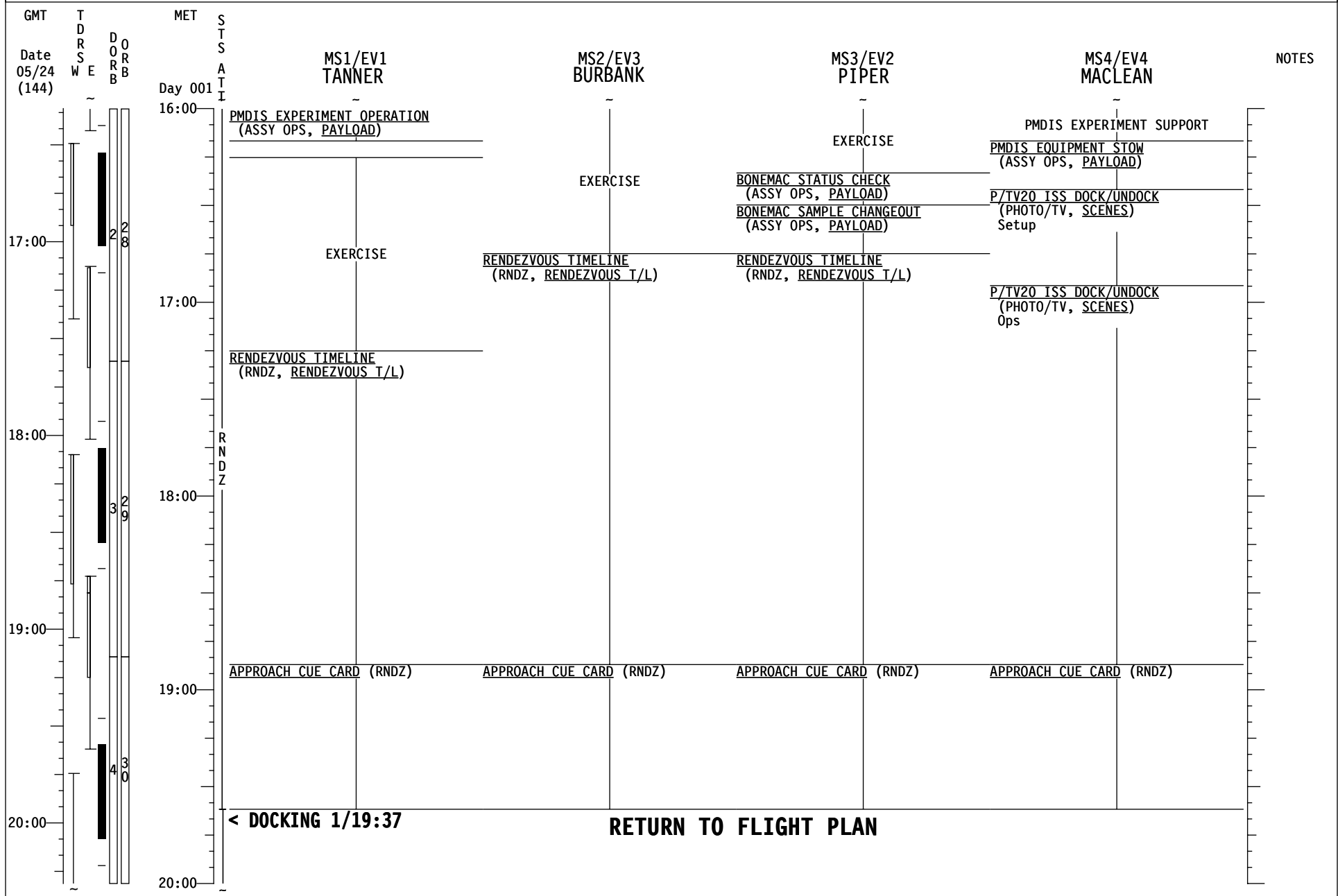
STS-115 (FD03)

GMT	T D R S W E	D O R B	MET	S T S A T T I	MS1/EV1 TANNER	MS2/EV3 BURBANK	MS3/EV2 PIPER	MS4/EV4 MACLEAN	NOTES
Date 05/24 (144)			Day 001						
			12:00	Z	<u>SLEEP LOG (ORB OPS, DSOS)</u> <u>SALIVA COLLECTION (ORB OPS, DSOS)</u>	<u>SLEEP LOG (ORB OPS, DSOS)</u>	<u>SALIVA COLLECTION (ORB OPS, DSOS)</u>	<u>SLEEP LOG (ORB OPS, DSOS)</u>	
			13:00	X		<u>POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)</u>			
			13:00	V				<u>POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)</u>	
			14:00	Z	<u>POST SLEEP ACTIVITY (ORB OPS, CREW SYS)</u> <u>GALLEY MORNING CONFIG (ORB OPS, GLY IODINE RMVL)</u>	<u>SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS)</u> Initiate Supply/Waste Dump	<u>POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)</u>		
			14:00	L					
			14:00	Y		<u>POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)</u>		<u>PMDIS EXPERIMENT SETUP (ASSY OPS, PAYLOAD)</u>	
			15:00	V				<u>PMDIS EXPERIMENT OPERATION (ASSY OPS, PAYLOAD)</u>	
			15:00	Z		<u>SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS)</u> Terminate Supply/Waste Dump			
			15:00	R		<u>SHUTTLE CONDENSATE COLLECTION (ORB OPS, ECLS)</u> SETUP, Steps 1-11 Perform post dump	<u>PMDIS EXPERIMENT OPERATION (ASSY OPS, PAYLOAD)</u>		
			16:00	N	<u>EMU REMOVAL (EVA, AIRLOCK CONFIG)</u> Z Move EMUs to Middeck	<u>PMDIS EXPERIMENT OPERATION (ASSY OPS, PAYLOAD)</u>			
			16:00	D				<u>PMDIS EXPERIMENT SUPPORT</u>	
			16:00	Z	<u>PMDIS EXPERIMENT OPERATION (ASSY OPS, PAYLOAD)</u>	<u>EXERCISE</u>	<u>EXERCISE</u>		

STS-115 (FD03)



STS-115 (FD03)



STS-115 (FD03)

GMT	TDRS W E	DORB B	MET	S T S A T I	CDR JETT	PLT FERGUSON	MCC	NOTES
Date 05/24 (144)			Day 001					
20:00		430			<u>MNVR (TRK) BIAS -XLV, +ZVV</u> TG=2 BV=5 P=158 Y=3 OM=1 A12/AUTO/VERN Init TRK (01/20:05)			
					<u>HANDOVER ATTITUDE CONTROL ORBITER TO CMG TA</u> (JOINT OPS, MATED OPS)			
21:00					<u>PRIORITY PWRDN GRP B</u> (ORB PKT, PRIOR PWRDN) In Step 12, IMU 1 STBY-ITEM 21 EXEC 06 S TRK PWR -Z - OFF	<u>PRIORITY PWRDN GRP B</u> (ORB PKT, PRIOR PWRDN) In Step 12, IMU 1 STBY-ITEM 21 EXEC 06 S TRK PWR -Z - OFF		
					<u>HATCH OPENING AND SHUTTLE/ISS</u> <u>DUCT INSTALLATION</u> (JOINT OPS, INGRESS STATION)	<u>TOPPING FES DEACT(ORB OPS, ECLS)</u> <u>RMS PWRUP</u> (PDRS, RMS PWRUP)		
		531				<u>P3/4 GRAPPLE</u> (PDRS, NOM P3/4 HANDOFF) Steps 1-2 only		
22:00					WELCOME CEREMONY	WELCOME CEREMONY		
					SAFETY BRIEFING	SAFETY BRIEFING		
22:00						<u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX	<u>VERIFY COMM CONFIG 3B</u>	
					EXERCISE			
23:00		632						
					<u>VTR SETUP (DOCKING VIDEO)</u> (CUE CARD, TV/VTR)	<u>CONFIG FOR P/B USING SHUTTLE 02</u> (JOINT OPS, MATED OPS)		
					<u>PLAYBACK (DOCKING VIDEO)</u> (CUE CARD, TV/VTR) KU AVAIL: 23:20-23:35			
00:00		733						
00:00								

STS-115 (FD03)

GMT	T D R S W E D O R B B	MET	S T S A T T I	MS1/EV1 TANNER	MS2/EV3 BURBANK	MS3/EV2 PIPER	MS4/EV4 MACLEAN	NOTES
Date 05/24 (144)		Day 001						
20:00	4 3 0			<u>POST DOCKING HATCH LEAK CHECK</u> (JOINT OPS, <u>INGRESS STATION</u>)	<u>PGSC NETWORK RCNFG</u> Configure PGSCs for docked timeframe	<u>POST DOCKING HATCH LEAK CHECK</u> (JOINT OPS, <u>INGRESS STATION</u>)	<u>HARDLINE AUDIO CONFIGURATION (ISS)</u> (JOINT OPS, <u>COMM/DATA</u>) Steps 1,2,6,7	
21:00	5 3 1			<u>ODS VOLUME PREP FOR INGRESS</u> (JOINT OPS, <u>INGRESS STATION</u>)		<u>ODS VOLUME PREP FOR INGRESS</u> (JOINT OPS, <u>INGRESS STATION</u>)		
21:00				<u>P/TV21 ISS INTERNAL OPS</u> (PHOTO/TV, <u>SCENES</u>) Setup	<u>RMS PWRUP</u> (PDRS, <u>RMS PWRUP</u>)	<u>HATCH OPENING AND SHUTTLE/ISS DUCT INSTALLATION</u> (JOINT OPS, <u>INGRESS STATION</u>)	<u>EXERCISE</u>	
22:00				<u>WELCOME CEREMONY</u>	<u>WELCOME CEREMONY</u>	<u>WELCOME CEREMONY</u>	<u>WELCOME CEREMONY</u>	
22:00				<u>SAFETY BRIEFING</u>	<u>SAFETY BRIEFING</u>	<u>SAFETY BRIEFING</u>	<u>SAFETY BRIEFING</u>	
23:00	6 3 2			<u>POST-DOCKING EVA TRANSFER/RCNFG</u> (EVA, <u>AIRLOCK CNFG</u>)	<u>POST-DOCKING EVA TRANSFER/RCNFG</u> (EVA, <u>AIRLOCK CNFG</u>)	<u>POST-DOCKING EVA TRANSFER/RCNFG</u> (EVA, <u>AIRLOCK CNFG</u>)	<u>POST-DOCKING EVA TRANSFER/RCNFG</u> (EVA, <u>AIRLOCK CNFG</u>)	
23:00				<u>EMU TO AIRLOCK INTERFACE CHECK</u> (ISS EVA SYS, <u>CHECKOUTS</u>)		<u>EMU TO AIRLOCK INTERFACE CHECK</u> (ISS EVA SYS, <u>CHECKOUTS</u>)		
00:00	7 3 3			<u>EQUIPMENT LOCK PREP</u> (ISS EVA SYS, <u>AIRLOCK CNFG</u>)		<u>EQUIPMENT LOCK PREP</u> (ISS EVA SYS, <u>AIRLOCK CNFG</u>)		
00:00					<u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX		<u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX	
00:00				<u>REBA INSTALLATION</u> (ISS EVA SYS, <u>BATTERY OPS</u>)		<u>REBA INSTALLATION</u> (ISS EVA SYS, <u>BATTERY OPS</u>)		

STS-115 (FD03)

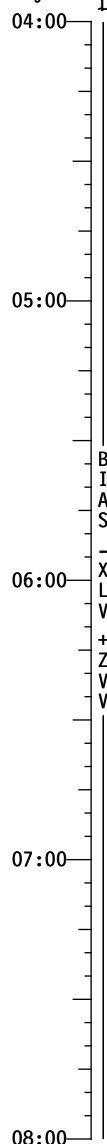
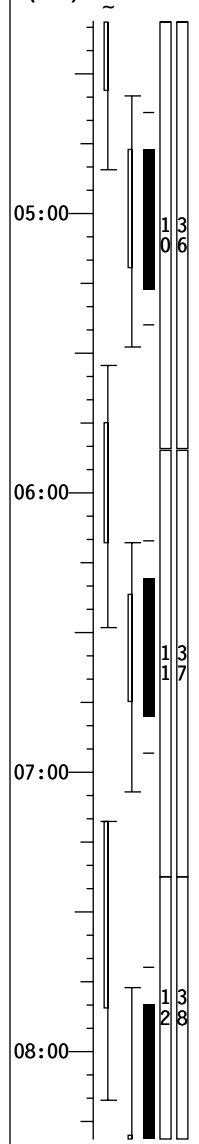
GMT	T D R S W E	D O R B	MET	S T S	C D R	P L T	M C C	N O T E S
Date 05/25 (145)			Day 002	A T I	J E T T	F E R G U S O N		
00:00					<u>NITROGEN TRANSFER INITIATION</u> (JOINT OPS, <u>MATED OPS</u>)			
01:00						EXERCISE		
01:00					<u>ILLUMINATOR OPS</u> (PHOTO/TV, <u>CUE CARDS</u>) ILLUMINATORS ON - B and C			
02:00					<u>EVA PROCEDURE REVIEW</u> REF: <u>EVA 1 BRIEFING CARD</u> (EVA, <u>TIMELINES</u>) <u>12A EVA 1</u> (EVA, <u>EVA 1</u>)	<u>EVA PROCEDURE REVIEW</u> REF: <u>EVA 1 BRIEFING CARD</u> (EVA, <u>TIMELINES</u>) <u>12A EVA 1</u> (EVA, <u>EVA 1</u>)		
02:00					<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, <u>CREW SYS</u>)			DTV-OFF SSV-OFF
02:00							DAILY PLANNING CONFERENCE	
03:00					<u>VIDEO CONFERENCING</u> (ORB OPS, <u>PGSC</u>) Private Medical Conference			OCA-PMC
03:00					<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, <u>CREW SYS</u>)	<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, <u>CREW SYS</u>)		
04:00					<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, <u>CREW SYS</u>)			

STS-115 (FD03)

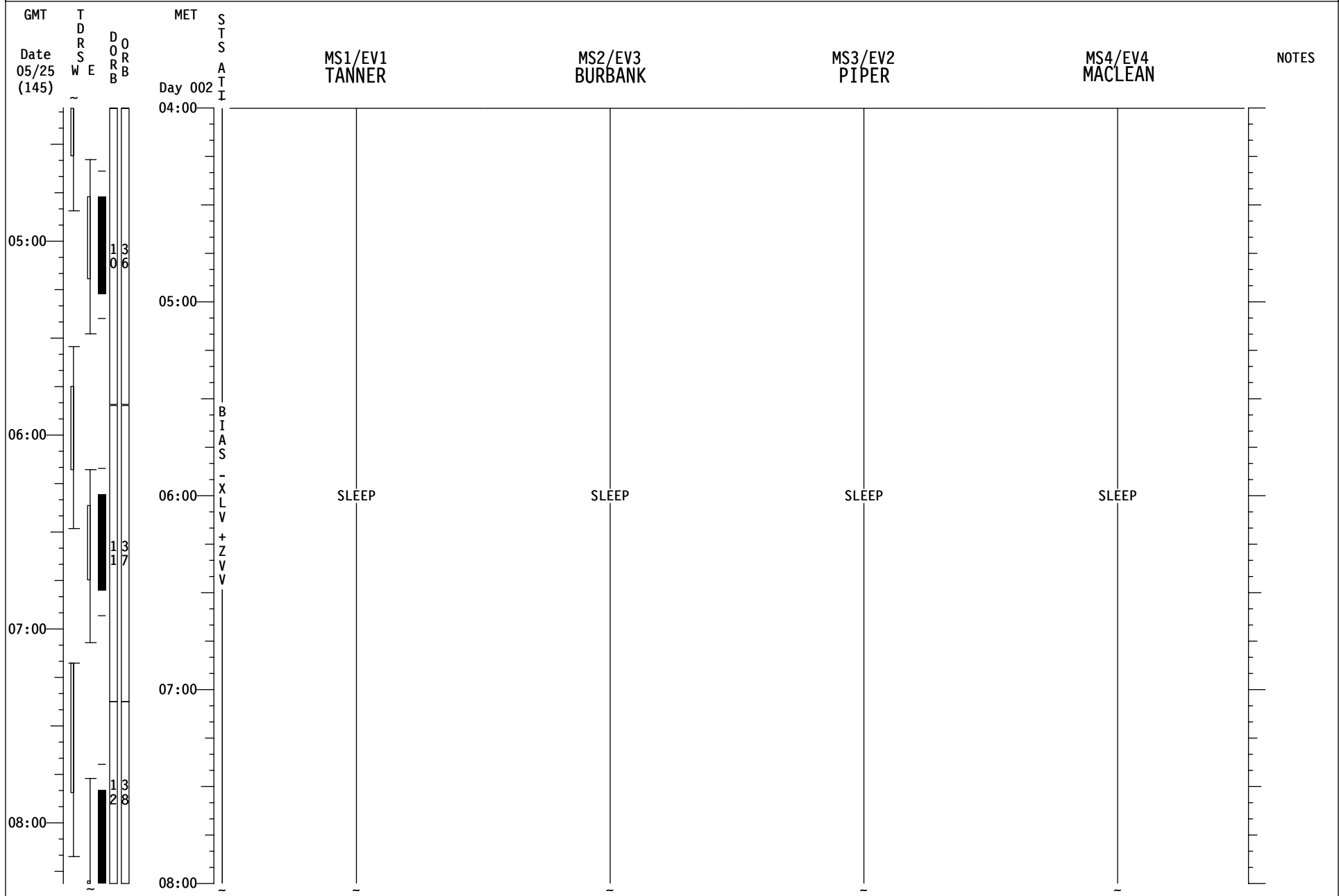
GMT	T D R S E W E	D O R B B B	MET Day 002	S T S A T T I	MS1/EV1 TANNER	MS2/EV3 BURBANK	MS3/EV2 PIPER	MS4/EV4 MACLEAN	NOTES
00:00					<u>REBA POWERED HARDWARE CHECKOUT</u> (ISS EVA SYS, CHECKOUTS) EMU 1,2 (all); EMU 3,4 (w/o EMU TV) <u>PRE EVA 1 TOOL CONFIG</u> (EVA, TIMELINES)	<u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX <u>EVA F5 (Setup)</u> (ISS CUE CARD)	<u>REBA POWERED HARDWARE CHECKOUT</u> (ISS EVA SYS, CHECKOUTS) EMU 1,2 (all); EMU 3,4 (w/o EMU TV) <u>PRE EVA 1 TOOL CONFIG</u> (EVA, TIMELINES)	<u>FD3 P3P4 DRY RUN</u> (ROBOTICS, P3P4 INSTALL)	
01:00					<u>EVA PROCEDURE REVIEW</u> REF: <u>EVA 1 BRIEFING CARD</u> (EVA, TIMELINES) 12A EVA 1 (EVA, EVA 1)	<u>EVA PROCEDURE REVIEW</u> REF: <u>EVA 1 BRIEFING CARD</u> (EVA, TIMELINES) 12A EVA 1 (EVA, EVA 1)	<u>EVA PROCEDURE REVIEW</u> REF: <u>EVA 1 BRIEFING CARD</u> (EVA, TIMELINES) 12A EVA 1 (EVA, EVA 1)	<u>EVA PROCEDURE REVIEW</u> REF: <u>EVA 1 BRIEFING CARD</u> (EVA, TIMELINES) 12A EVA 1 (EVA, EVA 1)	
02:00								<u>TRANSFER TAGUP</u> Coordinate with transfer counterpart <u>TRANSFER BRIEF</u> Call down status to MCC	
03:00					<u>PRE SLEEP ACTIVITY</u> (ORB OPS, CREW SYS) <u>GALLEY OVERNIGHT CONFIG</u> (ORB OPS, GLY IODINE RMVL)	<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS) <u>OVERNIGHT CONFIG</u> <input checked="" type="checkbox"/>	<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)		
04:00						<div style="border: 1px solid black; padding: 5px;"> <input checked="" type="checkbox"/> <u>OVERNIGHT CONFIG</u> <input type="checkbox"/> COLOR PRINTER - ON <input type="checkbox"/> PAPER IN COLOR PRINTER <input type="checkbox"/> FLOPPY DISK IN PROSHARE <input type="checkbox"/> OCA ROUTER - ON <input type="checkbox"/> PROSHARE - ON <input type="checkbox"/> KFX LAUNCHED CHECK APPLICATIONS CLOSED <input type="checkbox"/> OUTLOOK </div>			

STS-115 (FD03)

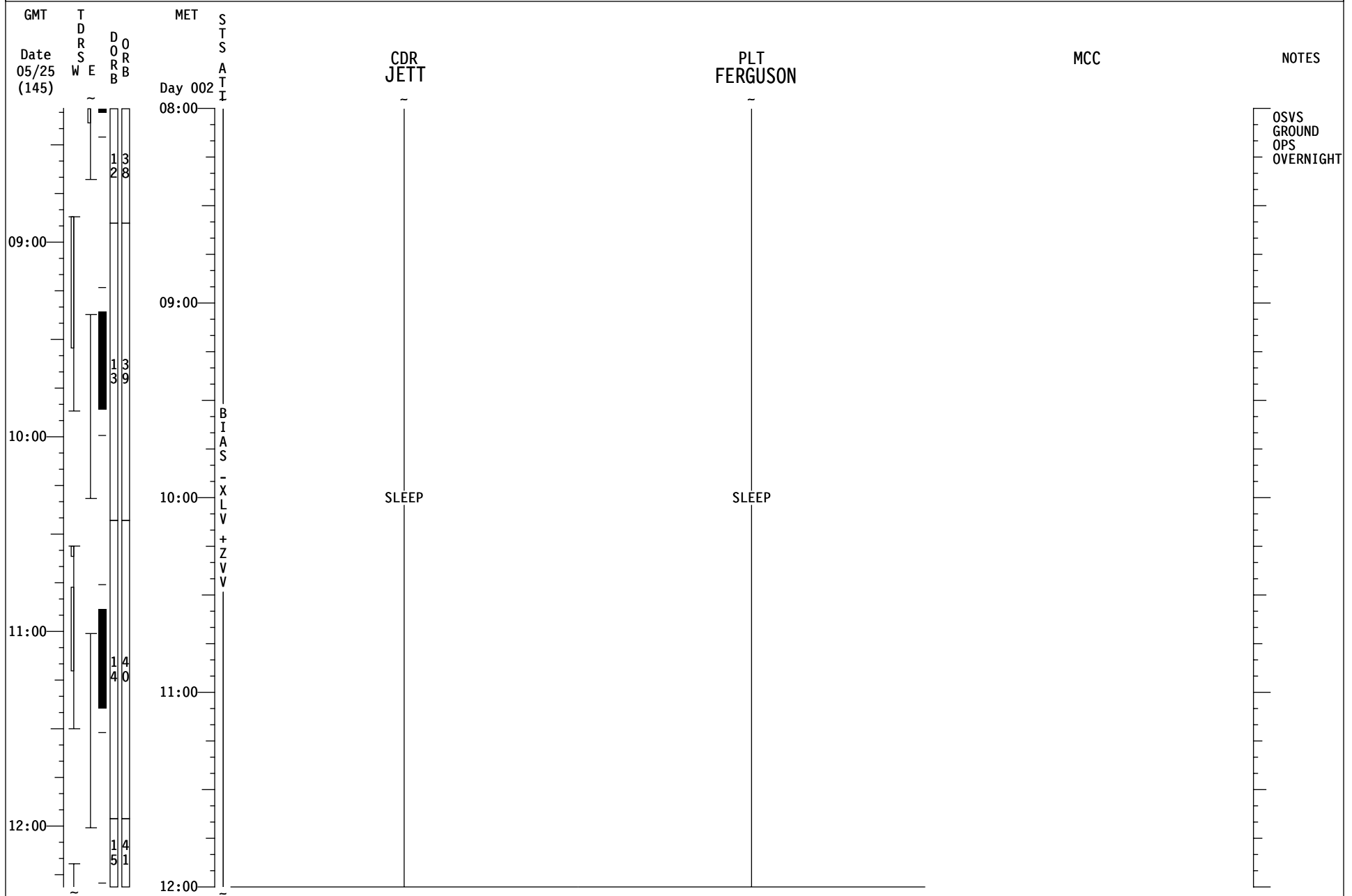
GMT	T D R S W E	D O R B	MET	S T S A T I	CDR JETT	PLT FERGUSON	MCC	NOTES
Date 05/25 (145)			Day 002					
04:00	~		04:00					OSVS GROUND OPS OVERNIGHT
05:00			05:00				<u>P1P3 SSAS PREP FOR MATE</u> (ASSY OPS, ASSY)	
06:00			06:00		SLEEP	SLEEP		
07:00			07:00					
08:00			08:00					



STS-115 (FD03)

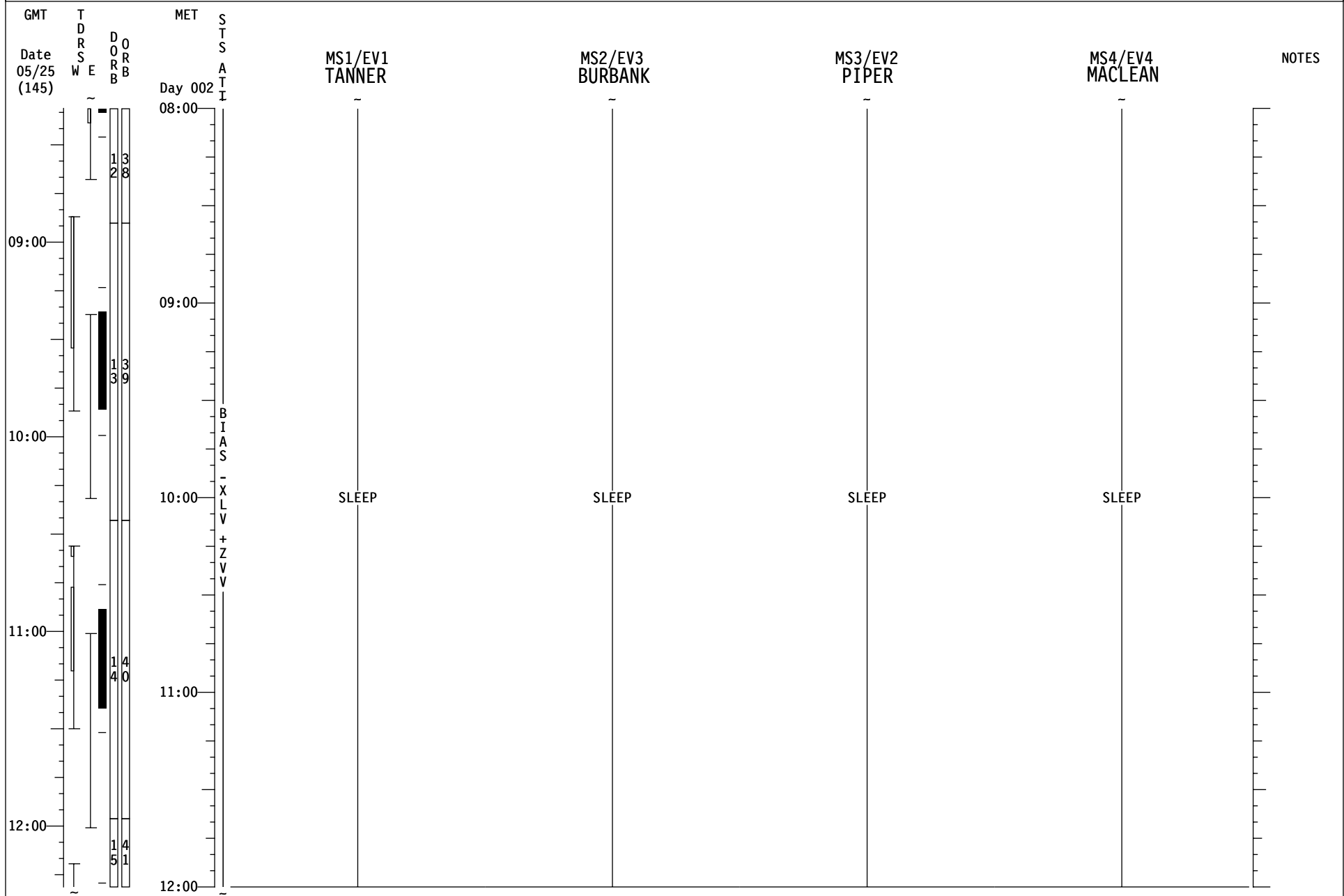


STS-115 (FD03)

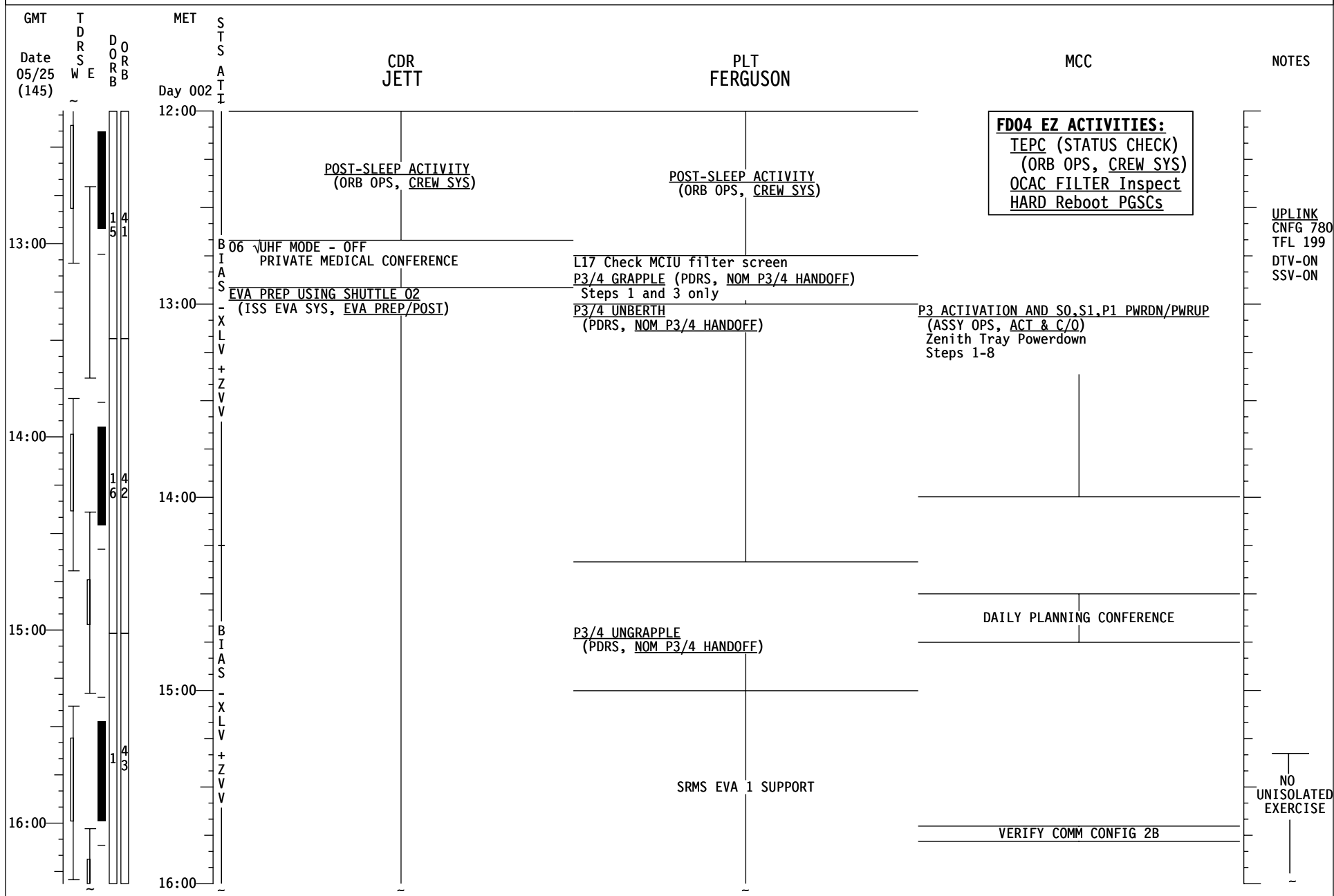


OSVS
GROUND
OPS
OVERNIGHT

STS-115 (FD03)



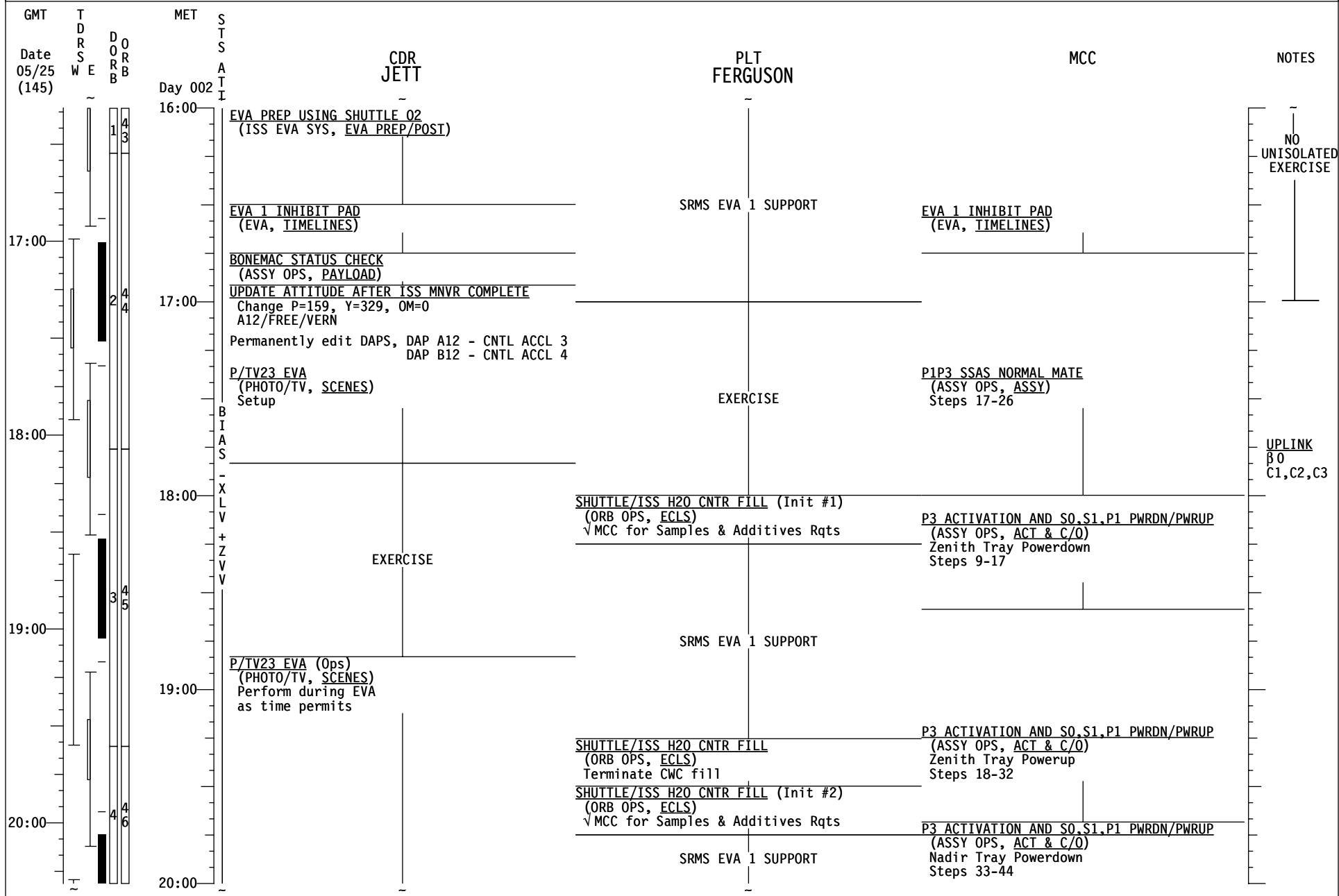
STS-115 (FD04)



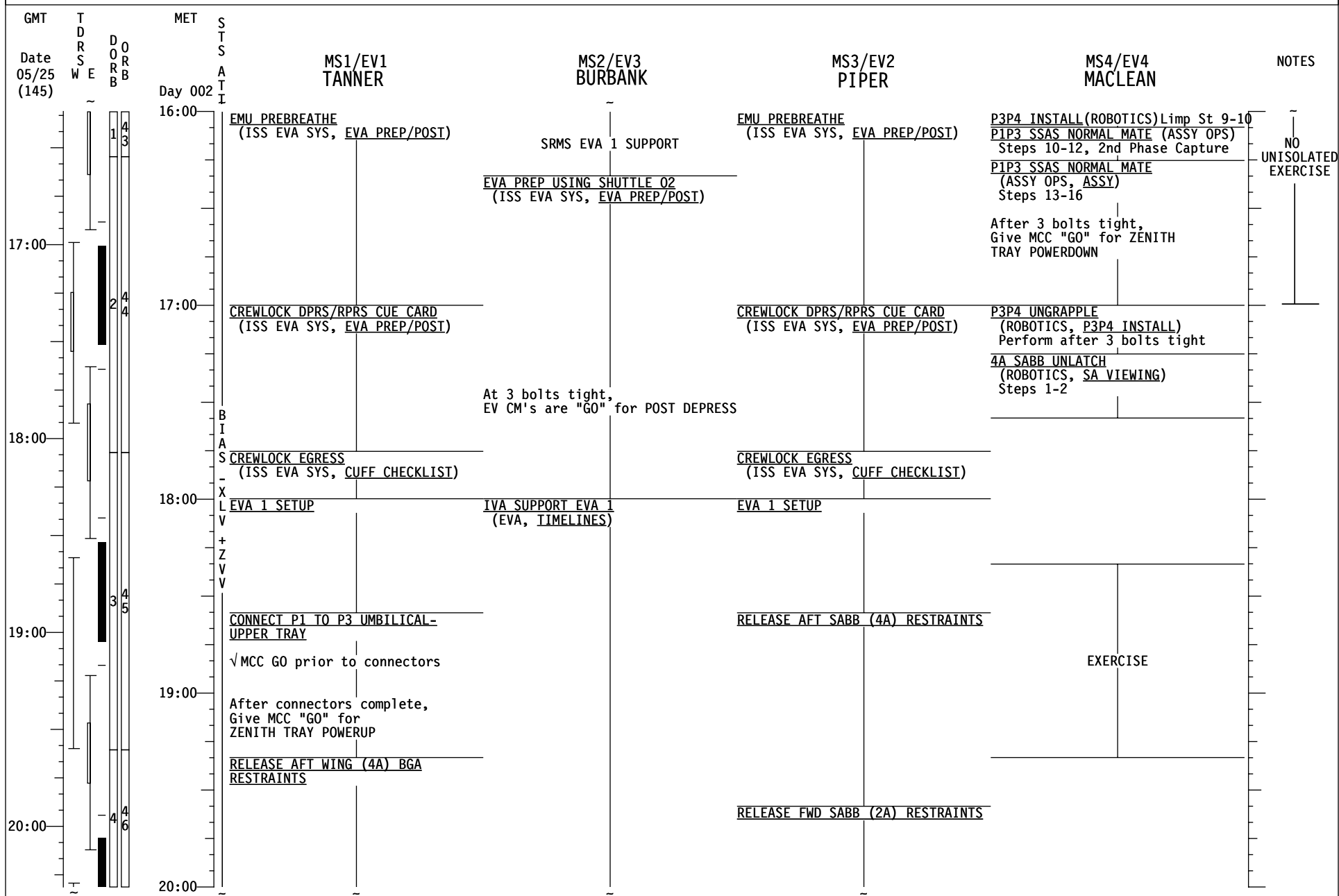
STS-115 (FD04)

GMT	T D R S W E	D O R B	MET	S T S A T T I	MS1/EV1 TANNER	MS2/EV3 BURBANK	MS3/EV2 PIPER	MS4/EV4 MACLEAN	NOTES
Date 05/25 (145)			Day 002						
12:00					POST SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
13:00		1451			GALLEY MORNING CONFIG (ORB OPS, GLY IODINE RMVL)			OIU ACTIVATION (ORB OPS, OIU PROC) Step 3 only (Activate OIU 1) SSV RATE-2	
13:00					EVA PREP USING SHUTTLE 02 (ISS EVA SYS, EVA PREP/POST)	P3/4 GRAPPLE (PDRS, NOM P3/4 HANDOFF) Steps 1 and 3 only	EVA PREP USING SHUTTLE 02 (ISS EVA SYS, EVA PREP/POST)		
						P3/4 UNBERTH (PDRS, NOM P3/4 HANDOFF)			
14:00		1462						POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
14:00									
15:00								P3P4 HANDOFF (ROBOTICS, P3P4 INSTALL)	
15:00						P3/4 UNGRAPPLE (PDRS, NOM P3/4 HANDOFF)		P3P4 INSTALL (ROBOTICS, P3P4 INSTALL) Auto MNVR to Approach Corridor Steps 1-3	
16:00		143				SRMS EVA 1 SUPPORT		MNVR TO PRE-INSTALL PIP3 SSAS NORMAL MATE (ASSY OPS, ASSY) Steps 1-5	
16:00					EMU PURGE (ISS EVA SYS, EVA PREP/POST)		EMU PURGE (ISS EVA SYS, EVA PREP/POST)	P3P4 INSTALL (MNVR to RTL) (ROBOTICS, P3P4 INSTALL) Steps 4-8	NO UNISOLATED EXERCISE
16:00								PIP3 SSAS NORMAL MATE (ASSY OPS) Steps 6-9, 1st Phase Capture	

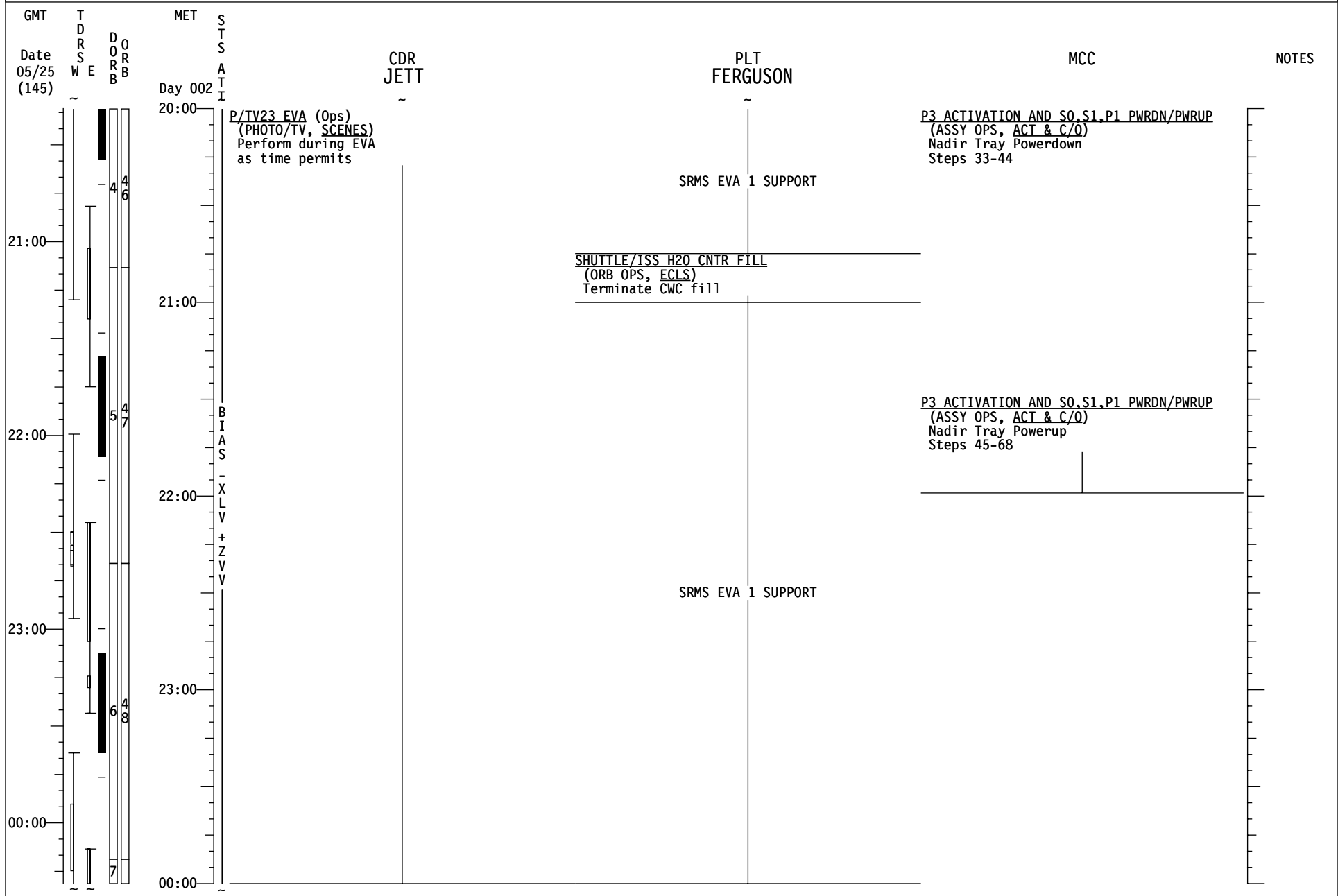
STS-115 (FD04)



STS-115 (FD04)



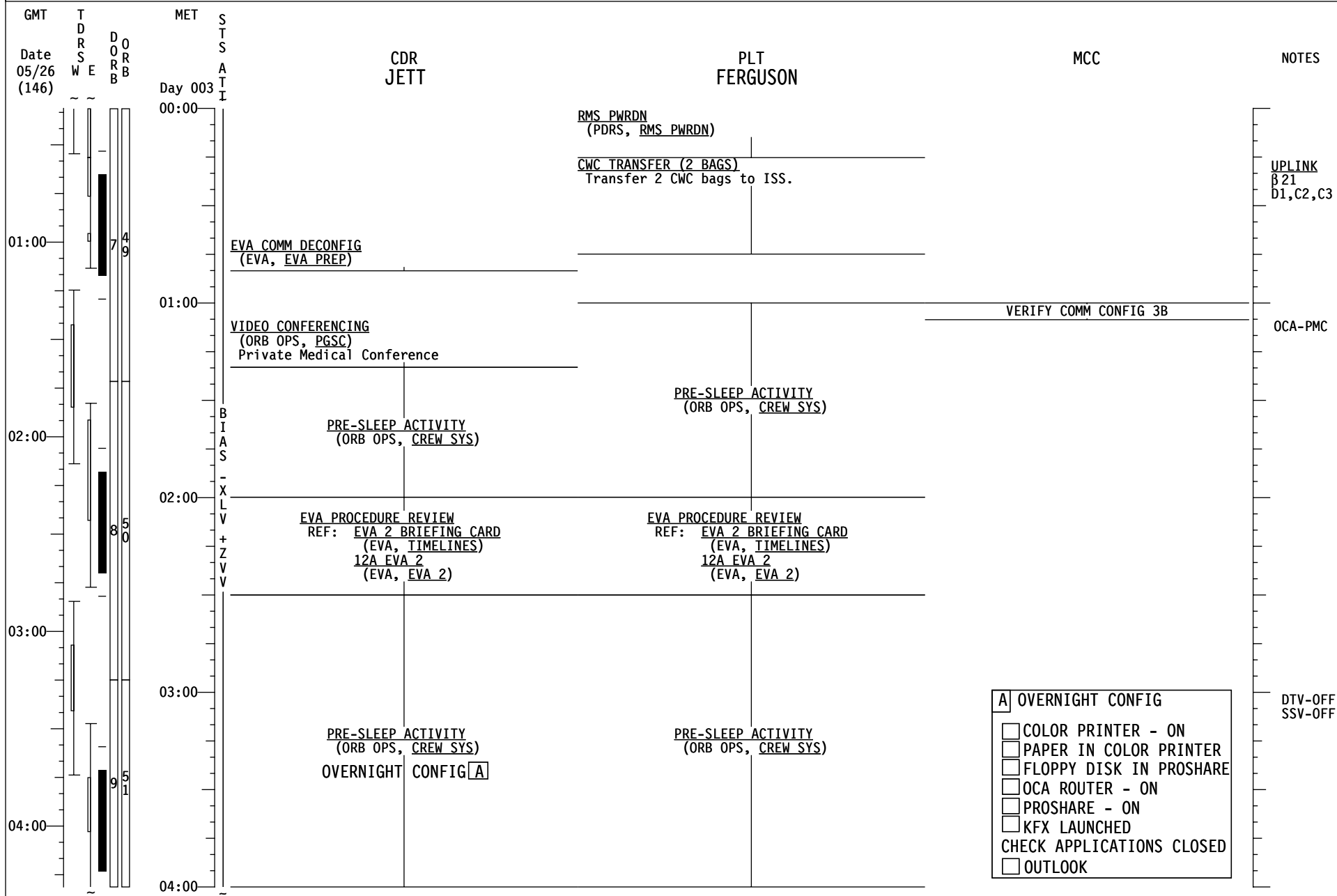
STS-115 (FD04)



STS-115 (FD04)

GMT	T D R S W E	D O R B	MET	S T S	MS1/EV1 TANNER	MS2/EV3 BURBANK	MS3/EV2 PIPER	MS4/EV4 MACLEAN	NOTES
Date 05/25 (145)			Day 002						
20:00					RELEASE AFT WING-(4A) BGA RESTRAINTS	IVA SUPPORT EVA 1 (EVA, TIMELINES)	RELEASE FWD SABB (2A) RESTRAINTS		
					ROTATE P4 KEEL PIN			POST-DOCKING EVA TRANSFER/RECNGF (EVA, AIRLOCK CNFG)	
					UNSTOW AFT WING (4A) SABB				
21:00					CONNECT P1 TO P3 UMBILICAL-LOWER TRAY		RELEASE FWD WING (2A) BGA RESTRAINTS		
					√ MCC GO prior to connectors				
					After connectors complete, Give MCC "GO" for NADIR TRAY POWERUP				
					SARJ PREPARATION		UNSTOW FWD WING (2A) SABB	EQUIPMENT LOCK PREP (ISS EVA SYS, AIRLOCK CNFG)	
22:00							SARJ PREPARATION		
								2A SABB UNLATCH (ROBOTICS, SA VIEWING) Steps 1-2	
								2A SABB UNLATCH (ROBOTICS, SA VIEWING)	
23:00									
					EVA 1 CLEANUP		EVA 1 CLEANUP		
00:00									

