

FLIGHT DATA FILE

Flight Plan

STS-66

BRANCH CHIEF
B. NUTE
DO4
BOND

1

(Flight Cycle Trajectory)

Mission Operations Directorate Operations Division

Final September 14, 1994

<u>EVENT</u>	<u>GDT</u>		
Launch	11:46	Thu	October 27
CRISTA/SPAS Deploy	07:36	Fri	October 28
Daylight Savings Time Ends		<u>CST</u> Sun	October 30
CRISTA/SPAS Grapple	06:55	Sat	November 05
KSC Landing	06:32	Mon	November 07

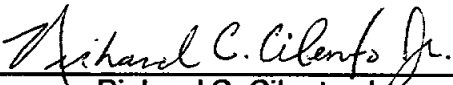
National Aeronautics and
Space AdministrationLyndon B. Johnson Space Center
Houston, Texas

MISSION OPERATIONS DIRECTORATE


STS-66 FLIGHT PLAN


FINAL
September 14, 1994

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	FLT PLN-1681	FLT PLN-1686	MULTI-1069
	FLT PLN-1682	FLT PLN-1687A	MULTI-1072A
	FLT PLN-1683A		MULTI-1079

AREAS OF TECHNICAL RESPONSIBILITY

Book Manager/Lead FAO	DO4/R. Cilento	244-1089
Nominal Timeline	DO4/N. Popple	244-1109
Contingency Timeline	DO4/P. Bolton	244-1176
Attitude & Pointing	DO4/J. Kirinich	244-5752

FLIGHT PLAN
STS-66

LIST OF EFFECTIVE PAGES

	FINAL	09/14/94	
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STS-66 FLIGHT PLAN FABRICATED ITEMS

<u>Title</u>	<u>Ref. Page</u>	<u>Item No.</u>
DAP A, DAP B TOC	7-2	FLT PLN-1a/66/O/B
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DAP A	7-3	FLT PLN-2a/66/O/A
DAP A1	7-3	FLT PLN-2b/66/O/A
A1	7-3	FLT PLN-3a/66/O/A
DAP A2	7-3	FLT PLN-3b/66/O/A
A2	7-4	FLT PLN-4a/66/O/A
DAP A3	7-4	FLT PLN-4b/66/O/A
A3	7-4	FLT PLN-5a/66/O/A
DAP A4	7-4	FLT PLN-5b/66/O/A
A4	7-5	FLT PLN-6a/66/O/A
DAP A5	7-5	FLT PLN-6b/66/O/A
A5	7-5	FLT PLN-7a/66/O/A
DAP A6	7-5	FLT PLN-7b/66/O/A
A6	7-6	FLT PLN-8a/66/O/A
DAP A7	7-6	FLT PLN-8b/66/O/A
A7	7-6	FLT PLN-9a/66/O/A
DAP A8	7-6	FLT PLN-9b/66/O/A
A8	7-7	FLT PLN-10a/66/O/A
DAP A9	7-7	FLT PLN-10b/66/O/A
A9	7-7	FLT PLN-11a/66/O/B
DAP A10	7-7	FLT PLN-11b/66/O/A
A10	7-8	FLT PLN-12a/66/O/B
DAP A11	7-8	FLT PLN-12b/66/O/A
A11	7-8	FLT PLN-13a/66/O/B
DAP A12	7-8	FLT PLN-13b/66/O/A
A12	7-9	FLT PLN-14a/66/O/B
DAP A13	7-9	FLT PLN-14b/66/O/A
A13	7-9	FLT PLN-15a/66/O/B
DAP A14	7-9	FLT PLN-15b/66/O/A
A14	7-10	FLT PLN-16a/66/O/B
DAP A15	7-10	FLT PLN-16b/66/O/A
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DAP B	7-11	FLT PLN-18a/66/O/A
DAP B1	7-11	FLT PLN-18b/66/O/A
B1	7-11	FLT PLN-19a/66/O/B
DAP B2	7-11	FLT PLN-19b/66/O/A
B2	7-12	FLT PLN-20a/66/O/B
DAP B3	7-12	FLT PLN-20b/66/O/A
B3	7-12	FLT PLN-21a/66/O/B
DAP B4	7-12	FLT PLN-21b/66/O/A
B4	7-13	FLT PLN-22a/66/O/B
DAP B5	7-13	FLT PLN-22b/66/O/A
B5	7-13	FLT PLN-23a/66/O/A
DAP B6	7-13	FLT PLN-23b/66/O/B
B6	7-14	FLT PLN-24a/66/O/B
DAP B7	7-14	FLT PLN-24b/66/O/A
B7	7-14	FLT PLN-25a/66/O/A
DAP B8	7-14	FLT PLN-25b/66/O/A
B8	7-15	FLT PLN-26a/66/O/A

<u>Title</u>	<u>Ref. Page</u>	<u>Item No.</u>
DAP B9	7-15	FLT PLN-26b/66/O/A
B9	7-15	FLT PLN-27a/66/O/B
DAP B10	7-15	FLT PLN-27b/66/O/A
B10	7-16	FLT PLN-28a/66/O/B
DAP B11	7-16	FLT PLN-28b/66/O/A
B11	7-16	FLT PLN-29a/66/O/B
DAP B12	7-16	FLT PLN-29b/66/O/A
B12	7-17	FLT PLN-30a/66/O/B
DAP B13	7-17	FLT PLN-30b/66/O/A
B13	7-17	FLT PLN-31a/66/O/B
DAP B14	7-17	FLT PLN-31b/66/O/A
B14	7-18	FLT PLN-32a/66/O/B
DAP B15	7-18	FLT PLN-32b/66/O/A
B15	7-18	FLT PLN-33a/66/O/B
(Blank)	7-18	FLT PLN-33b/66/O/A
UNIV PTG	7-19	FLT PLN-34/66/O/A

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INTRODUCTION

The STS-66 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 timelines and procedures are in the Rendezvous Checklist, as are the deploy procedures required during the deploy time frame. For continuity, the summary level timeline includes the entire flight.

This on-orbit timeline satisfies the objectives specified in the Flight Definition and Requirements Directive and the requirements of the STS-66 Flight Requirements Document. The Flight Plan, as part of the Flight Data File, meets the specifications of the Flight Cycle version of the STS-66 Flight Initialization Data Pack.

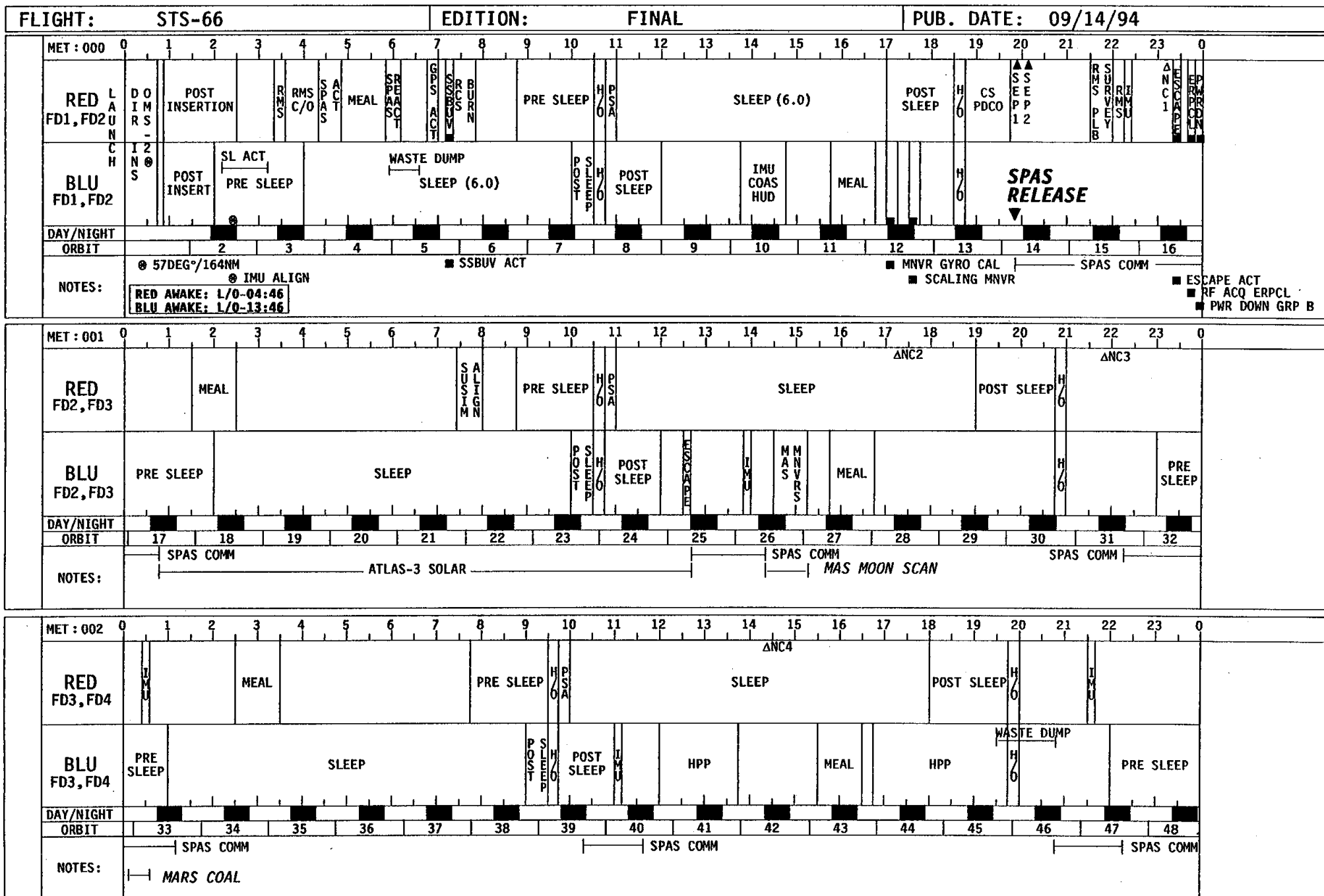
The flight profile used for this Flight Plan is for a launch date of October 27, 1994, at 16:46 GMT. Orbiter inertial attitudes are expressed relative to a Mean of 1950 (M50) reference frame.

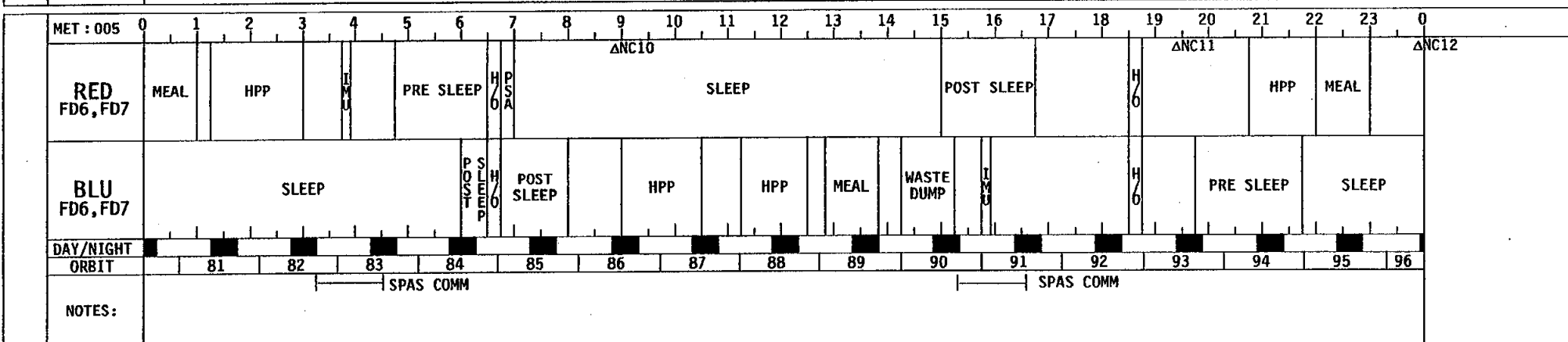
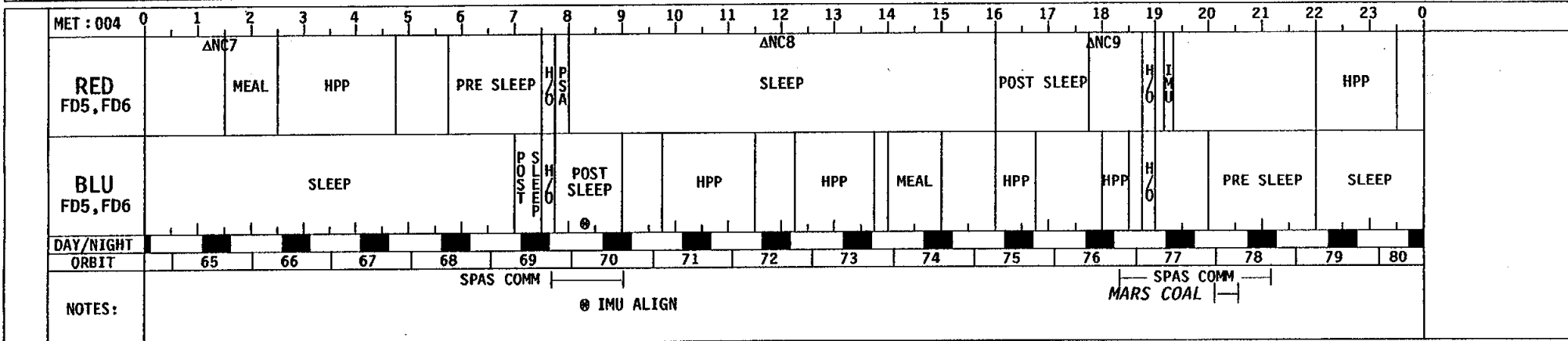
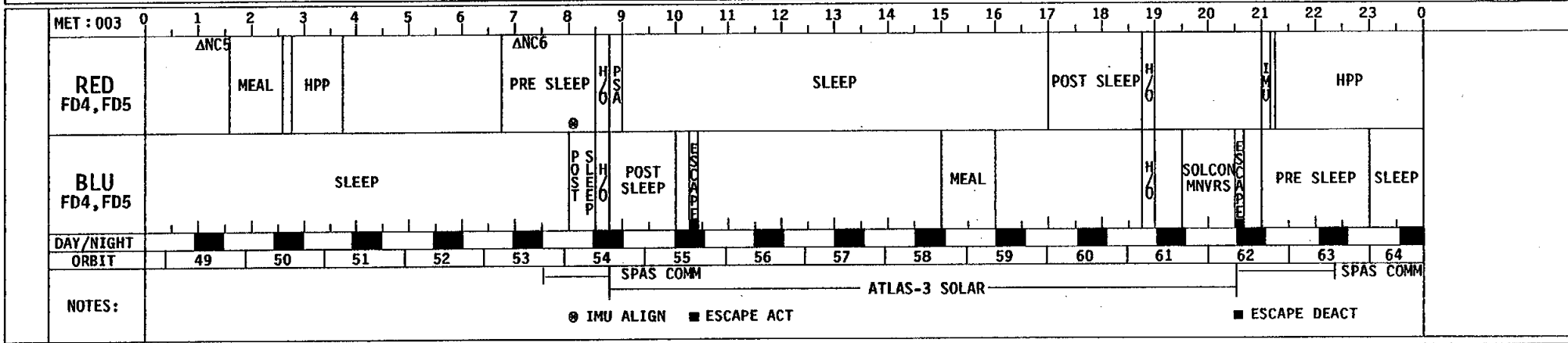
JSC-22359, Crew Scheduling Constraints (Appendix K, CPMP), Basic, Rev B, January 1992, has been used to build the timelines contained in this Flight Plan.