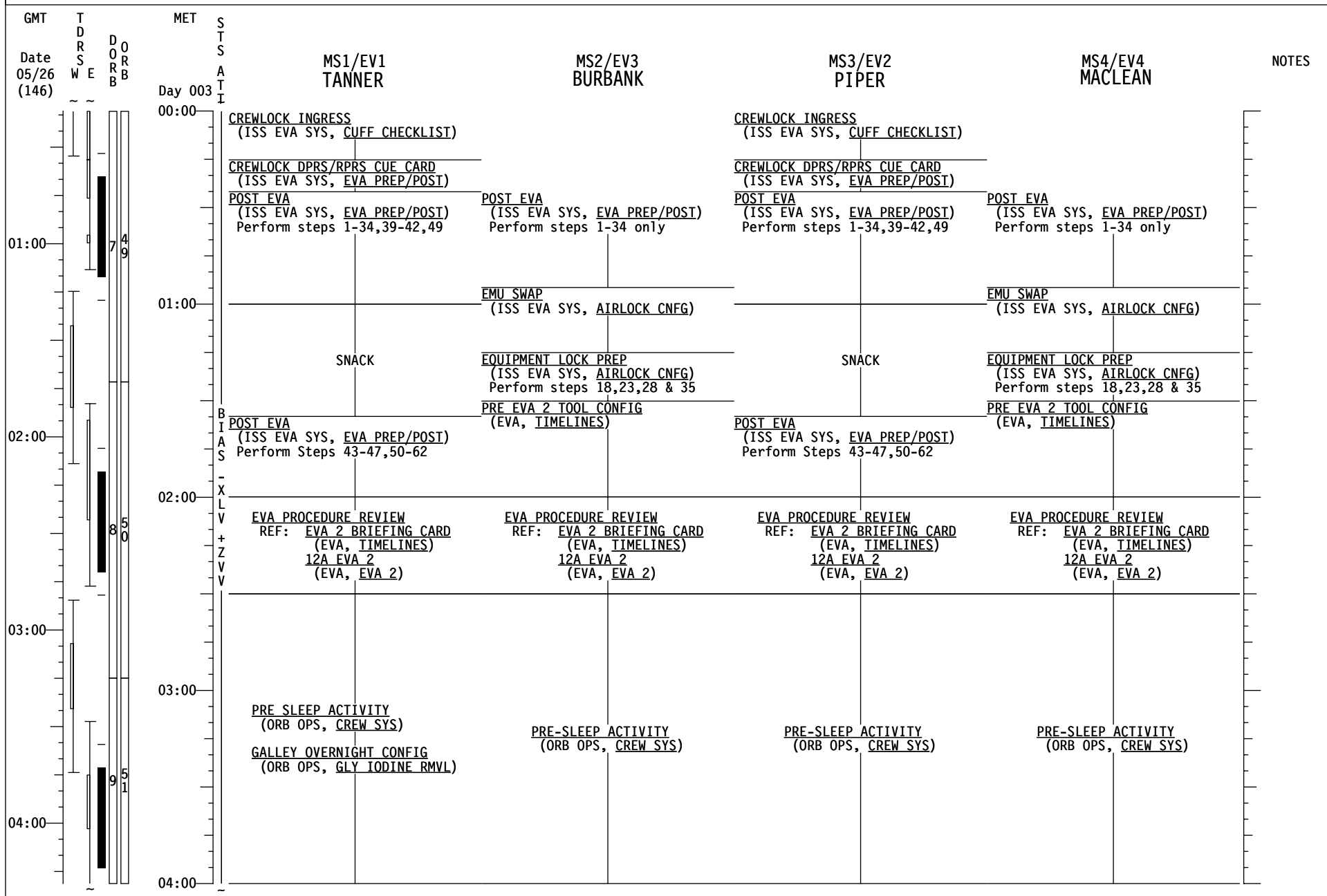
STS-115 (FD04)



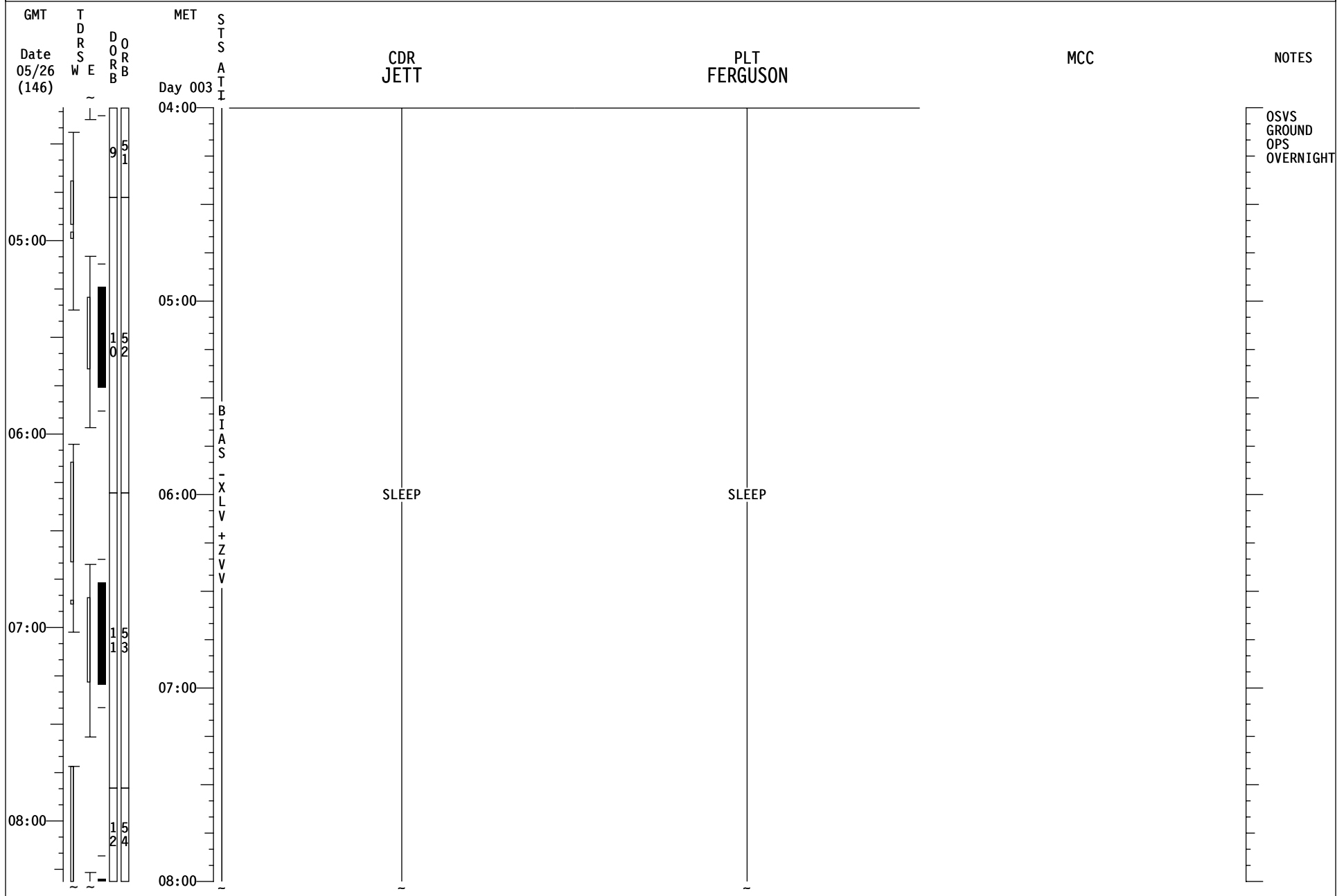
- A] OVERNIGHT CONFIG**

 - COLOR PRINTER - ON
 - PAPER IN COLOR PRINTER
 - FLOPPY DISK IN PROSHARE
 - OCA ROUTER - ON
 - PROSHARE - ON
 - KFX LAUNCHED
 - CHECK APPLICATIONS CLOSED
 - OUTLOOK

STS-115 (FD04)



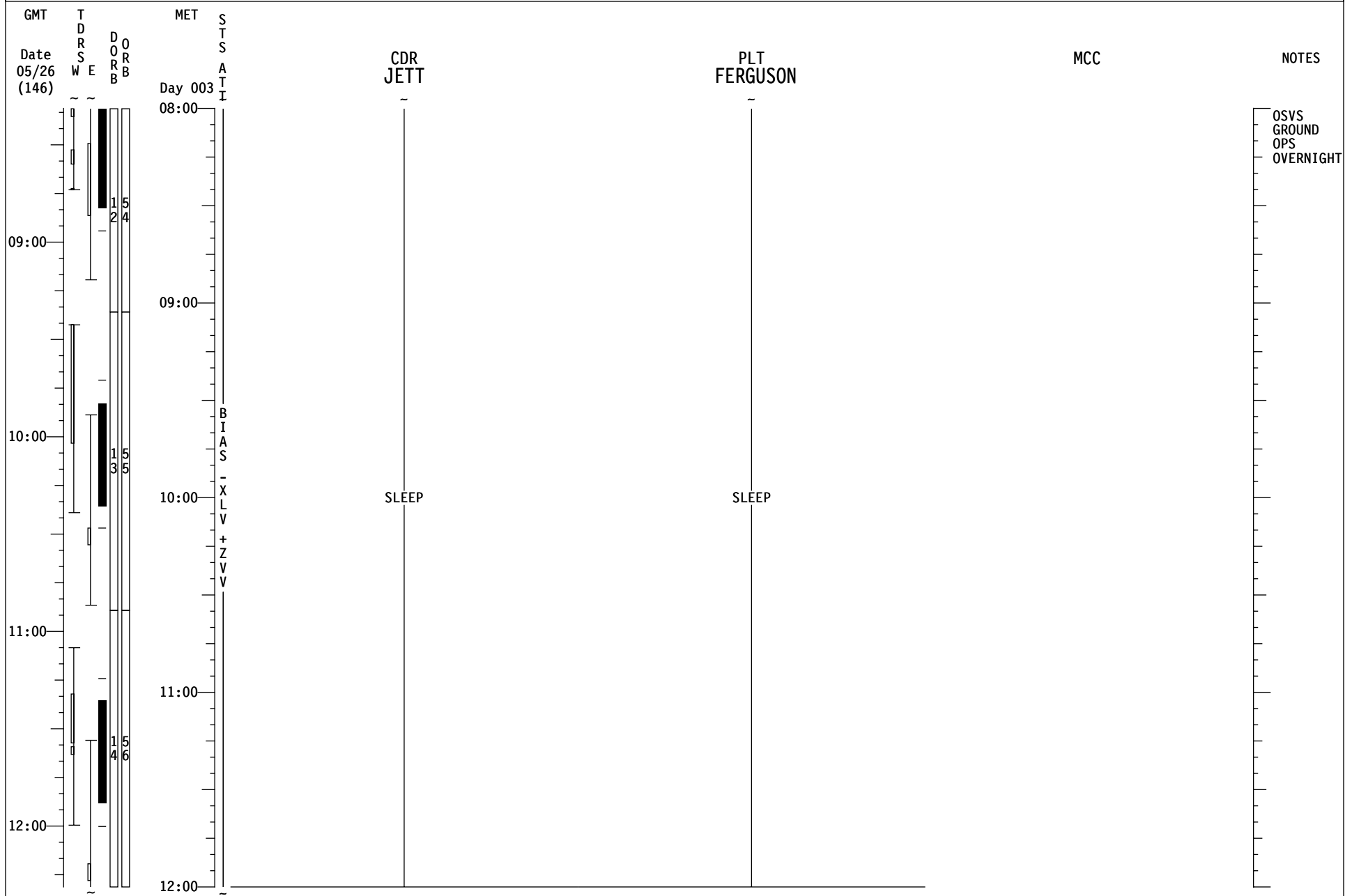
STS-115 (FD04)



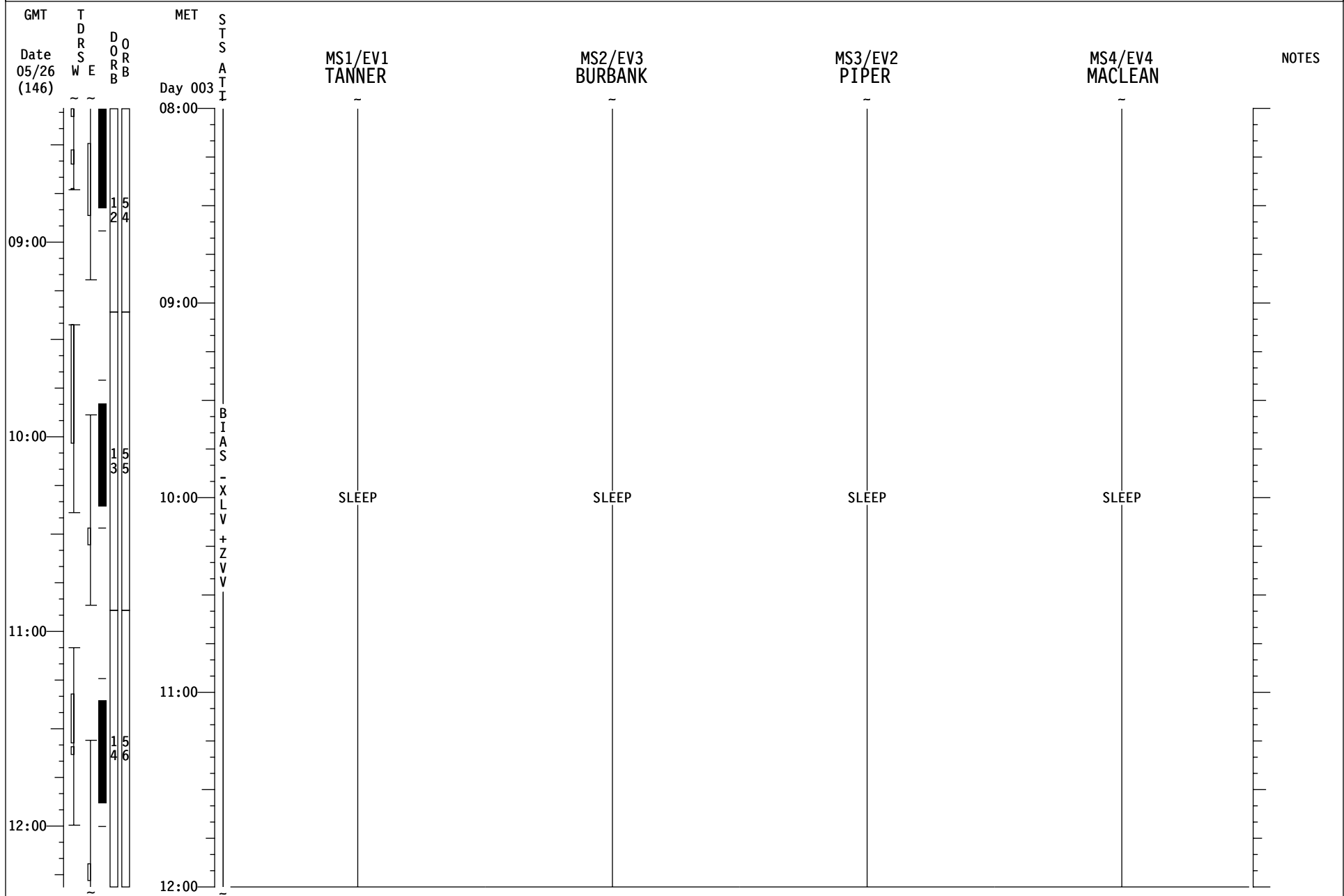
STS-115 (FD04)

GMT	T D R S W E	D O R B B	MET Day 003	S T S A T T I	MS1/EV1 TANNER	MS2/EV3 BURBANK	MS3/EV2 PIPER	MS4/EV4 MACLEAN	NOTES
04:00		951							
05:00									
06:00		102			SLEEP	SLEEP	SLEEP	SLEEP	
07:00		113							
08:00		124							

STS-115 (FD04)



STS-115 (FD04)



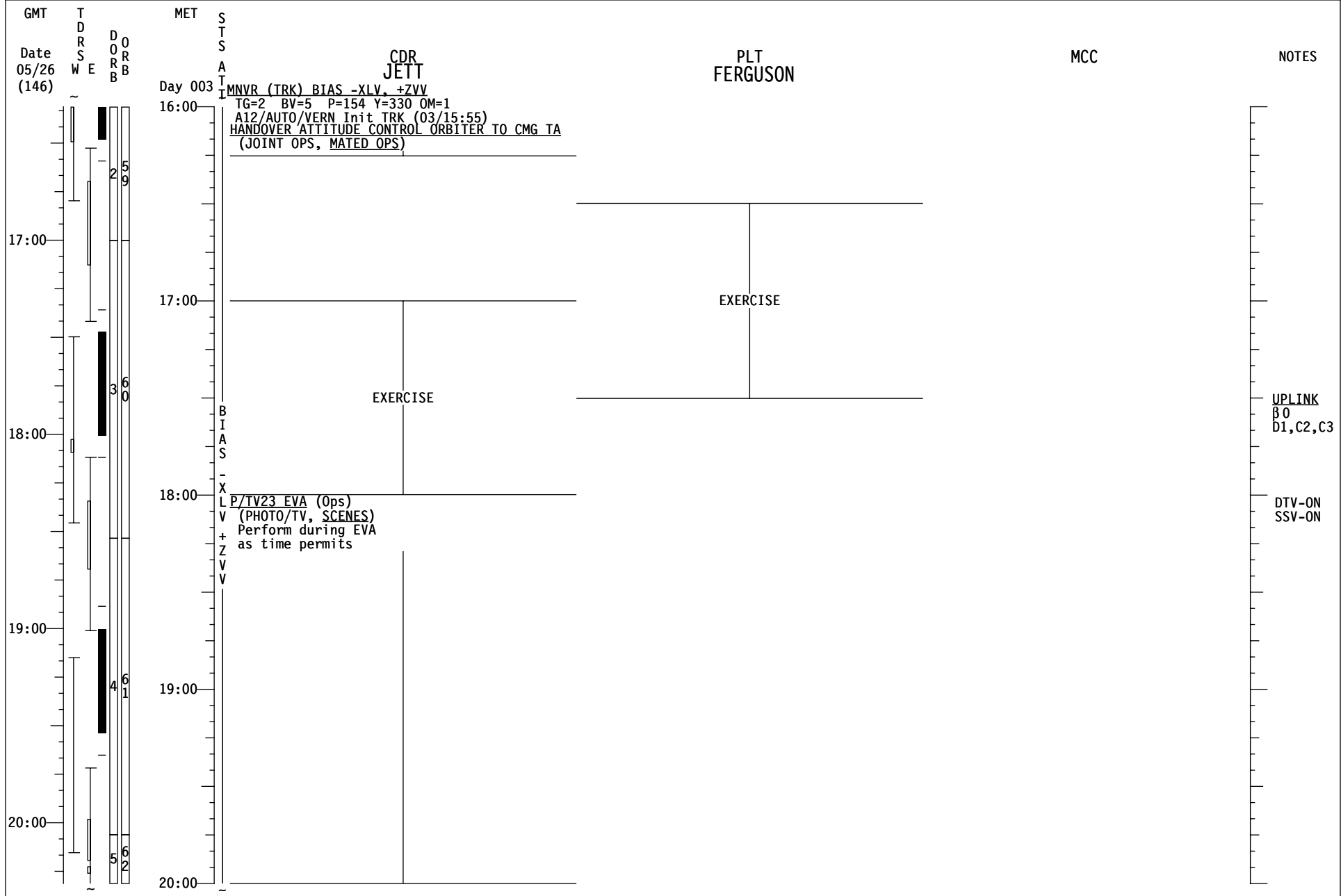
STS-115 (FD05)

GMT	T D R S E W E	D O R B B	MET Day 003	S T S A T T I	CDR JETT	PLT FERGUSON	MCC	NOTES
12:00							FD05 EZ ACTIVITIES: TEPC (STATUS CHECK) (ORB OPS, CREW SYS) OCAC FILTER Inspect HARD Reboot PGSCs	
13:00		157		B I A S	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)			
13:00				X 06	UHF MODE - OFF PRIVATE MEDICAL CONFERENCE			
				Z	EVA 2 INHIBIT PAD (EVA, TIMELINES)		EVA 2 INHIBIT PAD (EVA, TIMELINES)	
14:00				V V	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)		
14:00					HANDOVER ATTITUDE CONTROL CMG TA TO ORBITER (JOINT OPS, MATED OPS)			
		158			MNVR (TRK) BIAS -XLV, +YVV TG=2 BV=5 P=190 Y=0 OM=270 A12/AUTO/VERN Init TRK (03/14:10)			
					SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS) Initiate Supply Dump			
15:00				B I A S			DAILY PLANNING CONFERENCE	UPDATE H2O SPLY DUMP QTY TK A & B
15:00				X L V	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	L17 Check MCIU filter screen	VERIFY COMM CONFIG 2B	
16:00		259		+ Y V V				
16:00					SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS) Terminate Supply Dump			
16:00					MNVR (TRK) BIAS -XLV, +ZVV TG=2 BV=5 P=159 Y=329 OM=0 A12/AUTO/VERN Init TRK (03/15:55)			

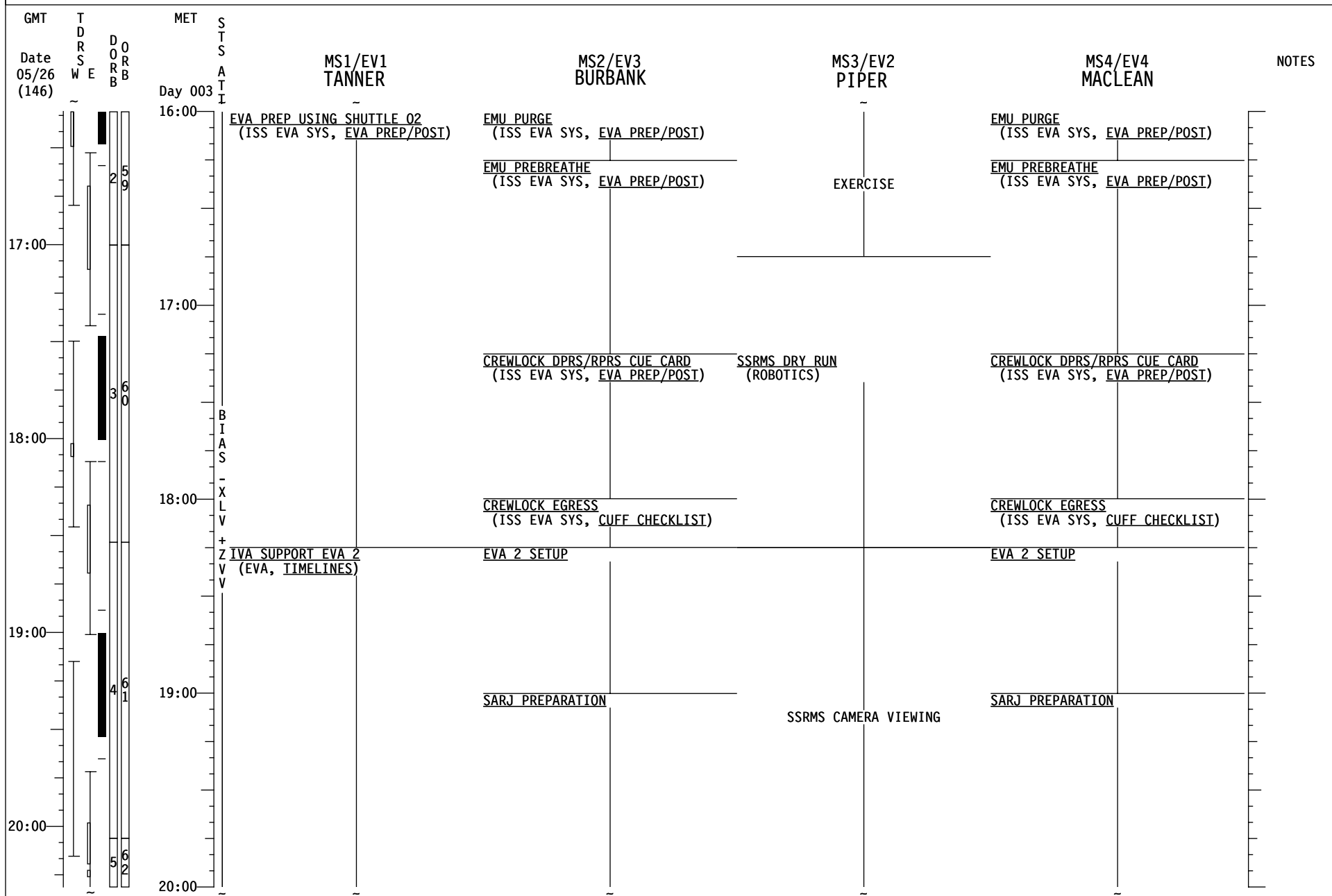
STS-115 (FD05)

GMT Date 05/26 (146)	T D R S W E	D O R B	MET Day 003	S T S A T T I	MS1/EV1 TANNER	MS2/EV3 BURBANK	MS3/EV2 PIPER	MS4/EV4 MACLEAN	NOTES
				B I A S			<u>SALIVA COLLECTION</u> (ORB OPS, DSQS)		
		157		- X	<u>POST SLEEP ACTIVITY</u> (ORB OPS, CREW SYS) <u>GALLEY MORNING CONFIG</u> (ORB OPS, GLY IODINE RMVL)	<u>POST-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	<u>POST-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	<u>POST-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	
				L V + Z V V	EV CREW: TAKE 1 ASPIRIN (325mg) EVA PREP USING SHUTTLE 02 (ISS EVA SYS, EVA PREP/POST)	EVA PREP USING SHUTTLE 02 (ISS EVA SYS, EVA PREP/POST)	<u>SHUTTLE LEH CONFIG FOR EVA P/B ON</u> ISS (ISS EVA SYS, EVA PREP/POST) EV CREW: TAKE 1 ASPIRIN (325mg)	EVA PREP USING SHUTTLE 02 (ISS EVA SYS, EVA PREP/POST)	
		158		B I A S			<u>POST-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)		
				- X					
				L V + Y V V			<u>BONEMAC STATUS CHECK</u> (ASSY OPS, PAYLOAD) EVA F5 (Setup) (ISS CUE CARD)		
		259		B I A S			EXERCISE		

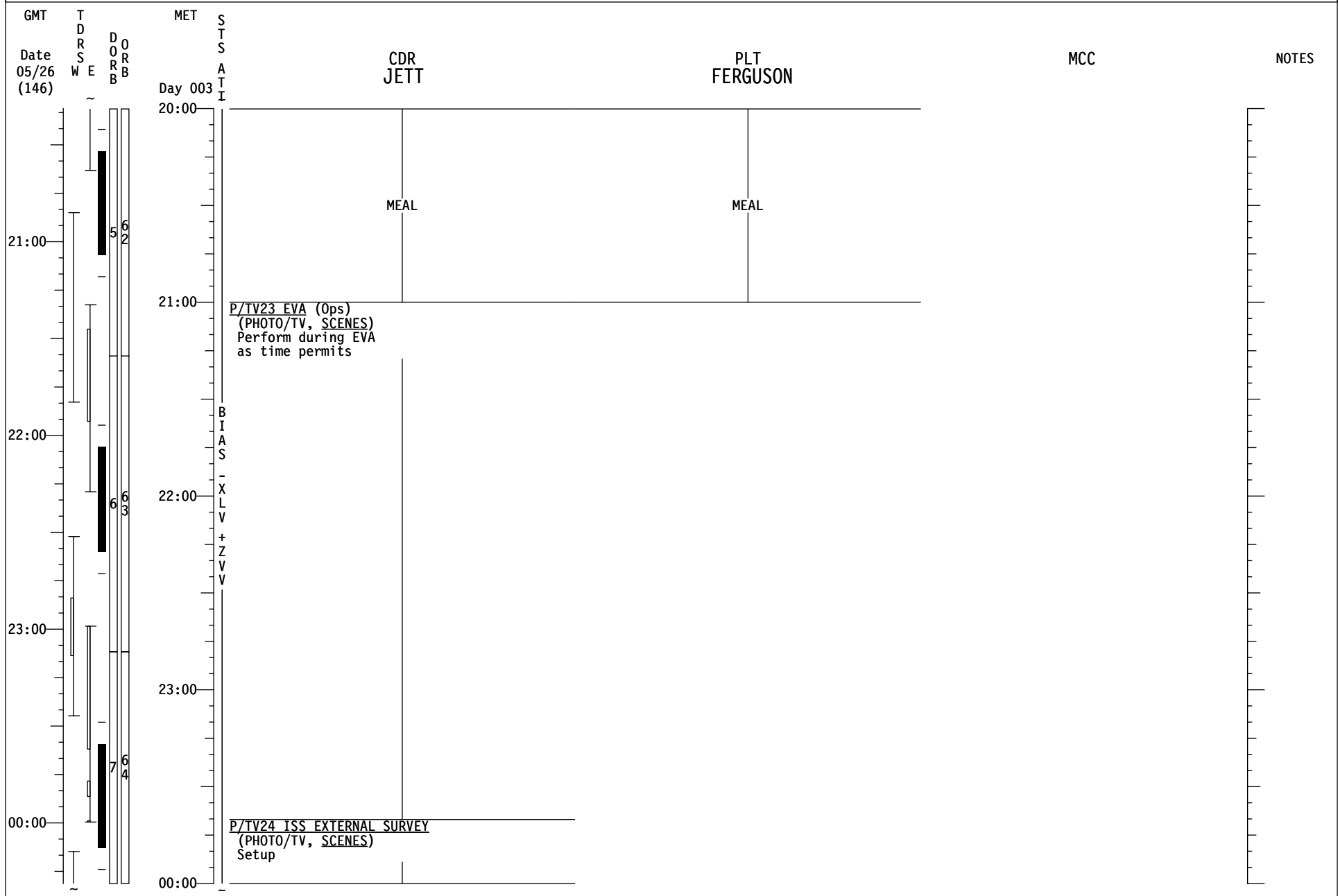
STS-115 (FD05)



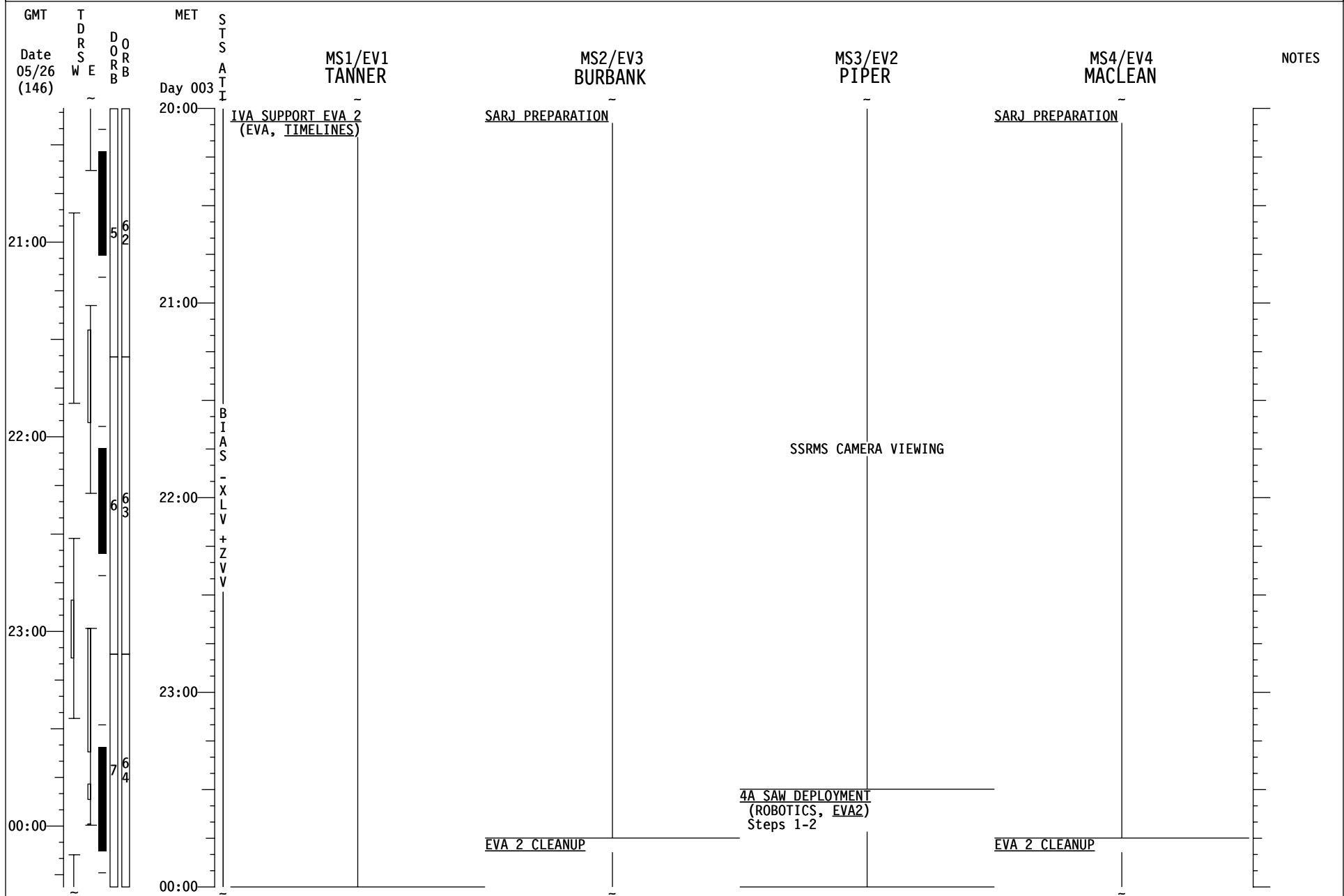
STS-115 (FD05)



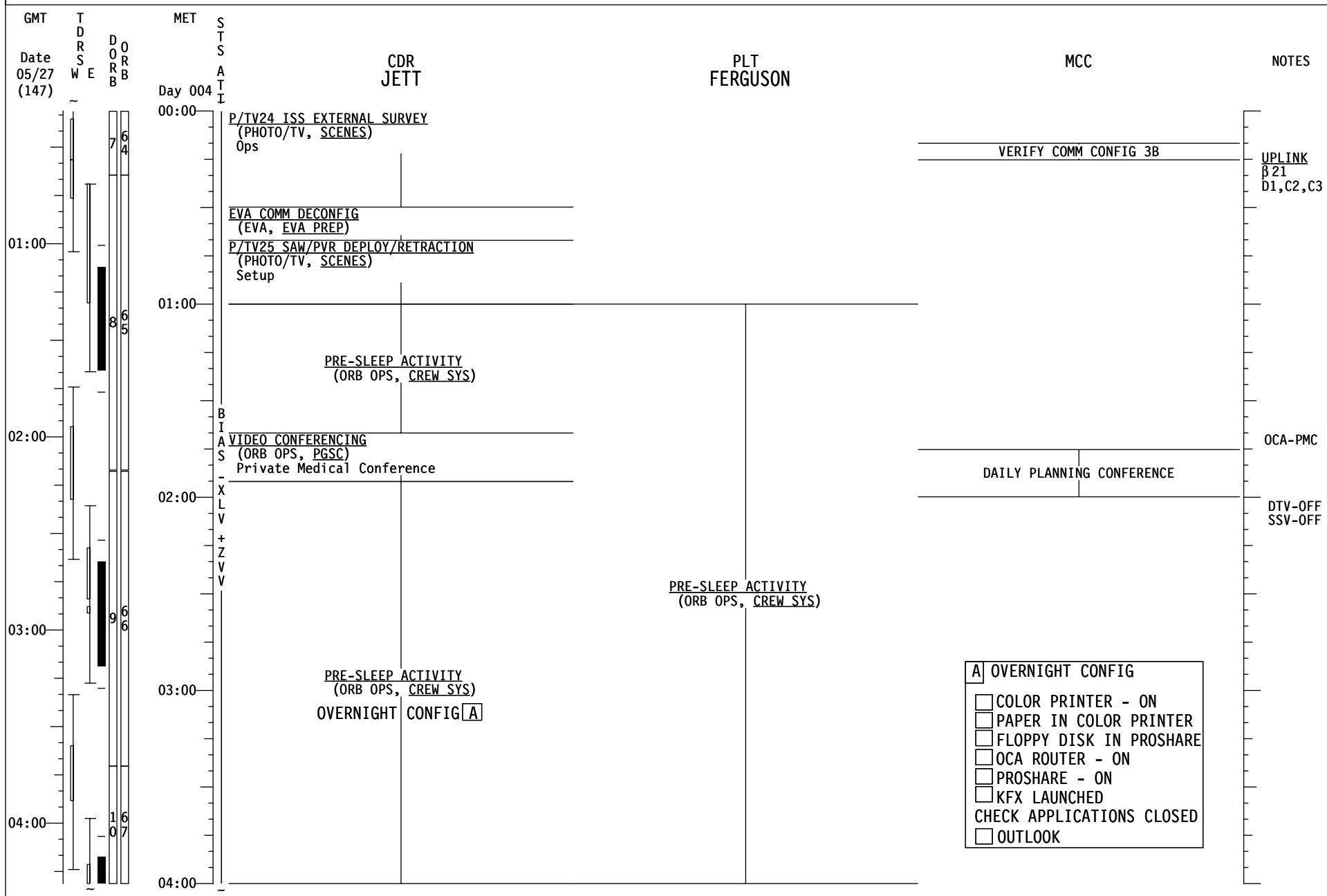
STS-115 (FD05)



STS-115 (FD05)



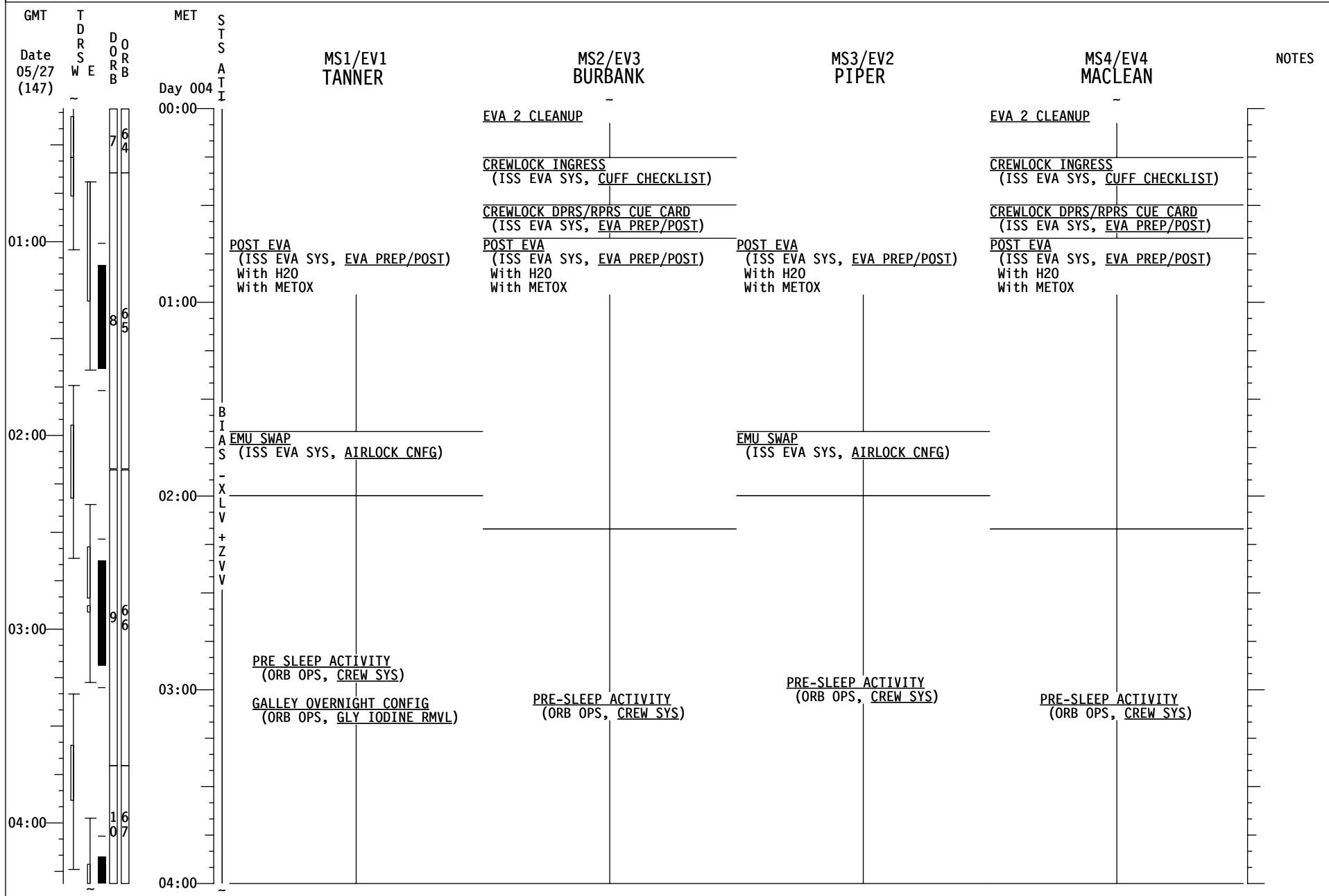
STS-115 (FD05)



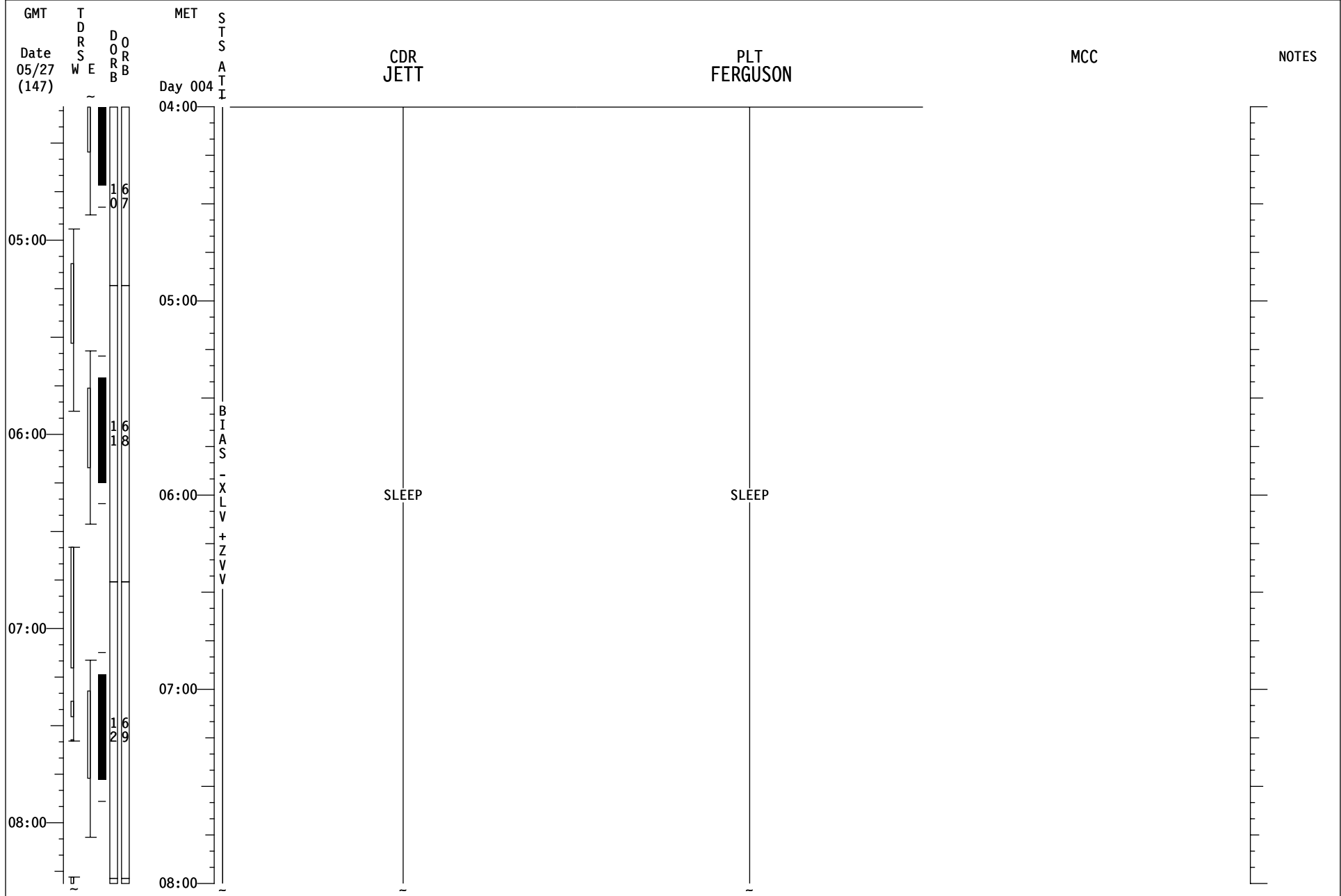
- A** OVERNIGHT CONFIG

 - COLOR PRINTER - ON
 - PAPER IN COLOR PRINTER
 - FLOPPY DISK IN PROSHARE
 - OCA ROUTER - ON
 - PROSHARE - ON
 - KFX LAUNCHED
 - CHECK APPLICATIONS CLOSED
 - OUTLOOK

STS-115 (FD05)



STS-115 (FD05)



CDR
JETT

PLT
FERGUSON

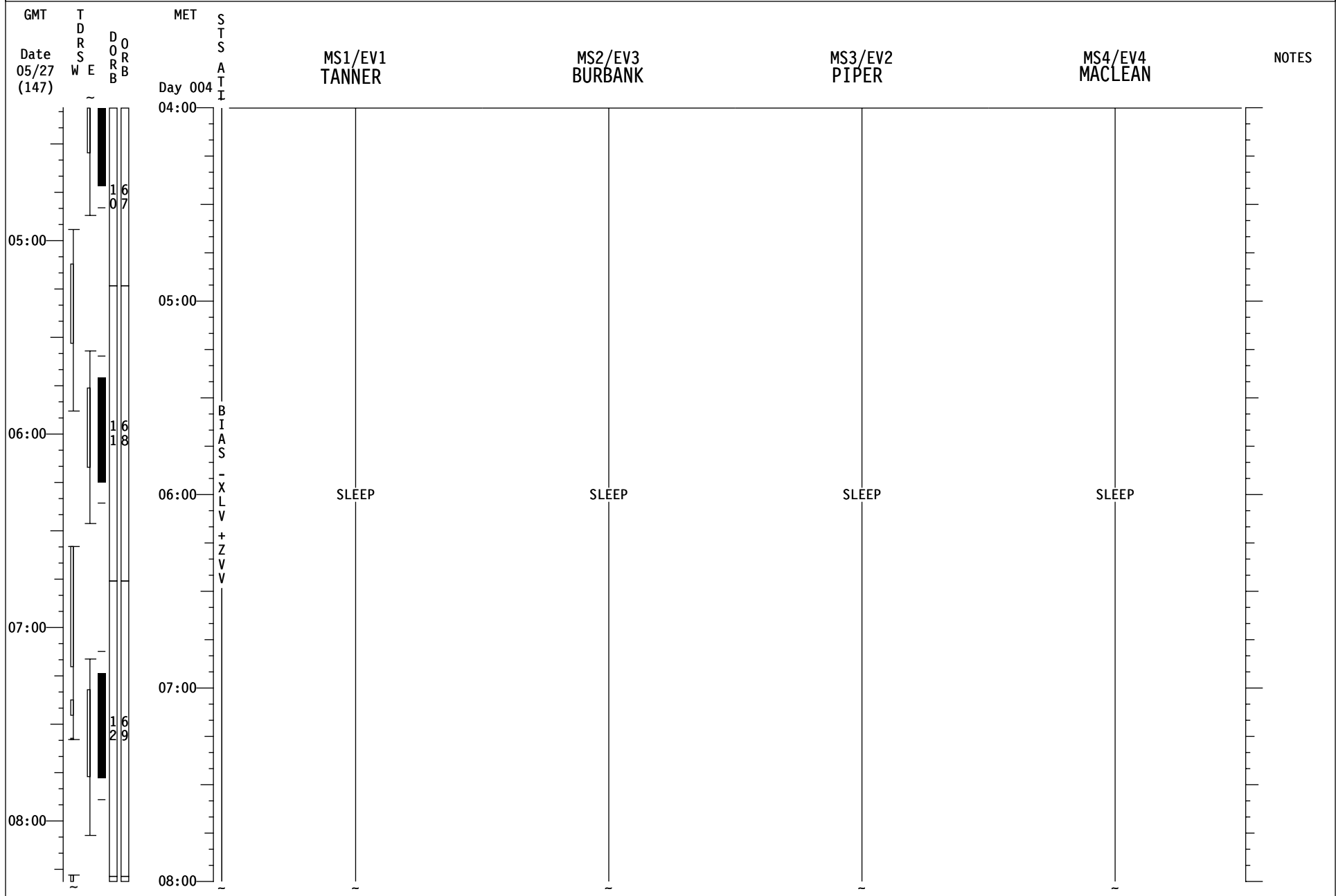
MCC

NOTES

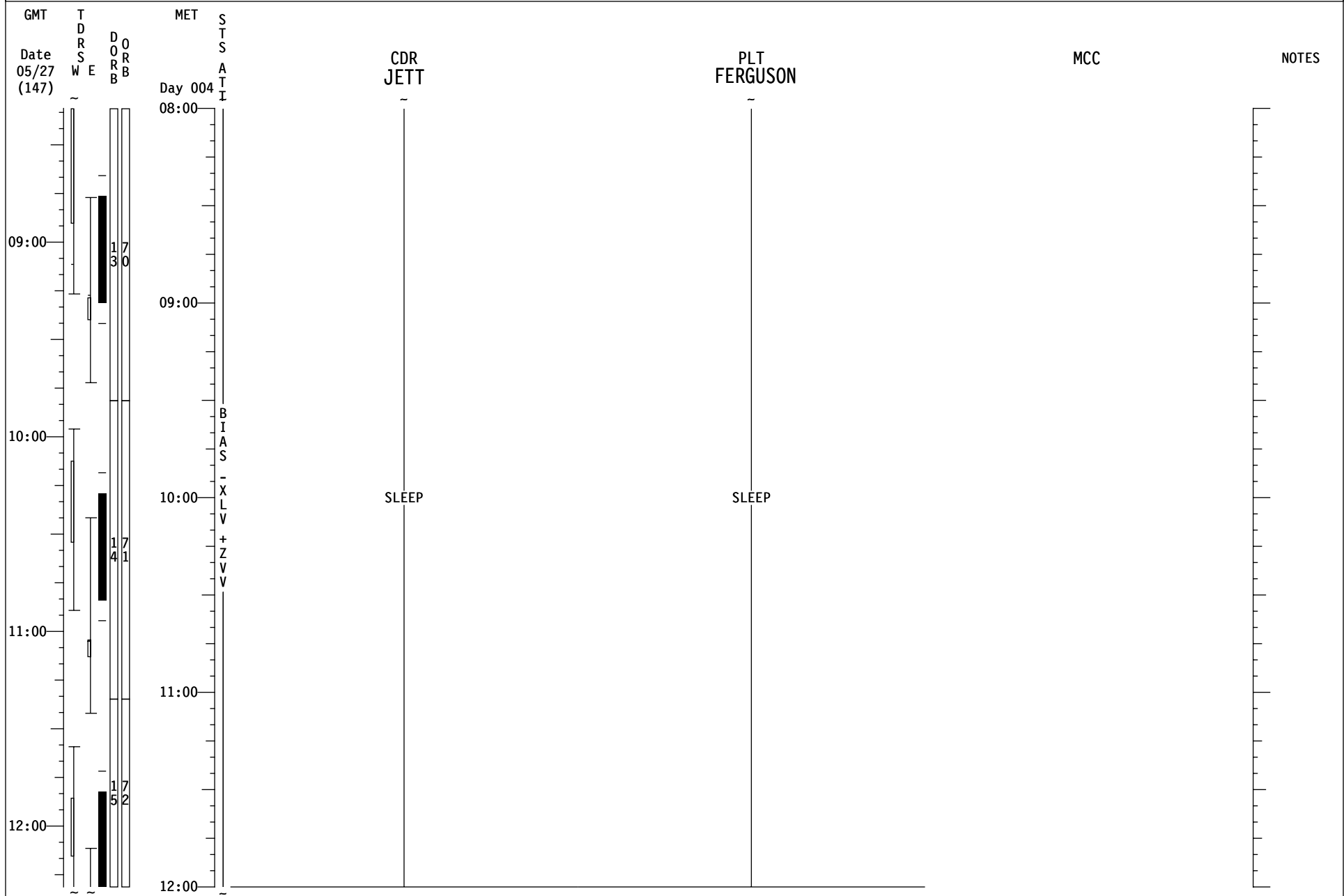
SLEEP

SLEEP

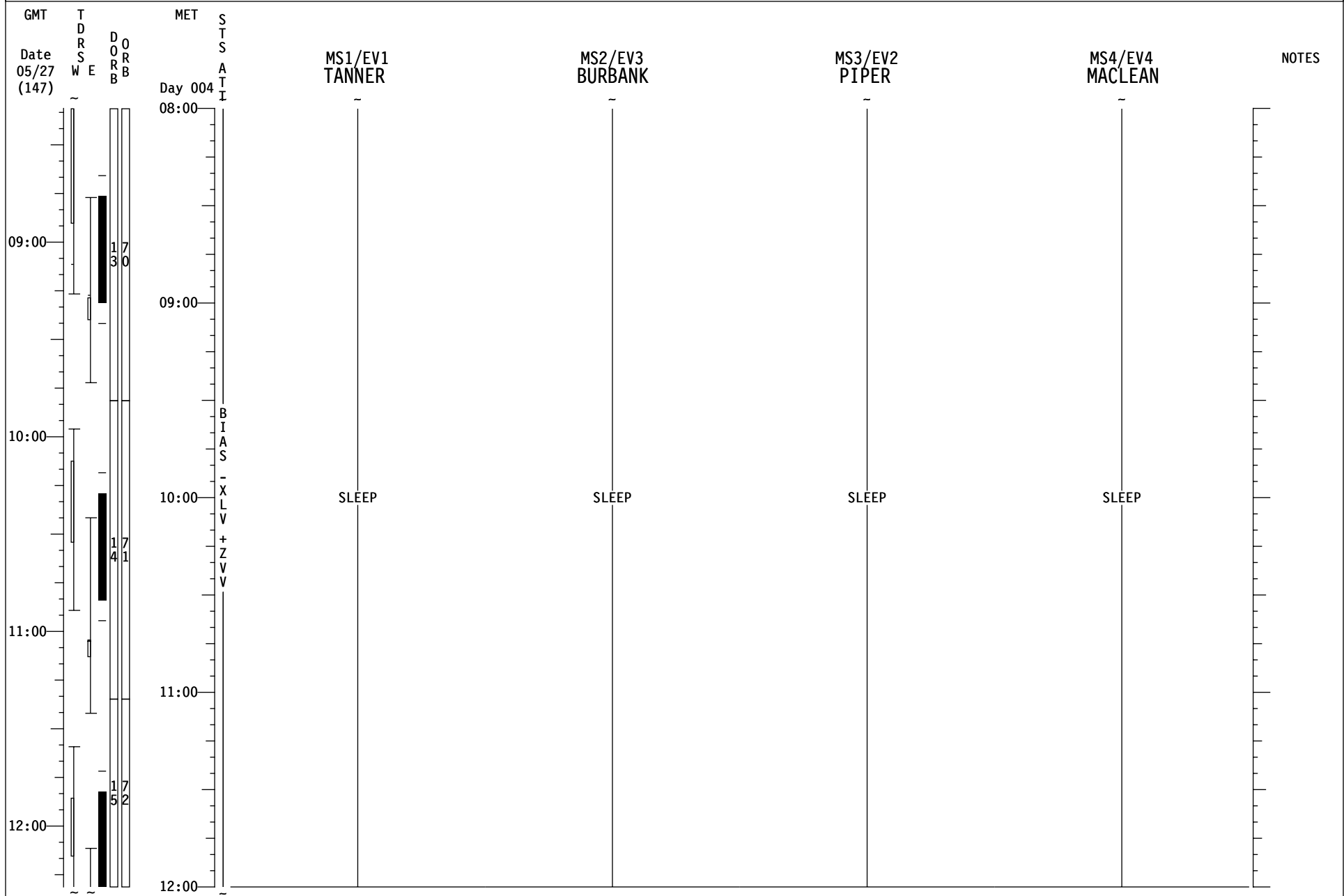
STS-115 (FD05)



STS-115 (FD05)



STS-115 (FD05)



STS-115 (FD06)

GMT	T D R S E W E	D O R B B	MET Day 004	S T S A T T I	CDR JETT	PLT FERGUSON	MCC	NOTES
12:00		1752			<p><u>SLEEP LOG (ORB OPS, DSOS)</u></p> <p><u>HANDOVER ATTITUDE CONTROL CMG TA TO ORBITER (JOINT OPS, MATED OPS)</u></p> <p><u>MNVR (TRK) BIAS -XLV, +YVV</u> TG=2 BV=5 P=190 Y=0 OM=270 A12/AUTO/VERN Init TRK (04/12:15)</p>	<p><u>POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)</u></p> <hr/> <p><u>SHUTTLE CONDENSATE COLLECTION (ORB OPS, ECLS)</u></p> <p><u>SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS)</u> Initiate Supply/Waste Dump</p>	<div style="border: 1px solid black; padding: 5px;"> <p>FD06 EZ ACTIVITIES:</p> <p><u>TEPC (STATUS CHECK) (ORB OPS, CREW SYS)</u></p> <p><u>QCAC FILTER Inspect</u></p> <p><u>HARD Reboot PGSCs</u></p> </div>	
13:00		1763		B I A S - X L V + Y V V	<p><u>POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)</u></p>			
14:00					<p><u>SUPPLY/WASTE WATER DUMP (ORB OPS, ECLS)</u> Terminate Supply/Waste Dump</p> <p><u>CWC OVERBOARD DUMP (ORB OPS, ECLS)</u> Dump Orbtr Condnst CWC S/N: XXXX</p>			
15:00		1774			<p><u>MNVR (TRK) BIAS -ZLV, +ZVV</u> TG=2 BV=5 P=158 Y=314 OM=3 A12/AUTO/VERN Init TRK (04/14:35)</p> <p><u>HANDOVER ATTITUDE CONTROL ORBITER TO CMG TA (JOINT OPS, MATED OPS)</u></p> <p><u>SAW DEPLOY (ASSY OPS, ACT & C/O)</u> Deploy 4A Solar Array</p>	<p><u>POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)</u></p>	DAILY PLANNING CONFERENCE	DTV-ON SSV-ON
16:00		275			<p><u>FILTER CLEANING (IFM, SCHEDULED MAINTENANCE)</u> Inspect filters and clean as necessary</p>			NO UNISOLATED EXERCISE

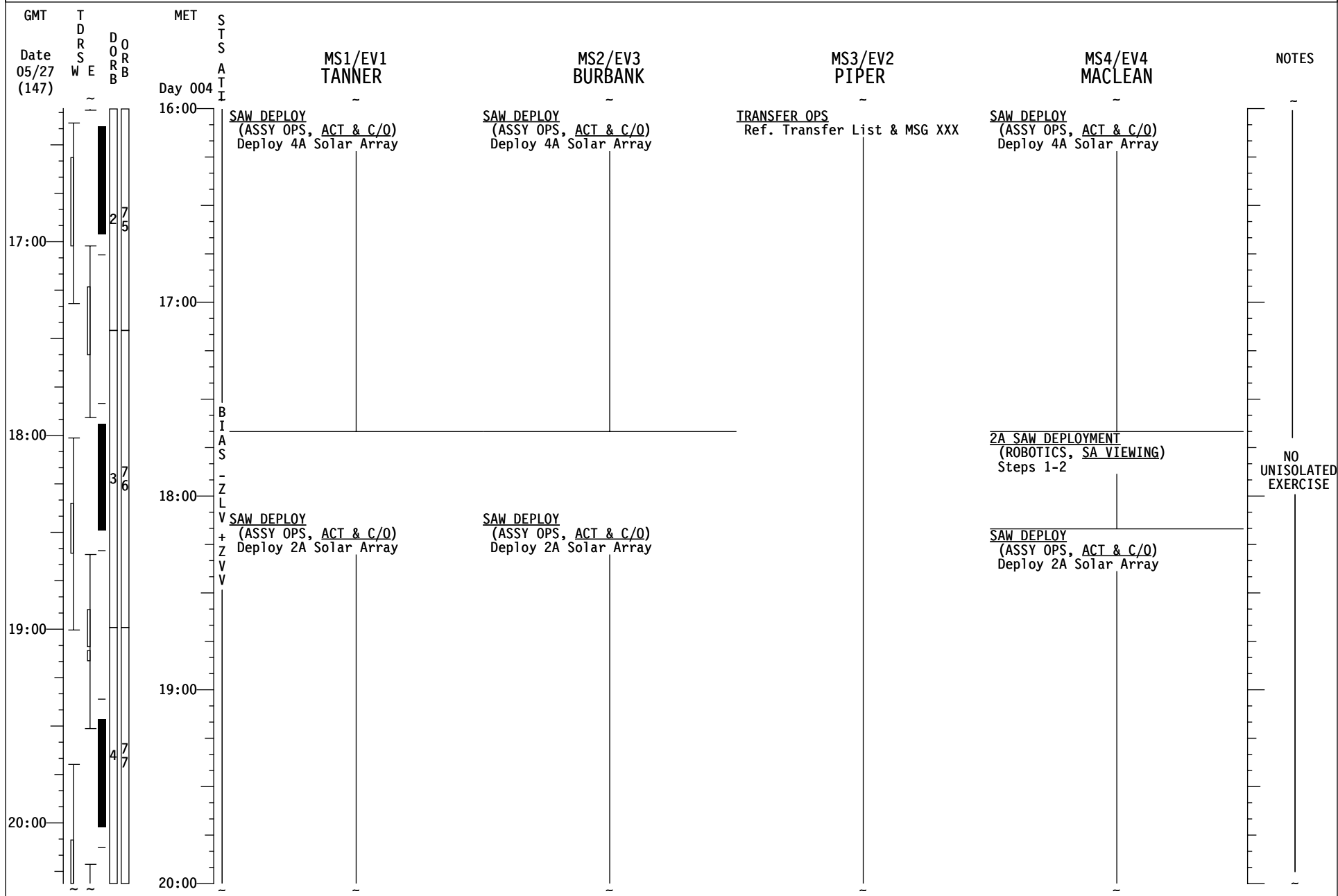
STS-115 (FD06)

GMT	T D R S W E	D O R B B	MET Day 004	S T S A T T	MS1/EV1 TANNER	MS2/EV3 BURBANK	MS3/EV2 PIPER	MS4/EV4 MACLEAN	NOTES
05/27 (147)									
12:00		1752			<u>SLEEP LOG (ORB OPS, DSOS)</u> <u>SALIVA COLLECTION (ORB OPS, DSOS)</u>	<u>SLEEP LOG (ORB OPS, DSOS)</u>	<u>SALIVA COLLECTION (ORB OPS, DSOS)</u>	<u>SLEEP LOG (ORB OPS, DSOS)</u>	
13:00		1763		B I A S					
14:00				- X L V	<u>POST SLEEP ACTIVITY (ORB OPS, CREW SYS)</u> <u>GALLEY MORNING CONFIG (ORB OPS, GLY IODINE RMVL)</u>	<u>POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)</u>	<u>POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)</u>	<u>POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)</u>	
15:00		1774		+ Y V V					
16:00		1785		B I A S					
15:00				- Z L V	<u>SAW DEPLOY (ASSY OPS, ACT & C/O)</u> Deploy 4A Solar Array	<u>SAW DEPLOY (ASSY OPS, ACT & C/O)</u> Deploy 4A Solar Array	<u>BONEMAC STATUS CHECK (ASSY OPS, PAYLOAD)</u> <u>BONEMAC SAMPLE CHANGEOUT (ASSY OPS, PAYLOAD)</u>	<u>SAW DEPLOY (ASSY OPS, ACT & C/O)</u> Deploy 4A Solar Array	
16:00				+ Z V V		<u>EV CREW: TAKE 1 ASPIRIN (325mg)</u>	<u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX	<u>EV CREW: TAKE 1 ASPIRIN (325mg)</u>	
16:00									NO UNISOLATED EXERCISE

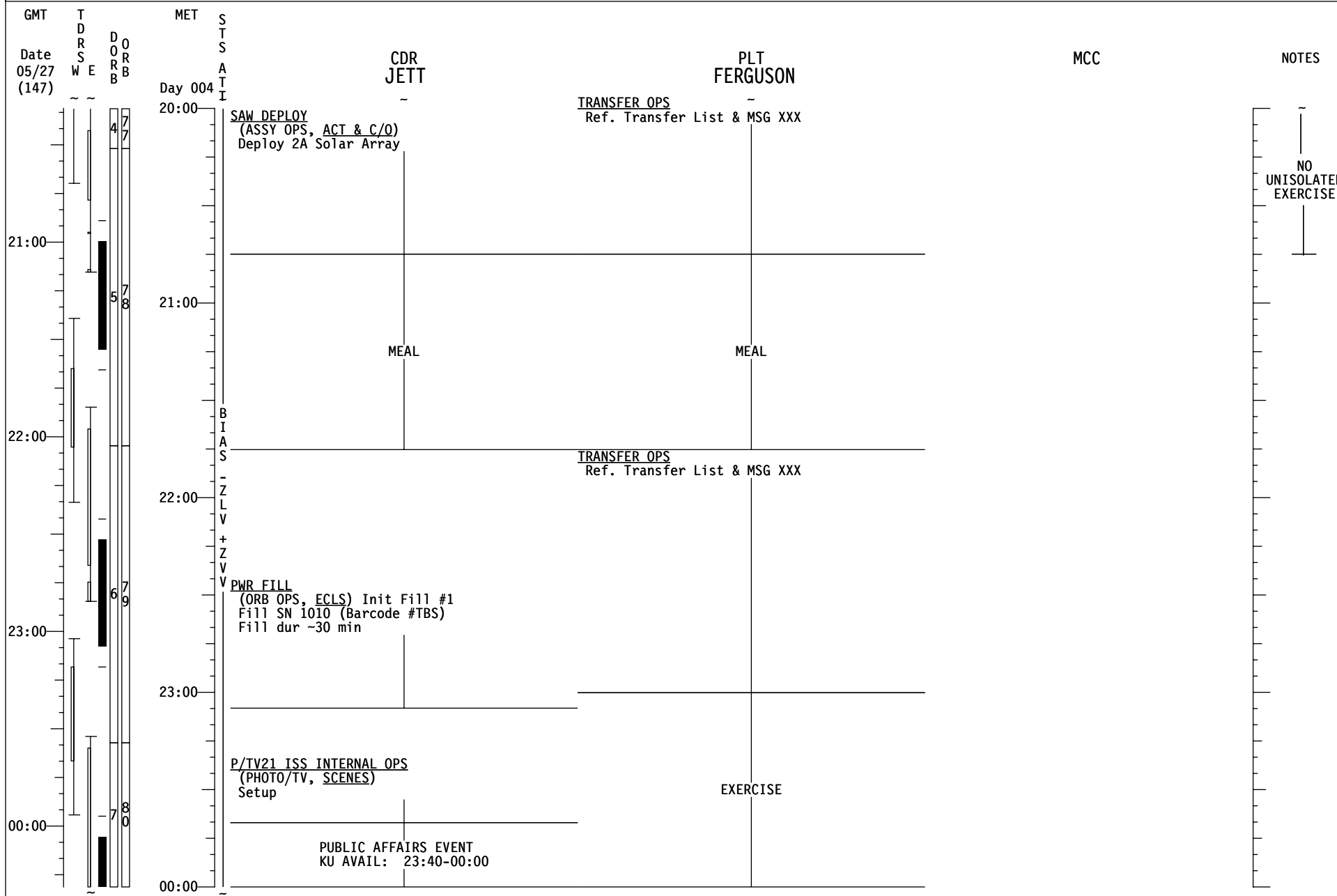
STS-115 (FD06)

GMT	T D R S W E	D O R B	MET	S T S A T T I	CDR JETT	PLT FERGUSON	MCC	NOTES
Date 05/27 (147)			Day 004					
16:00						<u>FILTER CLEANING</u> (IFM, SCHEDULED MAINTENANCE) Inspect filters and clean as necessary		
17:00		275				<u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX		
18:00		376		B I A S		<u>CABIN TEMP CNTL RECONFIG 2(1)</u> (ORB OPS, ECLS) <u>HEATER RECONFIG-Config B</u> (ORB OPS, EPS) <u>RCS REGULATOR RCNFG</u> (ORB OPS, RCS)		NO UNISOLATED EXERCISE
18:00				Z L		<u>SAW DEPLOY</u> (ASSY OPS, ACT & C/O) Deploy 2A Solar Array <u>WCS CRADLE-AUTO INHIBIT</u> Inspect hose block filter, change if req'd <u>WCS CRADLE-AUTO</u> <u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX		
19:00				Z V V				
20:00		477						
20:00								

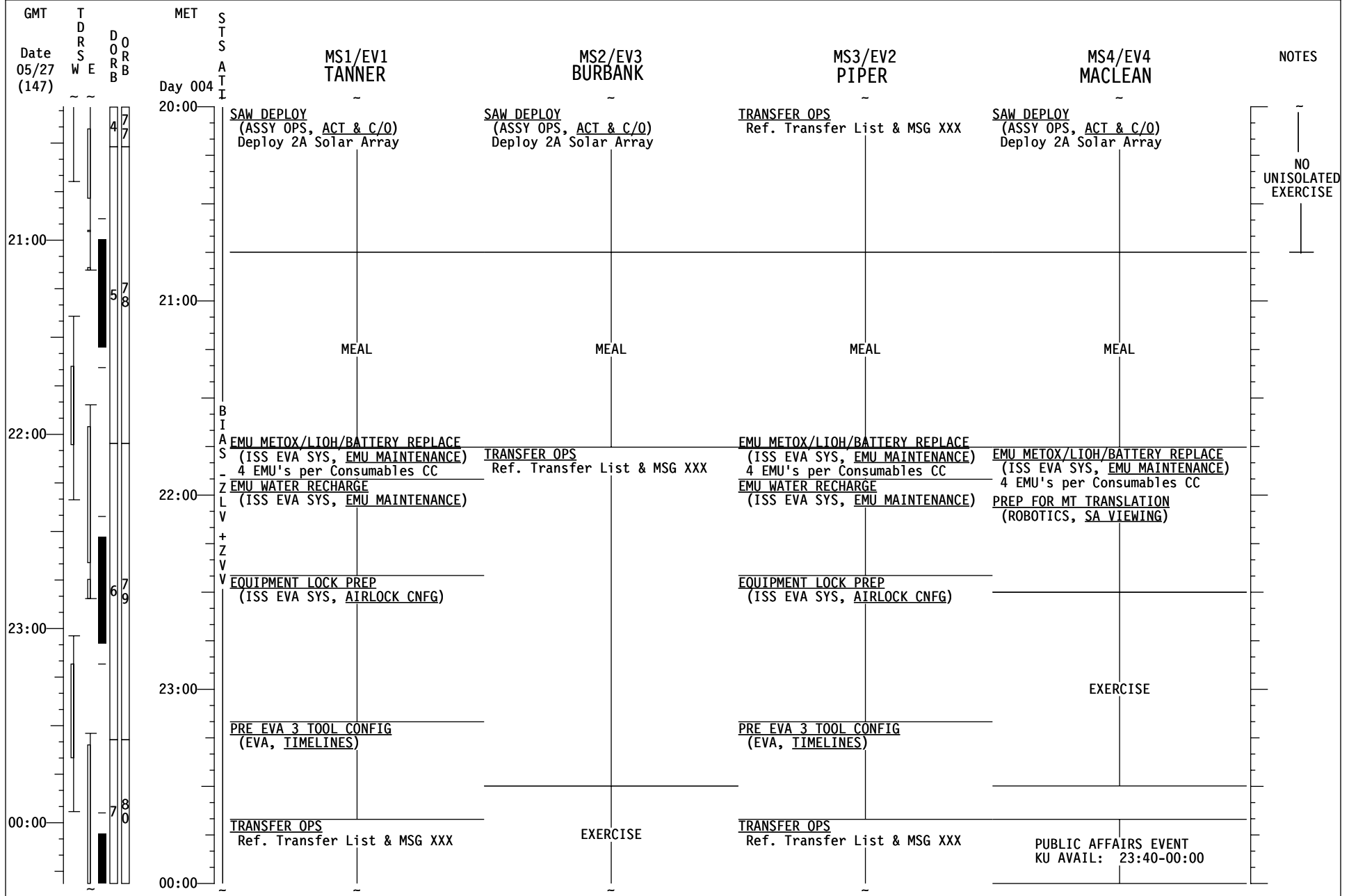
STS-115 (FD06)



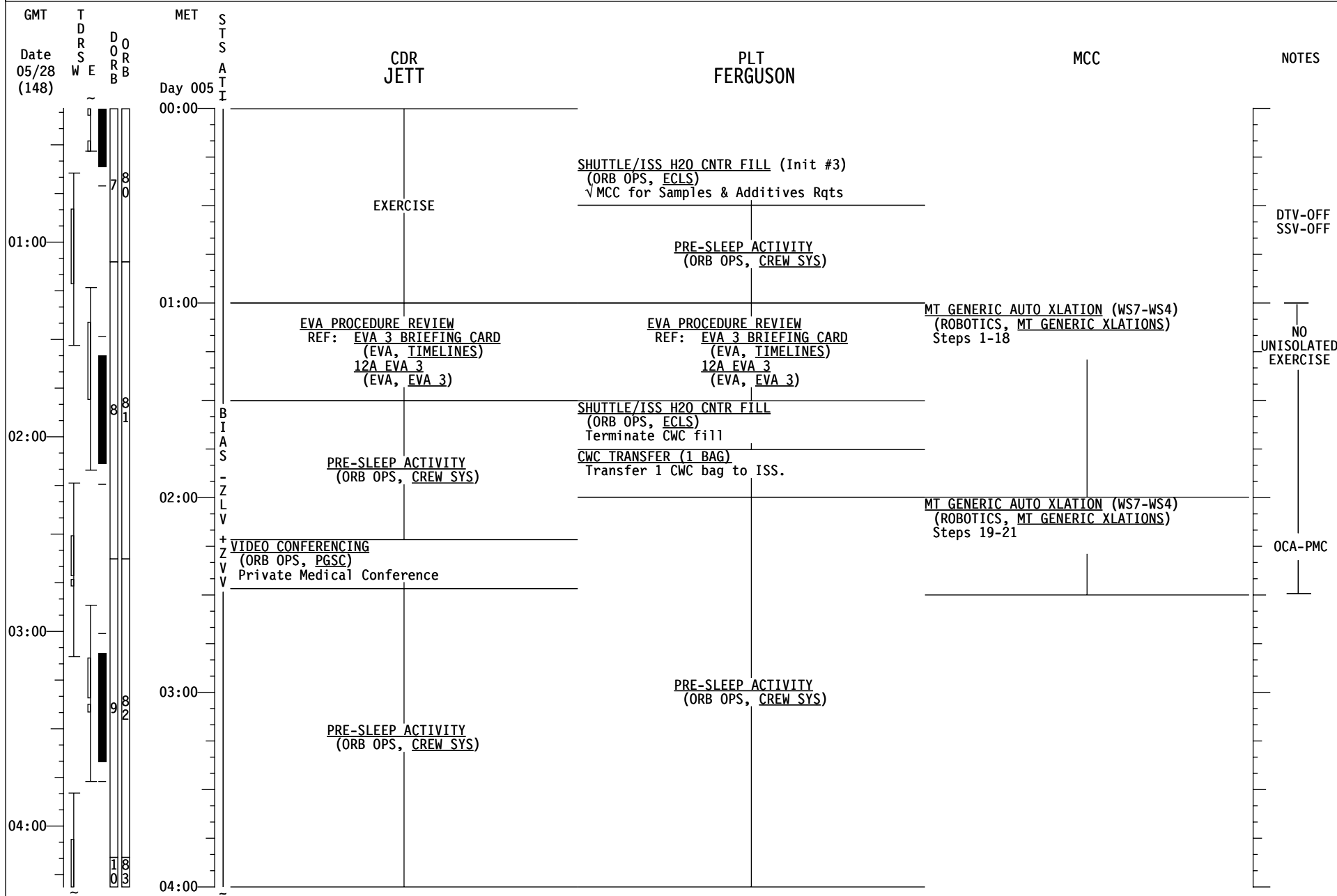
STS-115 (FD06)



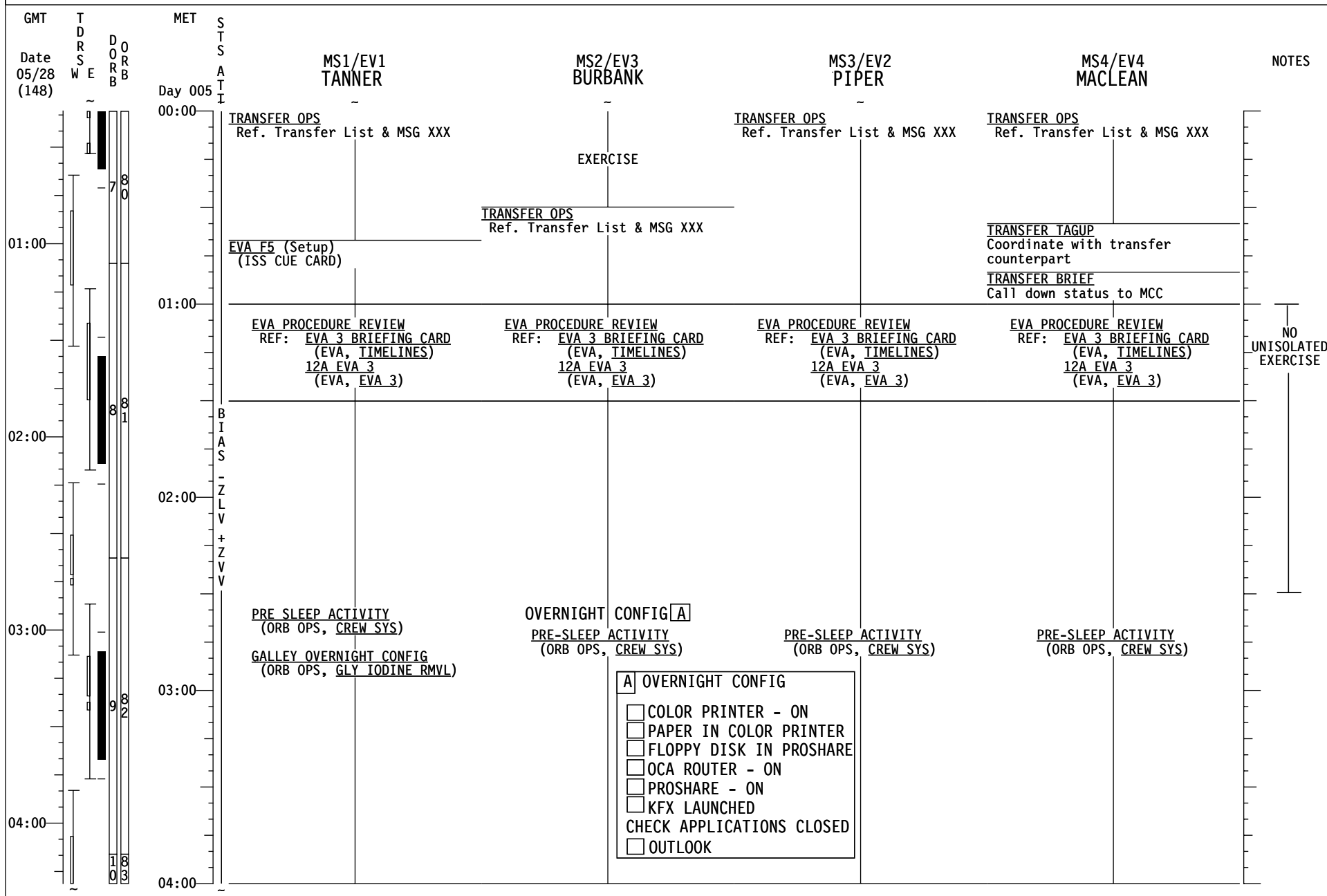
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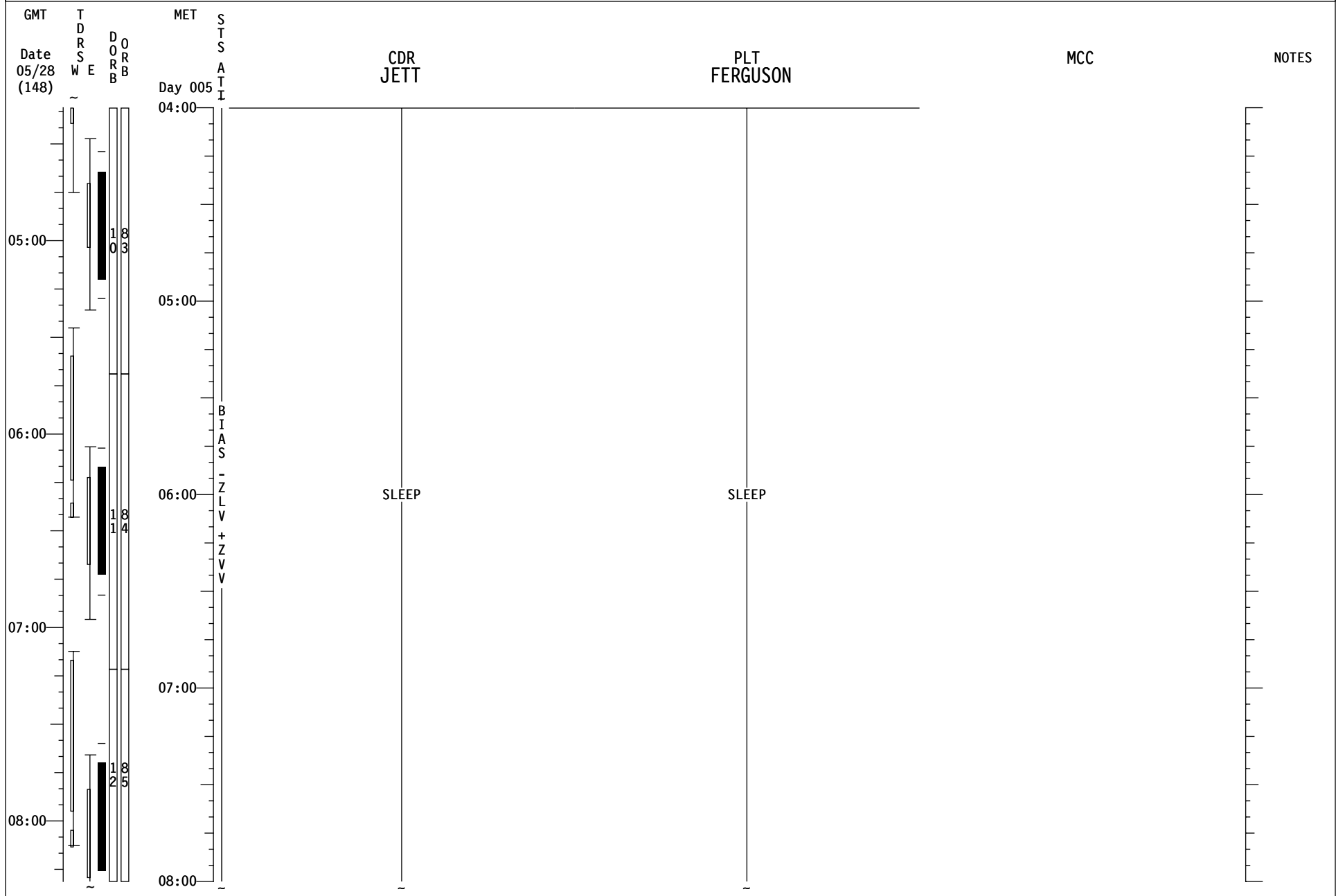
STS-115 (FD06)



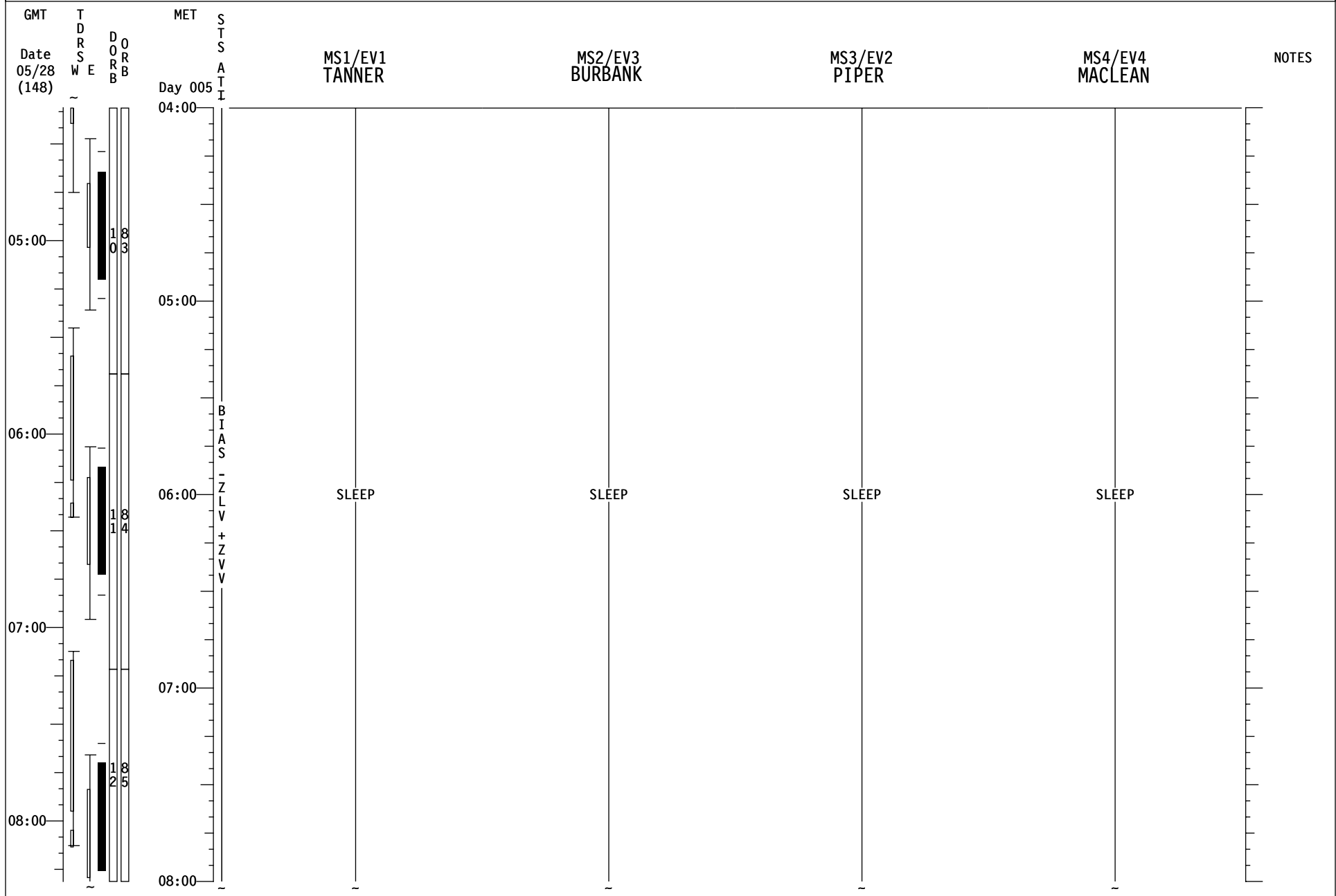
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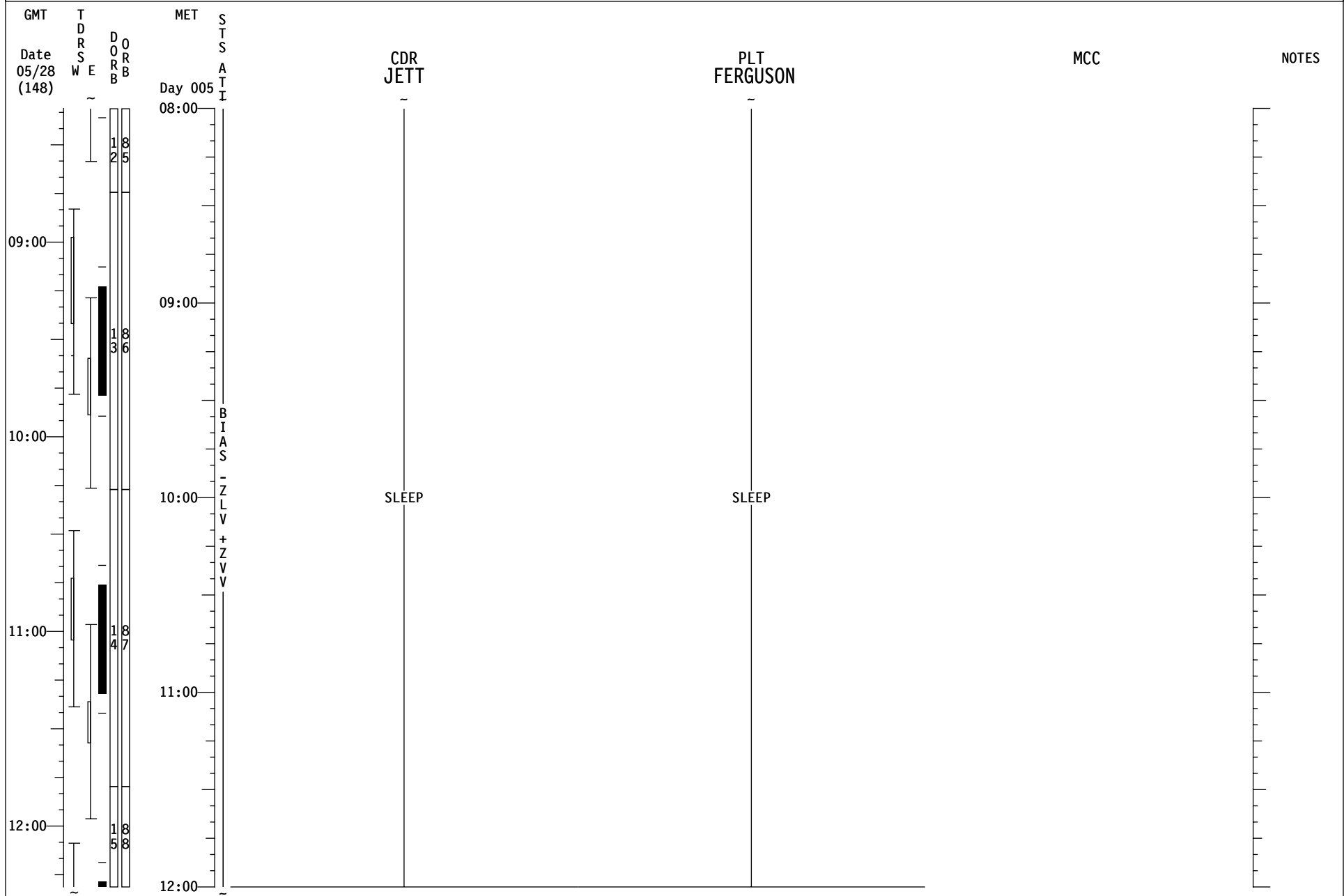
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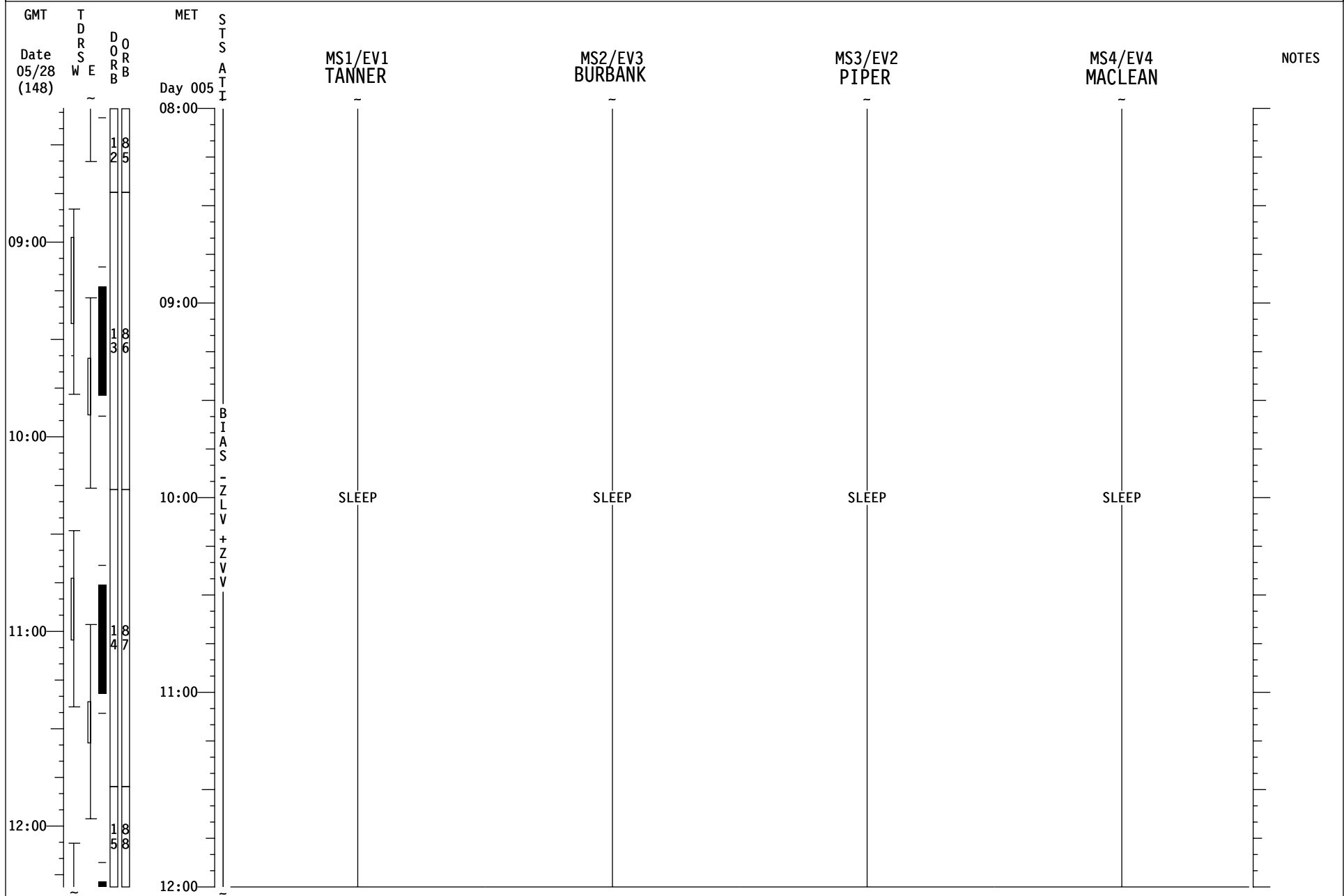
STS-115 (FD06)



STS-115 (FD06)



STS-115 (FD06)

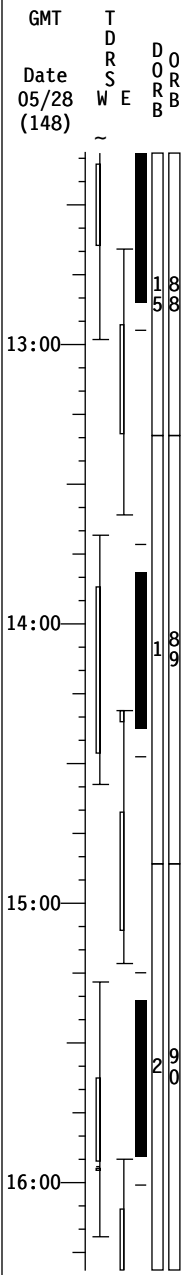


STS-115 (FD07)