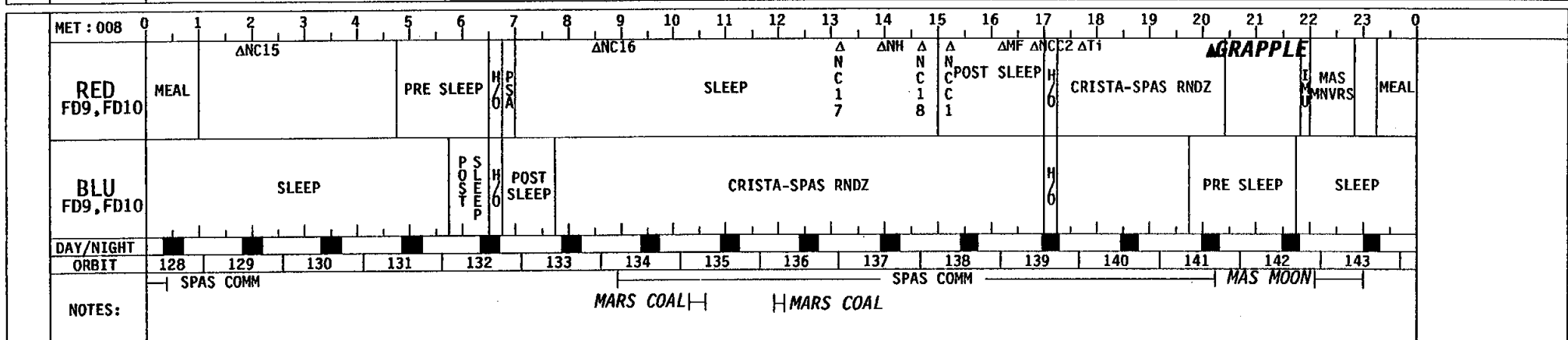
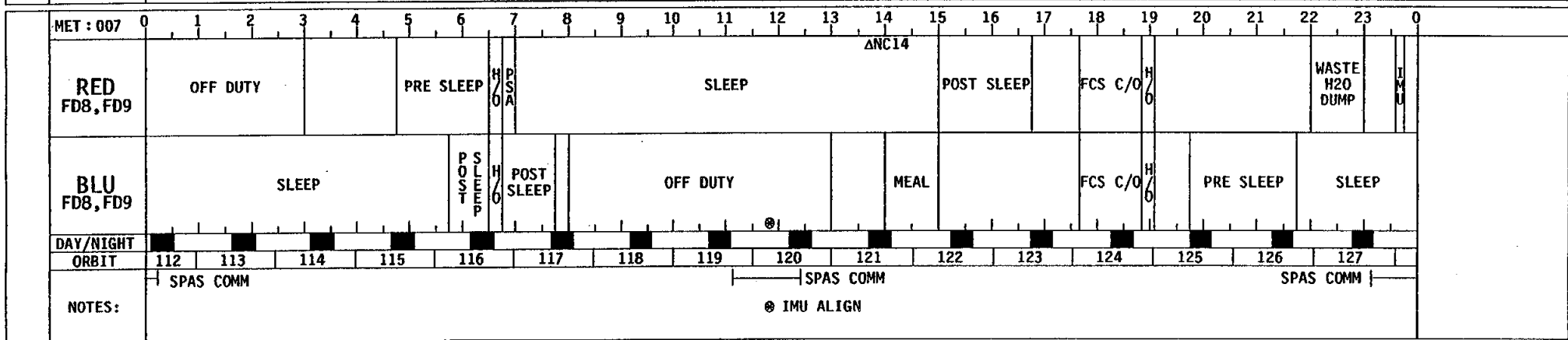
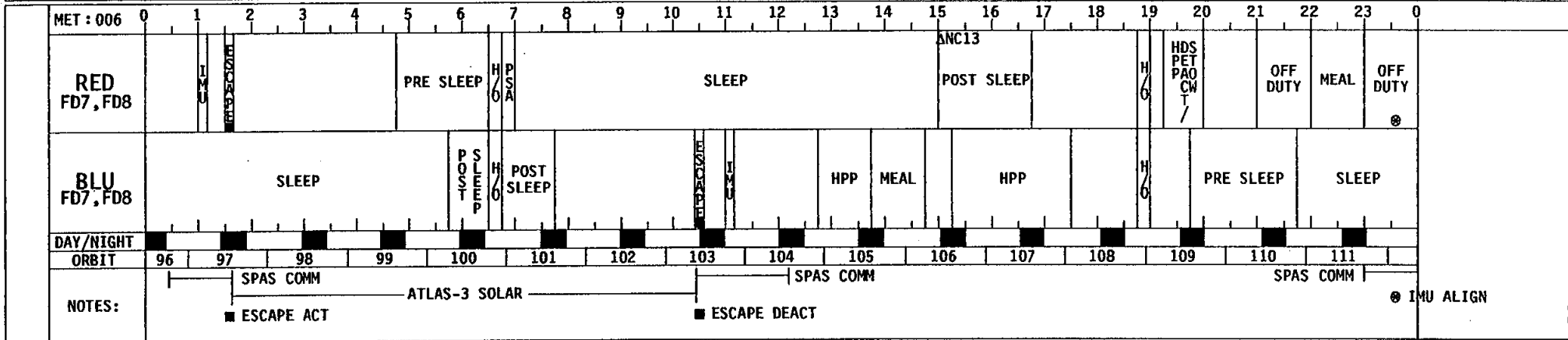
Note: The PLT is assigned to the Blue team shift schedule. On the last flight day, The PLT will wake up 14 hours prior to entry.