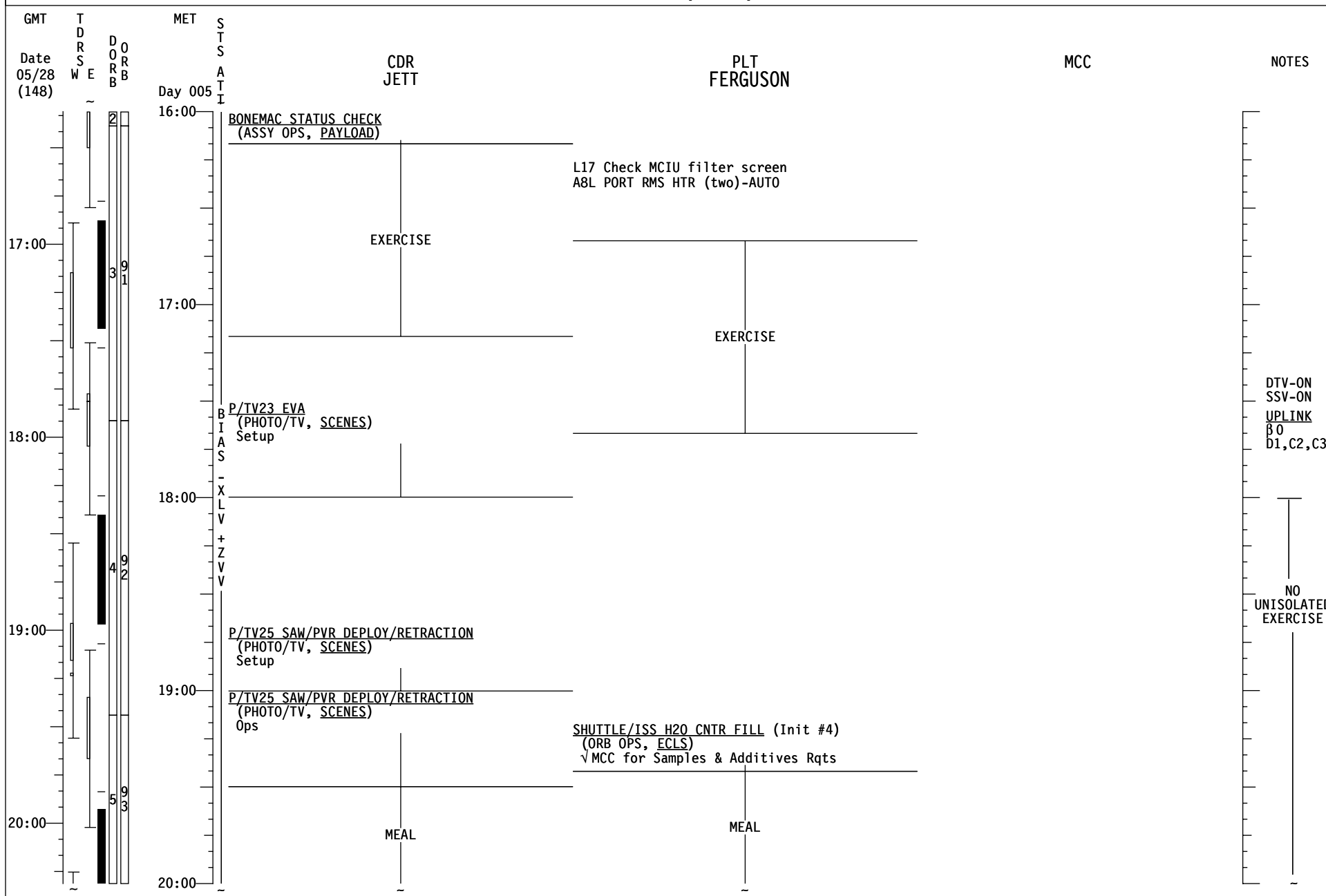
GMT	TDRS W E	DORB B	MET Day 005	S T S A T I	CDR JETT	PLT FERGUSON	MCC	NOTES
12:00					SLEEP LOG (ORB OPS, DSOS)			FD07 EZ ACTIVITIES: TEPC (STATUS CHECK) (ORB OPS, CREW SYS) OCAC FILTER Inspect HARD Reboot PGSCs
13:00		1858		B I A S	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)		
13:00				Z L V	06 UHF MODE - OFF PRIVATE MEDICAL CONFERENCE			
				Z V V	EVA 3 INHIBIT PAD (EVA, TIMELINES)		EVA 3 INHIBIT PAD (EVA, TIMELINES)	
14:00		189			POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	HANDOVER ATTITUDE CONTROL CMG TA TO ORBITER (JOINT OPS, MATED OPS)		
					P/TV26 REBOOST (PHOTO/TV, SCENES) Setup	MNVR (TRK) BIAS -XLV, -ZVV TG=2 BV=5 P=176 Y=0 OM=180 A12/AUTO/VERN Init TRK (05/13:35)		
14:00					POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)		
15:00				R E B O O S T	P/TV26 REBOOST (PHOTO/TV, SCENES) Ops	AUTO REBOOST (ORB OPS, REBOOST/DAP) CONFIG 3	DAILY PLANNING CONFERENCE	
15:00							VERIFY COMM CONFIG 2B	
16:00		290			POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	MNVR (TRK) BIAS -XLV, +ZVV TG=2 BV=5 P=158 Y=314 OM=3 A12/AUTO/VERN Init TRK (05/15:15)		
16:00						HANDOVER ATTITUDE CONTROL ORBITER TO CMG TA (JOINT OPS, MATED OPS)		

STS-115 (FD07)

GMT	TDRS W E	DORB B	MET Day 005	STS ATTI	MS1/EV1 TANNER	MS2/EV3 BURBANK	MS3/EV2 PIPER	MS4/EV4 MACLEAN	NOTES
12:00									SLEEP LOG (ORB OPS, DSQS)
				B I A S	POST SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)		
13:00				Z L V	GALLEY MORNING CONFIG (ORB OPS, GLY IODINE RMVL)				
				+ Z V V	EVA PREP USING SHUTTLE 02 (ISS EVA SYS, EVA PREP/POST)	EVA PREP USING SHUTTLE 02 (ISS EVA SYS, EVA PREP/POST)	EVA PREP USING SHUTTLE 02 (ISS EVA SYS, EVA PREP/POST)		
14:00									
				R E B O O S T					POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
15:00									
									EXERCISE
16:00					EMU PURGE (ISS EVA SYS, EVA PREP/POST)		EMU PURGE (ISS EVA SYS, EVA PREP/POST)		
16:00									



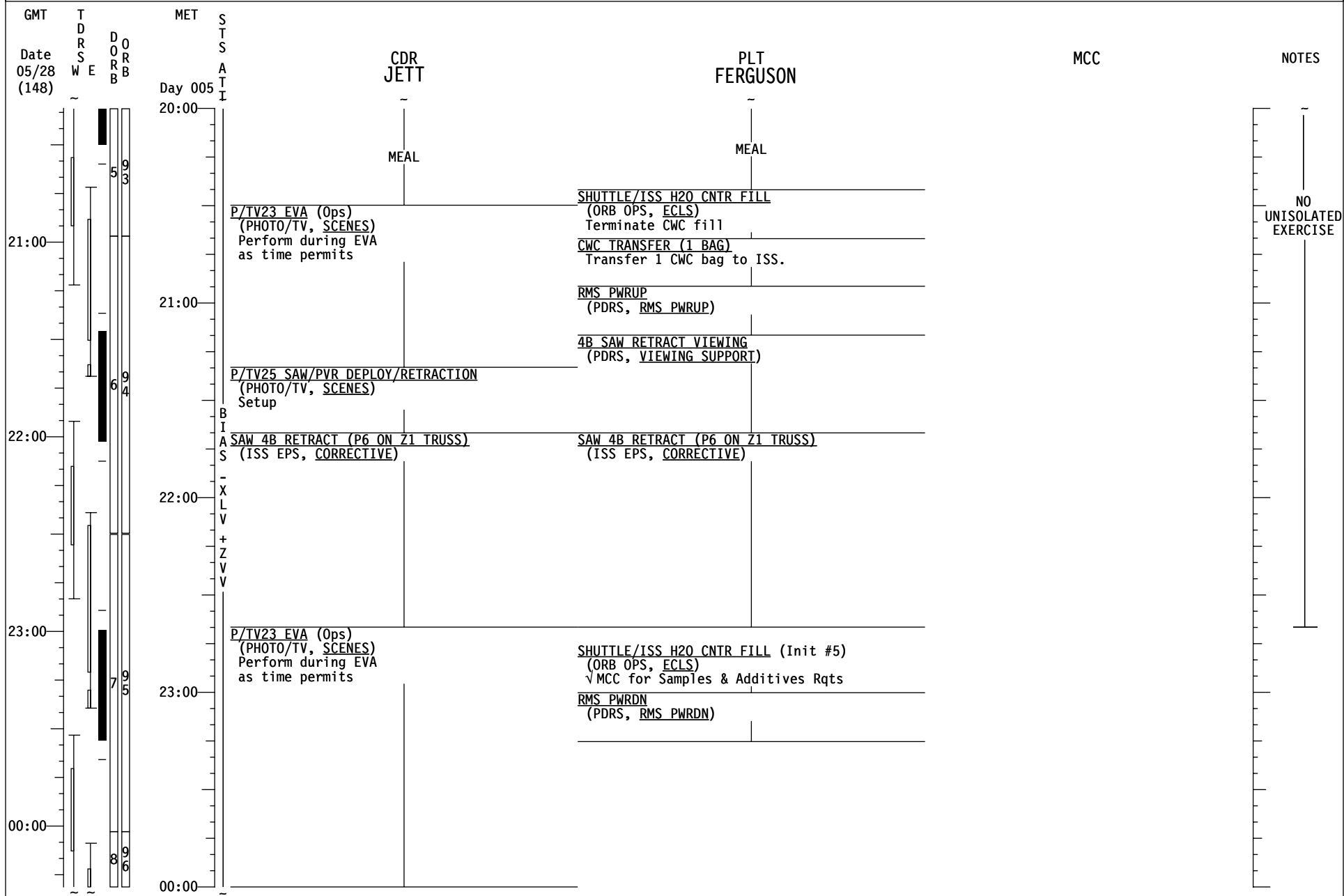
STS-115 (FD07)



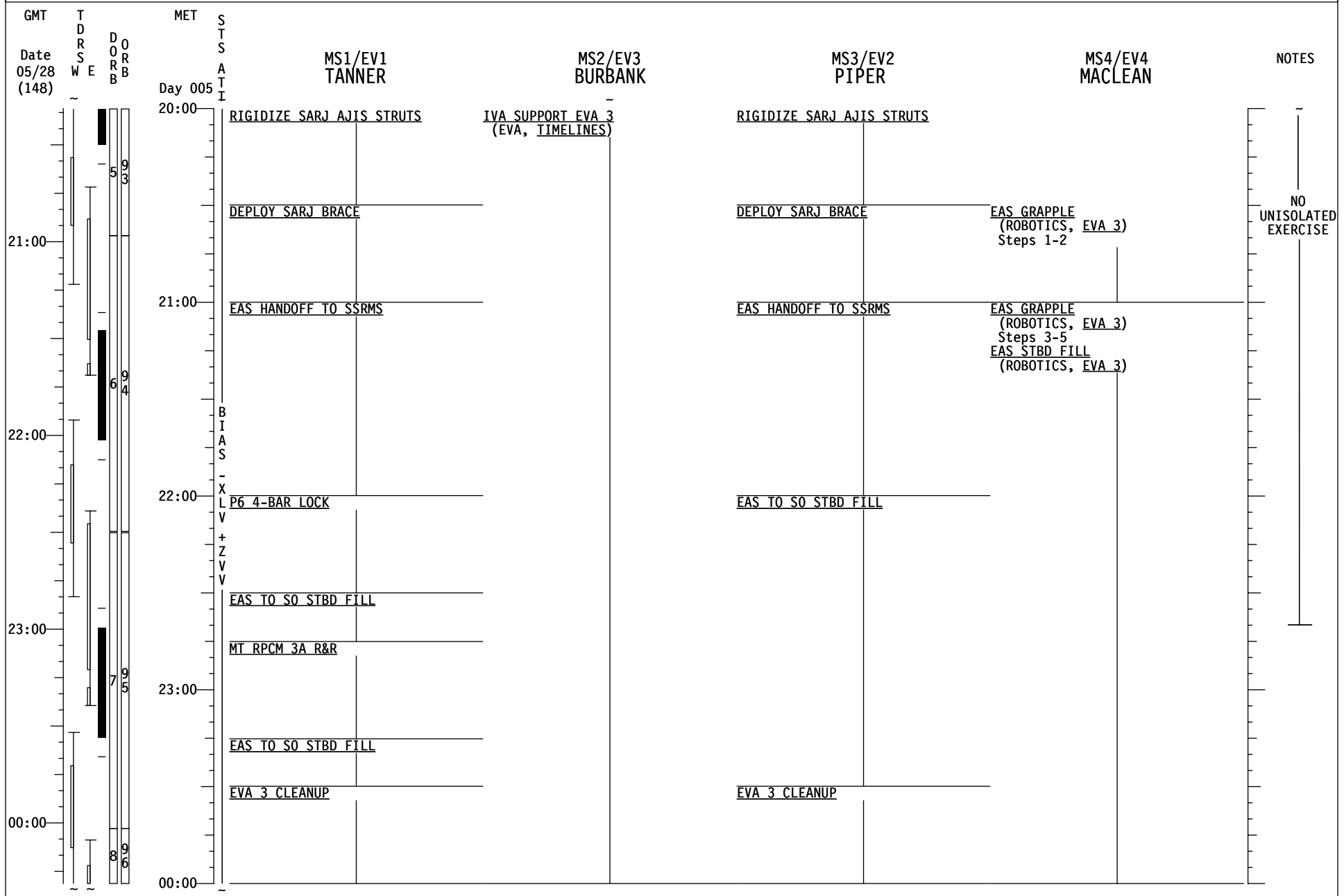
STS-115 (FD07)

GMT	T D R S E W	D O R B B	MET Day 005	S T S A T T I	MS1/EV1 TANNER	MS2/EV3 BURBANK	MS3/EV2 PIPER	MS4/EV4 MACLEAN	NOTES
16:00		2			EMU PREBREATHE (ISS EVA SYS, EVA PREP/POST)	EVA PREP USING SHUTTLE 02 (ISS EVA SYS, EVA PREP/POST)	EMU PREBREATHE (ISS EVA SYS, EVA PREP/POST)	EXERCISE	
17:00		3			CREWLOCK DPRS/RPRS CUE CARD (ISS EVA SYS, EVA PREP/POST)		CREWLOCK DPRS/RPRS CUE CARD (ISS EVA SYS, EVA PREP/POST)		
18:00		4		B I A	CREWLOCK EGRESS (ISS EVA SYS, CUFF CHECKLIST)		CREWLOCK EGRESS (ISS EVA SYS, CUFF CHECKLIST)	SSRMS EVA3 RECONFIG (ROBOTICS, EVA 3)	
18:00		4		X L V	EVA 3 SETUP	IVA SUPPORT EVA 3 (EVA, TIMELINES)	EVA 3 SETUP		
19:00		5		+ Z V V	RELEASE PVR CINCHES/WINCH		RELEASE PVR CINCHES/WINCH		
19:00		5			REMOVE AND STOW P3 KEEL PIN AND DRAG LINK		REMOVE AND STOW P3 KEEL PIN AND DRAG LINK	PVM-RADIATOR DEPLOY (ASSY OPS, ACT & C/O)	
20:00		5							NO UNISOLATED EXERCISE

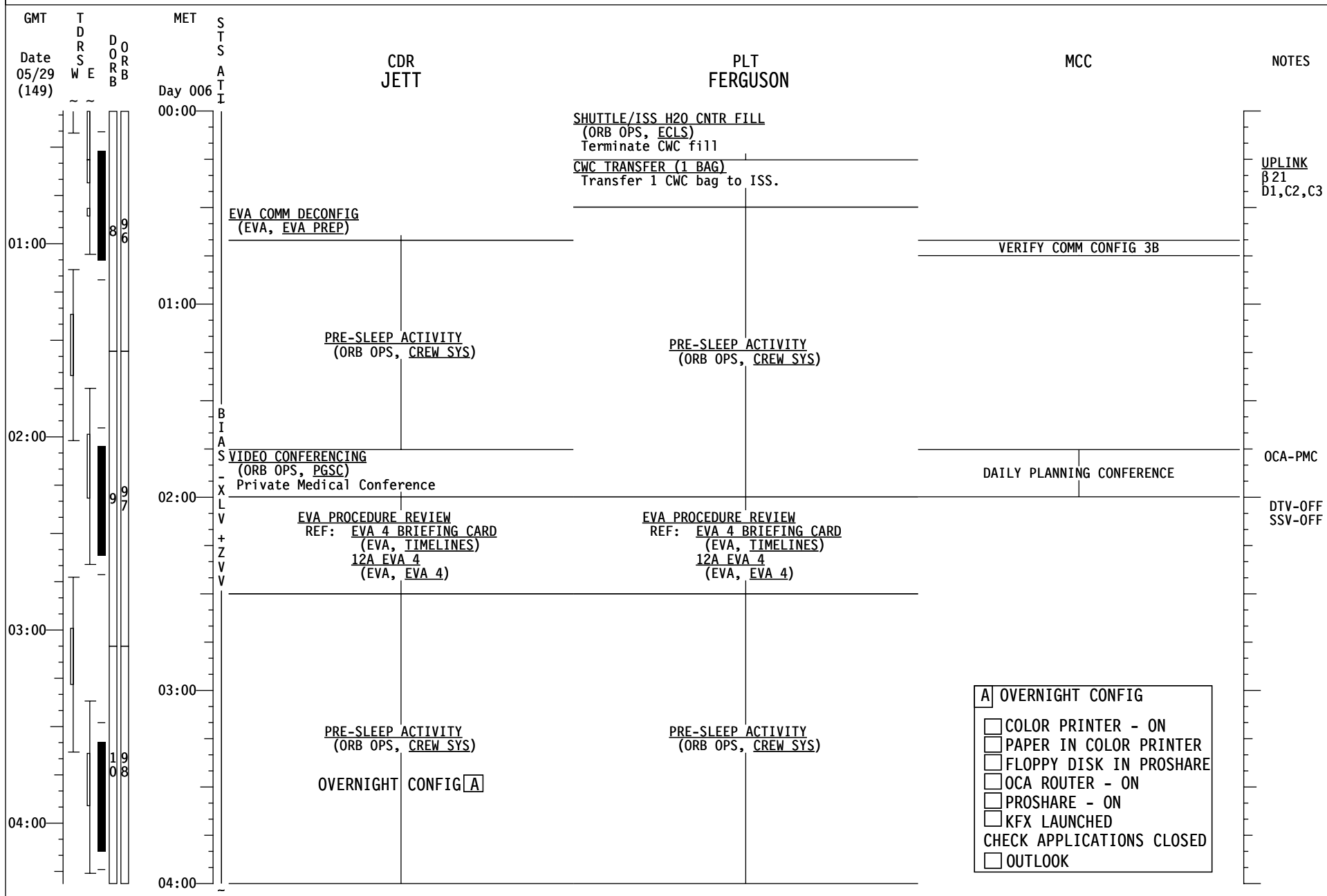
STS-115 (FD07)



STS-115 (FD07)



STS-115 (FD07)



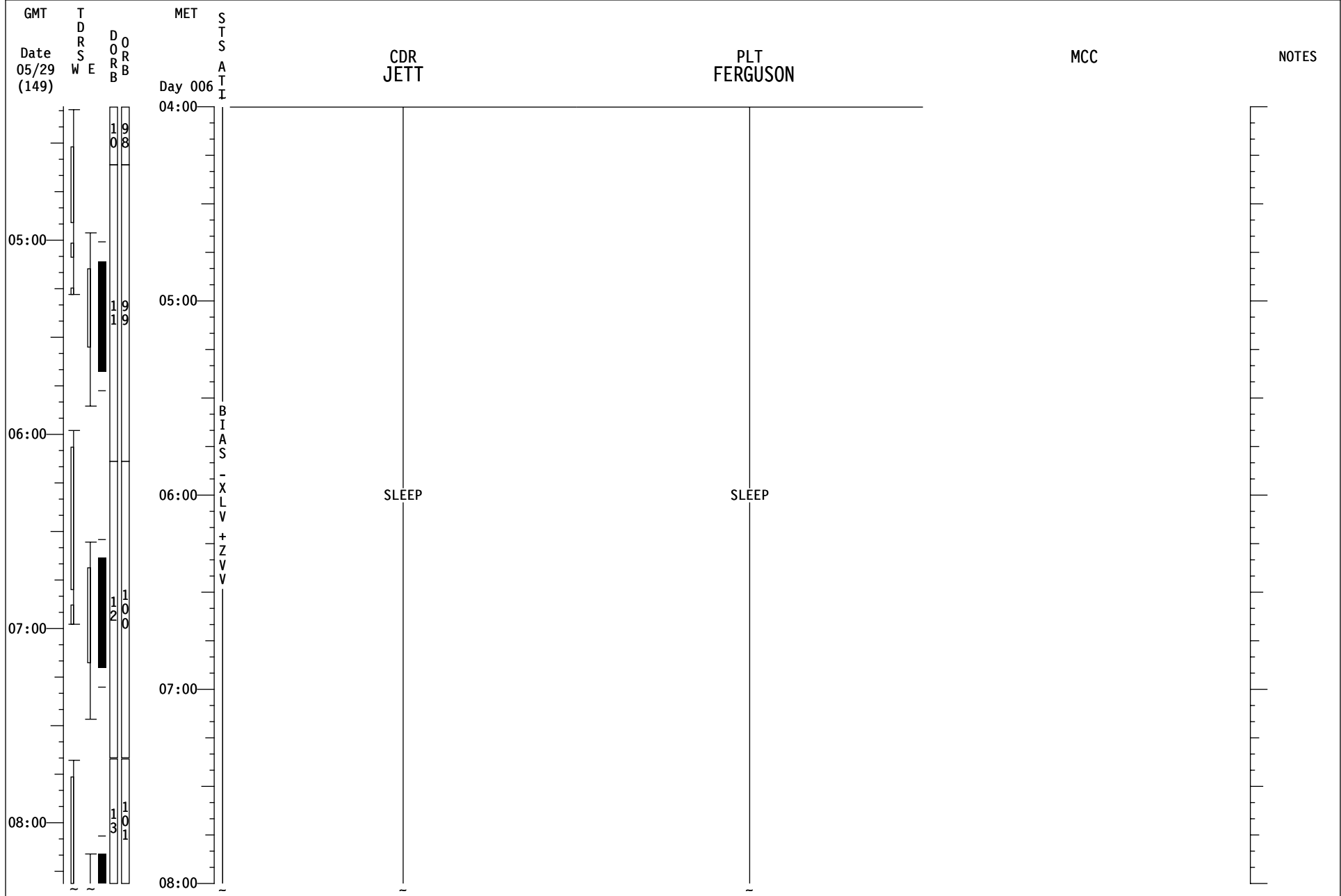
- A** OVERNIGHT CONFIG

 - COLOR PRINTER - ON
 - PAPER IN COLOR PRINTER
 - FLOPPY DISK IN PROSHARE
 - OCA ROUTER - ON
 - PROSHARE - ON
 - KFX LAUNCHED
 - CHECK APPLICATIONS CLOSED
 - OUTLOOK

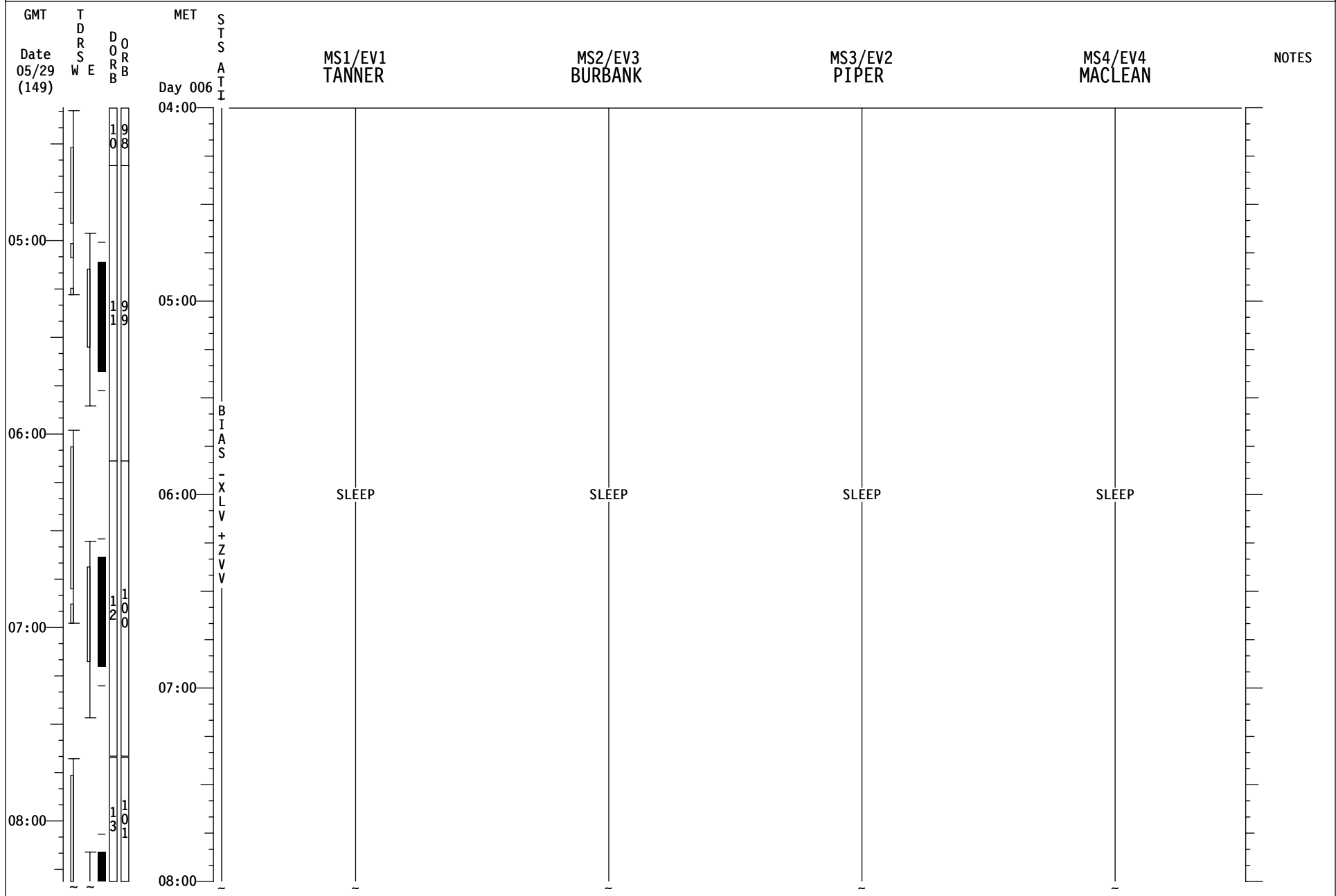
STS-115 (FD07)

GMT	T D R S W E	D O R B	MET	S T S	MS1/EV1 TANNER	MS2/EV3 BURBANK	MS3/EV2 PIPER	MS4/EV4 MACLEAN	NOTES
Date 05/29 (149)			Day 006	A T T I					
00:00					<u>CREWLOCK INGRESS</u> (ISS EVA SYS, <u>CUFF CHECKLIST</u>)		<u>CREWLOCK INGRESS</u> (ISS EVA SYS, <u>CUFF CHECKLIST</u>)		
					<u>CREWLOCK DPRS/RPRS CUE CARD</u> (ISS EVA SYS, <u>EVA PREP/POSTI</u>)		<u>CREWLOCK DPRS/RPRS CUE CARD</u> (ISS EVA SYS, <u>EVA PREP/POSTI</u>)		
01:00		8 9 6			<u>POST EVA</u> (ISS EVA SYS, <u>EVA PREP/POSTI</u>) Perform steps 1-34,39-42,49	<u>POST EVA</u> (ISS EVA SYS, <u>EVA PREP/POSTI</u>) Perform steps 1-34 only	<u>POST EVA</u> (ISS EVA SYS, <u>EVA PREP/POSTI</u>) Perform steps 1-34,39-42,49	<u>POST EVA</u> (ISS EVA SYS, <u>EVA PREP/POSTI</u>) Perform steps 1-34 only	
						<u>EMU SWAP</u> (ISS EVA SYS, <u>AIRLOCK CNFG</u>)		<u>EMU SWAP</u> (ISS EVA SYS, <u>AIRLOCK CNFG</u>)	
					SNACK	<u>EQUIPMENT LOCK PREP</u> (ISS EVA SYS, <u>AIRLOCK CNFG</u>) Perform steps 18,23,28 & 35	SNACK	<u>EQUIPMENT LOCK PREP</u> (ISS EVA SYS, <u>AIRLOCK CNFG</u>) Perform steps 18,23,28 & 35	
02:00		9 9 7		B I A S	<u>POST EVA</u> (ISS EVA SYS, <u>EVA PREP/POSTI</u>) Perform Steps 43-47,50-62	<u>PRE EVA 2 TOOL CONFIG</u> (EVA, <u>TIMELINES</u>)	<u>POST EVA</u> (ISS EVA SYS, <u>EVA PREP/POSTI</u>) Perform Steps 43-47,50-62	<u>PRE EVA 2 TOOL CONFIG</u> (EVA, <u>TIMELINES</u>)	
				- X L V + Z V V	<u>EVA PROCEDURE REVIEW</u> REF: <u>EVA 4 BRIEFING CARD</u> (EVA, <u>TIMELINES</u>) 12A <u>EVA 4</u> (EVA, <u>EVA 4</u>)	<u>EVA PROCEDURE REVIEW</u> REF: <u>EVA 4 BRIEFING CARD</u> (EVA, <u>TIMELINES</u>) 12A <u>EVA 4</u> (EVA, <u>EVA 4</u>)	<u>EVA PROCEDURE REVIEW</u> REF: <u>EVA 4 BRIEFING CARD</u> (EVA, <u>TIMELINES</u>) 12A <u>EVA 4</u> (EVA, <u>EVA 4</u>)	<u>EVA PROCEDURE REVIEW</u> REF: <u>EVA 4 BRIEFING CARD</u> (EVA, <u>TIMELINES</u>) 12A <u>EVA 4</u> (EVA, <u>EVA 4</u>)	
03:00									
					<u>PRE SLEEP ACTIVITY</u> (ORB OPS, <u>CREW SYS</u>)	<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, <u>CREW SYS</u>)	<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, <u>CREW SYS</u>)	<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, <u>CREW SYS</u>)	
					<u>GALLEY OVERNIGHT CONFIG</u> (ORB OPS, <u>GLY IODINE RMVL</u>)				
04:00		1 0 8							
04:00									

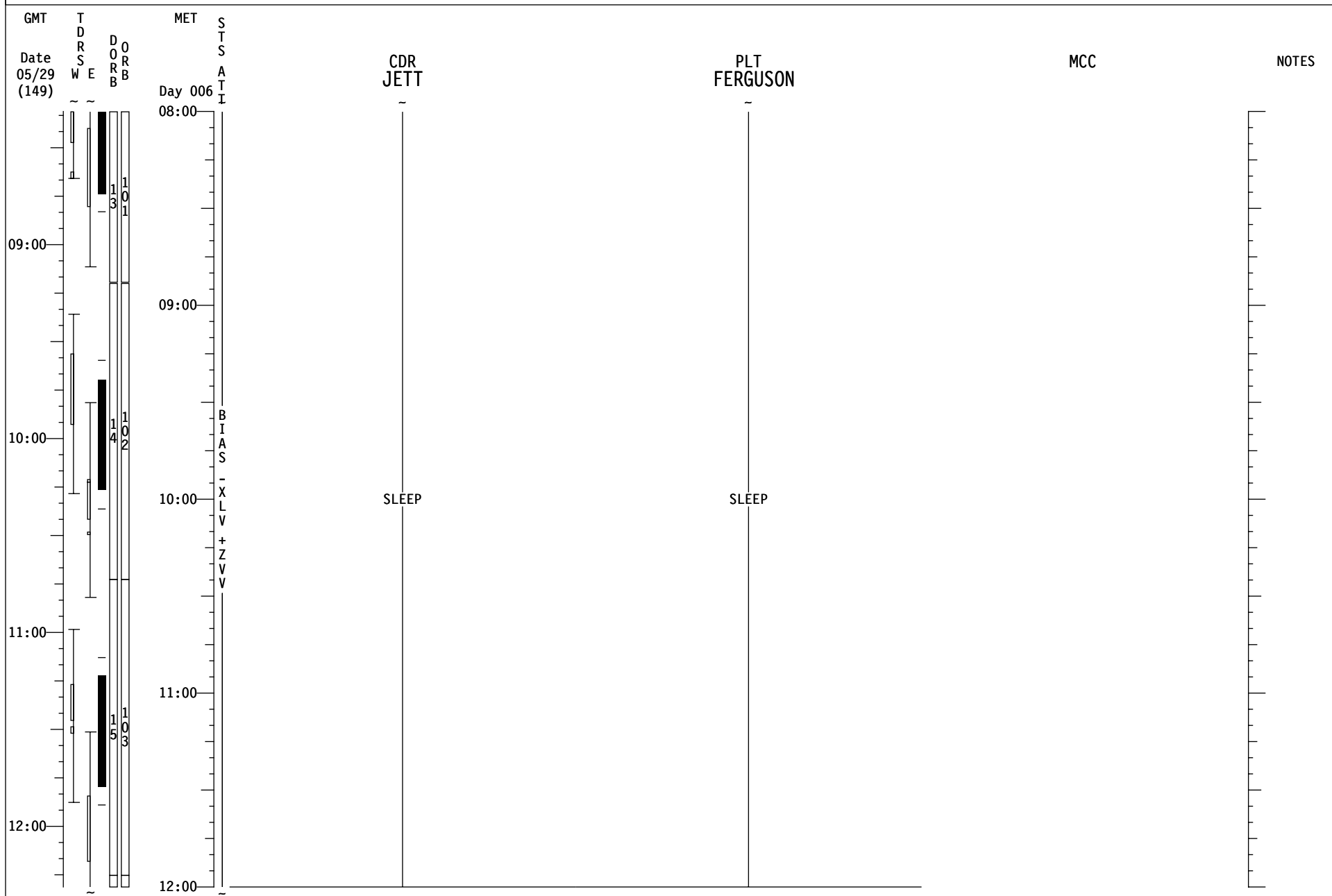
STS-115 (FD07)



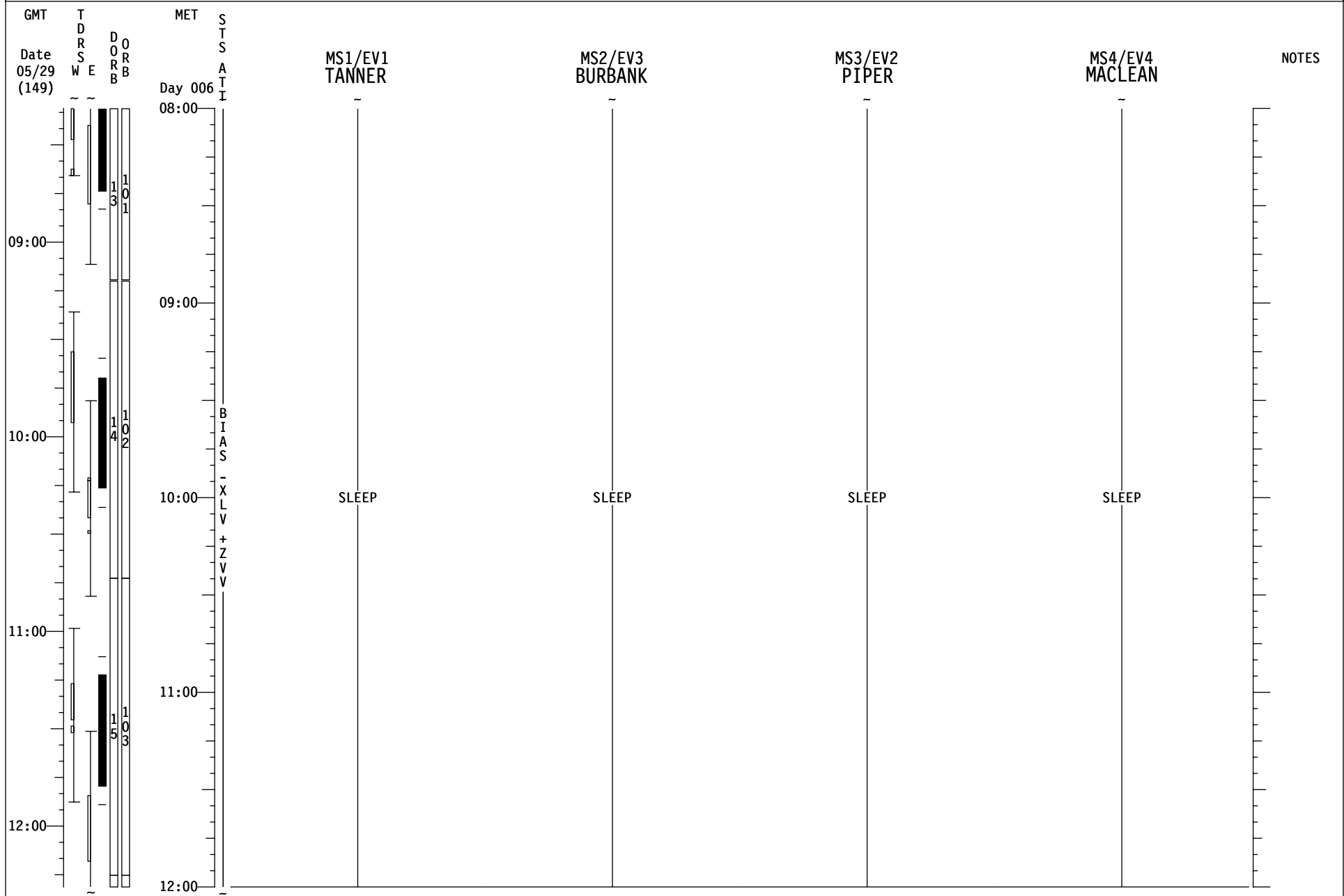
STS-115 (FD07)



STS-115 (FD07)



STS-115 (FD07)



STS-115 (FD08)

GMT	TDRS W E	DORB	MET	S T S	CDR JETT	PLT FERGUSON	MCC	NOTES
Date 05/29 (149)			Day 006	A T T				
12:00					<u>SLEEP LOG (ORB OPS, DSOS)</u>			<div style="border: 1px solid black; padding: 5px; width: fit-content;"> FD08 EZ ACTIVITIES: <u>TEPC (STATUS CHECK)</u> <u>(ORB OPS, CREW SYS)</u> <u>OCAC FILTER Inspect</u> <u>HARD Reboot PGSCs</u> </div>
13:00		104		B I A S	<u>POST-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)			
13:00				X L V		<u>POST-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)		
				+	Z06 <u>UHF MODE - OFF</u> <u>PRIVATE MEDICAL CONFERENCE</u>			
14:00				V	<u>EVA 4 INHIBIT PAD</u> (EVA, TIMELINES)		<u>EVA 4 INHIBIT PAD</u> (EVA, TIMELINES)	
14:00					<u>POST-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	<u>HANDOVER ATTITUDE CONTROL CMG TA TO ORBITER</u> (JOINT OPS, MATED OPS)		
						<u>MNVR (TRK) BIAS -XLV, -ZVV</u> TG=2 BV=5 P=176 Y=0 OM=180 A12/AUTO/VERN Init TRK (06/14:00)		
		205			<u>P/TV26 REBOOST</u> (PHOTO/TV, SCENES) Setup	<u>POST-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)		
15:00				R E B O O S T	<u>P/TV26 REBOOST</u> (PHOTO/TV, SCENES) Ops	<u>AUTO REBOOST</u> (ORB OPS, REBOOST/DAP) CONFIG 3	<u>DAILY PLANNING CONFERENCE</u>	
16:00		306			<u>POST-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	<u>MNVR (TRK) BIAS -XLV, +ZVV</u> TG=2 BV=5 P=158 Y=314 OM=3 A12/AUTO/VERN Init TRK (06/15:40)	<u>VERIFY COMM CONFIG 2B</u>	
16:00								

STS-115 (FD08)

GMT	TDRS W E	DORB	MET Day 006	S T S A T T I	MS1/EV1 TANNER	MS2/EV3 BURBANK	MS3/EV2 PIPER	MS4/EV4 MACLEAN	NOTES
12:00							<u>SALIVA COLLECTION</u> (ORB OPS, DSQS)		
13:00		104		B I A S	<u>POST SLEEP ACTIVITY</u> (ORB OPS, CREW SYS) <u>GALLEY MORNING CONFIG</u> (ORB OPS, GLY IODINE RMVL)	<u>POST-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	<u>POST-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	<u>POST-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)	
13:00				X L	<u>EV CREW: TAKE 1 ASPIRIN (325mg)</u> <u>+ EVA PREP USING SHUTTLE O2</u> (ISS EVA SYS, EVA PREP/POST)	<u>EVA PREP USING SHUTTLE O2</u> (ISS EVA SYS, EVA PREP/POST)	<u>SHUTTLE LEH CONFIG FOR EVA P/B ON</u> <u>ISS (ISS EVA SYS, EVA PREP/POST)</u> <u>EV CREW: TAKE 1 ASPIRIN (325mg)</u>	<u>EVA PREP USING SHUTTLE O2</u> (ISS EVA SYS, EVA PREP/POST)	
14:00		205		V V					
15:00		306		R E B O O S T			<u>POST-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)		
16:00							<u>BONEMAC STATUS CHECK</u> (ASSY OPS, PAYLOAD) <u>SHUTTLE/ISS H2O CNTR FILL (Init #6)</u> (ORB OPS, ECLS) √ MCC for Samples & Additives Rqts		
16:00							EXERCISE		

STS-115 (FD08)

GMT	T D R S W E	D O R B	MET	S T S	C D R	P L T	M C C	N O T E S
Date 05/29 (149)			Day 006	A T T I	J E T T	F E R G U S O N		
16:00		106				<u>MNVR (TRK) BIAS -XLV, -ZVV</u> TG=2 BV=5 P=154 Y=330 OM=1 <u>A12/AUTO/VERN Init TRK (06/15:40)</u> <u>HANDOVER ATTITUDE CONTROL ORBITER TO CMG TA</u> (JOINT OPS, MATED OPS) L17 Check MCIU filter screen A8L PORT RMS HTR (two)-AUTO		
17:00		306			POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)			
17:00		407				<u>SHUTTLE/ISS H2O CNTR FILL (Init #7)</u> (ORB OPS, ECLS) √MCC for Samples & Additives Rqts		
18:00		508		B I A S		EXERCISE		
18:00		609		- X L V	EXERCISE	<u>SHUTTLE/ISS H2O CNTR FILL</u> (ORB OPS, ECLS) Terminate CWC fill <u>CWC TRANSFER (2 BAG)</u> Transfer 2 CWC bag to ISS.		
19:00				+ Z V V				
19:00					<u>P/TV23 EVA (Ops)</u> (PHOTO/TV, SCENES) Perform during EVA as time permits			
19:00						<u>RMS PWRUP</u> (PDRS, RMS PWRUP)		
19:00						<u>EVA 4</u> (PDRS, EVA/VIEWING SUPPORT)		
20:00								
20:00								

DTV-ON
 SSV-ON
UPLINK
 B0
 D1,C2,C3

STS-115 (FD08)

GMT	T D R S W E	D O R B	MET	S T S	MS1/EV1 TANNER	MS2/EV3 BURBANK	MS3/EV2 PIPER	MS4/EV4 MACLEAN	NOTES
Date 05/29 (149)			Day 006	A T T I					
16:00		106			<u>EVA PREP USING SHUTTLE 02</u> (ISS EVA SYS, EVA PREP/POST)	<u>EMU PURGE</u> (ISS EVA SYS, EVA PREP/POST)		<u>EMU PURGE</u> (ISS EVA SYS, EVA PREP/POST)	
						<u>EMU PREBREATHE</u> (ISS EVA SYS, EVA PREP/POST)	EXERCISE	<u>EMU PREBREATHE</u> (ISS EVA SYS, EVA PREP/POST)	
17:00							<u>SHUTTLE/ISS H2O CNTR FILL</u> (ORB OPS, ECLS) Terminate CWC fill		
							<u>EVA F5 (Setup)</u> (ISS CUE CARD)		
17:00		107							
						<u>CREWLOCK DPRS/RPRS CUE CARD</u> (ISS EVA SYS, EVA PREP/POST)	<u>EAS PORT FILL</u> (ROBOTICS, EVA 4) Steps 1-2	<u>CREWLOCK DPRS/RPRS CUE CARD</u> (ISS EVA SYS, EVA PREP/POST)	
18:00				B I A S					
18:00				- X L V		<u>CREWLOCK EGRESS</u> (ISS EVA SYS, CUFF CHECKLIST)		<u>CREWLOCK EGRESS</u> (ISS EVA SYS, CUFF CHECKLIST)	
					<u>IVA SUPPORT EVA 4</u> (EVA, TIMELINES)	<u>EVA 4 SETUP</u>	<u>EAS PORT FILL</u> (ROBOTICS, EVA 4)	<u>EVA 4 SETUP</u>	
19:00		108		+ Z V V V					
						<u>WETA STANCHION INSTALLATION</u>		<u>WETA STANCHION INSTALLATION</u>	
19:00									
								<u>SO PORT FILL SITE PREP</u>	
20:00		109				<u>EAS TO SO PORT FILL</u>		<u>EAS TO SO PORT FILL</u>	
20:00									

STS-115 (FD08)

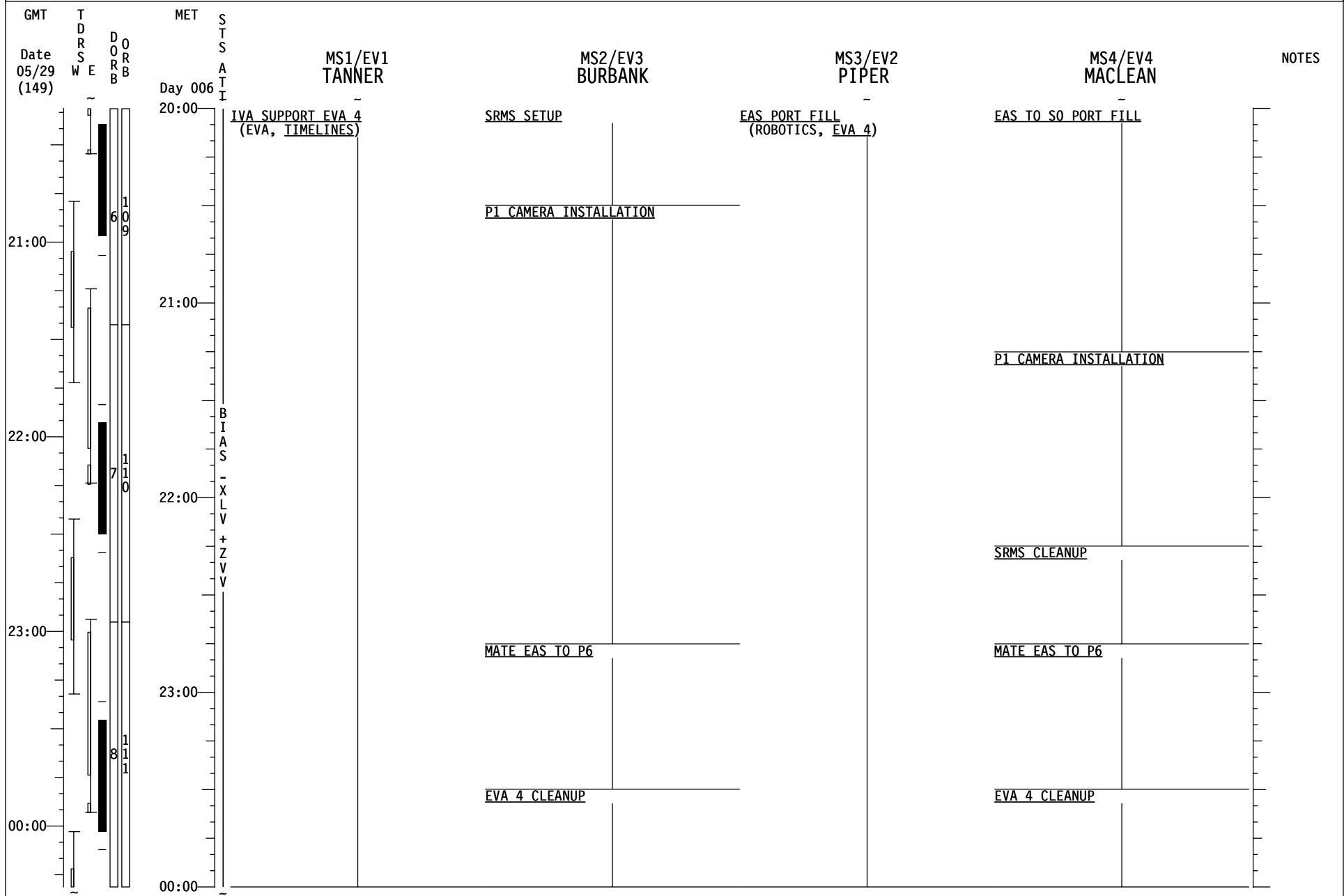
GMT	T D R S W E	D O R B	MET	S T S	CDR	PLT	MCC	NOTES
Date 05/29 (149)			Day 006	A T I	JETT	FERGUSON		
20:00		609						
21:00								
22:00		710						
23:00								
00:00		811						
00:00								

P/TV23 EVA (Ops)
(PHOTO/TV, SCENES)
Perform during EVA
as time permits

EVA 4
(PDRS, EVA/VIEWING SUPPORT)

RMS PWRDN
(PDRS, RMS PWRDN)

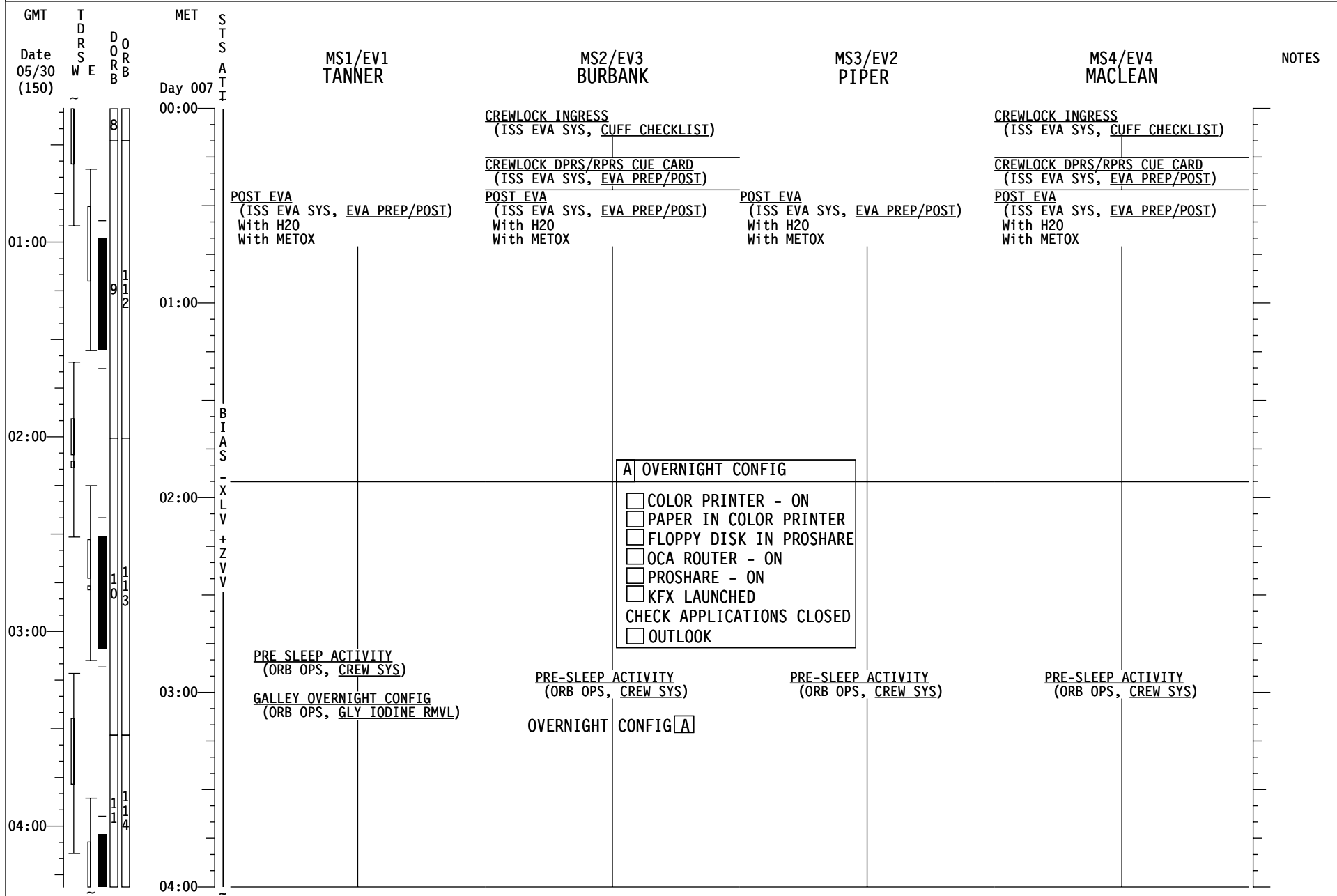
STS-115 (FD08)



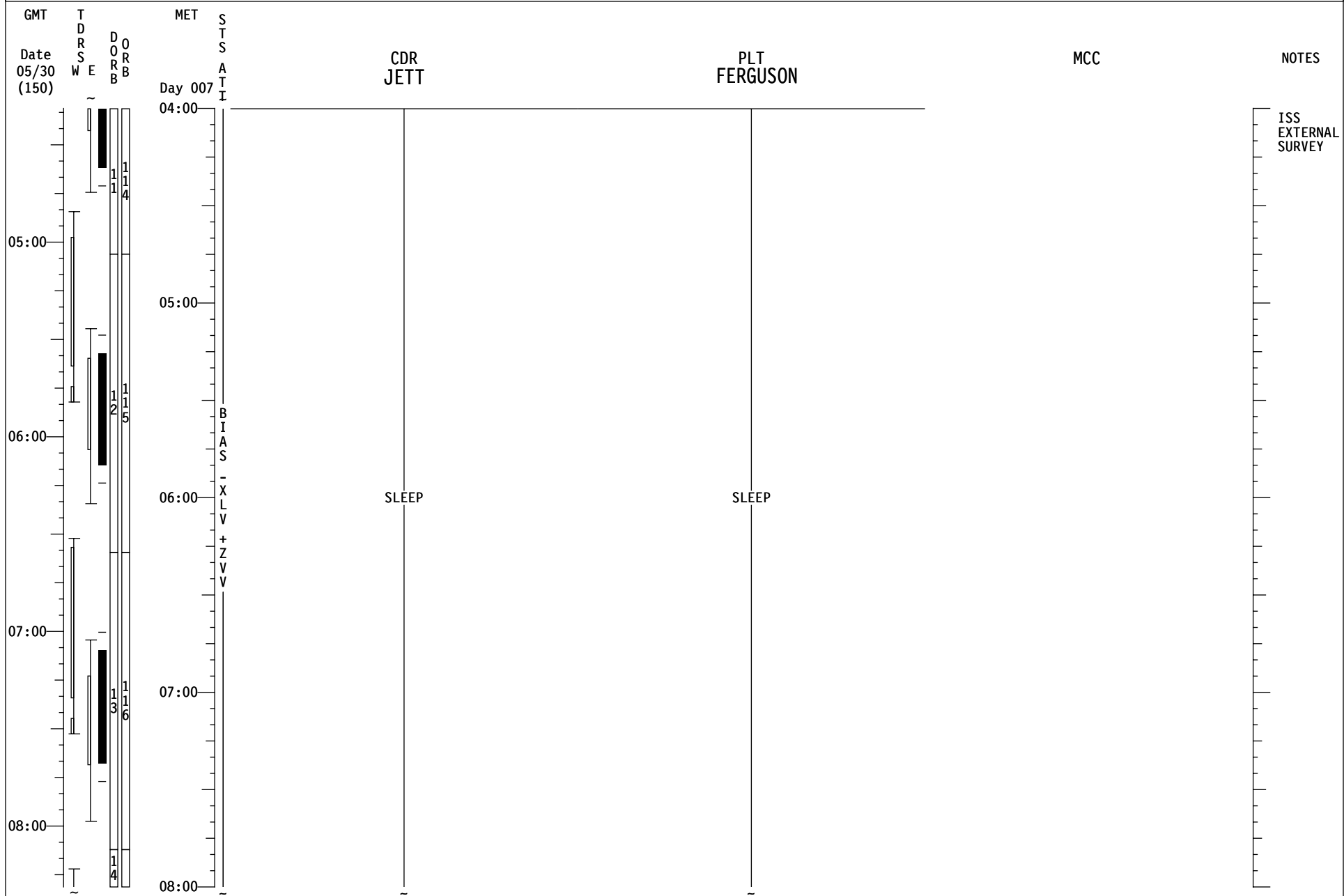
STS-115 (FD08)

GMT	T D R S W E	D O R B	MET	S T S	C D R	P L T	M C C	N O T E S
Date 05/30 (150)			Day 007	A T T I	J E T T	F E R G U S O N		
00:00		8			<u>EVA COMM DECONFIG</u> (EVA, EVA PREP)	<u>SHUTTLE/ISS H2O CNTR FILL</u> (Init #8) (ORB OPS, ECLS)	<u>VERIFY COMM CONFIG 3B</u>	<u>UPLINK</u> β 21 C1,C2,C3
					<u>ILLUMINATOR OPS</u> (PHOTO/TV, CUE CARDS) ILLUMINATORS ON - A,B,C,D,Elbow	√MCC for Samples & Additives Rqts		
01:00		9			<u>RECONFIG FROM P/B ON SHUTTLE</u> <u>O2 TO O2 TRANSFER</u> (JOINT OPS, MATED OPS) Perform after Step 42 of "Post EVA"	M010W 14.7 CABIN REG INLET SYS 1 - OP		
01:00		11 2				<u>OIU DEACTIVATION</u> (ORB OPS, OIU PROC) Expect PSP msg		DTV-OFF SSV-OFF
						<u>CABIN REPRESS TO 14.7 PSI</u> (EVA, 10.2 PSI CABIN) Step 6 only		
02:00					<u>O2 XFER to HIGH PRESSURE TANK</u> (Init) (JOINT OPS, MATED OPS) Steps 1 & 2	<u>SHUTTLE/ISS H2O CNTR FILL</u> (ORB OPS, ECLS) Terminate CWC fill		
02:00					<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)		<u>DAILY PLANNING CONFERENCE</u>	DTV MUX-ON VIP-ON VTR-ON SSV-ON
					<u>VIDEO CONFERENCING</u> (ORB OPS, PGSC) Private Medical Conference	<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)		OCA-PMC
03:00		11 0 3				<u>SHUTTLE/ISS H2O CNTR FILL</u> (ORB OPS, ECLS) Terminate CWC fill		
03:00					<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)			
04:00		11 1 4				<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, CREW SYS)		
04:00								

STS-115 (FD08)

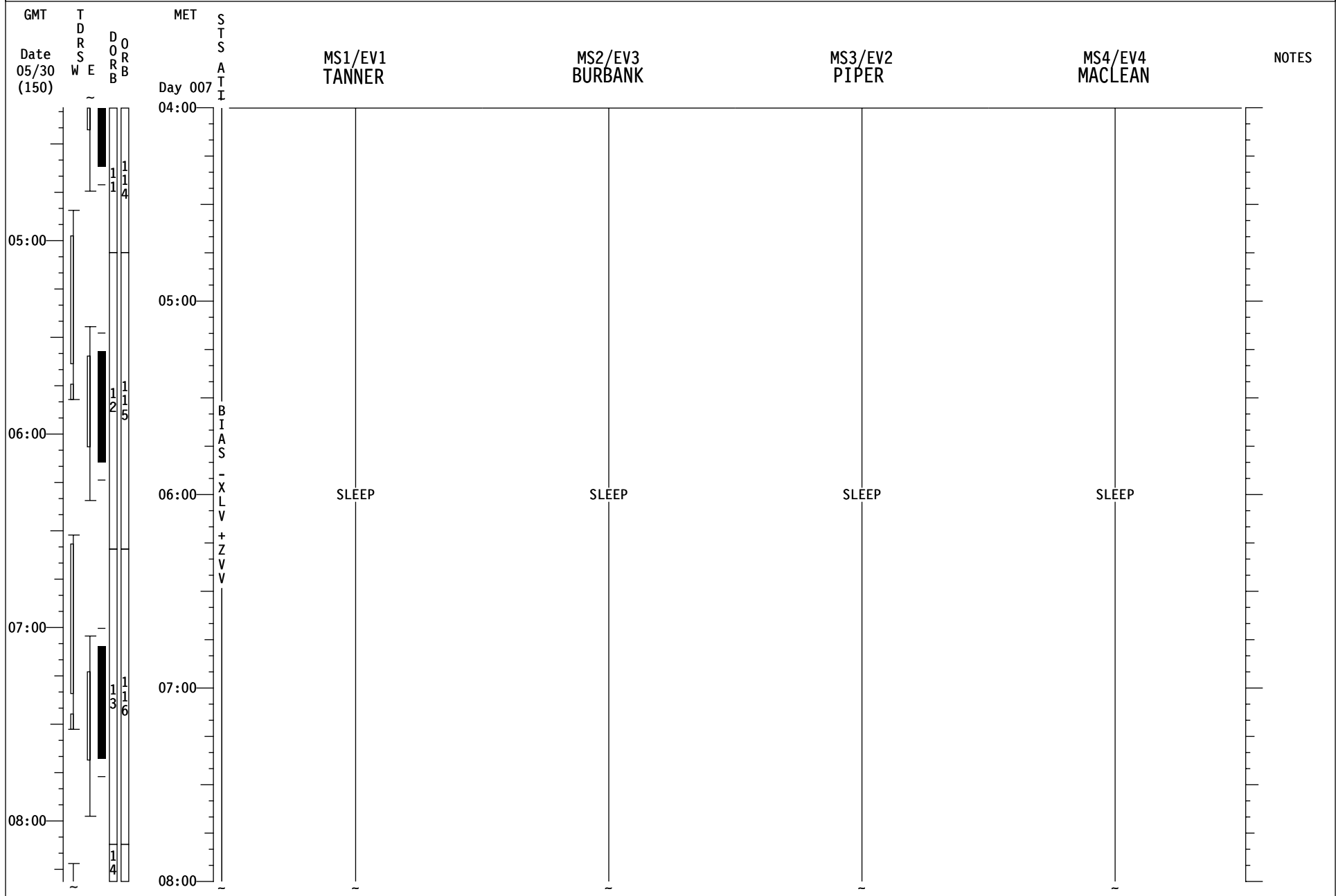


STS-115 (FD08)

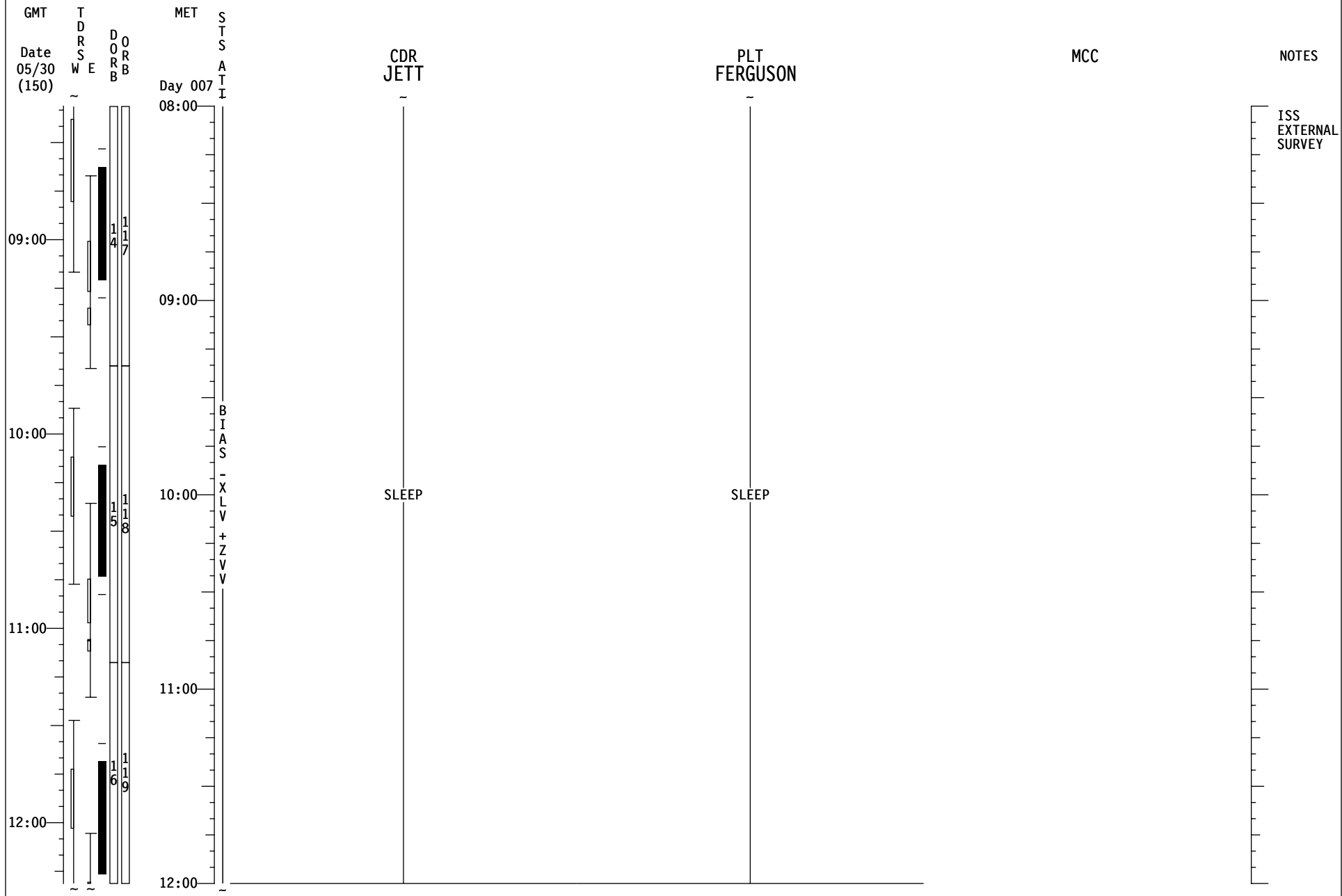


ISS
EXTERNAL
SURVEY

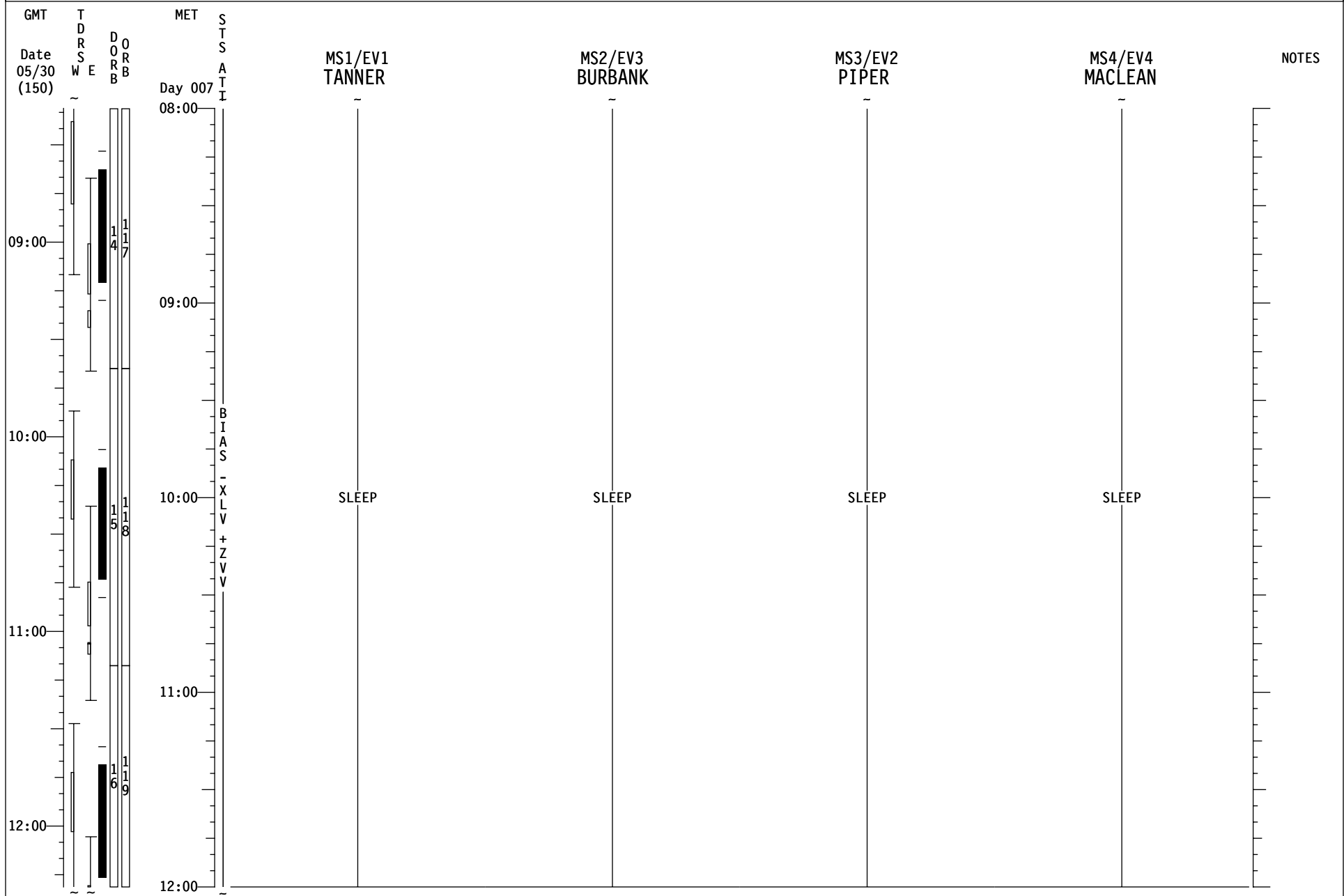
STS-115 (FD08)



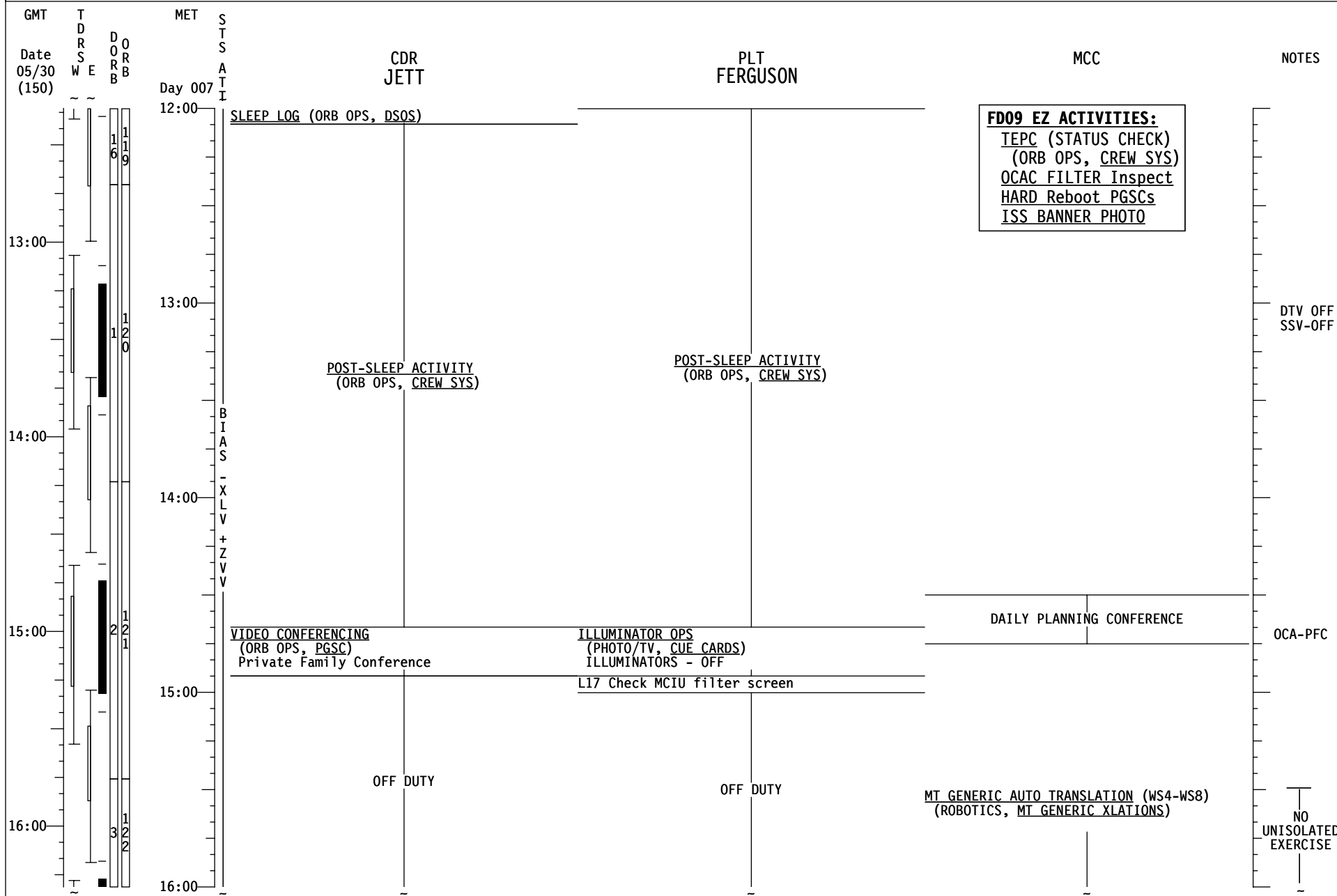
STS-115 (FD08)



STS-115 (FD08)



STS-115 (FD09)



FD09 EZ ACTIVITIES:
TEPC (STATUS CHECK)
(ORB OPS, CREW SYS)
OCAC FILTER Inspect
HARD Reboot PGSCs
ISS BANNER PHOTO

DTV OFF
SSV-OFF

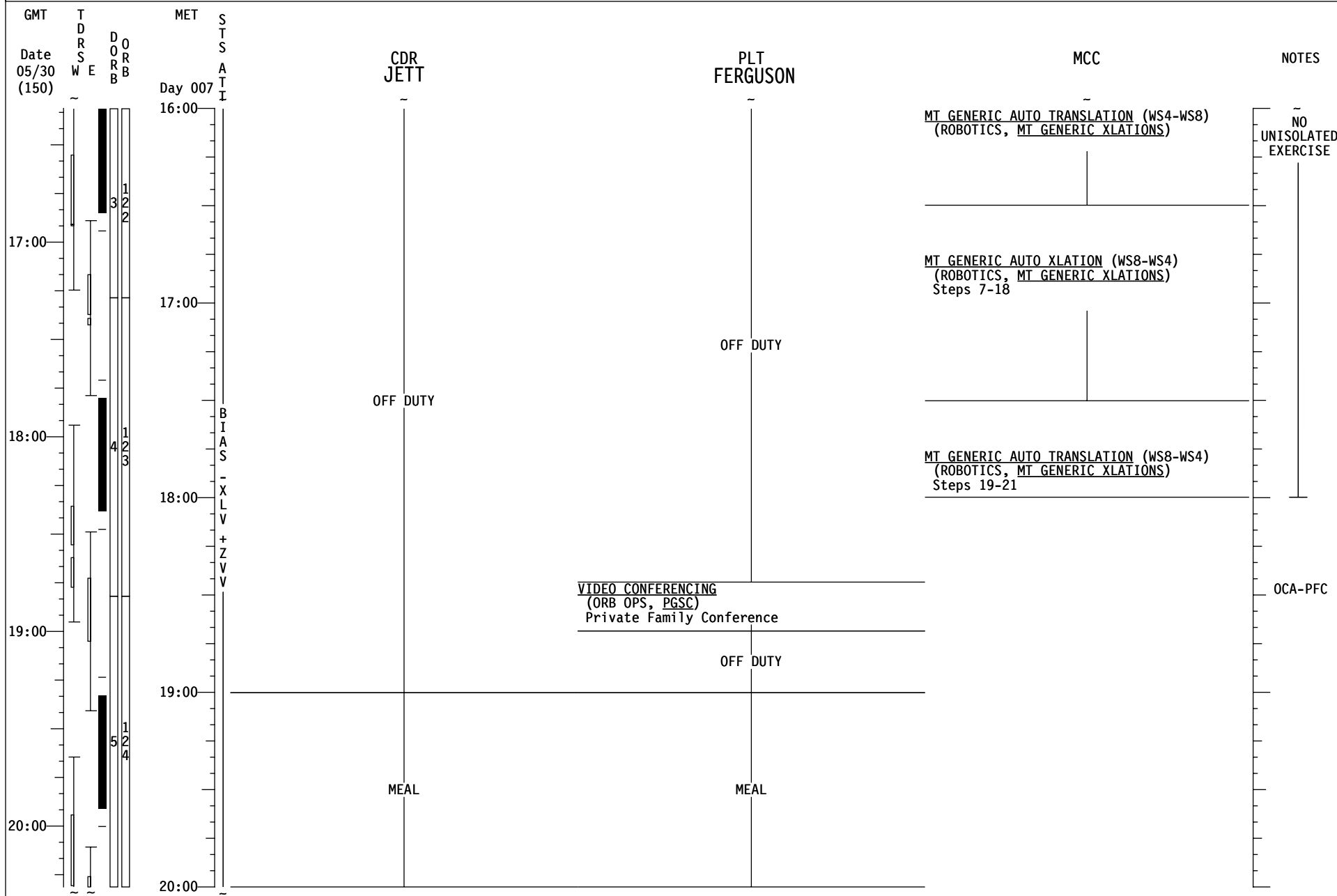
OCA-PFC

NO
UNISOLATED
EXERCISE

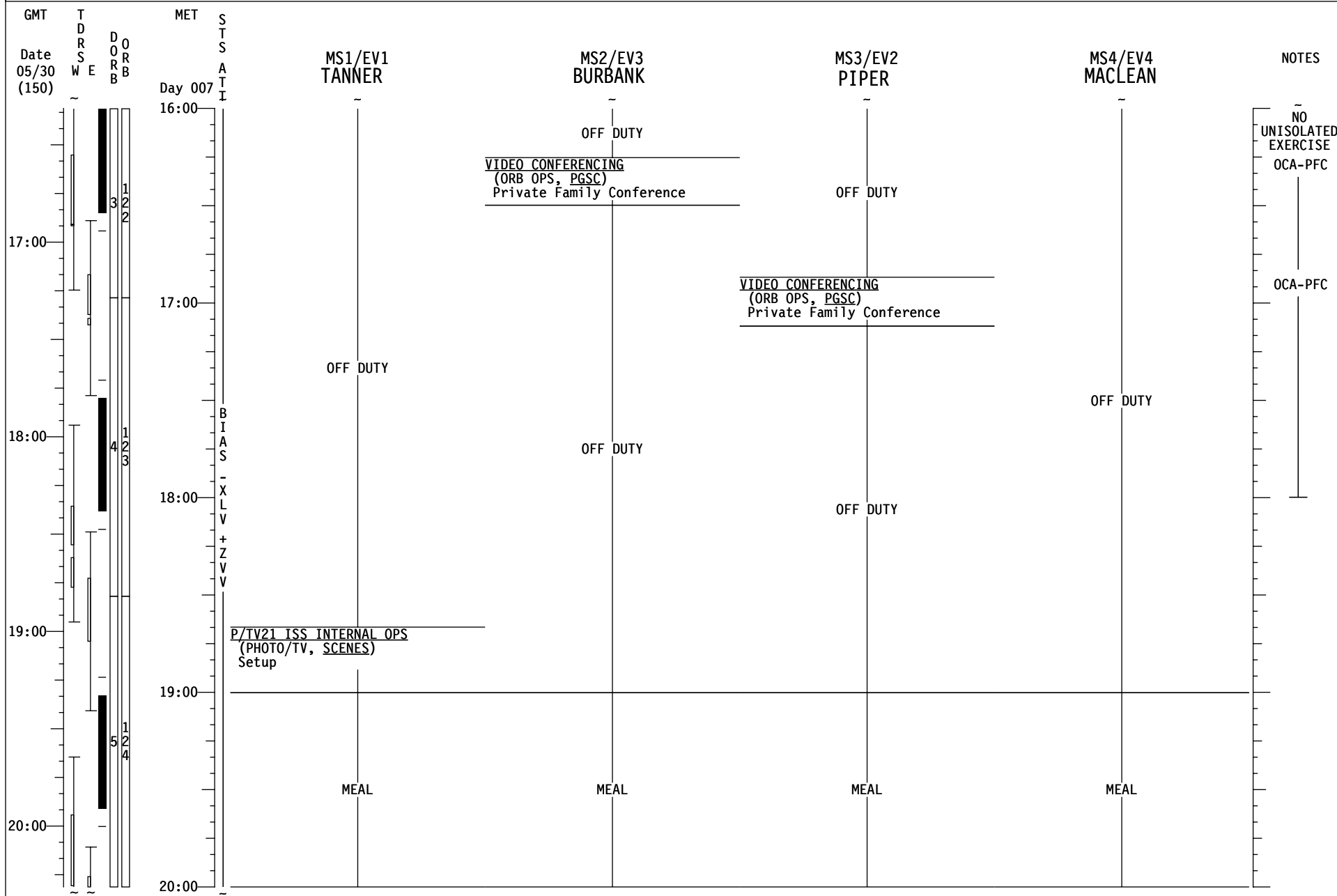
STS-115 (FD09)

GMT Date 05/30 (150)	T D R S W E	D O R B	MET Day 007	S T S A T T I	MS1/EV1 TANNER	MS2/EV3 BURBANK	MS3/EV2 PIPER	MS4/EV4 MACLEAN	NOTES
					<p>12:00 SLEEP LOG (ORB OPS, DSOS) SALIVA COLLECTION (ORB OPS, DSOS)</p>	<p>12:00 SLEEP LOG (ORB OPS, DSOS)</p>	<p>12:00 SALIVA COLLECTION (ORB OPS, DSOS)</p>	<p>12:00 SLEEP LOG (ORB OPS, DSOS)</p>	
					<p>13:00 POST SLEEP ACTIVITY (ORB OPS, CREW SYS)</p> <p>14:00 GALLEY MORNING CONFIG (ORB OPS, GLY IODINE RMVL)</p>	<p>13:00 POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)</p>	<p>14:00 POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)</p>	<p>13:00 POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)</p> <p>14:00 VIDEO CONFERENCING (ORB OPS, PGSC) Private Family Conference</p>	OCA-PFC
					<p>15:00 OFF DUTY</p> <p>16:00 VIDEO CONFERENCING (ORB OPS, PGSC) Private Family Conference</p> <p>OFF DUTY</p>	<p>15:00 OFF DUTY</p>	<p>15:00 OFF DUTY</p>	<p>15:00 POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)</p> <p>15:00 BONEMAC STATUS CHECK (ASSY OPS, PAYLOAD)</p> <p>EV CREW: TAKE 1 ASPIRIN (325mg)</p> <p>OFF DUTY</p>	OCA-PFC
					<p>16:00 OFF DUTY</p>	<p>16:00 OFF DUTY</p>	<p>16:00 OFF DUTY</p>	<p>16:00 OFF DUTY</p>	NO UNISOLATED EXERCISE

STS-115 (FD09)



STS-115 (FD09)



STS-115 (FD09)

GMT	TDRS W E	DORB B	MET Day 007	STS ATTI	CDR JETT	PLT FERGUSON	MCC	NOTES
20:00					CREW CONFERENCE	CREW CONFERENCE		
21:00		125 6		BIAS	CREW PHOTO	CREW PHOTO		
21:00				-XLV		<u>CWC TRANSFER (2 BAG)</u> Transfer 2 CWC bag to ISS.		
22:00				+ZVV	EXERCISE	<u>PWR FILL</u> (ORB OPS, ECLS) Init Fill #2 Fill SN 1011 (Barcode #TBS) Fill dur ~30 min		
22:00					<u>HANDOVER ATTITUDE CONTROL CMG TA TO ORBITER</u> (JOINT OPS, MATED OPS)	<u>SHUTTLE/ISS H2O CNTR FILL (Init #10)</u> (ORB OPS, ECLS) √MCC for Samples & Additives Rqts		
23:00		126 7			<u>MNVR (TRK) BIAS -XLV, -ZVV</u> TG=2 BV=5 P=176 Y=0 OM=180 A12/AUTO/VERN Init TRK (07/22:10)			
23:00				R AUTO REBOOST	E (ORB OPS, REBOOST/DAP) B CONFIG 3	EXERCISE		
00:00		127 8		OOST		<u>SHUTTLE/ISS H2O CNTR FILL</u> (ORB OPS, ECLS) Terminate CWC fill		
00:00					<u>RNDZ TOOLS CHECKOUT</u> (RNDZ, RNDZ TOOLS)			<u>UPLINK</u> TGT SV
00:00					<u>MNVR (TRK) BIAS -XLV, +ZVV</u> TG=2 BV=5 P=158 Y=314 OM=3 A12/AUTO/VERN Init TRK (07/23:50)			

STS-115 (FD09)

GMT	T D R S E W E	D O R B B	MET Day 007	S T S A T T I	MS1/EV1 TANNER	MS2/EV3 BURBANK	MS3/EV2 PIPER	MS4/EV4 MACLEAN	NOTES
20:00					CREW CONFERENCE	CREW CONFERENCE	CREW CONFERENCE	CREW CONFERENCE	
21:00		125 6		B I A S	CREW PHOTO	CREW PHOTO	CREW PHOTO	CREW PHOTO	
21:00				X L V	<u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX	<u>REBA REMOVAL</u> (ISS EVA SYS, BATTERY OPS) <u>EVA PREP FOR TRANSFER TO SHUTTLE</u> (EVA, AIRLOCK CONFIG)	<u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX	<u>REBA REMOVAL</u> (ISS EVA SYS, BATTERY OPS) <u>EVA PREP FOR TRANSFER TO SHUTTLE</u> (EVA, AIRLOCK CONFIG)	
22:00				+ Z V V					
22:00		126 7			EXERCISE		<u>CPCG-H TRANSFER ISS TO MDDK</u> (ASSY OPS, TRANSFER)		
23:00					<u>P/TV26 REBOOST</u> (PHOTO/TV, SCENES) Setup	<u>PRE-UNDOCKING EVA TRANSFER</u> (EVA, AIRLOCK CONFIG)		<u>PRE-UNDOCKING EVA TRANSFER</u> (EVA, AIRLOCK CONFIG)	
23:00				R E B O O S T	<u>P/TV26 REBOOST</u> (PHOTO/TV, SCENES) Ops				
00:00		127 8				<u>RNDZ TOOLS CHECKOUT</u> (RNDZ, RNDZ TOOLS)	EXERCISE		<u>UPLINK</u> TGT SV
00:00					<u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX			EXERCISE	

STS-115 (FD09)

GMT	T D R S W E	D O R B	MET	S T S	C D R	P L T	M C C	N O T E S
Date 05/31 (151)			Day 008	A T T I	J E T T	F E R G U S O N		
			00:00		MNVR (TRK) BIAS -XLV, +ZVV TG=2 BV=5 P=158 Y=314 OM=3 A12/AUTO/VERN Init TRK (07/23:50)	SHUTTLE/ISS H2O CNTR FILL (Init #11) (ORB OPS, ECLS) √MCC for Samples & Additives Rqts		
		127			HANDOVER ATTITUDE CONTROL ORBITER TO CMG TA (JOINT OPS, MATED OPS)			
01:00						ILLUMINATOR OPS (PHOTO/TV, CUE CARDS) ILLUMINATORS ON - A,B,C,D,Elbow		
		128			VIDEO CONFERENCING (ORB OPS, PGSC) Private Medical Conference	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)		OCA-PMC
		928				SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Terminate CWC fill		
02:00				B I A S			DAILY PLANNING CONFERENCE	
				- X L V				
				+ Z V V				
03:00					PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)		DTV MUX-ON VIP-ON VTR-ON SSV-ON
		129						
		130						
04:00								
		130						

STS-115 (FD09)

GMT	T D R S W E	D O R B	MET	S T S	MS1/EV1 TANNER	MS2/EV3 BURBANK	MS3/EV2 PIPER	MS4/EV4 MACLEAN	NOTES
Date 05/31 (151)			Day 008	A T V I					
00:00		127			<u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX		<u>PCG-STES TRANSFER ISS TO MDDK</u> (ASSY OPS, <u>TRANSFER</u>)		
01:00		827				EXERCISE		EXERCISE	
01:00		128					<u>MIDDECK STATUS CHECKS</u> (ASSY OPS, <u>CUE CARD</u>)	<u>TRANSFER TAGUP</u> Coordinate with transfer counterpart <u>TRANSFER BRIEF</u> Call down status to MCC	
02:00		928		B I A S					
02:00				- X L V + Z V V	<u>PRE SLEEP ACTIVITY</u> (ORB OPS, <u>CREW SYS</u>) <u>GALLEY OVERNIGHT CONFIG</u> (ORB OPS, <u>GLY IODINE RMVL</u>)	<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, <u>CREW SYS</u>) OVERNIGHT CONFIG <u>A</u>	<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, <u>CREW SYS</u>)	<u>PRE-SLEEP ACTIVITY</u> (ORB OPS, <u>CREW SYS</u>)	
03:00		129							
03:00		109							
04:00		130							
04:00		110							

- A] OVERNIGHT CONFIG**

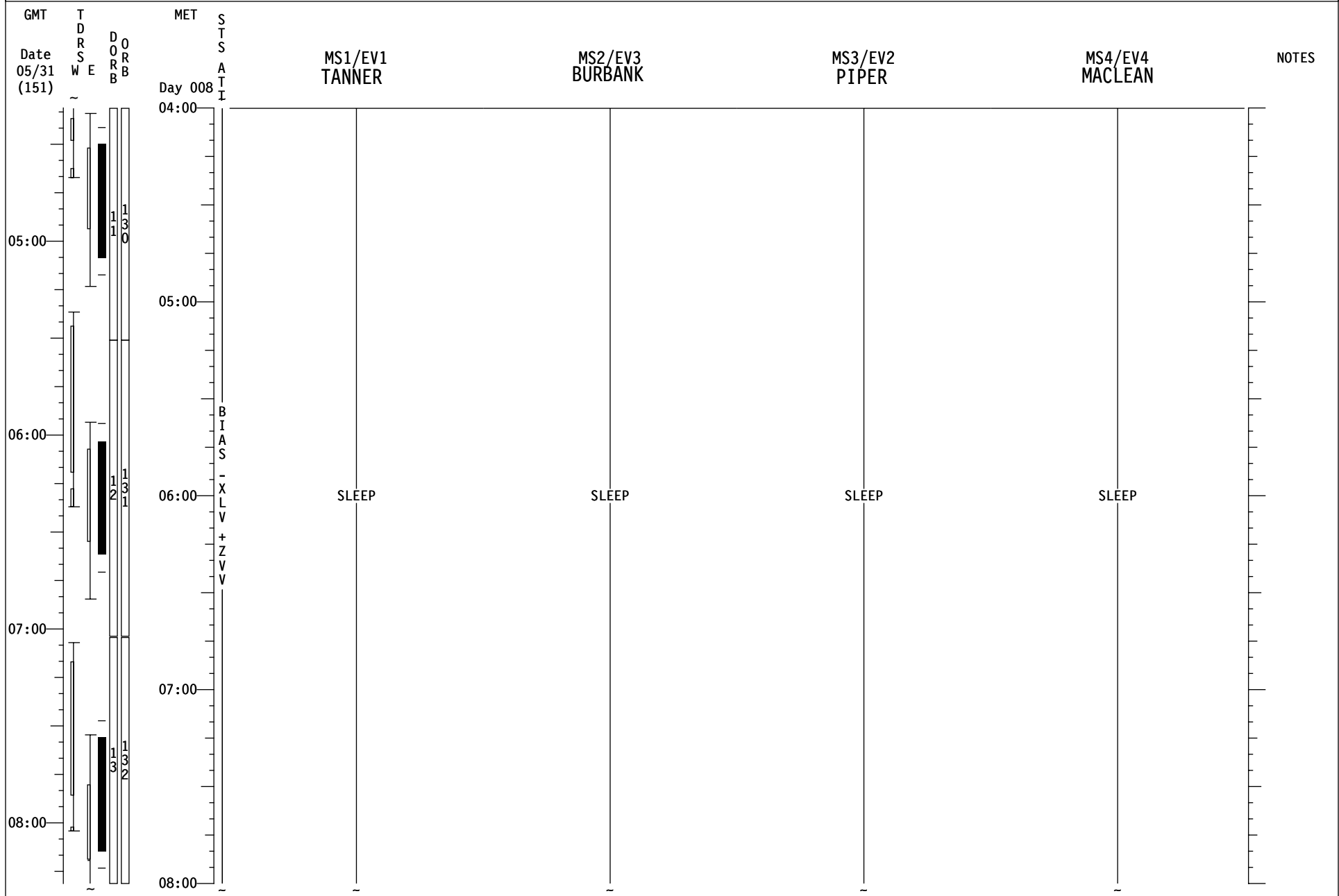
 - COLOR PRINTER - ON
 - PAPER IN COLOR PRINTER
 - FLOPPY DISK IN PROSHARE
 - OCA ROUTER - ON
 - PROSHARE - ON
 - KFX LAUNCHED
 - CHECK APPLICATIONS CLOSED
 - OUTLOOK

STS-115 (FD09)

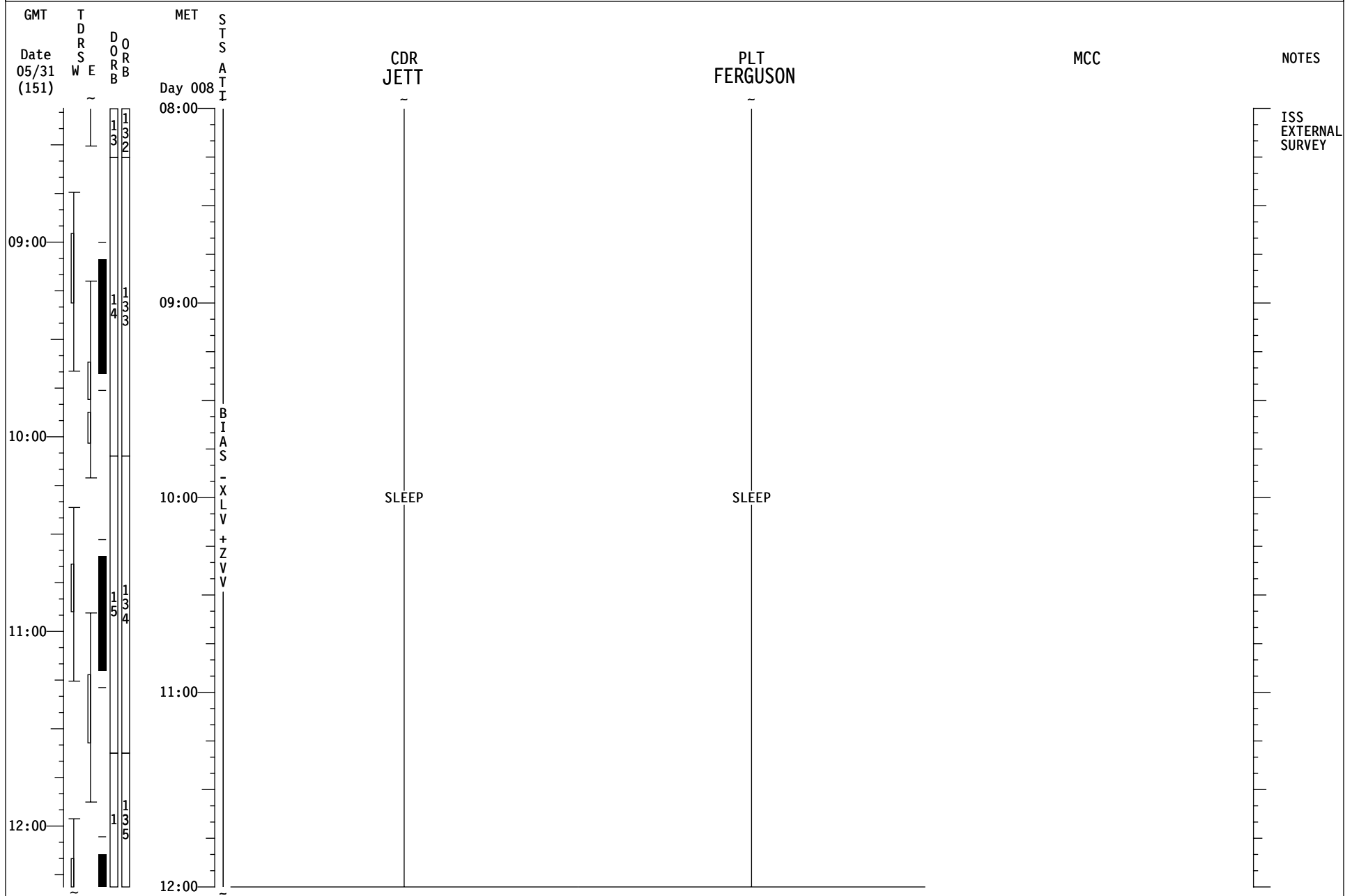
GMT	T D R S W E	D O R B	MET	S T S A T I	CDR	PLT	MCC	NOTES
Date 05/31 (151)			Day 008		JETT	FERGUSON		
04:00								
05:00								
06:00								
06:00					SLEEP	SLEEP		
07:00								
08:00								
08:00								

ISS
EXTERNAL
SURVEY

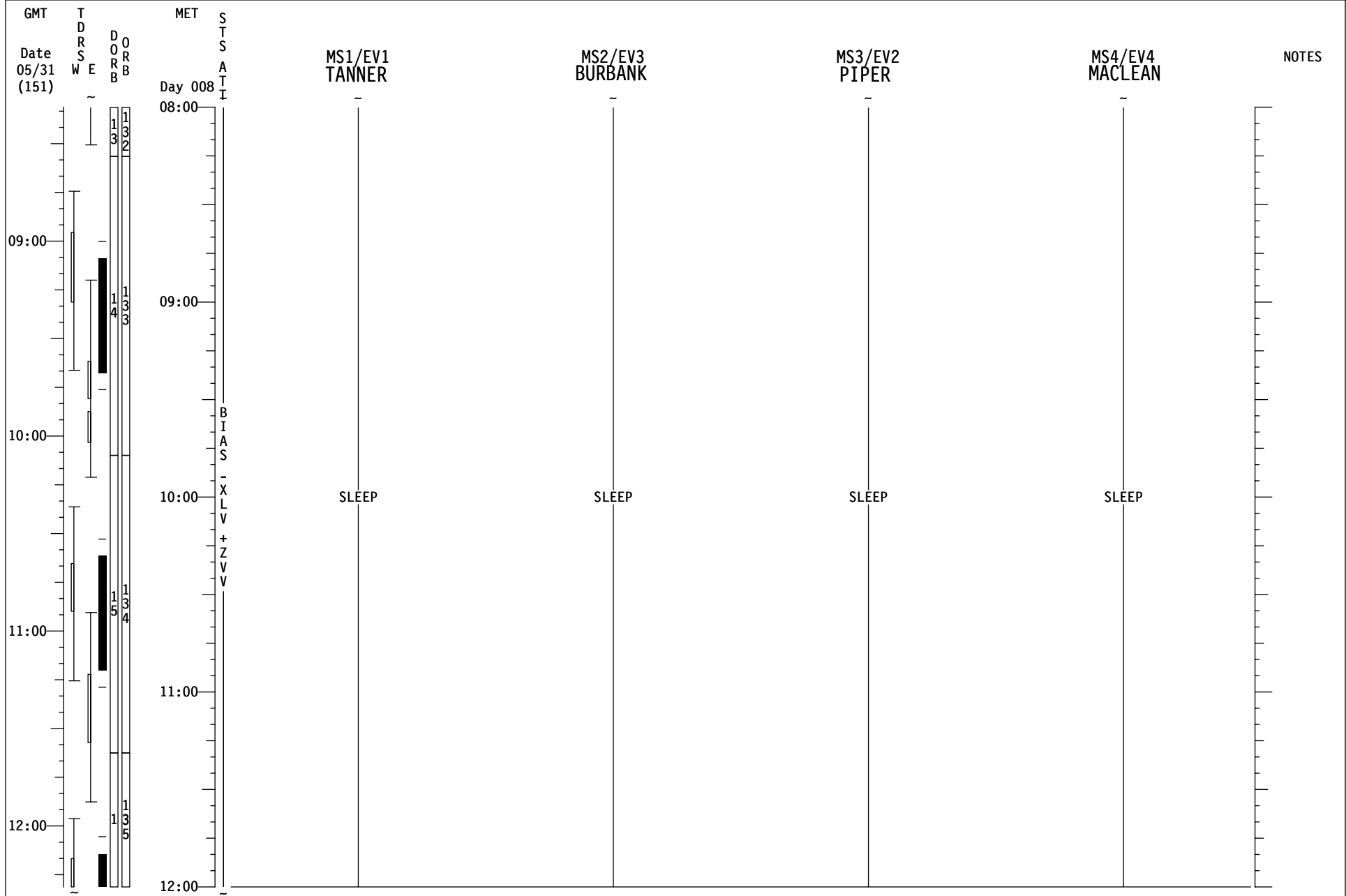
STS-115 (FD09)