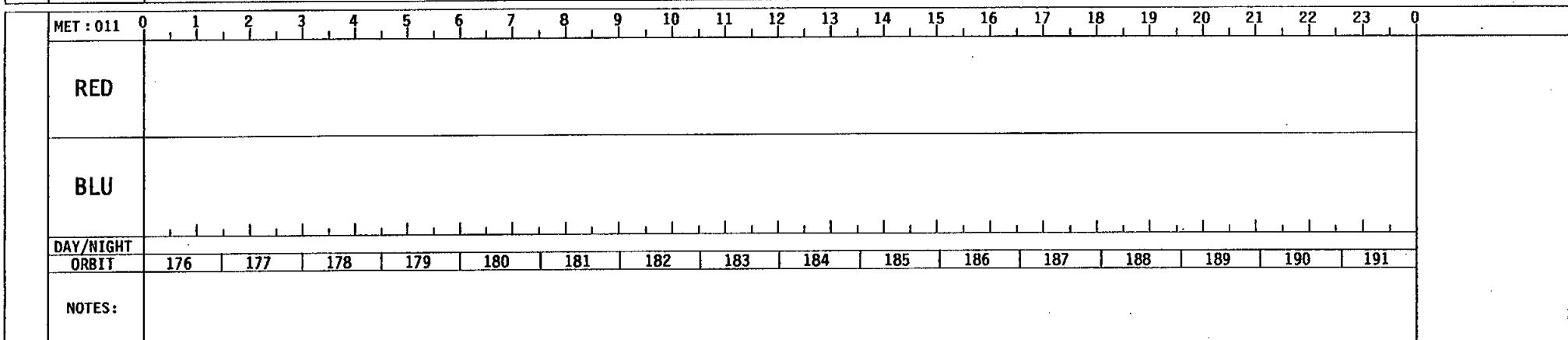
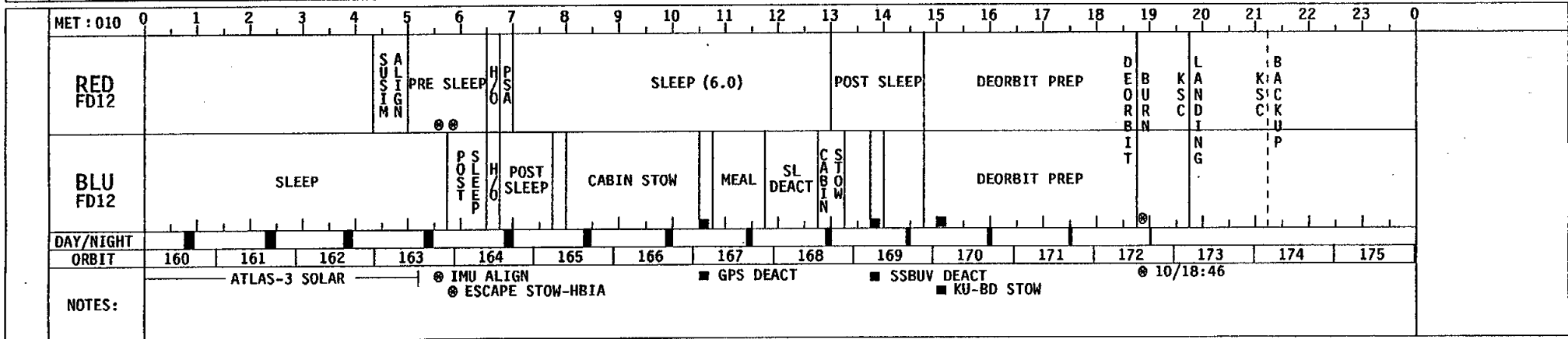
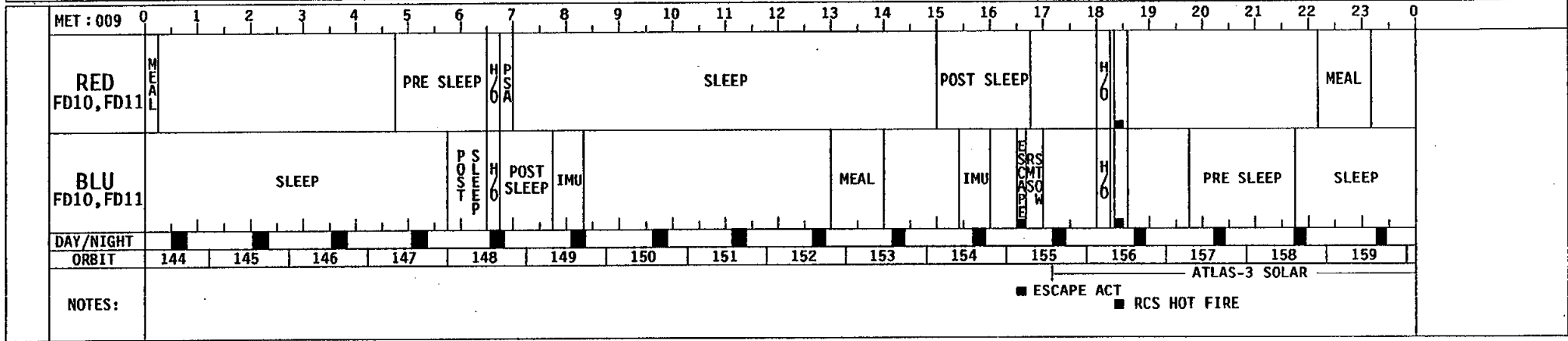
The timeline formats used in this Flight Plan are based on JSC-19933, Timeline Format Definitions and Standard Notes, Rev C, May 1990.

STS-66 OVERVIEW









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SUMMARY TIMELINE

SUMMARY TIMELINE

GMT (D:H:M)		MET (D:H:M)		CDT (D:H:M)		FD/ DOY	BETA	MOON	HOUSTON DATE	FLIGHT	EDITION	PUB. DATE								
300:16:46/ 301:04:46		000:00:00/ 000:12:00		300:11:46/ 300:23:46		01/300 CDT	-27.4		OCTOBER 27, 1994	STS-66	FINAL	09/14/94								
CDT	:300	12	13	14	15	16	17	18	19	20	21	22	23	12						
FD	:001	0	1	2	3	4	5	6	7	8	9	10	11	12						
MET	:000																			
RED	CDR		PLBD PLNDR PLNDR PLNDR		AMNVR AMNVR AMNVR	ACFTLR ACFTLR ACFTLR	OMS UA/ISU CKKS DOON	LOAD DAPS	ZLV ZLV ZLV	MEAL	WDI AUN SMI TPT	ZLV ZLV ZLV	RCS BURN	CS RYS OR OCZK	COM INT MED PR SUP	PRE SLEEP	H/O	SLEEP		
	MS1	DIRECT LAUNCH INSERTION	POST INSERTION	SL ACTIVATION	OTUS OTUS OTUS	RMS C/O	SPAS ACT	MEAL	SPAS ACT	REACT	PSA TUM G/S	GPS ACT	SA CTV U/V	PSS SUB U/V	PRE SLEEP	VTR OPS	PRE SLEEP	H/O	SLEEP	
	MS2	OMS-2	POST INSERTION		OTUS OTUS OTUS	RMS C/O	SPAS ACT	MEAL	SPAS ACT	REACT	OC CATC	VTR OPS	NO PHS -R	VTR OPS	VTR DN LK	VTR OPS	VTR DN LK	PRE SLEEP	H/O	SLEEP
BLUE	PLT		POST INSERTION		KDKA UPUC -L- BYB D	PRE SLEEP											DSQ 493	H/O	POST SLEEP	
	MS3		POST INSERTION			PRE SLEEP												DSQ 493	H/O	POST SLEEP
	MS4		POST INSERTION	SL ACTIVATION		PRE SLEEP												DSQ 493	H/O	POST SLEEP
DAY/NIGHT																				
ORBIT																				
EARTH TRACE																				
TDRS																				
ATT		ASC -ZLV +YVV BIAS -YLV -XVV -ZLV +YVV -ZLV -XVV																		
NOTES:		@ADV LOWER BODY RESTR TEST @CABIN AIR MONITOR @-ZLV, +YVV Δ APU HTR DEACT Δ APU HTR RECONFIG ○ WASTE DUMP TERM ■ DTR RESET/SPEE DF @-ZLV, -XVV ○ LAMP TEST @MONITOR LATENT VIRUS REACT @H/O RED TO BLUE																		

GMT (D:H:M)		MET (D:H:M)		CDT (D:H:M)		FD/ DOY	BETA	MOON	HOUSTON DATE	FLIGHT	EDITION	PUB. DATE					
301:04:46/ 301:16:46		000:12:00/ 001:00:00		300:23:46/ 301:11:46		B2/300 CDT	-29.7		OCTOBER 27, 1994	STS-66	FINAL	09/14/94					
CDT :300	0	CDT:301	1	2	3	4	5	6	7	8	9	10	11	0	MET:001		
BLU FD :002	12	13	14	15	16	17	RED FD02	18	19	20	21	22	23				
MET :000																	
RED	CDR	SLEEP (6.0)					POST SLEEP	H/O	REL▲	▲	SPAS DEPLOY	SEP 2	TRK	VTR	NCL▲	PCWRP	
	MS1	SLEEP (6.0)					POST SLEEP	H/O	SPAS DEPLOY	ADP	SPAS DEPLOY	TAL	RMS	RMS	DTO	PHS	
	MS2	SLEEP (6.0)					POST SLEEP	H/O	SPAS DEPLOY	ALIN	SPAS DEPLOY	ALG	PSP	P/TVO2	ERG	PSE	POPS
BLUE	PLT	POST	VTR	VTR	IMU	CMC	DTO	SAMS	MEAL	GYRO	SPAS	H/O	SPAS DEPLOY	P/TVO6	OPS	EXERCISE	
	MS3	POST	PSS	P/TVO3	OPS	STES	PSS	P/TVO4	MEAL	DTO	700-7	H/O	SPAS DEPLOY	DTO	700-7	RMS	MIR
	MS4	ADP	STES	VDA	ACT	VTR	MEAL	VTR	P/TVO1	SETUP	H/O	P/TVO1	OPS	CS	PCG-TES	ERG	VTR
DAY/NIGHT	[Day/Night Cycle Diagram]																
ORBIT	[Orbit Diagram]																
EARTH TRACE	[Earth Trace Diagram]																
TDRS	[TDRS Diagram]																
ATT	[ATT Diagram]																
NOTES:	<p> @AFT STATION @-ZLV, -XVV @CABIN TEMP SURVEY @REAL TIME NAV @-ZLV, -XVV @REAL TIME NAV @H/O BLUE TO RED @REAL TIME NAV @DISABLE RNDZ NAV @BLEED ORF CNFG @ADV LOWER BODY RESTR TEST @ESCAPE ACT </p>																

GMT (D:H:M)	MET (D:H:M)	CDT (D:H:M)	FD/ DOY	BETA	MOON	HOUSTON DATE	FLIGHT	EDITION	PUB. DATE
301:16:46/ 302:04:46	001:00:00/ 001:12:00	301:11:46/ 301:23:46	R2/301 CDT	-32.1		OCTOBER 28, 1994	STS-66	FINAL	09/14/94

CDT :301 RED FD :002 MET :001	12	13	14	15	16	17	18	19	20	21	22	23	12				
	0	1	2	3	4	5	6	7	8	9	10	11	12				
RED	CDR	PC RIV MED		MEAL	SN ULL M	ROTOR INIT	EXERCISE	ROTOR INIT	SUSIM ALIGN	ROTOR INIT	PRE SLEEP	ROTOR INIT	PRE SLEEP	H/O	PRE SLEEP	SLEEP	
	MS1	VTR OPPS	RR ACQ	MEAL	SN ULL M	PSS /TUL V95 CON	EXERCISE	SN ULL M	SUSIM ALIGN	TP IW PR SU P	PRE SLEEP		H/O	PRE SLEEP	SLEEP		
	MS2	FILTER CLEANING	DTO 666	MEAL	ROTOR INIT	EXERCISE	SN ULL M	NIH-R OPS	ROTOR INIT	SN ULL M	PSS /TTS VUI OPM 5	POS /PU TSS VOM 5	VTR PLBK	PRE SLEEP	US VEE RNT	H/O	PRE SLEEP
BLUE	PLT		PRE SLEEP				SLEEP						DSO 493	POST SLEEP	ROTOR INIT	POST SLEEP	
	MS3		PRE SLEEP				SLEEP						DSO 493	POST SLEEP		POST SLEEP	
	MS4		PRE SLEEP				SLEEP						DSO 493	POST SLEEP		POST SLEEP	