STS-115 (FD09)



STS-115 (FD09)



STS-115 (FD10)

GMT	T D R S W E	D O R B	MET	S T S A T T I	CDR JETT	PLT FERGUSON	MCC	NOTES
Date 05/31 (151)			Day 008					
12:00					<u>SLEEP LOG (ORB OPS, DSOS)</u>			
13:00		1 3 5						
14:00		2 3 6			<u>POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)</u>	<u>POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)</u>		
15:00		3 3 7						
16:00		4			<u>L17 Check MCIU filter screen</u> <u>ILLUMINATOR OPS (PHOTO/TV, CUE CARDS)</u> <u>ILLUMINATORS - OFF</u>	<u>SHUTTLE/ISS H2O CNTR FILL (Init #12)</u> <u>(ORB OPS, ECLS)</u> √MCC for Samples & Additives Rqts		
					<u>O2 XFER to HIGH PRESSURE TANK (Term)</u> <u>(JOINT OPS, MATED OPS) Step 3</u>	<u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX		
					<u>RECONFIG FROM PREBREATHE ON SHUTTLE O2</u> <u>(JOINT OPS, MATED OPS)</u>			
							<u>DAILY PLANNING CONFERENCE</u>	

FD10 EZ ACTIVITIES:
TEPC (STATUS CHECK)
(ORB OPS, CREW SYS)
QCAC FILTER Inspect
HARD Reboot PGSCs

STS-115 (FD10)

GMT	T D R S W E	D O R B	MET	S T S	MS1/EV1 TANNER	MS2/EV3 BURBANK	MS3/EV2 PIPER	MS4/EV4 MACLEAN	NOTES
Date 05/31 (151)			Day 008	A T T I					
12:00					<u>SLEEP LOG (ORB OPS, DSOS)</u> <u>SALIVA COLLECTION (ORB OPS, DSOS)</u>	<u>SLEEP LOG (ORB OPS, DSOS)</u>	<u>SALIVA COLLECTION (ORB OPS, DSOS)</u>	<u>SLEEP LOG (ORB OPS, DSOS)</u>	
13:00									
14:00				B I A S	<u>POST SLEEP ACTIVITY (ORB OPS, CREW SYS)</u> <u>GALLEY MORNING CONFIG (ORB OPS, GLY IODINE RMVL)</u>	<u>POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)</u>	<u>POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)</u>	<u>POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)</u>	
15:00				- X L V + Z V V					
16:00					<u>EXERCISE</u>	<u>CWC TRANSFER (2 BAG)</u> Transfer 2 CWC bag to ISS.	<u>MIDDECK STATUS CHECKS (ASSY OPS, CUE CARD)</u> <u>BONEMAC STATUS CHECK (ASSY OPS, PAYLOAD)</u> <u>BONEMAC SAMPLE CHANGEOUT (ASSY OPS, PAYLOAD)</u>	<u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX	
16:00						<u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX	<u>EXERCISE</u>		

STS-115 (FD10)

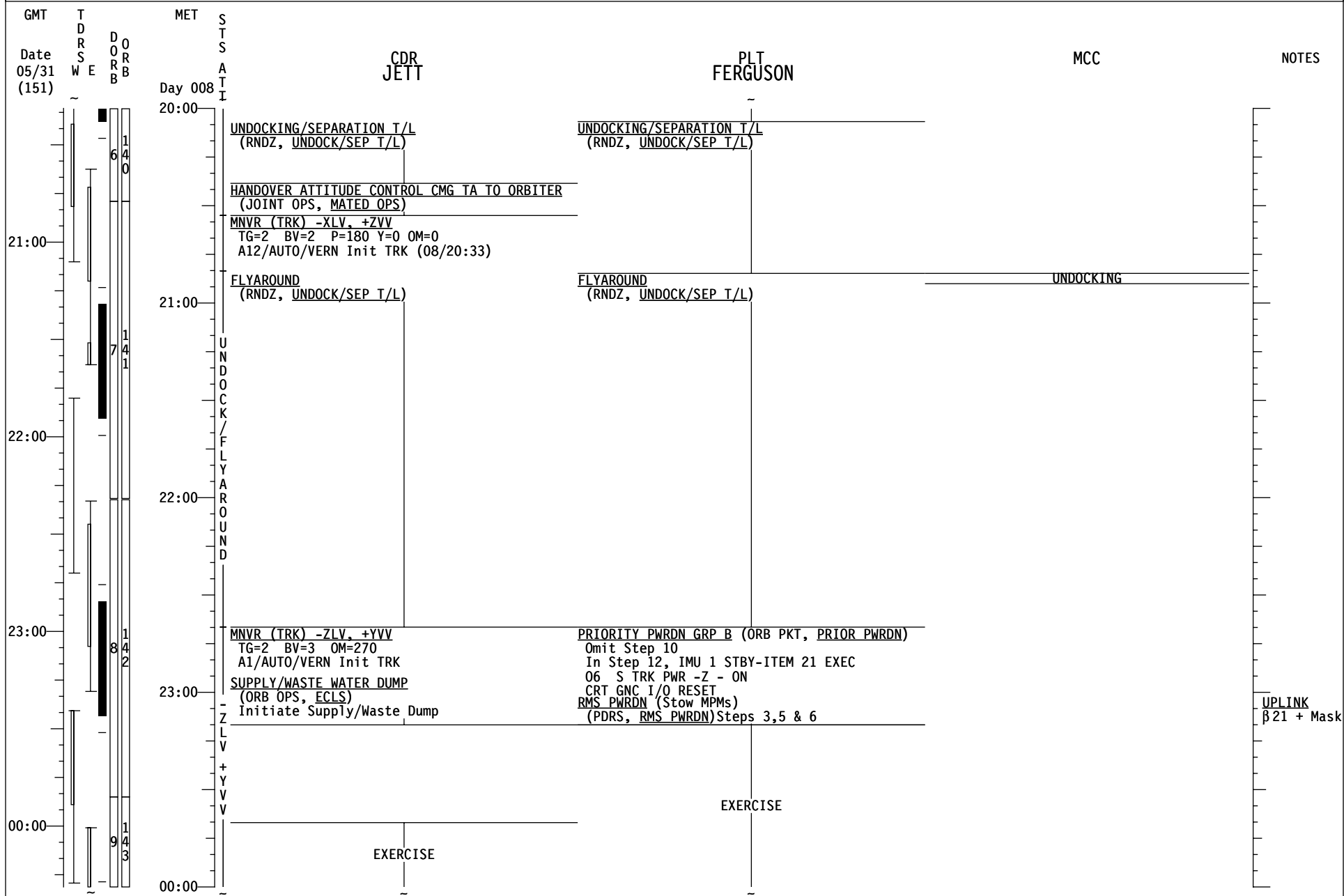
GMT	T D R S E W E	D O R B B B	MET	S T S A T	CDR JETT	PLT FERGUSON	MCC	NOTES
Date 05/31 (151)			Day 008					
16:00					RECONFIG FROM PREBREATHE ON SHUTTLE O2 (JOINT OPS, MATED OPS)	TRANSFER OPS Ref. Transfer List & MSG XXX		
					NITROGEN TRANSFER TERMINATION (JOINT OPS, MATED OPS)	SHUTTLE/ISS H2O CNTR FILL (ORB OPS, ECLS) Terminate CWC fill		
17:00		138				CWC TRANSFER (1 BAG) Transfer 1 CWC bag to ISS.		
		4				TOPPING FES STARTUP(ORB OPS, ECLS)St 1		
17:00					MEAL	MEAL		
18:00								
18:00		139			FARE WELL	FARE WELL		
		5						
19:00					SHUTTLE/ISS DUCT REMOVAL AND HATCH CLOSING (JOINT OPS, EGRESS STATION)	NOMINAL H2O CONFIG (ORB OPS, ECLS) L1 FLASH EVAP CNTLR PRI A(B)-ON		
19:00								
20:00		140			SSV RATE - 3			
		6						
20:00						PRIORITY PWRUP GRP B (ORB PKT, PRIOR PWRDN) Steps 5,6(Triple G2),9,12 (In step 12, Recover IMU 1)		

UPLINK
CNFG 760
TFL 184

STS-115 (FD10)

GMT	T D R S E W E	D O R B B B	MET Day 008	S T S A T T I	MS1/EV1 TANNER	MS2/EV3 BURBANK	MS3/EV2 PIPER	MS4/EV4 MACLEAN	NOTES
16:00					<u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX	<u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX		<u>TRANSFER OPS</u> Ref. Transfer List & MSG XXX	
17:00		138 48			<u>P/TV21 ISS INTERNAL OPS</u> (PHOTO/TV, SCENES) Setup		EXERCISE	<u>TRANSFER TAGUP</u> Coordinate with transfer counterpart <u>TRANSFER BRIEF</u> Call down status to MCC	
17:00					MEAL	MEAL	MEAL	MEAL	
18:00		139 59			FARE WELL	FARE WELL	FARE WELL	FARE WELL	
19:00		140 60			<u>SHUTTLE/ISS DUCT REMOVAL AND HATCH CLOSING</u> (JOINT OPS, EGRESS STATION)	<u>SHUTTLE/ISS DUCT REMOVAL AND HATCH CLOSING</u> (JOINT OPS, EGRESS STATION)		<u>HARDLINE AUDIO CONFIG (ISS) B/O</u> (JOINT OPS, COMM/DATA) Steps 1,3 & 4	
19:00					<u>ODS VEST/PMA DEPRESS & HATCH LEAK CHECK</u> (JOINT OPS, EGRESS STATION)		<u>ODS VEST/PMA DEPRESS & HATCH LEAK CHECK</u> (JOINT OPS, EGRESS STATION)		
20:00					<u>P/TV19 C/L CAMERA INSTALLATION</u> (PHOTO/TV, SCENES)	EXERCISE	<u>EMU INSTALLATION</u> (EVA, AIRLOCK CONFIG) Move EMUs to Airlock	<u>P/TV20 ISS DOCK/UNDOCK</u> (PHOTO/TV, SCENES) Setup	
20:00						<u>PRIORITY PWRUP GRP B (ORB PKT, PRIOR PWRDN)</u> Steps 5,6(Triple G2),9,12 (In step 12, Recover IMU 1)			

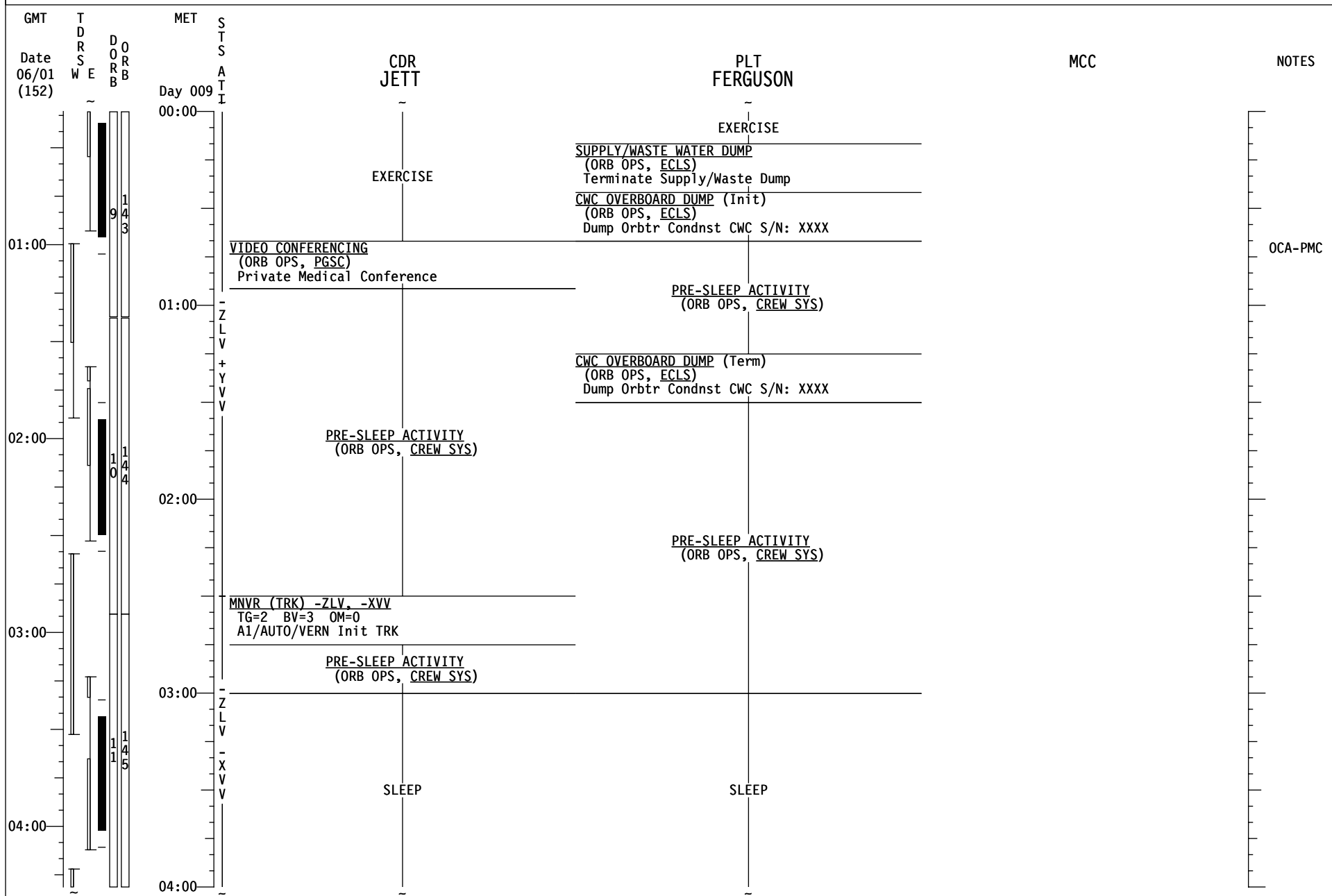
STS-115 (FD10)



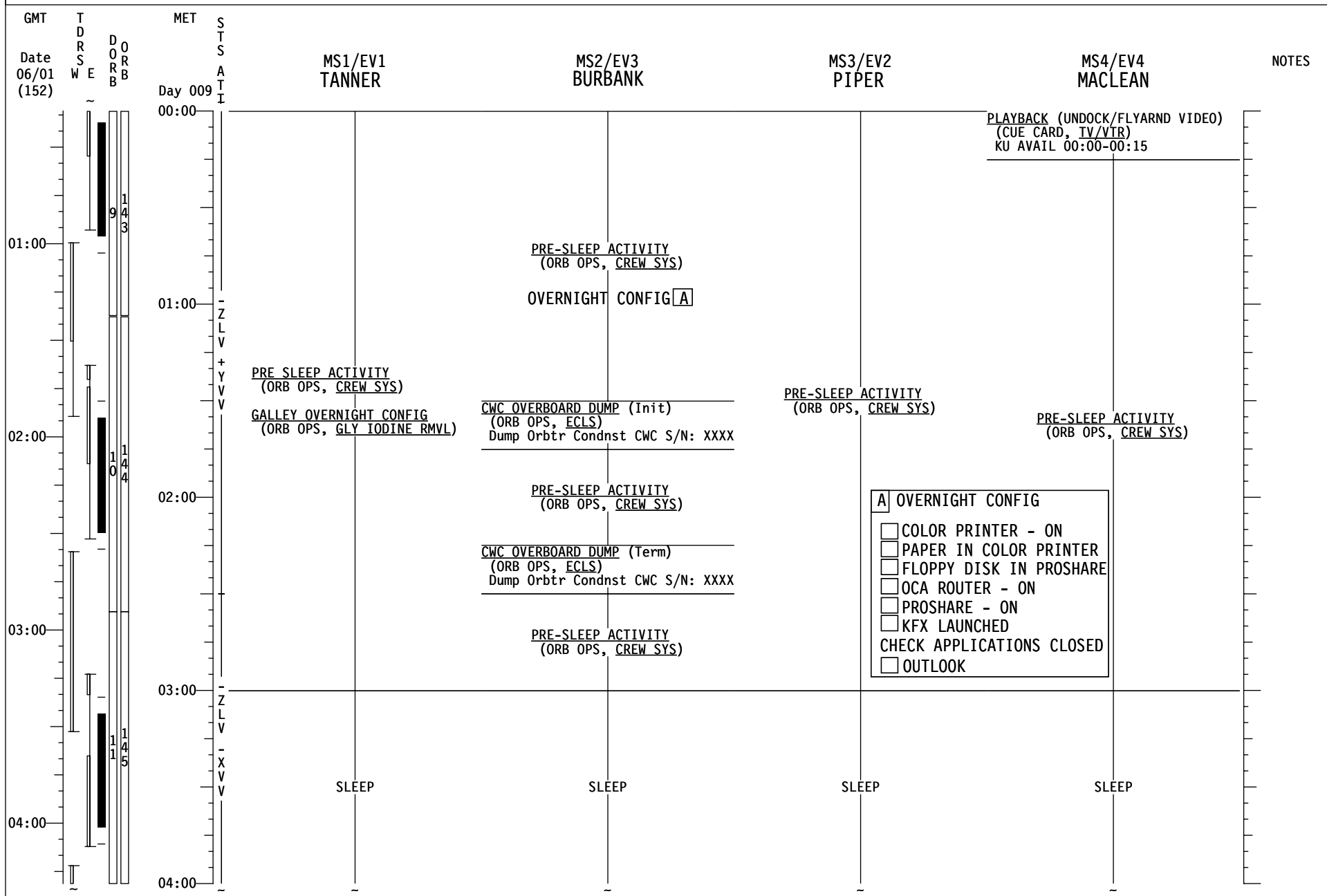
STS-115 (FD10)

GMT	T D R S E W E	D O R B B B	MET Day 008	S T S A T T I	MS1/EV1 TANNER	MS2/EV3 BURBANK	MS3/EV2 PIPER	MS4/EV4 MACLEAN	NOTES
20:00		140		U N D O C K / F L Y A R O U N D	UNDOCKING/SEPARATION T/L (RNDZ, UNDOCK/SEP T/L)	UNDOCKING/SEPARATION T/L (RNDZ, UNDOCK/SEP T/L)	UNDOCKING/SEPARATION T/L (RNDZ, UNDOCK/SEP T/L)	P/TV20 ISS DOCK/UNDOCK (PHOTO/TV, SCENES) Ops	
21:00		141			FLYAROUND (RNDZ, UNDOCK/SEP T/L)	FLYAROUND (RNDZ, UNDOCK/SEP T/L)	FLYAROUND (RNDZ, UNDOCK/SEP T/L)		
22:00		142							
23:00		143		Z L V + Y V V	P/TV19 C/L CAMR INSTALL (PHOTO/TV, SCENES) Deactivation	SHUTTLE CONDENSATE COLLECTION (ORB OPS, ECLS) Teardown			
					POST ISS EVA ENTRY PREP (EVA, POST EVA ENTRY PREP)	PGSC NETWORK RCNFG Configure PGSCs	POST ISS EVA ENTRY PREP (EVA, POST EVA ENTRY PREP)	EXERCISE	
00:00		143				COMM STRING 1 C/O (PART A) (ORB OPS, COMM/INST)			
00:00								VTR SETUP (UNDOCK/FLYARND VIDEO) (CUE CARD, TV/VTR)	
									MIDDECK STATUS CHECKS (ASSY OPS, CUE CARD)

STS-115 (FD10)



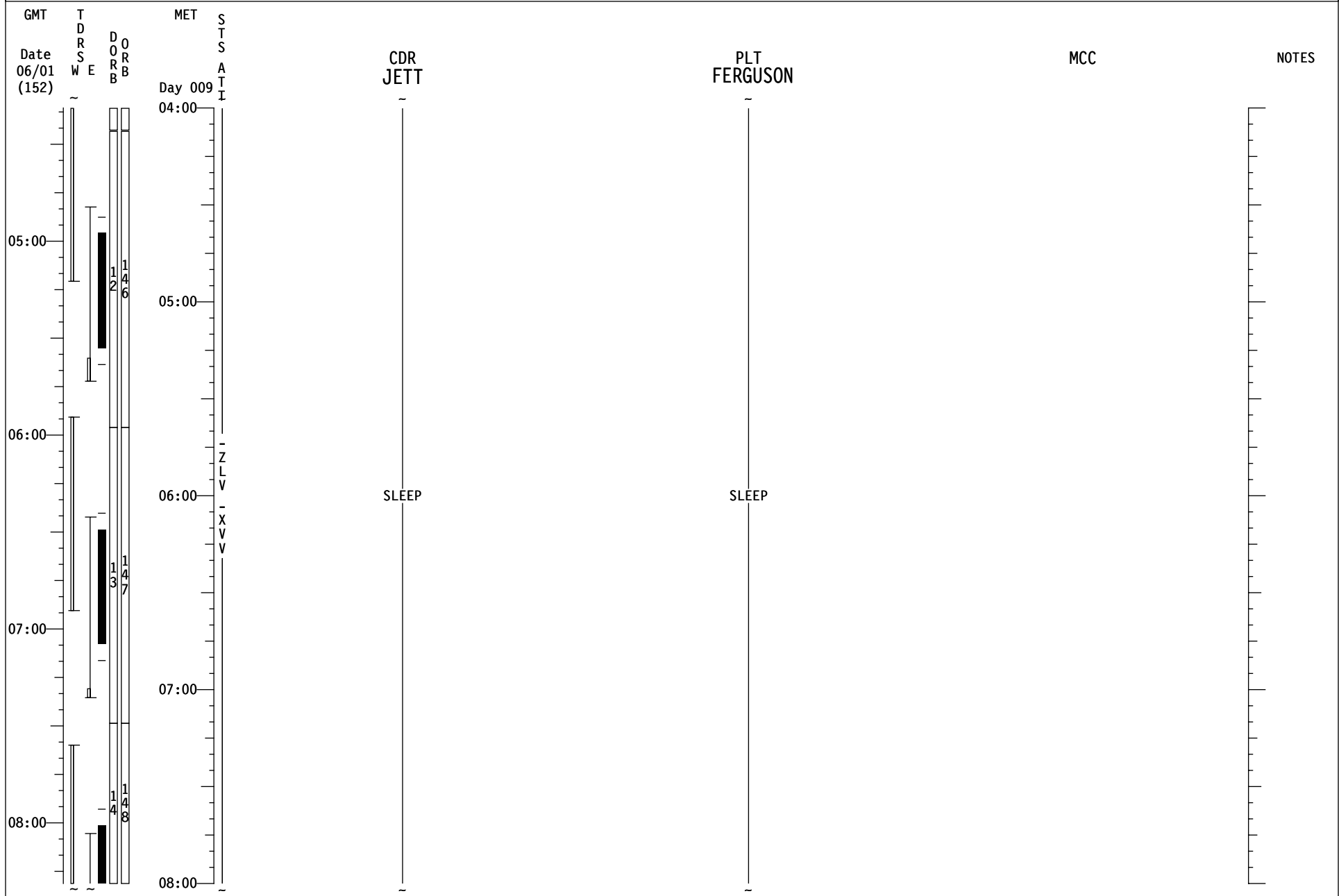
STS-115 (FD10)



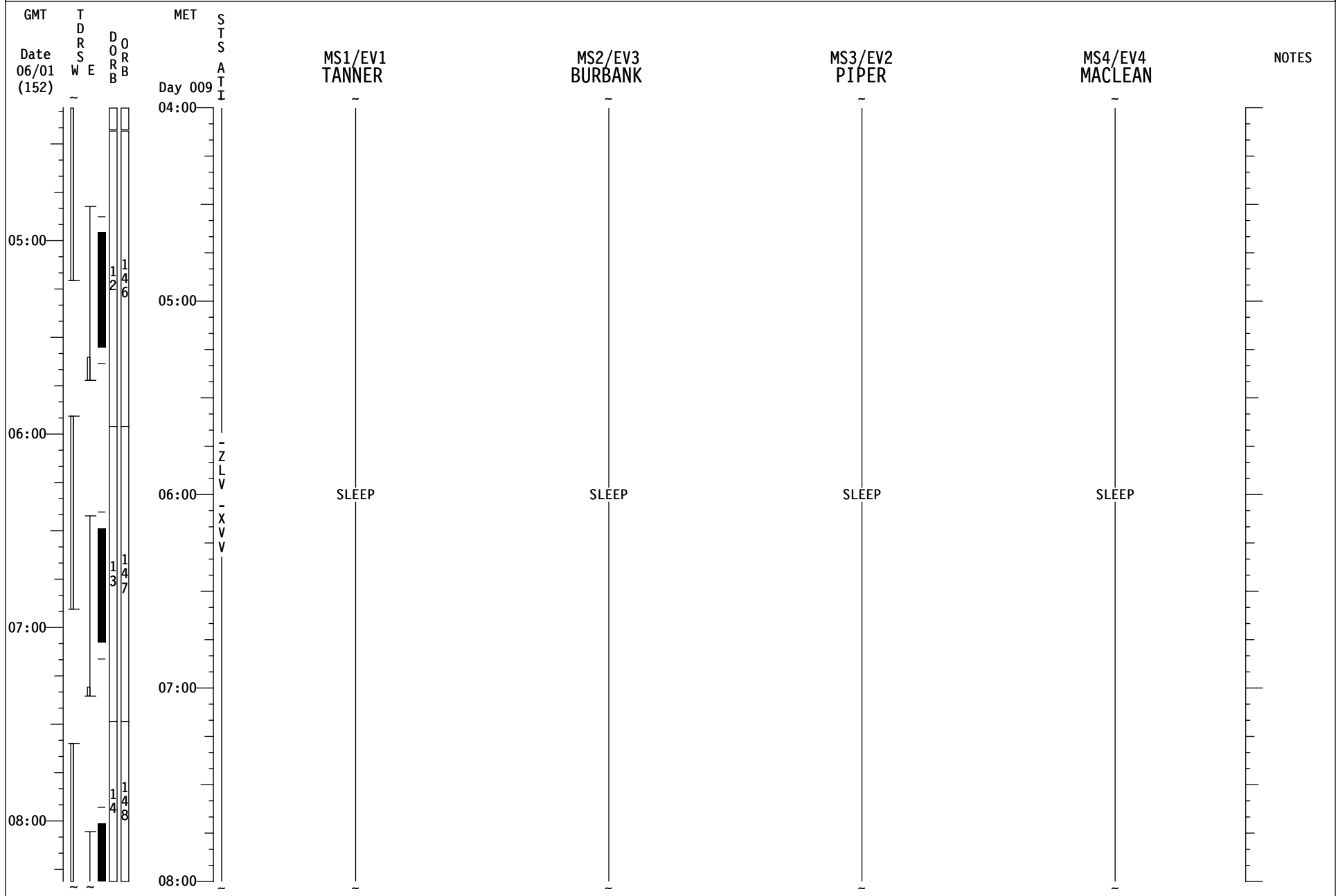
A OVERNIGHT CONFIG

- COLOR PRINTER - ON
- PAPER IN COLOR PRINTER
- FLOPPY DISK IN PROSHARE
- OCA ROUTER - ON
- PROSHARE - ON
- KFX LAUNCHED
- CHECK APPLICATIONS CLOSED
- OUTLOOK

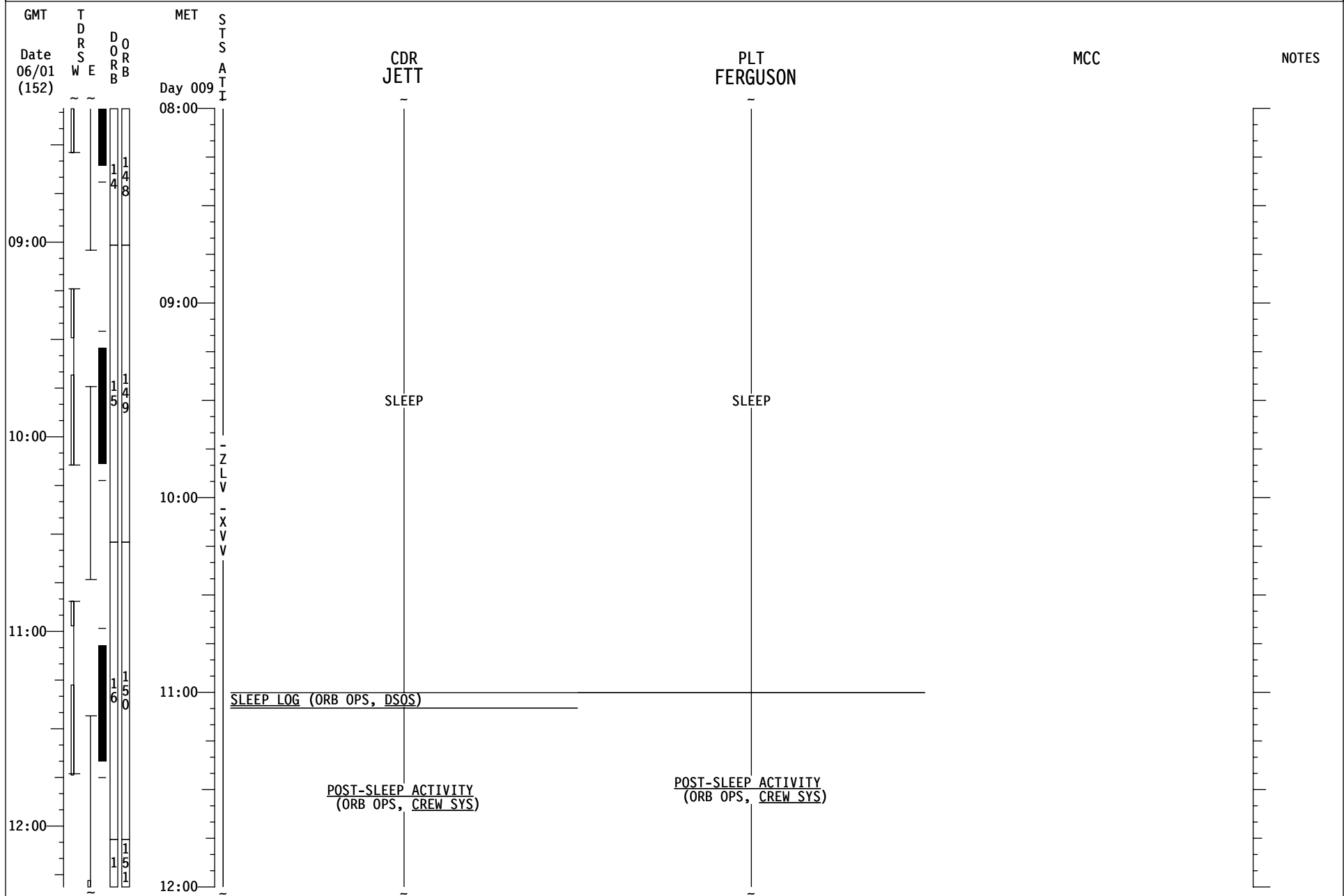
STS-115 (FD10)



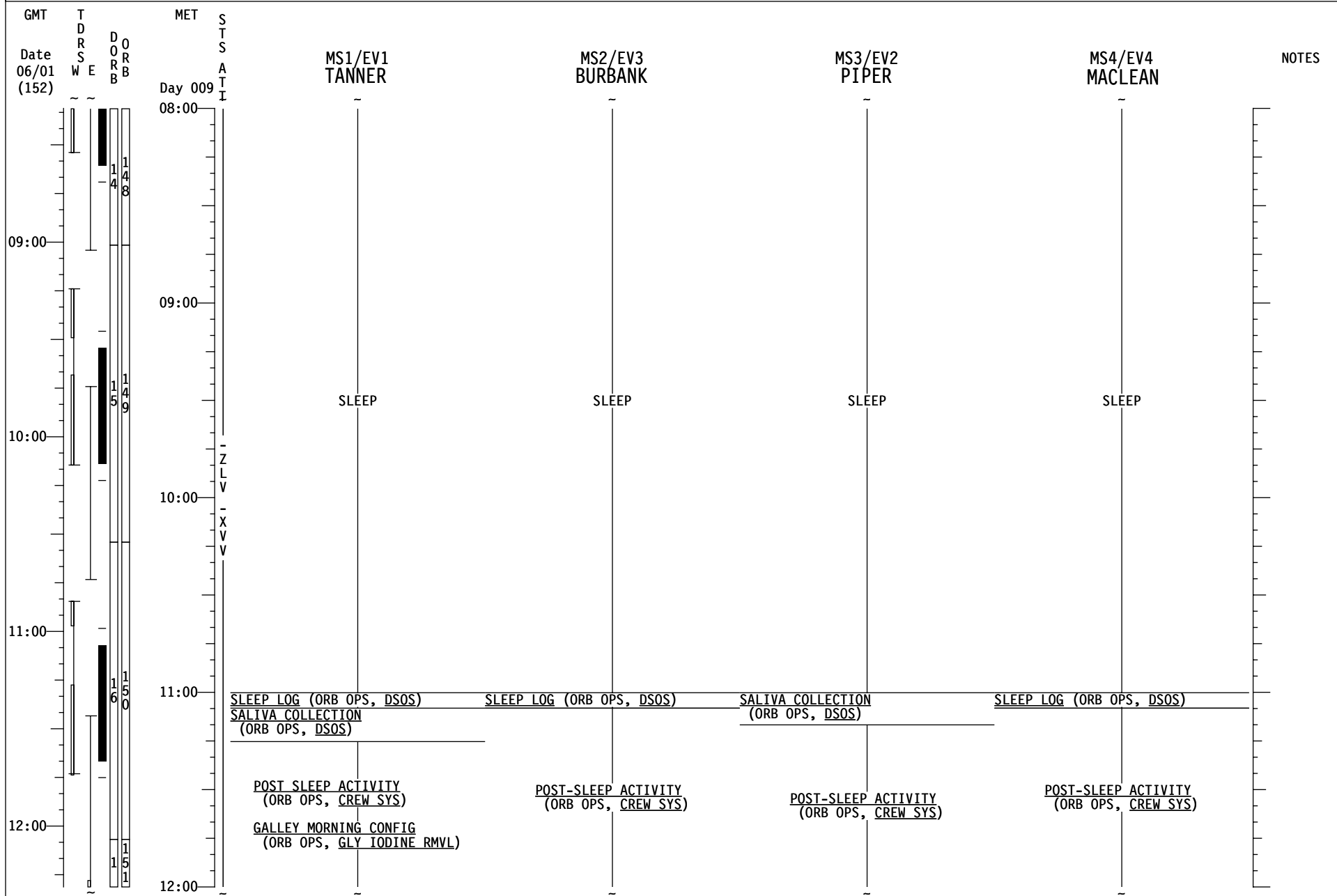
STS-115 (FD10)



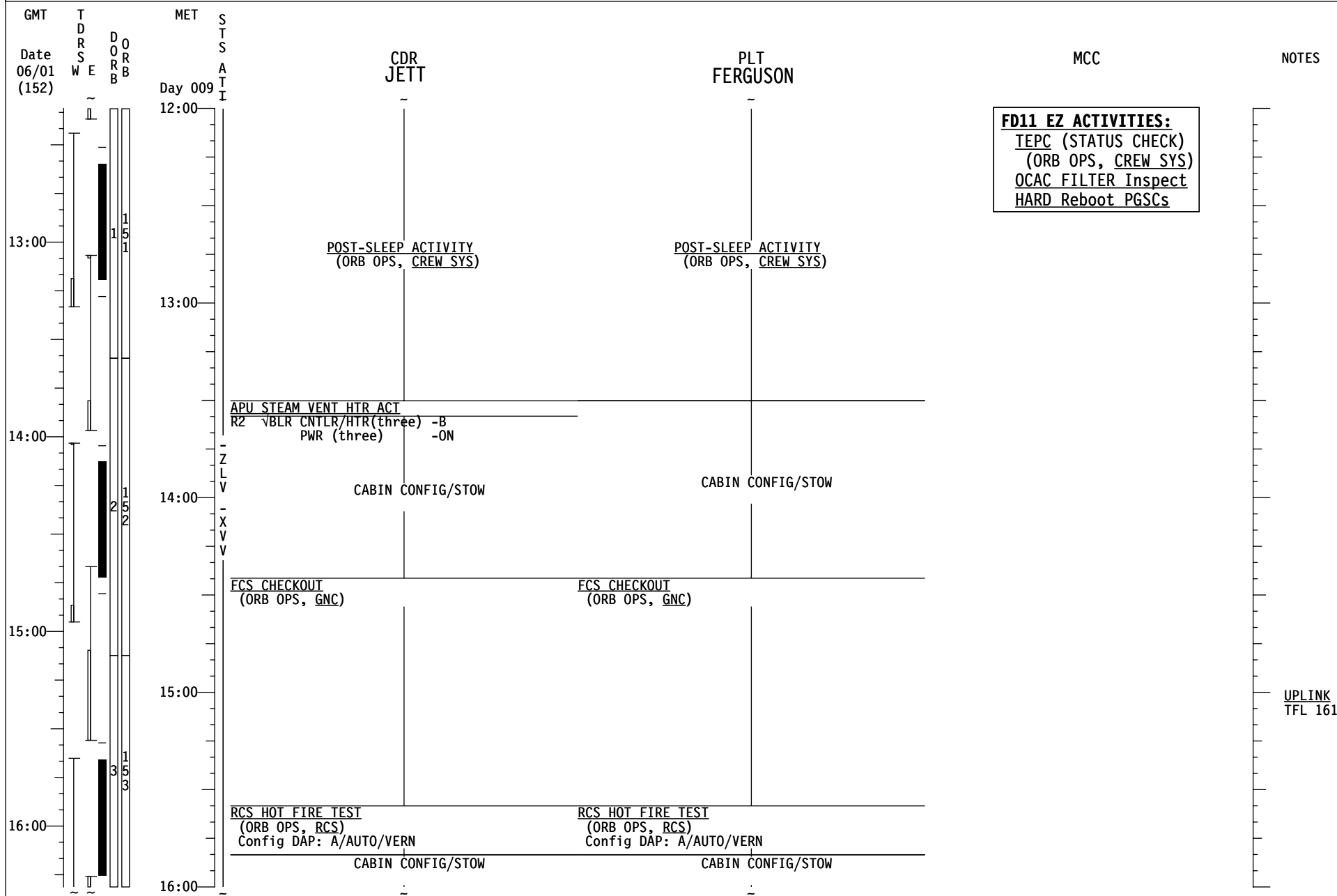
STS-115 (FD10)



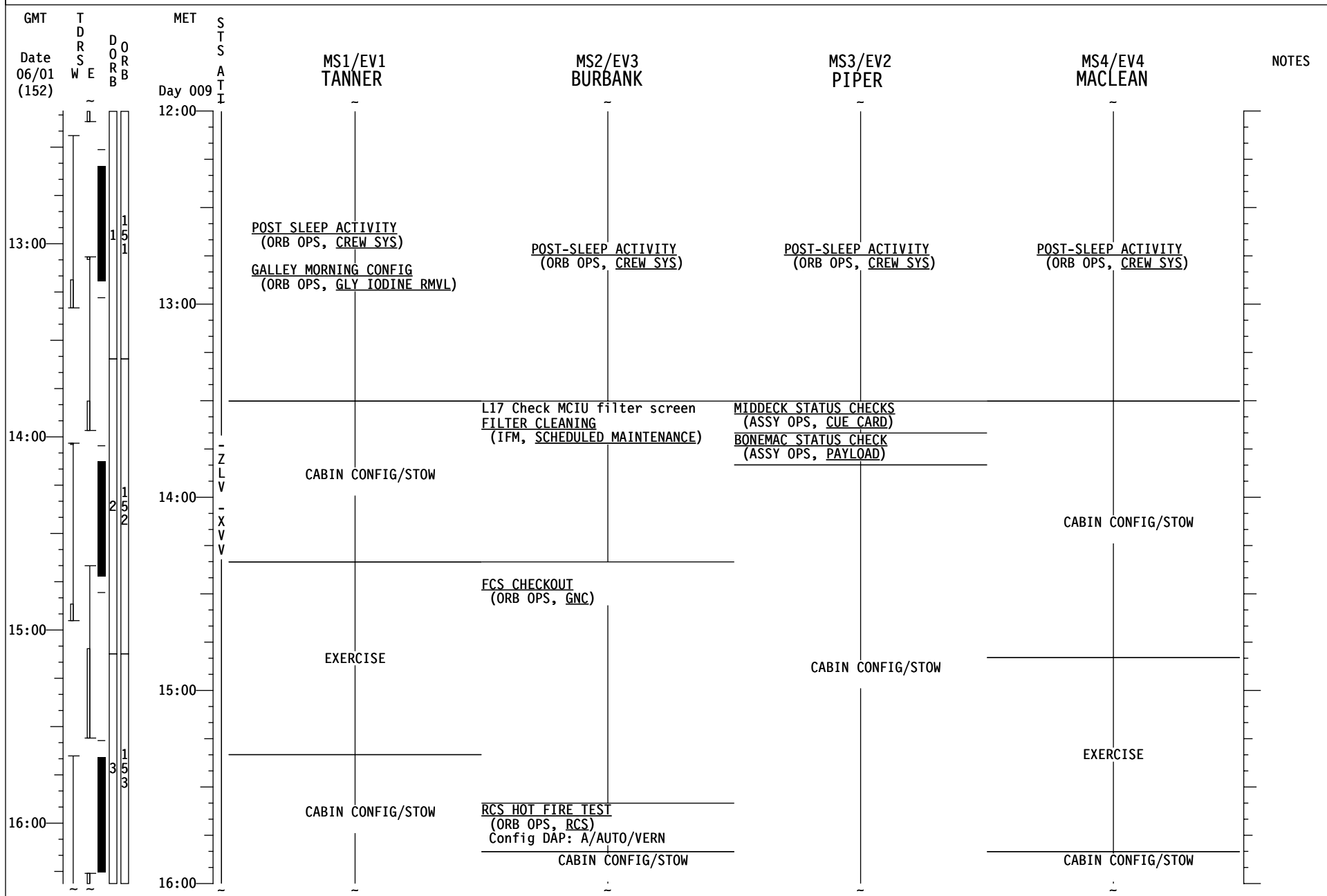
STS-115 (FD10)



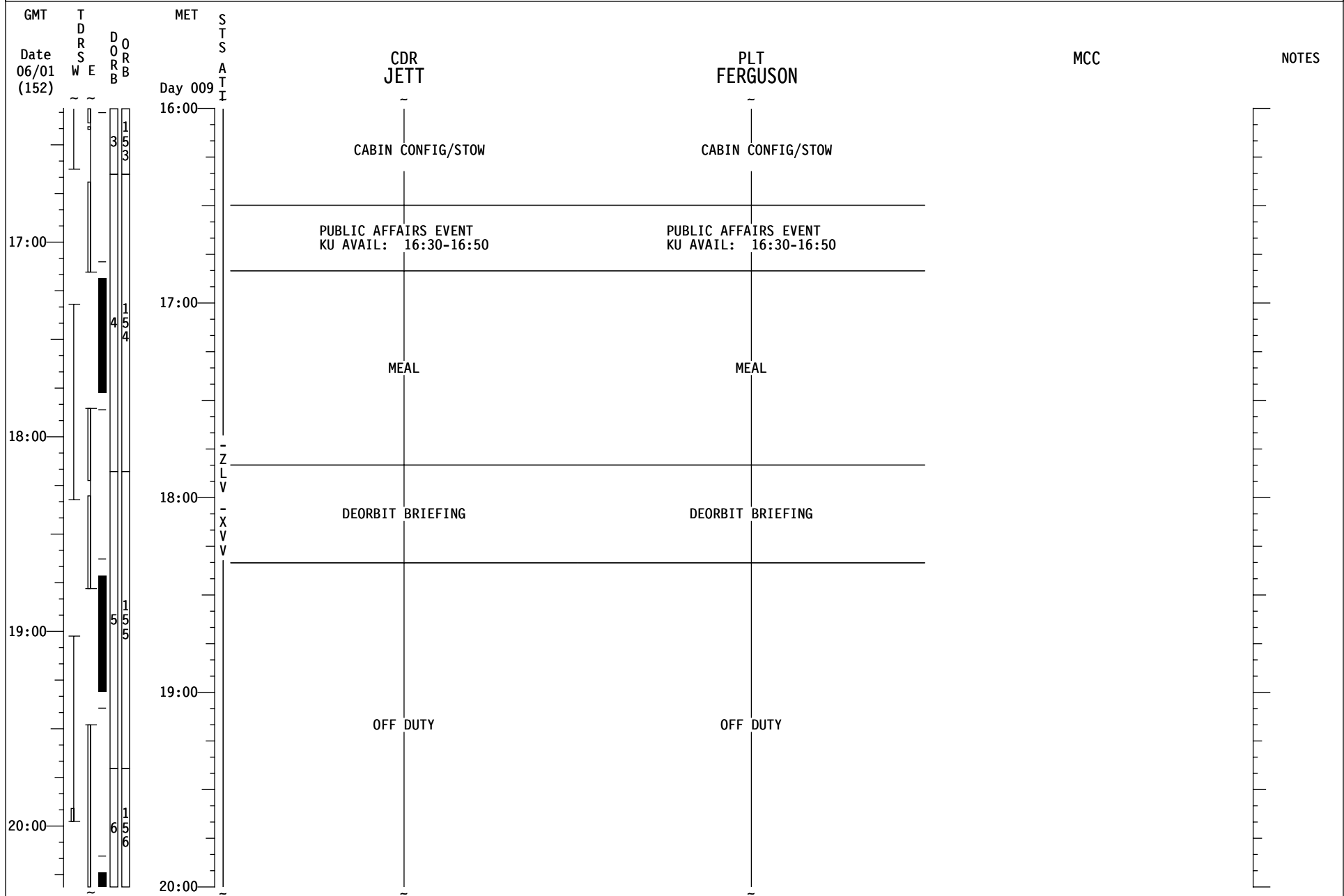
STS-115 (FD11)



STS-115 (FD11)



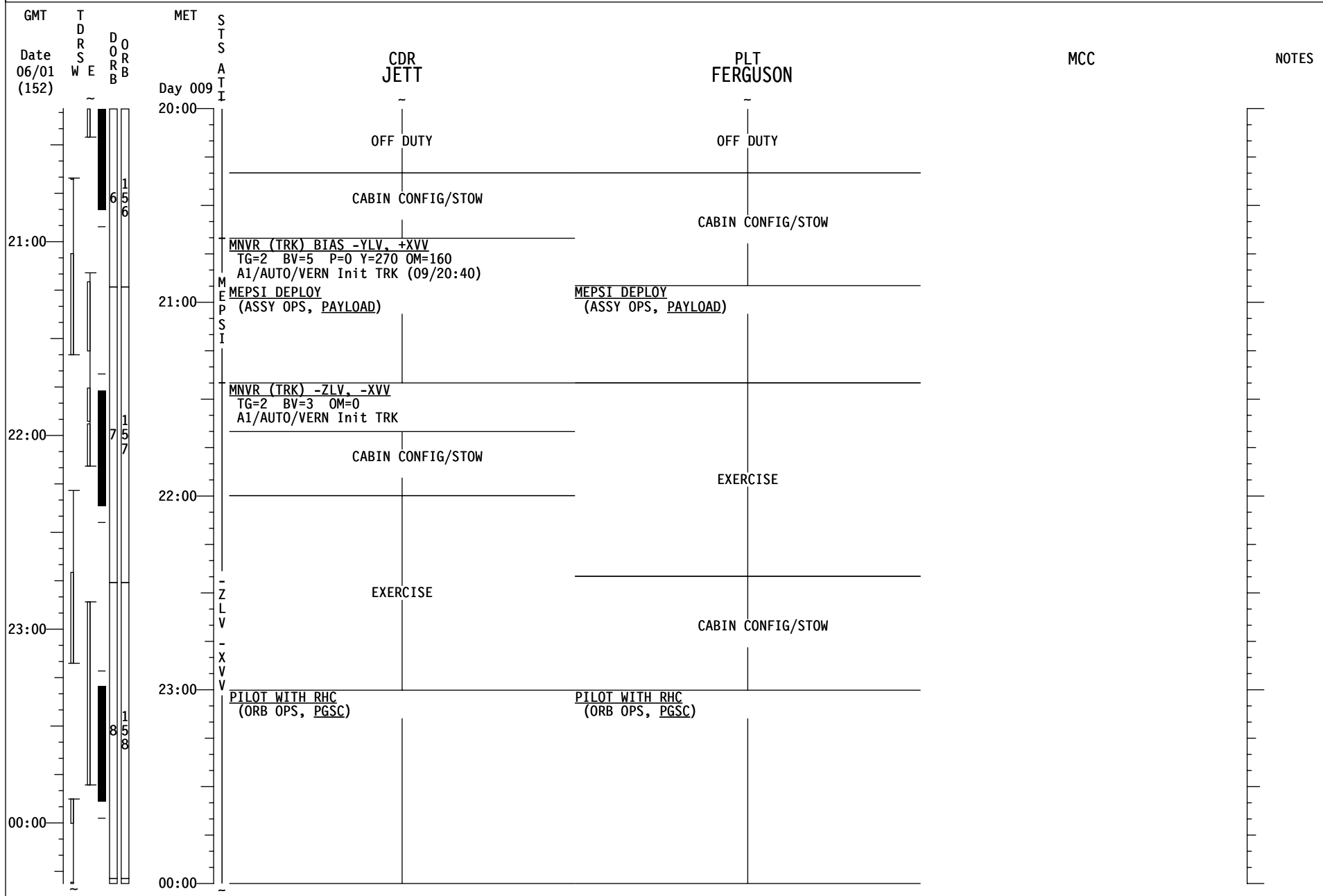
STS-115 (FD11)



STS-115 (FD11)