DAY/NIGHT	17	18	19	20	21	22	23	24
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TORS	E	W											
ATT	TGT TRK	ROTOR	ROTOR	ROTOR	ROTOR	ROTOR	ROTOR	ROTOR	ROTOR	ROTOR	ROTOR	ROTOR	ROTOR
		-ZSI	-ZSI	-ZSI	-ZSI	SUSIM	-ZSI	-ZSI	-ZSI	-ZSI	-ZSI	-ZSI	-ZSI

NOTES:	⊙ CABIN TEMP SURVEY ■ ERPCL CHECK	⊙ CABIN AIR MONITOR ■ P/TV95 OPS SOLCON	⊙ FUTURE START ROTOR INIT	⊙ MONITOR LATENT VIRUS REACT
			⊙ FUTURE START ROTOR INIT	⊙ H/O RED TO BLUE
				◆ ESCAPE SUN OVRD

GMT (D:H:M)	MET (D:H:M)	CDT (D:H:M)	FD/ DOY	BETA	MOON	HOUSTON DATE	FLIGHT	EDITION	PUB. DATE
302:04:46/ 302:16:46	001:12:00/ 002:00:00	301:23:46/ 302:11:46	B3/301 CDT	-34.5		OCTOBER 28, 1994	STS-66	FINAL	09/14/94

CDT :301	0	CDT:302	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	0	MET:002
BLU FD :003																												
MET :001																												

RED	CDR	SLEEP																		DSO 493	POST SLEEP	H/O	POST	SLEEP	NC3▲ MULT AXIS RCS BURN	TRK	MNV R	VTR	OPS	CONF	
	MS1	SLEEP																		DSO 493	POST SLEEP	H/O	POST	SLEEP	SADP FLIN ALG PSY	VTR	OPS	VC TH RAN GIR	VTR	OPS	EXERCISE
	MS2	SLEEP																		DSO 493	POST SLEEP	H/O			P/TV06 OPS				DTO 683		
BLUE	PLT	DTO 683	TRK	MNV R																											
	MS3	TP IN PR SD N	PS ET TV 06	OPS	EXERCISE																										
	MS4	SADP FLIN ALG PSY	ESCAPE																												

DAY/NIGHT	25		26		27		28		29		30		31		32	
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TDRS	E	W	[Timeline with TDRS station positions]															
ATT	-ZSI		TGT TRK		FMAS MOON		-ZLV -XVV		NC2		-ZLV -XVV		SPAS COAL					

NOTES:

- ⊙ CABIN TEMP SURVEY
- ◆ ESCAPE SUN REINST
- ◆ P/TV94 OPS MAS
- ⊙ -ZLV, -XVV
- ⊙ -ZLV, -XVV
- ⊙ MONITOR LATENT VIRUS REACT
- ▽ MCIU FLTR CHECK
- ⊙ H/O BLUE TO RED
- ⊙ INTERLIMB EXERCISE SESSION
- ⊙ INTERLIMB EXERCISE SESSION
- ⊙ CABIN TEMP SURVEY

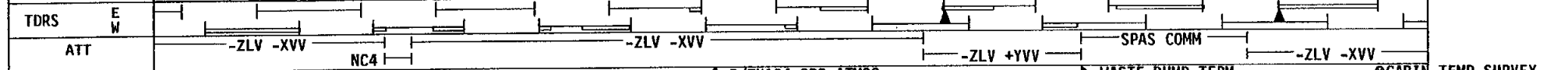
GMT (D:H:M)		MET (D:H:M)		CDT (D:H:M)		FD/ DOY	BETA	MOON	HOUSTON DATE	FLIGHT	EDITION	PUB. DATE
302:16:46 / 303:04:46		002:00:00 / 002:12:00		302:11:46 / 302:23:46		R3/302 CDT	-36.9		OCTOBER 29, 1994	STS-66	FINAL	09/14/94
CDT :302	12	13	14	15	16	17	18	19	20	21	22	23
RED FD :003	0	1	2	3	4	5	6	7	8	9	10	11
MET :002										BLU FD04		12
RED	CDR				MEAL			EXERCISE		PRE SLEEP		SLEEP
	MS1				MEAL					PRE SLEEP		SLEEP
	MS2				MEAL					PRE SLEEP		SLEEP
BLUE	PLT	PRE SLEEP								DSO 493	POST SLEEP	
	MS3	PRE SLEEP								DSO 493	POST SLEEP	
	MS4	PRE SLEEP								DSO 493	POST SLEEP	
DAY/NIGHT												
ORBIT		33	34	35	36	37	38	39	40			
EARTH TRACE												
TDRS												
ATT	SPAS COAL -ZLV -XV SPAS COMM -ZLV -XV											
NOTES:	◎-ZLV, -XV ◎CABIN AIR MONITOR ◎FUTURE START TGT TRK MNVR ■ P/TV103 OPS ATMOS ■ P/TV103 OPS ATMOS ◎MONITOR LATENT VIRUS REACT ◎H/O RED TO BLUE ◎ENERGY UTILIZATION ---COAL											

GMT (D:H:M)	MET (D:H:M)	CST (D:H:M)	FD/ DOY	BETA	MOON	HOUSTON DATE	FLIGHT	EDITION	PUB. DATE
303:04:46/ 303:16:46	002:12:00/ 003:00:00	302:22:46/ 303:10:46	B4/302 CST	-39.3		OCTOBER 29, 1994	STS-66	FINAL	09/14/94

CST :302 23 0 CST:303 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 MET:003
 BLU FD :004
 MET :002

RED	CDR	SLEEP																		DSO 493	DSO 612	POST SLEEP	H/O	POST SLEEP	TRK M N V R	TRK M N V R	PRIV MED		
	MS1	SLEEP																		DSO 493	POST SLEEP	H/O	P O S T O S T L I T A L E A L G P S Y	TP I W P R S D N	V T R O P S	V T R O P S	V T R O P S	V T R D N L K	EXERCISE
	MS2	SLEEP																		DSO 493	DSO 612	POST SLEEP	H/O	POST SLEEP	EXERCISE			V T R O P S	D T O 6 6 8
BLUE	PLT	D T O 6 6 8	EXERCISE		NC4▲	RCS BURN	-ZLV	M N V R	V T R O P S	MEAL	TP I W P R S D N	S A M S C R	V T R O P S	V T R O P S	V O T R A N G E	V T R O P S	V T R O P S	Z L V	M D I A U N S M I H / O	PRE SLEEP									
	MS3	H P P A S S Y / A C T	H P P R U N M 1	TP I W P R S D N	H P P R U N M 2	MEAL	H P P R U N M 3-M 4			H P S E I E A P T T E M P	H P P R U N M 5	H / O	P S A B O T M U P	EXERCISE	M I R O P P	PRE SLEEP													
	MS4	P / T V 0 6 O P S	V T R O P S	V T R O P S	V T R D N L K	V T R O P S	T I E W	U E S E R T	MEAL	P S A T U M O S	P S T U M A S	V T R O P S	H / O	EXERCISE	PRE SLEEP														

DAY/NIGHT ORBIT 41 42 43 44 45 46 47 48



NOTES: @CABIN TEMP SURVEY
 ▽ MCIU FLTR CHECK @-ZLV, -XVV
 ◆ P/TV104 OPS ATMOS
 ◆ P/TV104 OPS ATMOS
 @MONITOR LATENT VIRUS REACT
 @ENERGY UTILIZATION @-ZLV, +YVV
 @H/O BLUE TO RED
 ▶ WASTE DUMP TERM @CABIN TEMP SURVEY

GMT (D:H:M)	MET (D:H:M)	CST (D:H:M)	FD/ DOY	BETA	MOON	HOUSTON DATE	FLIGHT	EDITION	PUB. DATE
303:16:46/ 304:04:46	003:00:00/ 003:12:00	303:10:46/ 303:22:46	R4/303 CST	-41.7		OCTOBER 30, 1994	STS-66	FINAL	09/14/94

CST :030	11	12	13	14	15	16	17	18	19	20	21	22	12
RED FD :004	0	1	2	3	4	5	6	7	8	9	10	11	
MET :003									BLU	F005			

RED	CDR	DSO 612	NC5A MULT AXIS RCS BURN	MEAL	HPP RUN M6	HPP PADM	DEO CONTR	SAMS CK	EXERCISE	PRE SLEEP	NC6A MULT AXIS RCS BURN	PRE SLEEP	TRK MNV	PRE SLEEP	H/O	SLEEP								
	MS1	EXERCISE	VTR OPS	MEAL	P/TV100 OPS MAS	VTR OPS	VTR OPS	VTR OPS	PSS TUBUV	VTR OPS	VTR OPS	PRE SLEEP	VTR OPS	PRE SLEEP	H/O	SLEEP								
	MS2	DSO 612	MEAL	VTR OPS	NIH-R OPS	VTR OPS	TV SEW	TV SEW	US SVR	DTO 664	TP IPR SUP	PRE SLEEP	H/O	SLEEP										
BLUE	PLT	SLEEP (7.0)								DSO 493	DSO 612	POST SLEEP	H/O	MNV	POST SLEEP	ROTOR	IN IT	SN US SL IL M	IN IT	MNV	IN IT	MNV		
	MS3	SLEEP								DSO 493	POST SLEEP	H/O	POST SLEEP	TP IPR SDN										
	MS4	SLEEP								DSO 493	POST SLEEP	H/O	POST SLEEP	SN US SL IL M	ADP TAL LIN ALG SY	SN US SL IL M								

DAY/NIGHT	48	49	50	51	52	53	54	55	56
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ATT	-ZLV -XVV	SPAS COMM	-ZSI	ROTOR	-ZSI	ROTOR
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NOTES:

- ⊙ ENERGY UTILIZATION
- ⊙ CABIN AIR MONITOR
- P/TV92 OPS SSBV
- ⊙ CABIN TEMP SURVEY
- ERPCL CHECK
- ⊙ MONITOR LATENT VIRUS REACT
- ⊙ ENERGY UTILIZATION
- ⊙ H/O RED TO BLUE
- ◆ ESCAPE ACT