GMT	T D R S W E	D O R B	MET	S T S A T T I	MS1/EV1 TANNER	MS2/EV3 BURBANK	MS3/EV2 PIPER	MS4/EV4 MACLEAN	NOTES
Date 06/01 (152)			Day 009						
16:00		1 3 5 3			CABIN CONFIG/STOW				
					<u>P/TV02 IN-CABIN ACTIVITIES</u> (PHOTO/TV, SCENES) Setup	CABIN CONFIG/STOW	CABIN CONFIG/STOW	CABIN CONFIG/STOW	
17:00					PUBLIC AFFAIRS EVENT KU AVAIL: 16:30-16:50	PUBLIC AFFAIRS EVENT KU AVAIL: 16:30-16:50	PUBLIC AFFAIRS EVENT KU AVAIL: 16:30-16:50	PUBLIC AFFAIRS EVENT KU AVAIL: 16:30-16:50	
		1 4 5 4							
17:00					MEAL	MEAL	MEAL	MEAL	
18:00				Z L V					
					DEORBIT BRIEFING	DEORBIT BRIEFING	DEORBIT BRIEFING	DEORBIT BRIEFING	
				X V V					
19:00		1 5 5 5							
					OFF DUTY	OFF DUTY	OFF DUTY	OFF DUTY	
20:00		1 6 5 6							
20:00									

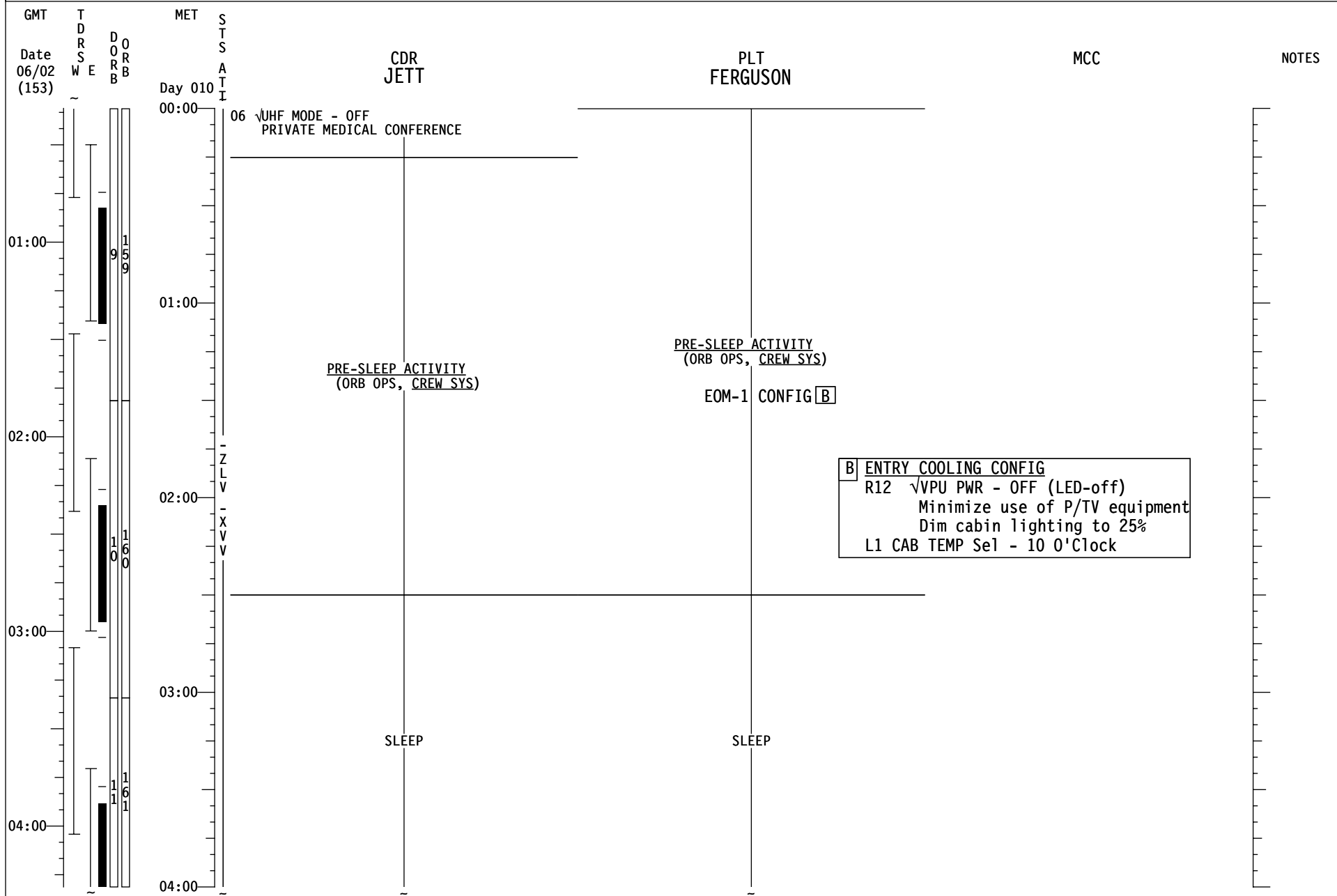
STS-115 (FD11)



STS-115 (FD11)

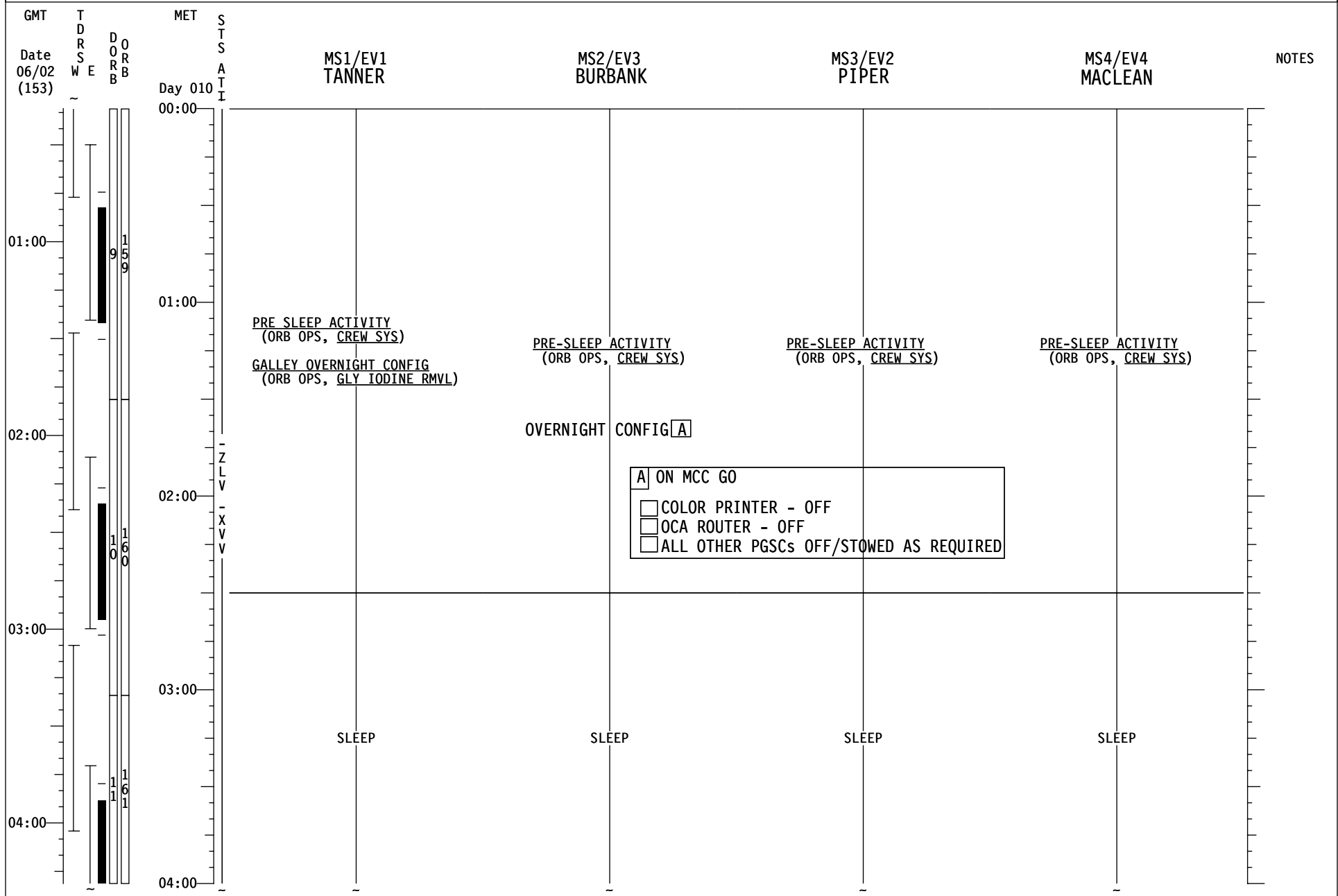
GMT	T D R S E W E	D O R B B B	MET Day 009	S T S A T T I	MS1/EV1 TANNER	MS2/EV3 BURBANK	MS3/EV2 PIPER	MS4/EV4 MACLEAN	NOTES
20:00					OFF DUTY	OFF DUTY	OFF DUTY	OFF DUTY	
21:00		156 66				CABIN CONFIG/STOW			
					P/TV07 MEPSI DEPLOY (PHOTO/TV, SCENES) Setup		EXERCISE		
21:00				M E P S I	P/TV07 MEPSI DEPLOY (PHOTO/TV, SCENES) Ops				
						EXERCISE			
					P/TV05 ENTRY VIDEO (PHOTO/TV, SCENES) Setup		LANDING-1 COMM C/O (ORB OPS, COMM/INST)		
22:00		157 77							
					P/TV06 SSV (PHOTO/TV, SCENES) Deactivation			CABIN CONFIG/STOW	
						CABIN CONFIG/STOW	CABIN CONFIG/STOW		
23:00				Z L V					
				X V V	CABIN CONFIG/STOW				
							LANDING-1 COMM C/O (ORB OPS, COMM/INST)		
						PGSC STOW (PART I) Stow STS PGSCs except for OCA ROUTER	COMM STRING 1 C/O (PART B) (ORB OPS, COMM/INST)		
00:00		158 88			CYCLE ERGOMETER OPS (ORB OPS, CREW SYS) Perform Ergometer Stow	KU-BD ANT STOW (ORB OPS, COMM/INST) Deactivate CCTV OCA S-BAND MODEM (MFX) ACT (ORB OPS, PGSC) √ MCC prior to setup, Step 3 not req'd	CABIN CONFIG/STOW	CYCLE ERGOMETER OPS (ORB OPS, CREW SYS) Perform Ergometer Stow	
00:00							MIDDECK STATUS CHECKS (ASSY OPS, CUE CARD)		

STS-115 (FD11)



B ENTRY COOLING CONFIG
 R12 VVPU PWR - OFF (LED-off)
 Minimize use of P/TV equipment
 Dim cabin lighting to 25%
 L1 CAB TEMP Sel - 10 O'Clock

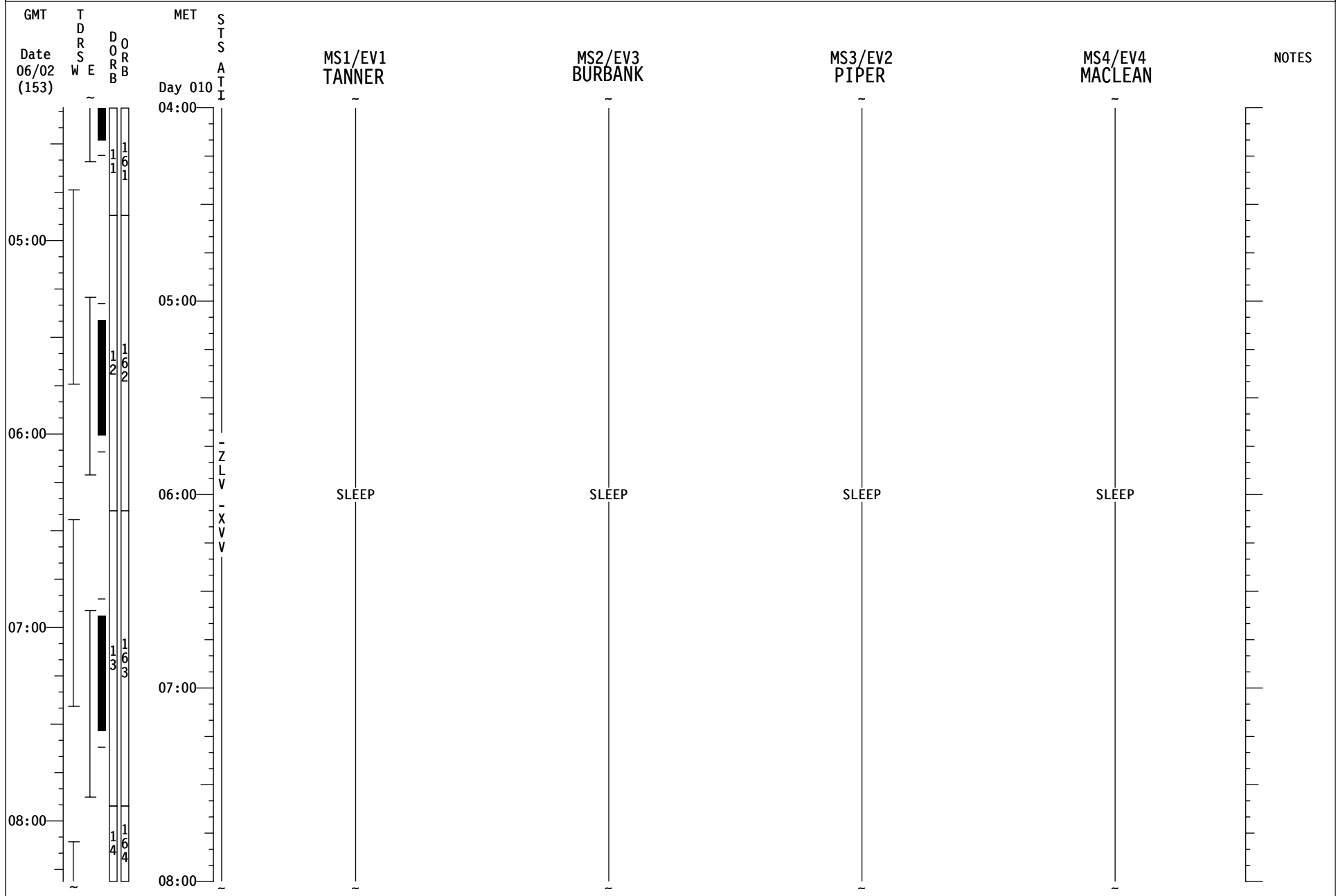
STS-115 (FD11)



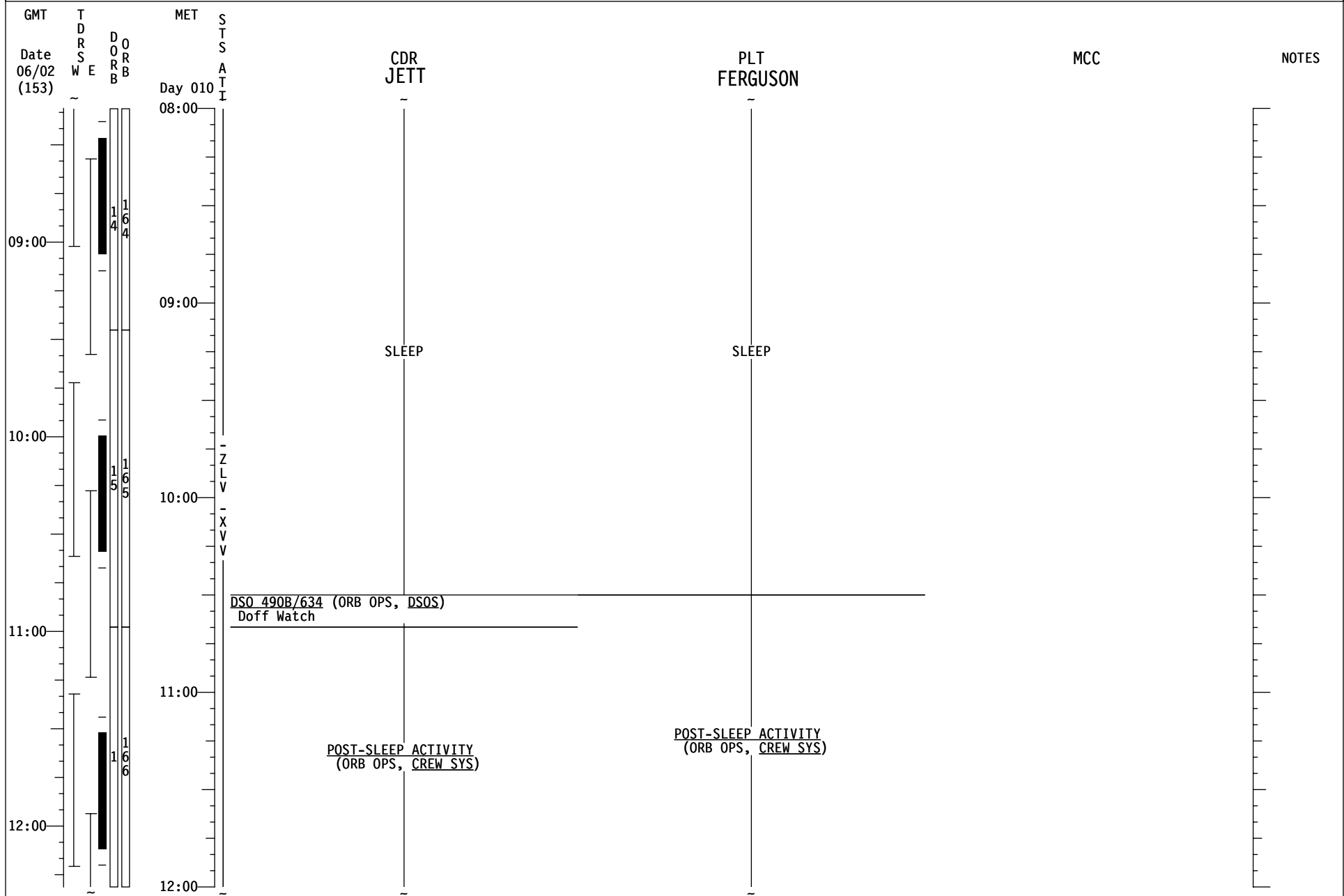
STS-115 (FD11)

GMT	T D R S W E	D O R B	MET	S T S	MCC	NOTES
Date 06/02 (153)			Day 010	A T I		
04:00		1161			CDR JETT	
05:00		1161				
06:00		1162				
06:00		1162		Z L V	SLEEP	
07:00		1163		X V V	SLEEP	
08:00		1164				
08:00		1164				

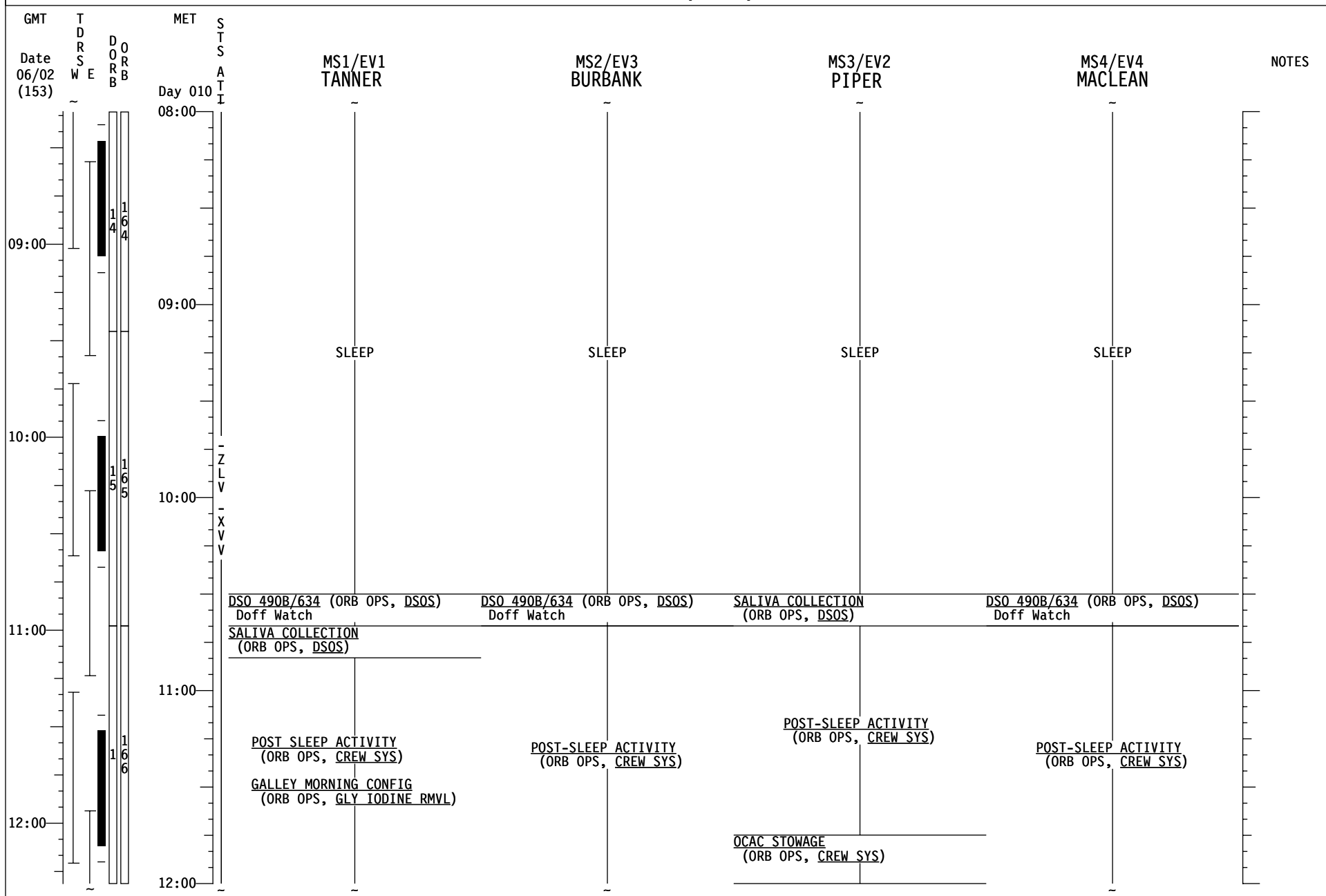
STS-115 (FD11)



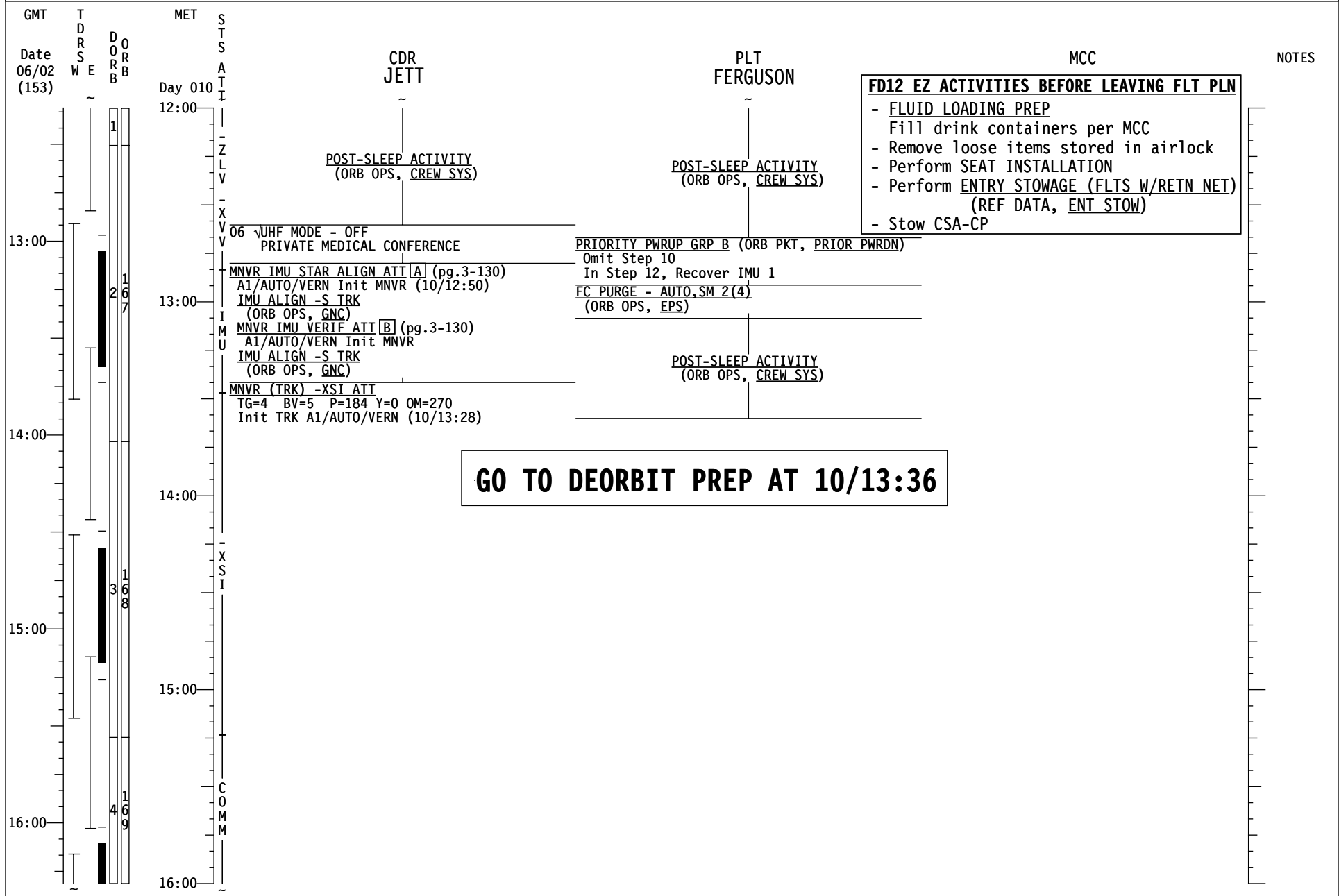
STS-115 (FD11)



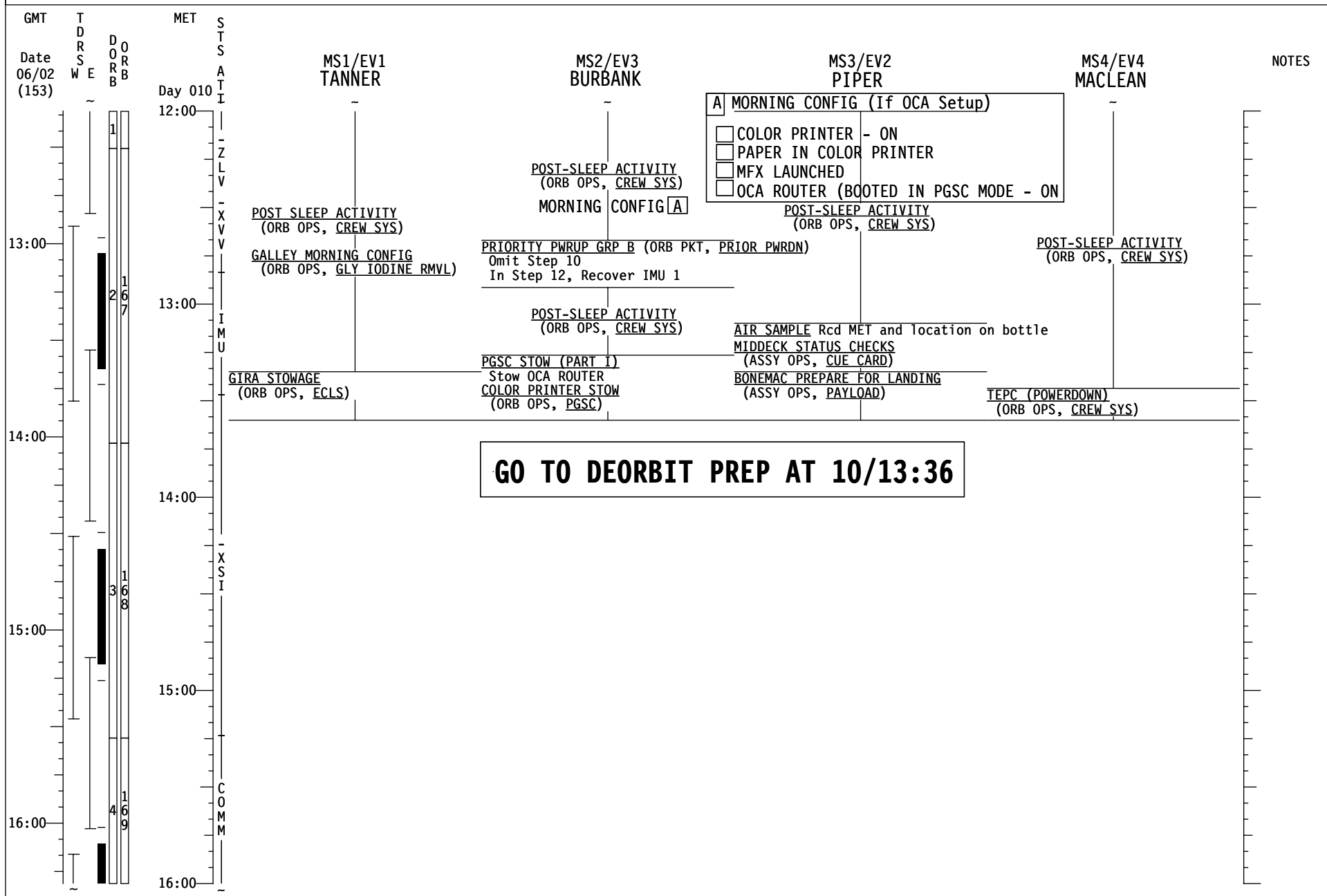
STS-115 (FD11)



STS-115 (FD12)



STS-115 (FD12)



A	IMU STAR ALIGN		
	ID: -Y: 17, ACRUX MET (10/12:45 TO 10/13:36)		
	-Z: 26, FOMALHAUT MET (10/12:55 TO 10/13:44)		
	ANG DIFF: 85.6		
	DUAL S TRKR <u>ALIGNMENT</u>	2nd ATTITUDE (SINGLE S TRKR) -Z: 17 -Y: 26	
	R 237 P 173 Y 284	R 184 45 P 208 256 Y 294 275	
	REQD ID:		
	-Y: ____, -Z: ____, ANG ERR ____, ____, ____, ____, ____, ____,		
	ANG:	1	2 3
	ΔX	() ____, ____, ____,	() ____, ____, ____,
	ΔY	() ____, ____, ____,	() ____, ____, ____,
	ΔZ	() ____, ____, ____,	() ____, ____, ____,
	EXECUTION TIME: __/__:__:__ MET		

B	IMU STAR VERIFICATION		
	ID: -Y: 81, PHACT MET (10/13:11 TO 10/14:00)		
	-Z: 33, PEACOCK MET (10/12:49 TO 10/13:38)		
	ANG DIFF: 82.6		
	DUAL S TRKR <u>ALIGNMENT</u>	2nd ATTITUDE (SINGLE S TRKR) -Z: 81 -Y: 33	
	R 211 P 155 Y 2	R 126 295 P 170 154 Y 1 347	
	REQD ID:		
	-Y: ____, -Z: ____, ANG ERR ____, ____, ____, ____, ____, ____,		
	ANG:	1	2 3
	ΔX	() ____, ____, ____,	() ____, ____, ____,
	ΔY	() ____, ____, ____,	() ____, ____, ____,
	ΔZ	() ____, ____, ____,	() ____, ____, ____,
	If any ΔX, ΔY, OR ΔZ > 0.1 Check MCC		
	EXECUTION TIME: __/__:__:__ MET		

DAP TABLE

DAP TABLE

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DAP Overview

DAP – Purpose	DAP – Purpose
A1 – Nominal	B1 – OMS & RCS Burns (ORB OPS)
A2 – PTC	B2 – Loss of VERN (Tail Only)
A3 – GG	B3 – Loss of VERN (All)
A4 – Pre/Post Deploy	B4 –
A5 – Loss of VERN (All)	B5 – COAS/HUD CAL
A6 – Loss of VERN (Tail Only)	B6 –
A7 – Rendezvous	B7 – Rendezvous
A8 – Terminal Phase	B8 – Terminal Phase
A9 – PROX OPS/Flyaround	B9 – PROX OPS/Flyaround
A10 – Docking	B10 – Docking
A11 – Auto Reboost	B11 –
A12 – Mated MNVRS & Att Hold (VRCS)	B12 – Mated MNVRS & Att Hold (ALT)
A13 – Shuttle A/L Depress Att Cntrl	B13 –
A14 – SRMS/SSRMS P3/P4 Install	B14 –
A15 –	B15 –

- CNTL ACC = 0 Orbiter alone with unloaded RMS
 = 1 Mated Control - VRCS - 12A Initial Config, SRMS P3/P4 : low hover & port side
 = 2 Mated Control - ALT - 12A Initial Config
 = 3 Mated Control - VRCS - 12A Final Config, SSRMS P3/P4 : pre-install
 = 4 Mated Control - ALT - 12A Final Config
 = 5 Mated Control - VRCS - P3/P4 Hand-off SRMS - SSRMS
 = 6 Mated Control - VRCS - SSRMS P3/P4 : OCAS 1
 = 7 Mated Control - VRCS - SSRMS P3/P4 : OCAS 2
 = 8 Mated Control - VRCS & ODS Depressurized - 12A Final Config
 = 9 not used

DAPs for mated operations are based on analysis from GNC, PDRS, and C. S. Draper Labs
 CNTL ACC 1-7 assume Shuttle airlock pressurized
 SRMS-SSRMS P3/P4 operations with Shuttle ALT DAP are not analyzed
 ALT DAP control with Shuttle airlock depressurized is not analyzed

UNIV PTG

TGT ID = 1 Orbiting Vehicle = 2 Earth Center = 3 Earth Target Input LAT (± 90) LON (± 180 , + = East) ALT (-3444.0 to 20000.0 nm) = 4 Sun Center = 5 Celestial Target Input RA (0-359.99) DEC (± 90) = 11-110 Nav Stars	
BODY VECTOR = 1 +X* = 2 -X* = 3 -Z* = 4 -Y Star Tracker* = 5 Selectable Input P (0-359.99) Y (270-359.99, 0-90) *Input OM → OM (0-359.99)	I
MON AXIS = 1 +X = 2 -X	

STS-115 DAP A1 THROUGH A8 CONFIGURATIONS

	ITEM #	A1	A2	A3	A4	A5	A6	A7	A8
PRI									
ROT RATE	10 (50)	0.2000	0.4000	0.2000	0.5000	0.2000	0.2000	0.2000	0.0500
ATT DB	11 (51)	5.00	1.00	0.30	3.00	5.00	5.00	2.00	2.00
RATE DB	12 (52)	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
ROT PLS	13 (53)	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100
COMP	14 (54)	.000	.000	.000	.000	.000	.000	.000	.000
P OPTION	15 (55)	ALL	ALL	ALL	ALL	ALL	TAIL	ALL	ALL
Y OPTION	16 (56)	ALL	ALL	TAIL	ALL	ALL	TAIL	ALL	ALL
TRAN PLS	17 (57)	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100
ALT									
RATE DB	18 (58)	0.200	0.200	0.070	0.200	0.070	0.070	0.100	0.100
JET OPT	19 (59)	ALL	ALL	ALL	ALL	ALL	TAIL	ALL	ALL
# JETS	20 (60)	2	2	1	2	1	1	2	2
ON TIME	21 (61)	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
DELAY	22 (62)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VERN									
ROT RATE	23 (63)	0.2000	0.4000	0.0080	0.2000	0.0500	0.0500	0.0160	0.0500
ATT DB	24 (64)	1.000	1.000	0.070	1.000	1.000	1.000	1.000	1.000
RATE DB	25 (65)	.020	.020	.010	.020	.020	.020	.020	.020
ROT PLS	26 (66)	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.050
COMP	27 (67)	.000	.000	.000	.000	.000	.000	.000	.000
CNTL ACC	28 (68)	0	0	0	0	0	0	0	0
PURPOSE		NOMINAL	PTC	GG	PRE/POST DEPLOY	LOSS OF VERN (ALL)	LOSS OF VERN (TAIL ONLY)	RNDZ	TERMINAL PHASE
BOLD/ITALIC indicates change from I-Load.									

STS-115 DAP A9 -- A15 CONFIGURATIONS

	ITEM #	A9	A10	A11	A12	A13	A14	A15
PRI								
ROT RATE	10 (50)	0.1300	0.0500	0.1000	0.1000	0.1000	0.0500	0.1000
ATT DB	11 (51)	1.00	0.50	15.00	5.00	5.00	5.00	40.00
RATE DB	12 (52)	0.10	0.10	0.20	0.20	0.20	0.20	0.20
ROT PLS	13 (53)	0.100	0.100	0.100	0.040	0.040	0.040	0.003
COMP	14 (54)	.000	.000	.000	.000	.000	.000	.000
P OPTION	15 (55)	TAIL	TAIL	TAIL	TAIL	TAIL	TAIL	TAIL
Y OPTION	16 (56)	TAIL	TAIL	TAIL	TAIL	TAIL	TAIL	TAIL
TRAN PLS	17 (57)	0.050	0.050	0.100	0.010	0.010	0.010	0.010
ALT								
RATE DB	18 (58)	0.100	0.100	0.070	0.070	0.070	0.120	0.200
JET OPT	19 (59)	TAIL	TAIL	TAIL	TAIL	TAIL	TAIL	TAIL
# JETS	20 (60)	2	2	3	3	3	3	2
ON TIME	21 (61)	0.08	0.08	0.08	0.08	0.08	0.08	0.08
DELAY	22 (62)	0.00	0.00	12.00	11.04	11.04	11.04	0.00
VERN								
ROT RATE	23 (63)	0.1300	0.0500	0.1000	0.1000	0.1000	0.0500	0.2000
ATT DB	24 (64)	1.000	0.500	5.000	3.000	3.000	5.000	5.000
RATE DB	25 (65)	.020	.020	.050	.050	.080	.150	.050
ROT PLS	26 (66)	0.050	0.050	0.010	0.002	0.002	0.002	0.001
COMP	27 (67)	.000	.000	.000	.000	.000	.000	.000
CNTL ACC	28 (68)	0	0	1,2,3,4*	1,3**	8***	1,3,5,6,7****	7
PURPOSE		PROX OPS/ FLYAROUND	DOCKING	AUTO REBOOST	MATED MNVRS & HOLD (VRCS)	A/L DEPRESS ATTITUDE CONTROL POST-INSTALL	SRMS/SSRMS P3/P4 INSTALL	
<p>BOLD/ITALIC indicates change from I-Load. * 1 for Configs 3&4 pre-install, 3 post-install. 2 for Configs 1&2 pre-install, 4 post-install. ** 1 pre-install, 3 post-install *** 8 for VRCS, post-install only. ****reference loads constraints matrix</p>								

STS-115 DAP B1 THROUGH B8 CONFIGURATIONS

	ITEM #	B1	B2	B3	B4	B5	B6	B7	B8
PRI									
ROT RATE	10 (50)	0.5000	0.2000	0.2000	0.2000	0.2000	0.5000	0.5000	0.0500
ATT DB	11 (51)	3.00	3.00	3.00	0.30	3.00	3.00	2.00	2.00
RATE DB	12 (52)	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
ROT PLS	13 (53)	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040
COMP	14 (54)	.000	.000	.000	.000	.000	.000	.000	.000
P OPTION	15 (55)	ALL	TAIL	ALL	TAIL	TAIL	ALL	ALL	ALL
Y OPTION	16 (56)	ALL	TAIL	ALL	TAIL	TAIL	ALL	ALL	ALL
TRAN PLS	17 (57)	0.100	0.020	0.020	0.020	0.020	0.020	0.050	0.050
ALT									
RATE DB	18 (58)	0.200	0.070	0.070	0.100	0.200	0.200	0.100	0.100
JET OPT	19 (59)	ALL	TAIL	ALL	ALL	ALL	ALL	ALL	ALL
# JETS	20 (60)	2	1	1	2	2	2	2	2
ON TIME	21 (61)	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
DELAY	22 (62)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VERN									
ROT RATE	23 (63)	0.2000	0.2000	0.2000	0.0080	0.0160	0.2000	0.2000	0.0500
ATT DB	24 (64)	1.000	1.000	1.000	0.100	0.033	1.000	1.000	1.000
RATE DB	25 (65)	.020	.020	.020	.010	.020	.020	.020	.020
ROT PLS	26 (66)	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.020
COMP	27 (67)	.000	.000	.000	.000	.000	.000	.000	.000
CNTL ACC	28 (68)	0	0	0	0	0	0	0	0
PURPOSE		NOMINAL OMS & RCS BURNS	LOSS OF VERN (TAIL ONLY)	LOSS OF VERN (NOSE/TAIL)		COAS/HUD CAL		RNDZ	TERMINAL PHASE
BOLD/ITALIC indicates change from I-Load.									

STS-115 DAP B9 THROUGH B15 CONFIGURATIONS

	ITEM #	B9	B10	B11	B12	B13	B14	B15
PRI								
ROT RATE	10 (50)	0.1300	0.0500	0.5000	0.1000	0.5000	0.5000	0.1000
ATT DB	11 (51)	1.00	0.50	3.00	5.00	3.00	3.00	40.00
RATE DB	12 (52)	0.10	0.10	0.20	0.20	0.20	0.20	0.20
ROT PLS	13 (53)	0.040	0.040	0.040	0.040	0.040	0.040	0.003
COMP	14 (54)	.000	.000	.000	.000	.000	.000	.000
P OPTION	15 (55)	TAIL	TAIL	ALL	TAIL	ALL	ALL	TAIL
Y OPTION	16 (56)	TAIL	TAIL	ALL	TAIL	ALL	ALL	TAIL
TRAN PLS	17 (57)	0.010	0.010	0.100	0.010	0.100	0.100	0.010
ALT								
RATE DB	18 (58)	0.100	0.100	0.200	0.070	0.200	0.200	0.200
JET OPT	19 (59)	TAIL	TAIL	ALL	TAIL	ALL	ALL	TAIL
# JETS	20 (60)	2	2	2	3	2	2	2
ON TIME	21 (61)	0.08	0.08	0.08	0.08	0.08	0.08	0.08
DELAY	22 (62)	0.00	0.00	0.00	11.04	0.00	0.00	0.00
VERN								
ROT RATE	23 (63)	0.1300	0.0500	0.2000	0.1000	0.2000	0.2000	0.2000
ATT DB	24 (64)	1.000	0.500	1.000	3.000	1.000	1.000	5.000
RATE DB	25 (65)	.020	.020	.020	.050	.020	.020	.050
ROT PLS	26 (66)	0.020	0.020	0.002	0.002	0.002	0.002	0.001
COMP	27 (67)	.000	.000	.000	.000	.000	.000	.000
CNTL ACC	28 (68)	0	0	0	2,4*	0	0	7
PURPOSE		PROX OPS/ FLYAROUND	DOCKING		MATED MNVRS & HOLD (ALT PRCS)			
<p>BOLD/ITALIC indicates change from I-Load. * 2 pre-install, 4 post-install **8 for VRCS, post-install only.</p>								

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ATTITUDE TIMELINE

ATTITUDE
TIMELINE

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Attitude Timeline

MET/GMT	ORBITER		REF ATT/REMARKS	EVENT
	MNVR OPTION	DAP E/S/ β		
1 000/00:39:00 M 143/00:57:46 G	INRTL R = 64.00 MNVR P = 59.00 Y = 24.00 MNVR TRN/AUTO/PRI HOLD (same)	RATE 0.5000 DB AT 3.50 DB RT 0.20 SUN R 65 P 74 $\beta = 60$		OMS-2 Posigrade Heads Up TIG 0/00:38:08
2 000/01:12:00 M 23:45 143/01:30:46 G 42:31	LVLH TRACK TGT = 2 P = 90.00 BV = 3 Y = 0.00 OM = 270.00 MNVR A6/AUTO/ALT HOLD (same)	RATE 0.2000 DB AT 5.00 DB RT 0.070 EARTH R 0 P 90 $\beta = 60$	LVLH R= 0.00 P=180.00 Y= 90.00	PLBD Opening -ZLV +YVV
3 000/03:25:00 M 33:29 143/03:43:46 G 52:15	INRTL R = 64.00 MNVR P = 60.00 Y = 25.00 MNVR B1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020 SUN R 64 P 73 $\beta = 59$		NC-1 Posigrade Heads Down TIG 0/03:35:16
4 000/03:36:00 M 50:57 143/03:54:46 G 04:09:43	LVLH TRACK TGT = 2 P = 90.00 BV = 3 Y = 0.00 OM = 0.00 MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020 EARTH R 0 P 90 $\beta = 59$	LVLH R= 0.00 P=180.00 Y= 0.00	-ZLV -XVV
5 000/16:40:00 M 55:00 143/16:58:46 G 17:13:46	INRTL R = 66.00 MNVR P = 60.00 Y = 27.00 MNVR B1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020 SUN R 62 P 72 $\beta = 57$		NC-2 Posigrade Heads Down TIG 0/16:52:40
6 000/16:55:00 M 17:10:00 143/17:13:46 G 28:46	LVLH TRACK TGT = 2 P = 90.00 BV = 3 Y = 0.00 OM = 0.00 MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020 EARTH R 0 P 90 $\beta = 57$	LVLH R= 0.00 P=180.00 Y= 0.00	-ZLV -XVV
7 000/19:15:00 M 30:00 143/19:33:46 G 48:46	INRTL R = 63.00 MNVR P = 31.00 Y = 321.00 MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020 SUN R 62 P 109 $\beta = 56$		NPC TIG 0/19:32:13
8 000/19:35:00 M 50:00 143/19:53:46 G 20:08:46	LVLH TRACK TGT = 2 P = 90.00 BV = 3 Y = 0.00 OM = 0.00 MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020 EARTH R 0 P 90 $\beta = 56$	LVLH R= 0.00 P=180.00 Y= 0.00	-ZLV -XVV
9 001/01:25:00 M 39:59 144/01:43:46 G 58:45	INRTL R = 68.00 MNVR P = 60.00 Y = 28.00 MNVR B1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020 SUN R 60 P 71 $\beta = 55$		NC-3 Posigrade Heads Down TIG 1/01:44:27
10 001/01:50:00 M 02:05:00 144/02:08:46 G 23:46	LVLH TRACK TGT = 2 P = 90.00 BV = 3 Y = 0.00 OM = 0.00 MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020 EARTH R 0 P 90 $\beta = 55$	LVLH R= 0.00 P=180.00 Y= 0.00	-ZLV -XVV

ALL ORBITER DATA IN
MEAN OF 1950 AND PYR EULER SEQUENCE

Attitude Timeline

MET/GMT	ORBITER		REF ATT/REMARKS	EVENT
	MNVR OPTION	DAP E/S/ β		
11 001/13:05:00 M 12:30 144/13:23:46 G 31:16	LVLH TRACK TGT = 2 P = 90.00 BV = 3 Y = 0.00 OM = 270.00 MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020 EARTH R 0 P 90 $\beta = 53$	LVLH R= 0.00 P=180.00 Y= 90.00	-ZLV +YVV Waste Dump
12 001/14:40:00 M 51:30 144/14:58:46 G 15:10:16	INRTL R = 252.00 MNVR P = 46.00 Y = 349.00 MNVR A7/AUTO/ALT HOLD (same)	RATE 0.2000 DB AT 2.00 DB RT 0.100 SUN R 234 P 95 $\beta = 52$		NH Posigrade Heads Up TIG 1/14:58:22
13 001/15:00:00 M 144/15:18:46 G	HOLD A7/AUTO/ALT	RATE 0.2000 DB AT 2.00 DB RT 0.100 EARTH R 180 P 110 $\beta = 52$	LVLH R=359.65 HOLD P= 20.40 Y=359.71	LVLH Hold Between Burns
14 001/15:42:00 M 43:24 144/16:00:46 G 02:10	INRTL R = 107.00 MNVR P = 228.00 Y = 7.00 MNVR A7/AUTO/ALT HOLD (same)	RATE 0.2000 DB AT 2.00 DB RT 0.100 SUN R 307 P 87 $\beta = 52$		NC-4 Posigrade Heads Up TIG 1/15:44:37
15 001/15:46:00 M 49:38 144/16:04:46 G 08:24	LVLH TRACK TGT = 2 P = 0.00 BV = 1 Y = 0.00 OM = 0.00 MNVR B7/AUTO/ALT HOLD A7/AUTO/VERN	RATE 0.5000 DB AT 2.00 DB RT 0.100 EARTH R 90 P 0 $\beta = 52$	LVLH R= 0.00 P=270.00 Y= 0.00	-Z Target Track
16 001/15:50:00 M 16:36:40 144/16:08:46 G 55:26	LVLH TRACK TGT = 2 P = 346.00 BV = 5 Y = 0.00 OM = 0.00 MNVR A7/AUTO/VERN HOLD (same)	RATE 0.0050 DB AT 1.000 DB RT 0.020 EARTH R 180 P 14 $\beta = 52$	LVLH R= 0.00 P=284.00 Y= 0.00	-Z Target Track
17 001/16:37:00 M 17:08:07 144/16:55:46 G 17:26:53	LVLH TRACK TGT = 2 P = 0.00 BV = 1 Y = 0.00 OM = 0.00 MNVR A7/AUTO/ALT HOLD (same)	RATE 0.0075 DB AT 2.00 DB RT 0.100 EARTH R 288 P 0 $\beta = 52$	LVLH R= 0.00 P=270.00 Y= 0.00	-Z Target Track
18 001/17:10:00 M 16:25 144/17:28:46 G 35:11	INRTL R = 107.00 MNVR P = 229.00 Y = 5.00 MNVR A7/AUTO/ALT HOLD (same)	RATE 0.2000 DB AT 2.00 DB RT 0.100 SUN R 307 P 88 $\beta = 52$		Ti Posigrade Heads Up TIG 1/17:16:58
19 001/17:18:00 M 21:37 144/17:36:46 G 40:23	LVLH TRACK TGT = 2 P = 0.00 BV = 1 Y = 0.00 OM = 0.00 MNVR B7/AUTO/ALT HOLD A7/AUTO/VERN	RATE 0.5000 DB AT 2.00 DB RT 0.100 EARTH R 180 P 0 $\beta = 52$	LVLH R= 0.00 P=270.00 Y= 0.00	-Z Target Track
20 001/17:22:00 M 18:22:00 144/17:40:46 G 18:40:46	LVLH TRACK TGT = 2 P = 270.00 BV = 5 Y = 0.00 OM = 0.00 MNVR A7/AUTO/VERN HOLD (same)	RATE 0.0250 DB AT 1.000 DB RT 0.020 EARTH R 180 P 90 $\beta = 52$	LVLH R= 0.00 P= 0.00 Y= 0.00	-Z Target Track

ALL ORBITER DATA IN
MEAN OF 1950 AND PYR EULER SEQUENCE

Attitude Timeline

MET/GMT	ORBITER		REF ATT/REMARKS	EVENT
	MNVR OPTION	DAP E/S/ β		
21 001/18:30:00 M 41:32 144/18:48:46 G 19:00:18	LVLH TRACK TGT = 2 P = 180.00 BV = 2 Y = 0.00 OM = 0.00 MNVR A9/AUTO/ALT HOLD A9/AUTO/VERN	RATE 0.1300 DB AT 1.00 DB RT 0.100 EARTH R 90 P 180 $\beta = 52$	LVLH R= 0.00 P= 90.00 Y= 0.00	TORVA
22 001/19:37:52 M 144/19:56:38 G	LVLH TRACK TGT = 2 P = 180.00 BV = 2 Y = 0.00 OM = 0.00 MNVR A7/AUTO/ALT HOLD (same)	RATE 0.2000 DB AT 2.00 DB RT 0.100 EARTH R 68 P 180 $\beta = 51$	LVLH R= 0.00 P= 90.00 Y= 0.00	Docking 1/19:37:52
23 001/20:05:00 M 08:42 144/20:23:46 G 27:28	LVLH TRACK TGT = 2 P = 158.00 BV = 5 Y = 3.00 OM = 1.00 MNVR A12/AUTO/VERN HOLD (same)	RATE 0.1000 DB AT 3.000 DB RT 0.050 EARTH R 8 P 158 $\beta = 51$	LVLH R=357.95 P=112.07 Y= 2.41	Bias -XLV +ZVV Mated TEA Pre P3/4 Install
24 002/14:15:00 M 20:40 145/14:33:46 G 39:26	LVLH TRACK TGT = 2 P = 159.00 BV = 5 Y = 329.00 OM = 0.00 MNVR A12/AUTO/VERN HOLD (same)	RATE 0.1000 DB AT 3.000 DB RT 0.050 EARTH R 301 P 143 $\beta = 48$	LVLH R= 12.15 P=114.12 Y=331.26	Bias -XLV +ZVV Mated TEA Post P3/4 Install
25 003/14:10:00 M 25:00 146/14:28:46 G 43:46	LVLH TRACK TGT = 2 P = 190.00 BV = 5 Y = 0.00 OM = 270.00 MNVR A12/AUTO/VERN HOLD (same)	RATE 0.1000 DB AT 3.000 DB RT 0.050 EARTH R 180 P 170 $\beta = 43$	LVLH R= 90.00 P= 90.00 Y=350.00	Bias -XLV +YVV Water Dump Retrograde
26 003/15:55:00 M 16:10:00 146/16:13:46 G 28:46	LVLH TRACK TGT = 2 P = 159.00 BV = 5 Y = 329.00 OM = 0.00 MNVR A12/AUTO/VERN HOLD (same)	RATE 0.1000 DB AT 3.000 DB RT 0.050 EARTH R 301 P 143 $\beta = 43$	LVLH R= 12.15 P=114.12 Y=331.26	Bias -XLV +ZVV Mated TEA Post P3/4 Install
27 004/12:15:00 M 30:00 147/12:33:46 G 48:46	LVLH TRACK TGT = 2 P = 190.00 BV = 5 Y = 0.00 OM = 270.00 MNVR A12/AUTO/VERN HOLD (same)	RATE 0.1000 DB AT 3.000 DB RT 0.050 EARTH R 180 P 170 $\beta = 39$	LVLH R= 90.00 P= 90.00 Y=350.00	Bias -XLV +YVV Water Dump Retrograde
28 004/14:35:00 M 50:32 147/14:53:46 G 15:09:18	LVLH TRACK TGT = 2 P = 158.00 BV = 5 Y = 314.00 OM = 3.00 MNVR A12/AUTO/VERN HOLD (same)	RATE 0.1000 DB AT 3.000 DB RT 0.050 EARTH R 290 P 130 $\beta = 39$	LVLH R= 17.64 P=117.77 Y=316.71	Bias -ZLV +ZVV Mated TEA Post P3/4 Install
29 005/13:35:00 M 14:04:17 148/13:53:46 G 14:23:03	LVLH TRACK TGT = 2 P = 176.00 BV = 5 Y = 0.00 OM = 180.00 MNVR A12/AUTO/VERN HOLD (same)	RATE 0.1000 DB AT 3.000 DB RT 0.050 EARTH R 0 P 176 $\beta = 34$	LVLH R=180.00 P= 86.00 Y= 0.00	Bias -XLV -ZVV Reboost Config 3
30 005/15:15:00 M 44:17 148/15:33:46 G 16:03:03	LVLH TRACK TGT = 2 P = 158.00 BV = 5 Y = 314.00 OM = 3.00 MNVR A12/AUTO/VERN HOLD (same)	RATE 0.1000 DB AT 3.000 DB RT 0.050 EARTH R 290 P 130 $\beta = 34$	LVLH R= 17.64 P=117.77 Y=316.71	Bias -XLV +ZVV Mated TEA Post P3/4 Install

ALL ORBITER DATA IN
MEAN OF 1950 AND PYR EULER SEQUENCE

Attitude Timeline

MET/GMT	ORBITER		REF ATT/REMARKS	EVENT
	MNVR OPTION	DAP E/S/ β		
31 006/14:00:00 M 29:17 149/14:18:46 G 48:03	LVLH TRACK TGT = 2 P = 176.00 BV = 5 Y = 0.00 OM = 180.00 MNVR A12/AUTO/VERN HOLD (same)	RATE 0.1000 DB AT 3.000 DB RT 0.050 EARTH R 0 P 176 $\beta = 29$	LVLH R=180.00 P= 86.00 Y= 0.00	Bias -XLV -ZVV Reboost Config 3
32 006/15:40:00 M 16:09:17 149/15:58:46 G 16:28:03	LVLH TRACK TGT = 2 P = 158.00 BV = 5 Y = 314.00 OM = 3.00 MNVR A12/AUTO/VERN HOLD (same)	RATE 0.1000 DB AT 3.000 DB RT 0.050 EARTH R 290 P 130 $\beta = 29$	LVLH R= 17.64 P=117.77 Y=316.71	Bas -XLV +ZVV Mated TEA Post P3/4 Install
33 007/22:10:00 M 39:17 150/22:28:46 G 58:03	LVLH TRACK TGT = 2 P = 176.00 BV = 5 Y = 0.00 OM = 180.00 MNVR A12/AUTO/VERN HOLD (same)	RATE 0.1000 DB AT 3.000 DB RT 0.050 EARTH R 0 P 176 $\beta = 23$	LVLH R=180.00 P= 86.00 Y= 0.00	Bias -XLV -ZVV Reboost Config 3
34 007/23:50:00 M 008/00:19:17 151/00:08:46 G 38:03	LVLH TRACK TGT = 2 P = 158.00 BV = 5 Y = 314.00 OM = 3.00 MNVR A12/AUTO/VERN HOLD (same)	RATE 0.1000 DB AT 3.000 DB RT 0.050 EARTH R 290 P 130 $\beta = 23$	LVLH R= 17.64 P=117.77 Y=316.71	Bias -XLV +ZVV Mated TEA Post P3/4 Install
35 008/20:33:00 M 41:23 151/20:51:46 G 21:00:09	LVLH TRACK TGT = 2 P = 180.00 BV = 2 Y = 0.00 OM = 0.00 MNVR A12/AUTO/VERN HOLD (same)	RATE 0.1000 DB AT 3.000 DB RT 0.050 EARTH R 166 P 180 $\beta = 19$	LVLH R= 0.00 P= 90.00 Y= 0.00	-XLV +ZVV Mnvr To Undock
36 008/20:50:09 M 151/21:08:55 G				Undock 8/20:50:09
37 008/21:37:00 M 48:32 151/21:55:46 G 22:07:18	LVLH TRACK TGT = 2 P = 90.00 BV = 3 Y = 0.00 OM = 0.00 MNVR A9/AUTO/VERN HOLD (same)	RATE 0.1300 DB AT 1.000 DB RT 0.020 EARTH R 0 P 90 $\beta = 19$	LVLH R= 0.00 P=180.00 Y= 0.00	TORF
38 008/21:48:33 M 22:00:05 151/22:07:19 G 18:51	LVLH TRACK TGT = 2 P = 0.00 BV = 1 Y = 0.00 OM = 0.00 MNVR A9/AUTO/VERN HOLD (same)	RATE 0.1300 DB AT 1.000 DB RT 0.020 EARTH R 125 P 0 $\beta = 18$	LVLH R= 0.00 P=270.00 Y= 0.00	TORF
39 008/22:00:06 M 11:38 151/22:18:52 G 30:24	LVLH TRACK TGT = 2 P = 270.00 BV = 5 Y = 0.00 OM = 0.00 MNVR A9/AUTO/VERN HOLD (same)	RATE 0.1300 DB AT 1.000 DB RT 0.020 EARTH R 180 P 90 $\beta = 18$	LVLH R= 0.00 P= 0.00 Y= 0.00	TORF
40 008/22:11:39 M 23:11 151/22:30:25 G 41:57	LVLH TRACK TGT = 2 P = 180.00 BV = 2 Y = 0.00 OM = 0.00 MNVR A9/AUTO/VERN HOLD (same)	RATE 0.1300 DB AT 1.000 DB RT 0.020 EARTH R 270 P 180 $\beta = 18$	LVLH R= 0.00 P= 90.00 Y= 0.00	TORF

ALL ORBITER DATA IN
MEAN OF 1950 AND PYR EULER SEQUENCE

Attitude Timeline

MET/GMT	ORBITER		REF ATT/REMARKS	EVENT
	MNVR OPTION	DAP E/S/ β		
41 008/22:23:12 M 34:44 151/22:41:58 G 53:30	LVLH TRACK TGT = 2 P = 90.00 BV = 3 Y = 0.00 OM = 0.00 MNVR A9/AUTO/VERN HOLD (same)	RATE 0.1300 DB AT 1.000 DB RT 0.020 EARTH R 0 P 90 $\beta = 18$	LVLH R= 0.00 P=180.00 Y= 0.00	SEP Burn
42 008/22:40:00 M 47:30 151/22:58:46 G 23:06:16	LVLH TRACK TGT = 2 P = 90.00 BV = 3 Y = 0.00 OM = 270.00 MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020 EARTH R 0 P 90 $\beta = 18$	LVLH R= 0.00 P=180.00 Y= 90.00	-ZLV +YVV Simo Dump
43 009/02:30:00 M 37:30 152/02:48:46 G 56:16	LVLH TRACK TGT = 2 P = 90.00 BV = 3 Y = 0.00 OM = 0.00 MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020 EARTH R 0 P 90 $\beta = 18$	LVLH R= 0.00 P=180.00 Y= 0.00	-ZLV -XVV
44 009/20:40:00 M 53:49 152/20:58:46 G 21:12:35	LVLH TRACK TGT = 2 P = 0.00 BV = 5 Y = 270.00 OM = 160.00 MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020 EARTH R 270 P 90 $\beta = 14$	LVLH R=270.00 P= 0.00 Y=340.00	Bias -YLV +XVV MEPSI Deploy 70 degrees OOP Retrograde
45 009/21:25:00 M 38:49 152/21:43:46 G 57:35	LVLH TRACK TGT = 2 P = 90.00 BV = 3 Y = 0.00 OM = 0.00 MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020 EARTH R 0 P 90 $\beta = 14$	LVLH R= 0.00 P=180.00 Y= 0.00	-ZLV -XVV
46 010/12:50:00 M 13:03:36 153/13:08:46 G 22:22	INRTL R = 237.00 MNVR P = 173.00 Y = 284.00 MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020 SUN R 99 P 159 $\beta = 11$	Pair AOS/LOS 12:55 - 13:44	DO IMU Align -Y:17 12:45-13:36 -Z:26 12:55-13:44
47 010/13:10:00 M 16:37 153/13:28:46 G 35:23	INRTL R = 211.00 MNVR P = 155.00 Y = 2.00 MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020 SUN R 226 P 115 $\beta = 11$	Pair AOS/LOS 13:11 - 13:38	DO IMU Verif -Y:81 13:11-14:00 -Z:33 12:49-13:38
48 010/13:28:00 M 38:35 153/13:46:46 G 57:21	TGT= 4 BV = 5 P = 184.00 Y = 0.00 OM = 270.00 MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020 SUN R 180 P 176 $\beta = 11$	INRTL R= 80.66 P=129.75 Y=295.95 RA= 69.308 DEC= 22.082N	-XSI
49 010/15:14:00 M 18:02 153/15:32:46 G 36:48	INRTL R = 25.00 MNVR P = 105.00 Y = 325.00 MNVR A1/AUTO/VERN HOLD (same)	RATE 0.2000 DB AT 1.000 DB RT 0.020 SUN R 91 P 150 $\beta = 11$		Comm Att
50 010/17:25:00 M 29:20 153/17:43:46 G 48:06	INRTL R = 85.00 MNVR P = 233.00 Y = 15.00 MNVR TRN/AUTO/PRI HOLD (same)	RATE 0.5000 DB AT 3.50 DB RT 0.20 SUN R 334 P 71 $\beta = 10$		DO Burn TIG 10/17:36:00

ALL ORBITER DATA IN
MEAN OF 1950 AND PYR EULER SEQUENCE

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FLIGHT PLAN NOTES

FLIGHT PLAN NOTES
(CONSTRAINTS AND GUIDELINES)

A. FLIGHT DESCRIPTION

Orbiter: OV-105 Endeavour
 Launch Window: 10 min
 Inclination: 51.6°
 Insertion Altitude: 125 nm
 Rendezvous Altitude: 198 nm
 Duration: 11+ 1+ 2 days

B. SHUTTLE AND STATION CREW

CDR	– Brent Jett
PLT/IV/R1 (EVA), R2 (P3/4 Unberth)	– Christopher Ferguson
MS1/EV1	– Joseph Tanner
MS2/EV3/R1 (P3/4 Unberth)	– Daniel Burbank
MS3/EV2/M1 (P3/4 Inst., EVA 1, EVA 3)	– Heidemarie Stefanyshyn-Piper
MS4/EV4/M1 (EVA 2, EVA 4)	– Steven MacLean (CSA)
ISS CDR/M2 (P3/4 Inst., EVA 4)	– TBD
FE-1/M2 (EVA 1, EVA 2, EVA 3)	– TBD
FE-2	– TBD

C. MAJOR EVENTS

<u>EVENT</u>	<u>FD</u>	<u>MET</u>	<u>GMT</u>	<u>CDT</u>
Launch	01	00/00:00	143/00:18	19:18 (05/22/03)
OMS-2	01	00/00:38	143/00:56	19:56 (05/22/03)
NC1	01	00/03:35	143/03:53	22:53 (05/22/03)
NC2	02	00/16:52	143/17:10	12:10 (05/23/03)
NPC	02	00/19:32	143/19:50	14:50 (05/23/03)
NC3	02	01/01:44	144/02:02	21:02 (05/23/03)
NH	03	01/14:58	144/15:16	10:16 (05/24/03)
NC4	03	01/15:44	144/16:02	11:02 (05/24/03)
Ti	03	01/17:17	144/17:35	12:35 (05/24/03)
ISS Docking	03	01/19:38	144/19:56	14:56 (05/24/03)
P3/P4 Unberth	04	02/13:00	145/13:18	08:18 (05/25/03)
EVA 1	04	02/17:55	145/18:13	13:13 (05/25/03)
EVA 2	05	03/17:55	146/18:13	13:13 (05/26/03)
P4 4A SAW Deploy	06	04/15:00	147/15:18	10:18 (05/27/03)
P4 2A SAW Deploy	06	04/18:05	147/18:23	13:23 (05/27/03)
EVA 3	07	05/17:55	148/18:13	13:13 (05/28/03)
P6 4B Retract	07	05/21:40	148/21:58	16:58 (05/28/03)
EVA 4	08	06/17:55	149/18:13	13:13 (05/29/03)
Undock	10	08/20:50	151/21:08	16:08 (05/31/03)
Sep	10	08/22:34	151/22:52	17:52 (05/31/03)
Deorbit	12	10/17:36	153/17:54	12:54 (06/02/03)
Landing	12	10/18:39	153/18:58	13:58 (06/02/03)

D. LANDING OPPORTUNITIES

		<u>Landing Orbit #</u>	<u>Site</u>	<u>TIG MET</u>	<u>Landing MET</u>	<u>Landing GMT</u>	<u>Landing CDT</u>
Nominal	Primary	170	KSC	10/17:36	10/18:39	153/18:58	13:58 6/02/03
	1 Rev	171	KSC	10/19:13	10/20:15	153/20:34	15:04 6/02/03
	Late Weather Alt	172	EDW	10/20:43	10/21:45	153/22:04	17:04 6/02/03
EOM +1	Primary	185	KSC	11/16:29	11/17:32	154/17:51	12:51 6/03/03
	1 Rev	186	KSC	11/18:05	11/19:08	154/19:27	14:27 6/03/03
	Late Weather Alt	187	EDW	11/19:35	11/20:38	154/20:57	15:57 6/03/03
EOM +1	Primary	201	KSC	12/16:57	12/18:00	155/18:19	13:19 6/04/03
	1 Rev	202	EDW	12/18:28	12/19:31	155/19:50	14:50 6/04/03
	Late Weather Alt	203	EDW	12/20:04	12/21:06	155/21:25	16:25 6/04/03

E. COMMUNICATIONS

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

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

Shuttle

TDRS Support: East (47°), West (171°), Z (-275°)
 US Ground Sites: MIL, WLP, and DFR
 Contingency RTS: DGS, GTS, HTS, OTS, CTS, VTS, and NHS

ISS

TDRS Support: East (47°), West (171°), and Z (-275°)
 US Ground Sites: MIL, WLP, and DFR
 Russian Ground Sites: DJS, PPK, BRN, SPB, KLP, ULD, SHK, USK

F. PAYLOADS

1. LAUNCH PACKAGE (LP) 12A

The primary objective of this flight is to deliver and integrate the completion of ISS Stage 12A with the P3/P4 Integrated Truss Segment (ITS). The P4 Photovoltaic (PV) Module (PVM) contains two beta gimbal/PV array assemblies, two Beta Gimbal Transition Structures (BGTSSs), one Integrated Equipment Assembly (IEA) - Type I, and associated cabling. The cargo element also includes six battery sets, PV radiator, two Unpressurized Cargo Carrier Attach Systems (UCCAS), Solar Array Rotating Joint (SARJ), and pre-integrated Orbiter Space Vision System (OSVS) targets. The CE

occupies the majority of the payload bay and is attached in the payload bay by four active longeron trunnion latches and two active keel trunnion latches.

Return Complement In-Cabin Requirements: Two powered middeck locker replacement payloads (PGC-STES and CPCG-H) and passive stowage/hardware.

G. SECONDARY PAYLOADS

1. MEMS-BASED PICOSAT INSPECTOR (MEPSI)

The MEPSI payload consists of a launcher, or garage, which houses a set of two small deployable satellites, referred to as PICOSATs. Each PICOSAT weighs approximately one kilogram. The two miniature satellites will be attached to each other with a 50-foot tether on early flights. The 50 feet of tether is housed in one of the PICOSATs. The launcher is mounted to a standard Space Shuttle-provided Adaptive Payload Carrier (APC).

After release, the PICOSATs operate on battery power for several days to complete mission objectives.

The purpose of the deployed PICOSATs is to demonstrate the integration of Microelectromechanical Systems (MEMS) based subsystems for enabling new technology, low-power, autonomous on-board systems in support of critical satellite operations such as: (1) autonomous operation of inspection satellites; (2) demonstrate low power and mass MEMS systems-level technology; (3) provide proof-of-concept for on-board servicing and asset protection.

2. PERCEPTUAL-MOTOR DEFICITS IN SPACE (PMDIS)/TEST OF REACTION AND ADAPTION CAPABILITIES (TRAC) DATA COLLECTION

Utilization requires four crewmembers and desires six crewmembers to perform PMDIS/TRAC data collection in the Middeck prior to hardware transfer to ISS. This data collection requires power to be provided via a middeck utility outlet panel.

3. DIFFERENTIATION OF BONE MARROW MACROPHAGES IN SPACE (BONEMAC)

BONEMAC will utilize previously flown Space Hardware Optimization Technology (SHOT) CellCult Bioreactor and Advanced Separation (ADSEP) hardware. The objective of this experiment is to determine mechanisms for the disrupted Bone Marrow Macrophage Differentiation during spaceflight. Primary bone marrow cells will be cultured in the bioreactor unit in the presence of macrophage colony. The BONEMAC payload includes Commercial Cassettes (CCASE) sample cassettes. These will be flown as a middeck secondary payload and installed periodically during the mission.

H. PAYLOADS OF OPPORTUNITY

1. RAM BURN OBSERVATION (RAMBO)

The objective of the RAMBO payload is to help calibrate the RAMBO satellite. This requires retrograde, posigrade, and out-of-plane burns. The location of the RAMBO satellite is classified, therefore no pre-mission planning needs to be done for this payload.

I. ON ORBIT DETAILED TEST OBJECTIVES (DTOs)

1. ON-ORBIT BICYCLE ERGOMETER LOADS MEASUREMENT (DTO 262)

Reduction of engineering conservatism is often possible by comparing predicted structural response prior to flight to measured structural response during flight. Reduction of conservatism allows more operational flexibility by reducing preflight load predictions and thus operations constraints. Will be scheduled real-time if timeline permits.

2. DTO 805 CROSSWIND LANDING PERFORMANCE (DTO OF OPPORTUNITY)

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

J. ON ORBIT DETAILED SUPPLEMENTARY OBJECTIVES (DSOs)

1. BIOAVAILABILITY AND PERFORMANCE EFFECTS OF PROMETHAZINE DURING SPACE FLIGHT (DSO 490B)

All participants will don the Actiwatch activity monitor as soon as possible on orbit, and will wear the Actiwatch and will record sleep times throughout the mission. Before the first PMZ dose, participants will collect a saliva sample; thereafter, saliva samples will be collected and a Stanford Sleepiness Score (SSS) completed at 1, 2, 4, 8, 24, 36 and 48 hr post-PMZ. This protocol will be repeated each time PMZ is taken. Participants who do not take PMZ will wear the Actiwatch and record sleep times throughout the mission. However, if a participant elects to take PMZ presleep, saliva samples should be collected pre-dose, just before sleep, immediately upon wake-up, 1 hr after wake-up, and at 24, 36, and 48 hr post-dose.

2. MONITORING LATENT VIRUS REACTIVATION AND SHEDDING IN ASTRONAUTS (DSO 493)

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

Space flight-induced alterations in the immune response will become increasingly important on long-duration missions, with one focus being the potential for reactivation and dissemination (shedding) of latent viruses. An example of a latent virus is herpes simplex type-1 (HSV-1), which infects 70 to 80 percent of adults. Its manifestation is classically associated with the presence of cold sores, pharyngitis, and tonsillitis; and is usually acquired through contact with the saliva, skin, or mucous membranes of an infected individual. However, many recurrences are asymptomatic, resulting in shedding of the virus. Twenty subjects have been studied for Epstein-Barr virus. Three additional viruses will be focused upon with an increase in subject allotment.

3. SLEEP-WAKE ACTIGRAPHY AND LIGHT EXPOSURE DURING SPACEFLIGHT (DSO 634)

Subjects will don the Actilight watch as soon as possible upon entering orbit and will wear it continuously throughout the mission on their non-dominant wrists outside of their clothing/sleeve. The Actilight watch can be temporarily removed for activities such as EVAs. Subjects will also complete a short log within 15 min of final awakening every morning in-flight.

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FLIGHT PLAN WALKTHROUGH (WITH RATIONALE)

Generic Docked Activities

- Transfer total of 12 Collapsible Water Containers (CWCs) (using CWCs already manifested on ISS plus 4 launched on shuttle). Approximately two CWCs are filled each docked day.
- Transfer and Transfer Tagups are scheduled on non-EVA docked days.
- An estimated 25 required man-hr for 12A generic transfer. Powered payloads, EVA, water, and transfer briefings are in addition to the generic transfer time needed.
- All nominal EVAs are performed using the ISS Airlock with both ISS and shuttle crew performing SSRMS and Airlock tasks. The shuttle crew is prime for all EVA tasks. MCC-H is prime for ISS commanding activities.
- ISS Activities performed prior to orbiter docking include:
 - MSS C/O at WS#7
 - SSRMS Checkout
 - EMU and Safer Checkout
 - SSAS Checkout
 - P3/P4 Dry Run
 - 12A Timeline Review

Flight Day 1

- Standard FD01 activities will be completed: Aft Controller Checkout, Elevon Park, RMS On-Orbit Initiate, Galley Iodine Removal Assembly (GIRA) Installation, Tissue Equivalent Proportional Counter (TEPC) Power On, Auxiliary Power Unit (APU) FD01 Reconfiguration, flight specific DAP updates, and Group B Powerdown.
- Part I of PGSC Setup will be performed which includes setting up the OCA Router, Proshare and Color Printer. The remaining PGSC configurations will be performed on FD02.
- Rendezvous burn NC-1 will be performed.
- The BONEMAC payload will be activated and the first Commercial Cassette will be installed in the third slot in the bioreactor unit. Daily status checks will be performed.
- Participating crewmembers will don equipment and begin logs for DSOs.
- Crew will go to sleep at MET 0/5:00 to support docking on FD03. ISS crew will also sleep shift in preparation for shuttle docking.

Flight Day 2

- CDR, MS1, MS2, and MS4 will log DSO 490/634 results daily. MS1 and MS3 will collect their daily saliva sample in support of DSO 493. Only scheduled on days where the Pre and Post Sleep is above minimum duration.
- Shuttle crew performs checkouts of the shuttle robotic arm, EMU suits, and safers; and prepares for transfer.
- Rendezvous prep activities including Rendezvous Tools Setup and Checkout, Centerline Camera Install, and Orbiter Docking System (ODS) Ring Extension will be performed prior to docking with the ISS. Rendezvous burns NC-2, NPC, and NC-3 will be performed.
- Part II of PGSC Setup will be performed, which includes setting up the remaining PGSCs and running the Late Update Disk on all PGSCs.
- PAO Event scheduled before lunch for CDR, MS3, and MS4.
- The shuttle crew goes to bed one hr earlier in support of tomorrow's rendezvous activities.

Flight Day 3 - Docking

- A simo water dump will be performed as close to the start of Rendezvous ops as possible to minimize the amount of water dumped during the docked mission. The crew will set up the CWC Condensate Collection System to collect orbiter condensate to also minimize waste dumps during the docked mission.

- The MS crewmembers will perform the PMDIS experiment prior to TI. MS4 is scheduled for PMDIS support to assist the other MS crewmembers with the activity. PMDIS will then be stowed for later transfer to ISS.
- The EMUs will be removed from the Shuttle Airlock to facilitate transfers after docking.
- P/TV20 will support docking operations.
- The first Commercial Cassette for the BONEMAC payload is removed and the second is installed.
- The orbiter will dock with the ISS. There are no ground site or lighting constraints for docking.
- The shuttle will maneuver the stack into the Torque Equilibrium Attitude (TEA) attitude. ISS will maintain attitude control during the entire docked timeframe using the Lab Control Moment Gyros (CMGs). Shuttle will perform maneuvers and reboosts as propellant is available.
- After docking, leak checks will be performed on the PMA and ODS, the ODS will be prepared for ingress (centerline camera will be removed and ducting will be prepared), and hatches will be opened. P/TV21 will support hatch opening and ingress. A short ISS Safety Briefing will be given to the arriving shuttle crewmembers.
- The SRMS will be powered up and will be maneuvered to the pregrapple position.
- The PGSC network will be reconfigured from the rendezvous configuration after docking.
- EMU Reconfiguration Pre-EVA will transfer EMUs and EVA Equipment to ISS. The EMUs will be checked out with Airlock interfaces. Rechargeable EVA Battery Assembly (REBA) batteries will be installed into the EMUs and REBA powered equipment will be verified operational on both EMUs. EVA tools will be transferred to the ISS and will be prepared for EVA 1 the next day. Equipment Lock (E/L) Prep will be performed to install helmet light batteries, apply antifog, and fill drink bags. Additionally, the ISS F5 cameras will be prepared and the Pistol Grip Tool (PGT) will be checked out. The tools for EVA 1 will be setup and the EVA cameras will be prepared. All crewmembers will participate in an EVA 1 Procedure Review.
- Empty CWCs will be transferred from the ISS and the orbiter crew will begin filling the CWCs on FD04. The Flash Evaporator System (FES) will be shut down after docking to save power.
- The hardware for O2 Prebreathe and transfer, and N2 transfer will be set up.
- Transfer time is scheduled for high priority items on the Generic Transfer list.
- An SSRMS P3/P4 Dry Run is scheduled for an hr on MS4 and FE-1.
- Prior to crew wakeup on FD04, MCC-H completes the P1/P3 SSAS Prep for Mate activities.

Flight Day 4 – EVA 1

- The crew will grapple the P3/P4 with the SRMS and remove it from the Orbiter Payload Bay. A 10 hr thermal clock begins when the truss clears the PLB sill and ends when the survival heaters are activated. The P3/P4 truss will then be handed over to the SSRMS and installed on the SSAS using an auto sequence. The SRMS will then support P3/P4 installation with video cues. Third Stage is required for EVA loads. No exercise is permitted during SSAS ops. EVA is given a GO to go off SCU power when three of four bolts are tight. Once bolting is completed, the SSRMS is reconfigured to support EVA 1.
- The ISS Exercise EVA protocol will be used to support the EVA. The two EVA crewmembers will perform the required 10 min Cycle/Ergometer Vibration Isolation System (CVIS) exercise while breathing pure O2 to purge N2 from the EVA crewmember's blood. IV crewmembers will ingress the ISS Airlock with the two EVA crewmembers and close the Node hatch. The EVA crewmembers will continue to prebreathe pure O2 for a total of 80 min. The last 30 min of this time will include a 30 min Airlock depress to 10.2 psi. The EVA crew will then doff the O2 mask and don their EMUs. The EMUs are then purged with pure O2 and the Airlock will be repressurized to 14.7 psi. The Node hatch may then be opened. The EVA crewmembers will then perform a 60 min in-suit prebreathe followed by Crew Lock hatch closing, Crew Lock depress, and finally Post Depressurization where the EVA crew will go off the Service and Cooling Umbilical (SCU) and Phase Elapse Time (PET)

clock starts counting. Crew Lock depress will utilize the depress pump down to 1.5 psi. At 3 psi, the Crew Lock valves will be opened to vacuum. Once Crew Lock depress is complete, EVA crewmembers will egress the Crew Lock and begin EVA setup. P/TV23 will support EVA activities.

- EVA 1 (PET ~6:30): EVA Activities:
 - MCC will give GO after Nadir powerdown complete for P3/P1 Upper Tray Utilities. EV/IV will give GO after umbilicals are connected so MCC can power up Zenith and power down Nadir. MCC will give go for IV/EV to continue with power hookups on P3/P1 Lower Tray Utilities.
 - Between the Nadir and Zenith powerup/powerdown, the aft/fwd Wing Beta Gimbal Restraints and aft/fwd Solar Array Blanket Box (SABB) Restraints will be released, the P4 Keel Pin is rotated, and the aft/fwd Wing SABB are unstowed.
 - SARJ Preparation (Deploy and Verify DLAs 1 and 2 are engaged, and open MLI Cover Fasteners)
- MCC will command activation of the P4.
- CWCs 1 and 2 will be filled and transferred to ISS.
- When EVA cleanup is complete, EVA crewmembers will ingress ISS Crew Lock and perform Pre-repress (EVA crew back on SCU and EVA complete), close the EVA hatch, and repress the Crew Lock. Post EVA procedures and EVA preparation activities for the next EVA (Battery Stowage Assembly (BSA) and REBA battery charge initiate) will be performed. EMUs will be swapped with second set of EMUs and transferred to orbiter Airlock for recharging overnight. Water recharge of the EMUs will be performed. E/L Prep will be performed to install helmet light batteries, apply anti-fog, and fill drink bags in preparation for EVA 2 tomorrow.
- All crewmembers will participate in an EVA 2 Procedure Review.
- During crew sleep, MCC will start charging 4A and 2A batteries.

Flight Day 5 – EVA 2

- A SPLY water dump will be performed prior to the start of the EVA.
- CWCs 3, 4, and 5 will be filled and transferred to ISS.
- An SSRMS Dry Run will be performed on MS3 since she was unavailable to assist with the P3/P4 SSRMS Dry Run on FD03.
- EVA 2 (PET ~6:30): (See the FD04 explanation of pre and post EVA activities.) EVA specific tasks are:
 - Remove SARJ launch restraints, six total.
 - Remove SARJ MLI covers and launch locks, 16 total.
- Post EVA will include Metox Regeneration Init. The metox canisters were used for the first two EVAs, and in order to have enough for EVAs 3 and 4, the canisters must be regenerated. REBA, BSA, and EMU battery charging will be performed in support of EVA 3 on FD07.
- After the EVA, the SSRMS will maneuver and park overnight in preparation for 4A deploy the next day. Also, P/TV25 will be set up for tomorrow's Solar Array deploy activities.
- During crew sleep, MCC will activate and check out SARJ and continue charging 4A and 2A batteries. The SARJ checkout must be completed prior to Solar Array deploy to avoid collision of P4 arrays with the P6 port array.

Flight Day 6

- The day begins with a SIMO, and condensate CWC dump. The dump is scheduled just prior to the Solar Array deploy in order to minimize the number of future docked dumps and prevent possible contamination to the Solar Array wings.
- The second Commercial Cassette for the BONEMAC payload is removed and the third is installed.
- Solar Array Deploy. During the first insulation period, the crew is expected to deploy the Solar Array mast to 15.5 bays. If time permits, the crew is GO to deploy mast completely during the first insulation period. The next insulation period will be used to allow mast to

deploy completely if time runs out in the first insulation period. The timeline protects for two insulation periods per Solar Array. After 4A is deployed and visual verification is complete, SSRMS, PLB, and Photo/TV cameras will be set up in preparation for 2A Solar Array Deploy. After the 2A Solar Array is deployed, the SSRMS will be reconfigured to support EVA 3.

- Mid mission Cabin Temp Controller, Heater, and RCS Regulator reconfigs are scheduled. Also, WCS filter check.
- Also throughout the day, generic transfer activities are scheduled.
- PWR Fill #1 occurs.
- A PAO event is scheduled in the latter half of the day for CDR and MS4.
- EVA Tool Config and E/L Prep are scheduled in preparation for EVA 3.
- CWC #6 will be filled and transferred to ISS.
- All crewmembers will participate in an EVA 3 Procedure Review.
- MCC-H will translate the MT from Work Site 7 to Work Site 4.

Flight Day 7 - EVA 3

- The day starts with Prep for EVA 3.
- The first Reboost (Config 3) is scheduled during EVA Prep.
- EVA 3 (PET ~6:30): (See the FD04 explanation of pre and post EVA activities.) EVA specific tasks are:
 - Release the PV Radiator Cinches (6) and Winch bars (2) in order to deploy the radiator.
 - Remove the P3 Keel pin and Drag link. To clear the MT translation path.
 - Rigidize the SARJ AJIS struts and deploy the SARJ brace beams.
 - Demate the Early Ammonia Servicer from P6 (via the SSRMS) and position at the STBD S0 truss in order to fill the STBD S0 NH3 lines.
- Approx. 2 hr after the PV Radiator is deployed, the P6 4B Solar Array will be retracted. The SRMS will be configured to support video for the retraction.
- CWCs 7, 8, and 9 will be filled and transferred to ISS.
- All crewmembers will participate in an EVA 4 Procedure Review.

Flight Day 8 – EVA 4

- The day starts with Prep for EVA 4.
- The second Reboost (Config 3) is scheduled during EVA Prep.
- EVA 4 (PET ~6:15): (See the FD04 explanation of pre and post EVA activities.) EVA specific tasks are:
 - Install the WVS External Transceiver Assembly (WETA) stanchion.
 - Fill the STBD S0 NH3 lines from the EAS.
 - Install the P1 camera.
 - Remate the EAS to P6.
 - EVA cleanup.
- Post EVA will include Metox Regeneration Init. The metox canisters were used for EVAs 3 and 4 and need to be regenerated. REBA, BSA, and EMU battery charging will be performed in support of any contingency EVAs.
- After the EVA is complete, the O2 system will be reconfigured for O2 transfer.
- OIU is deactivated.
- CWCs 10 and 11 will be filled and transferred to ISS.

Flight Day 9

- Off Duty is scheduled for both the orbiter and ISS crewmembers.
- PFCs are scheduled for the orbiter crew. A Crew Conference and Crew Photo are scheduled after the meal. P/TV21 is scheduled to support the crew conference.
- MCC-H will translate the MT to WS8 for a checkout of the work site. After the checkout, the MT will be translated back to WS4.
- The third Reboost (Config 3) is scheduled after the Crew Conference.

- PWR #2 and CWC 12 are filled and transferred to ISS.
- Further generic transfers are scheduled.
- Both powered payloads (CPCG-H & PCG-STES) are transferred from station to shuttle. There's a 30-min maximum unpowered time for both powered payloads.
- Pre-Undock EVA Reconfigs are performed.
- RNDZ Tools C/O is performed in preparation for Undocking.

Flight Day 10

- Final generic transfer opportunity.
- The third Commercial Cassette for the BONEMAC payload is removed and the fourth is installed.
- The O2 and N2 transfer hardware is torn down.
- P/TV21 is set up to capture the farewell and hatch closure.
- P/TV19 C/L Camera Install is performed.
- P/TV20 is scheduled to capture undocking.
- After both crews say their good-byes, the hatches are closed and ODS leak checks are performed.
- Undocking at 8/20:51 with a 1.25 lap flyaround.
- After final sep, the orbiter maneuvers in support of an hour-long SIMO dump and two Condensate CWC dumps.
- The PGSC network will be reconfigured from the rendezvous configuration after undocking.
- COMM String 1 C/O (Part A) is performed.
- Post ISS EVA Entry Prep is scheduled in preparation for entry.
- The Sleep period is scheduled one hr earlier to prepare for deorbit opportunities. |

Flight Day 11

- FCS C/O, RCS Hot Fire, PILOT Ops, and Deorbit Briefing.
- L-1 COMM checks are performed for MILA and Dryden ground sites.
- Cabin Stow.
- PAO Event for all crewmembers on the eve of their return.
- Remainder of Off Duty scheduled after the PAO Event.
- MEPSI Deploy. P/TV07 will support.
- SSV Deact (P/TV06) and Entry Video Setup (P/TV05).
- Ergometer stow, Ku stow and MFX setup.
- PGSC Part I Stowage (stowing PGSCs not needed for MFX on entry morning).
- COMM String 1 C/O (Part B) is performed to switch back to COMM string 2.
- The Sleep period is scheduled 30 min earlier to prepare for deorbit opportunities. |

Flight Day 12

- Standard Entry Day activities, including IMU align, GIRA stow, TEPC stow, Air Sample, OCAC Stow, H2O Tank Reconfig, and MNVR to -XSI.
- DSO actilight watches are stowed after final log. BONEMAC entry setup.
- PGSC Part II Stowage. Color printer stowed.
- Deorbit Prep & landing at KSC.

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CONFIGURATION

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STS-115 DAP A1 -- A8 CONFIGURATIONS

	ITEM #	A1	A2	A3	A4	A5	A6	A7	A8
PRI									
ROT RATE	10 (50)	0.2000	0.4000	0.2000	0.5000	0.2000	0.2000	0.2000	0.0500
ATT DB	11 (51)	5.00	1.00	0.30	3.00	5.00	5.00	2.00	2.00
RATE DB	12 (52)	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
ROT PLS	13 (53)	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100
COMP	14 (54)	.000	.000	.000	.000	.000	.000	.000	.000
P OPTION	15 (55)	ALL	ALL	ALL	ALL	ALL	TAIL	ALL	ALL
Y OPTION	16 (56)	ALL	ALL	TAIL	ALL	ALL	TAIL	ALL	ALL
TRAN PLS	17 (57)	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100
ALT									
RATE DB	18 (58)	0.200	0.200	0.070	0.200	0.070	0.070	0.100	0.100
JET OPT	19 (59)	ALL	ALL	ALL	ALL	ALL	TAIL	ALL	ALL
# JETS	20 (60)	2	2	1	2	1	1	2	2
ON TIME	21 (61)	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
DELAY	22 (62)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VERN									
ROT RATE	23 (63)	0.2000	0.4000	0.0080	0.2000	0.0500	0.0500	0.0160	0.0500
ATT DB	24 (64)	1.000	1.000	0.070	1.000	1.000	1.000	1.000	1.000
RATE DB	25 (65)	.020	.020	.010	.020	.020	.020	.020	.020
ROT PLS	26 (66)	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.0500
COMP	27 (67)	.000	.000	.000	.000	.000	.000	.000	.000
CNTL ACC	28 (68)	0	0	0	0	0	0	0	0
PURPOSE		NOMINAL	PTC	GG	PRE/POST DEPLOY	LOSS OF VERN (ALL)	LOSS OF VERN (TAIL ONLY)	RNDZ	TERMINAL PHASE
BOLD/ITALIC indicates change from I-Load.									

FLT PLN-1a/115/O/A

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CC 8-2

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'STS-115 A1 THROUGH A8 DAP CONFIGURATIONS'

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STS-115 DAP B1 -- B8 CONFIGURATIONS

	ITEM #	B1	B2	B3	B4	B5	B6	B7	B8
PRI									
ROT RATE	10 (50)	0.5000	0.2000	0.2000	0.2000	0.2000	0.5000	0.5000	0.0500
ATT DB	11 (51)	3.00	3.00	3.00	0.30	3.00	3.00	2.00	2.00
RATE DB	12 (52)	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
ROT PLS	13 (53)	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040
COMP	14 (54)	.000	.000	.000	.000	.000	.000	.000	.000
P OPTION	15 (55)	ALL	TAIL	ALL	TAIL	TAIL	ALL	ALL	ALL
Y OPTION	16 (56)	ALL	TAIL	ALL	TAIL	TAIL	ALL	ALL	ALL
TRAN PLS	17 (57)	0.100	0.020	0.020	0.020	0.020	0.020	0.050	0.050
ALT									
RATE DB	18 (58)	0.200	0.070	0.070	0.100	0.200	0.200	0.100	0.100
JET OPT	19 (59)	ALL	TAIL	ALL	ALL	ALL	ALL	ALL	ALL
# JETS	20 (60)	2	1	1	2	2	2	2	2
ON TIME	21 (61)	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
DELAY	22 (62)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VERN									
ROT RATE	23 (63)	0.2000	0.2000	0.2000	0.0080	0.0160	0.2000	0.2000	0.0500
ATT DB	24 (64)	1.000	1.000	1.000	0.100	0.033	1.000	1.000	1.000
RATE DB	25 (65)	.020	.020	.020	.010	.020	.020	.020	.020
ROT PLS	26 (66)	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.020
COMP	27 (67)	.000	.000	.000	.000	.000	.000	.000	.000
CNTL ACC	28 (68)	0	0	0	0	0	0	0	0
PURPOSE		NOMINAL OMS & RCS BURNS	LOSS OF VERN (TAIL ONLY)	LOSS OF VERN (NOSE/TAIL)		COAS/HUD CAL		RNDZ	TERMINAL PHASE
BOLD/ITALIC indicates change from I-Load.									

FLT PLN-1aa/115/O/A

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BACK OF 'STS-115 A1 THROUGH A8 DAP CONFIGURATIONS'

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STS-115 DAP A9 -- A15 CONFIGURATIONS

	ITEM #	A9	A10	A11	A12	A13	A14	A15
PRI								
ROT RATE	10 (50)	0.1300	0.0500	0.1000	0.1000	0.1000	0.0500	0.1000
ATT DB	11 (51)	1.00	0.50	15.00	5.00	5.00	5.00	40.00
RATE DB	12 (52)	0.10	0.10	0.20	0.20	0.20	0.20	0.20
ROT PLS	13 (53)	0.100	0.100	0.100	0.040	0.040	0.040	0.003
COMP	14 (54)	.000	.000	.000	.000	.000	.000	.000
P OPTION	15 (55)	TAIL	TAIL	TAIL	TAIL	TAIL	TAIL	TAIL
Y OPTION	16 (56)	TAIL	TAIL	TAIL	TAIL	TAIL	TAIL	TAIL
TRAN PLS	17 (57)	0.050	0.050	0.100	0.010	0.010	0.010	0.010
ALT								
RATE DB	18 (58)	0.100	0.100	0.070	0.070	0.070	0.120	0.200
JET OPT	19 (59)	TAIL	TAIL	TAIL	TAIL	TAIL	TAIL	TAIL
# JETS	20 (60)	2	2	3	3	3	3	2
ON TIME	21 (61)	0.08	0.08	0.08	0.08	0.08	0.08	0.08
DELAY	22 (62)	0.00	0.00	12.00	11.04	11.04	11.04	0.00
VERN								
ROT RATE	23 (63)	0.1300	0.0500	0.1000	0.1000	0.1000	0.0500	0.2000
ATT DB	24 (64)	1.000	0.500	5.000	3.000	3.000	5.000	5.000
RATE DB	25 (65)	.020	.020	.050	.050	.080	.150	.050
ROT PLS	26 (66)	0.050	0.050	0.010	0.002	0.002	0.002	0.001
COMP	27 (67)	.000	.000	.000	.000	.000	.000	.000
CNTL ACC	28 (68)	0	0	1,2,3,4*	1,3**	8***	1,3,5,6,7****	7
PURPOSE		PROX OPS/ FLYAROUND	DOCKING	AUTO REBOOST	MATED MNVRS & HOLD (VRCS)	A/L DEPRESS ATTITUDE CONTROL POST-INSTALL	SRMS/SSRMS P3/P4 INSTALL	
<p>BOLD/ITALIC indicates change from I-Load. * 1 for Configs 3&4 pre-install, 3 post-install. 2 for Configs 1&2 pre-install, 4 post-install. ** 1 pre-install, 3 post-install *** 8 for VRCS, post-install only. ****reference loads constraints matrix</p>								

FLT PLN-1b/115/O/B

HINGE

TOP
 BACK OF 'STS-115 B1 THROUGH B8 DAP CONFIGURATIONS'
 HINGED AT BOTTOM OF
 'STS-115 A9 THROUGH A15 DAP CONFIGURATIONS'

HINGE

 STS-115 DAP B9 -- B15 CONFIGURATIONS

	ITEM #	B9	B10	B11	B12	B13	B14	B15
PRI								
ROT RATE	10 (50)	0.1300	0.0500	0.5000	0.1000	0.5000	0.5000	0.1000
ATT DB	11 (51)	1.00	0.50	3.00	5.00	3.00	3.00	40.00
RATE DB	12 (52)	0.10	0.10	0.20	0.20	0.20	0.20	0.20
ROT PLS	13 (53)	0.040	0.040	0.040	0.040	0.040	0.040	0.003
COMP	14 (54)	.000	.000	.000	.000	.000	.000	.000
P OPTION	15 (55)	TAIL	TAIL	ALL	TAIL	ALL	ALL	TAIL
Y OPTION	16 (56)	TAIL	TAIL	ALL	TAIL	ALL	ALL	TAIL
TRAN PLS	17 (57)	0.010	0.010	0.100	0.010	0.100	0.100	0.010
ALT								
RATE DB	18 (58)	0.100	0.100	0.200	0.070	0.200	0.200	0.200
JET OPT	19 (59)	TAIL	TAIL	ALL	TAIL	ALL	ALL	TAIL
# JETS	20 (60)	2	2	2	3	2	2	2
ON TIME	21 (61)	0.08	0.08	0.08	0.08	0.08	0.08	0.08
DELAY	22 (62)	0.00	0.00	0.00	11.04	0.00	0.00	0.00
VERN								
ROT RATE	23 (63)	0.1300	0.0500	0.2000	0.1000	0.2000	0.2000	0.2000
ATT DB	24 (64)	1.000	0.500	1.000	3.000	1.000	1.000	5.000
RATE DB	25 (65)	.020	.020	.020	.050	.020	.020	.050
ROT PLS	26 (66)	0.020	0.020	0.002	0.002	0.002	0.002	0.001
COMP	27 (67)	.000	.000	.000	.000	.000	.000	.000
CNTL ACC	28 (68)	0	0	0	2,4*	0	0	7
PURPOSE		PROX OPS/ FLYAROUND	DOCKING		MATED MNVRS & HOLD (ALT PRCS)			
BOLD/ITALIC indicates change from I-Load. * 2 pre-install, 4 post-install **8 for VRCS, post-install only.								

FLT PLN-1bb/115/O/A

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Space Shuttle Program
FLIGHT DATA FILE

JSC-48000-115
BASIC, REVISION A



FLIGHT PLAN

**STS
115**