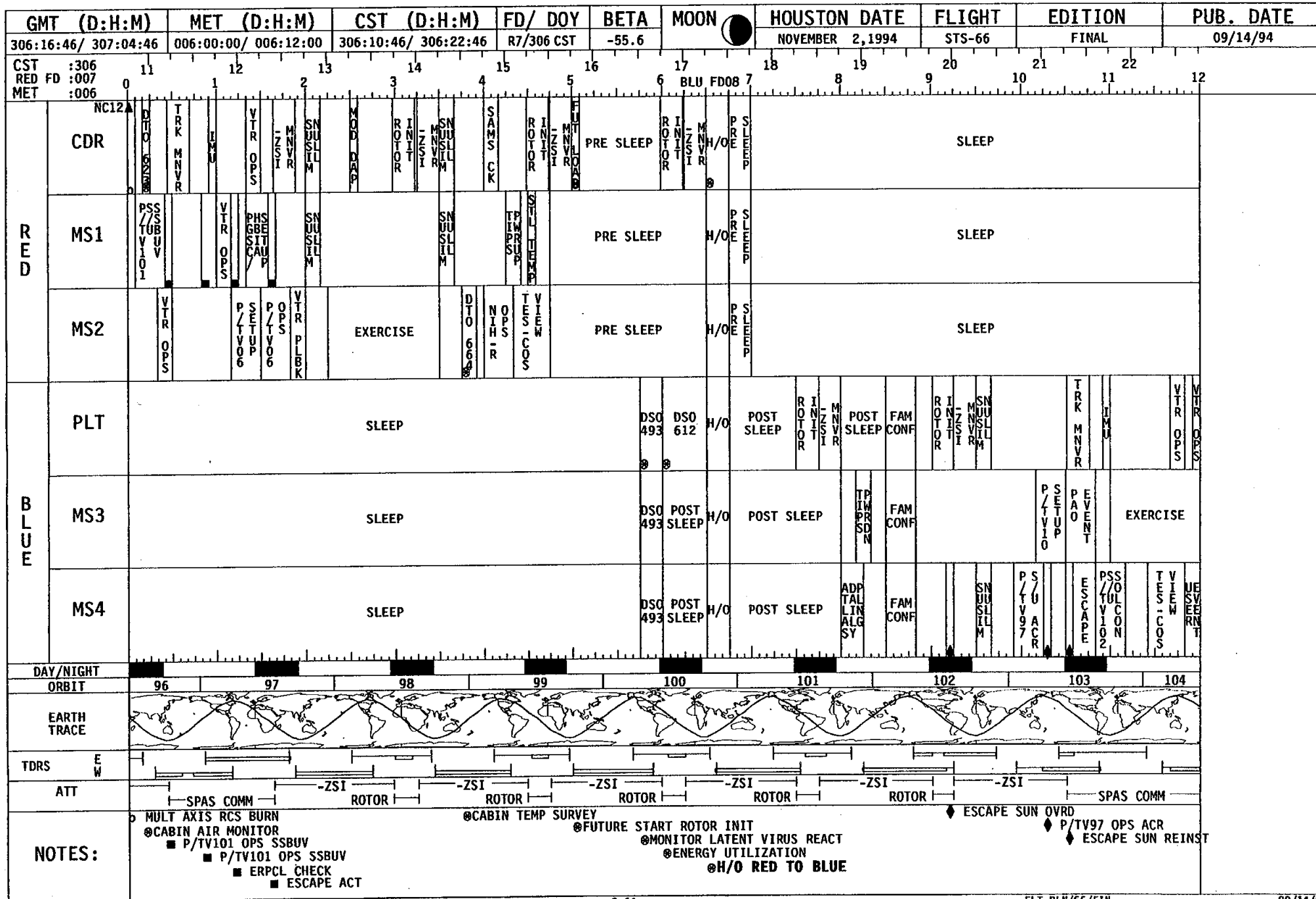
GMT (D:H:M)		MET (D:H:M)		CST (D:H:M)		FD/ DOY	BETA	MOON	HOUSTON DATE	FLIGHT	EDITION	PUB. DATE																			
304:04:46 / 304:16:46		003:12:00 / 004:00:00		303:22:46 / 304:10:46		B5/303 CST	-44.1		OCTOBER 30, 1994	STS-66	FINAL	09/14/94																			
CST	:303	23	0	CST:304	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	MET:004		
BLU FD	:005																														
MET	:003																														
RED	CDR	SLEEP				DSO 493	DSO 612	POST SLEEP	H/O	POST SLEEP	SOLCON MNVRS	TRK MNVR	IMU	PRIV MED	CONFR	MNVR	ZLV	EXERCISE													
	MS1	SLEEP				DSO 493	POST SLEEP		H/O	POLIT	SADP	ELIN	EALG	PSY	EXERCISE		HPP CAPT	TEUP	HPP SET	HPP RUN N1-N2	CHG C	HPP RUN N3									
	MS2	SLEEP				DSO 493	DSO 612	POST SLEEP	H/O	POST SLEEP	SOLCON MNVRS	DTIO 604	TESCO	VTEW	VTR OPS	VTR OPS	VTR OPS	VTR OPS	VTR DNK	VTR OPS	VTR OPS	VTR OPS	VTHRANGE								
BLUE	PLT	SN U/SLILM	ROTOR	ZSI	MNVR	SN U/SLILM	ROTOR	ZSI	MNVR	MEAL	ROTOR	ZSI	MNVR	SN U/SLILM	SAMSK	H/O	ROTOR	ZSI	MNVR	EXERCISE		PRE SLEEP		SLEEP							
	MS3	PSS/EA	TTM	VUS	OP 4	PO/PP	TS	VOS	AA	M S	MEAL			TPW PR	SUP	EXERCISE		H/O		P/TV	10	SAO	SETUP	PTW	RRD	DSN	PS	ADT	MUP	PRE SLEEP	SLEEP
	MS4	SN U/SLILM	EXERCISE			SN U/SLILM	TESCO	VTEW	ME	SEER	NT	MEAL	SN U/SLILM	PSS/TV	96	SN U/SLILM	H/O		SN U/SLILM	CLD	ESCAPE	PRE SLEEP		SLEEP							
DAY/NIGHT	56		57		58		59		60		61		62		63		64														
ORBIT	[Orbit diagram showing Earth trace]																														
EARTH TRACE	[Orbit diagram showing Earth trace]																														
TDRS	[TDRS diagram]																														
ATT	-ZSI ROTOR -ZSI ROTOR -ZSI ROTOR -ZSI ROTOR -ZSI ROTOR -ZSI ROTOR -ZSI SPAS COMM -ZLV -XVV																														
NOTES:	- ZSI MNVR ▶ SAMS DISK ♦ MONITOR LATENT VIRUS REACT ♦ P/TV96 OPS SOLSPEC • ENERGY UTILIZATION ▽ MCIU FLTR CHECK ♦ H/O BLUE TO RED ♦ ESCAPE SUN OVRD ♦ ESCAPE SUN REINST • CABIN TEMP SURVEY • ZLV, -XVV																														

GMT (D:H:M)		MET (D:H:M)		CST (D:H:M)		FD/ DOY	BETA	MOON	HOUSTON DATE	FLIGHT	EDITION	PUB. DATE									
304:16:46 / 305:04:46		004:00:00 / 004:12:00		304:10:46 / 304:22:46		R5/304 CST	-46.4		OCTOBER 31, 1994	STS-66	FINAL	09/14/94									
CST	:304	0	11	12	13	14	15	16	17	18	19	20	21	22	12						
RED FD	:005									BLU FD06 8											
MET	:004																				
RED	CDR		NC7▲ MULT AXIS RCS BURN	MEAL	HPP RUN N4	VTR OPPS	HPS EIE APT TEU P	HPP RUN N5-N6	SAM S C K		PRE SLEEP	H/O	PRE SLEEP	SLEEP							
	MS1	VTR OPPS	VTR OPPS	MEAL	P/T V06	P/T V06 OPPS	PSA T V 103		TP W PR SU P	VTR OPPS	PRE SLEEP	H/O	PRE SLEEP	SLEEP							
	MS2	EXERCISE		MEAL	VTR OPPS	NIH-R OPPS	AWR EAE MTE E I R L L	VTR OPPS	VTR OPPS	VTR OPPS	PRE SLEEP	H/O	PRE SLEEP	SLEEP							
BLUE	PLT						SLEEP				DSO 493	POST SLEEP	H/O	TRK MNV R	POST SLEEP	POST SLEEP	POST SLEEP	POST SLEEP	DTO 668	TP W PR SU P	NC8▲ MULT AXIS RCS BURN
	MS3						SLEEP				DSO 493	POST SLEEP	H/O	POST SLEEP	VTR OPPS	VTR OPPS	HPS EIE APT TEU P	HPP RUN Q1-Q2		VTR OPPS	VC TR R A N G E
	MS4						SLEEP				DSO 493	POST SLEEP	H/O	POST SLEEP	VTR OPPS	POST SLEEP	PSS /T BU VU 1 V 0 1	ADP TAL LIN ALG SY	VTR OPPS	VTR OPPS	EXERCISE
DAY/NIGHT																					
ORBIT	64	65	66	67	68	69	70	71	72												
EARTH TRACE																					
TDRS																					
ATT	-ZLV -XVV SPAS COMM -ZLV -XVV																				
NOTES:	@CABIN AIR MONITOR ■ P/TV103 OPS ATMOS @-ZLV, -XVV ■ P/TV103 OPS ATMOS @CABIN TEMP SURVEY @FUTURE START TGT TRK MNVR @MONITOR LATENT VIRUS REACT @H/O RED TO BLUE																				

GMT (D:H:M)		MET (D:H:M)		CST (D:H:M)		FD/ DOY	BETA	MOON	HOUSTON DATE	FLIGHT	EDITION	PUB. DATE						
305:04:46/ 305:16:46		004:12:00/ 005:00:00		304:22:46/ 305:10:46		B6/304 CST	-48.8		OCTOBER 31, 1994	STS-66	FINAL	09/14/94						
CST	:304	23	0	CST:305	1	2	3	4	5	6	7	8	9	10	0	MET:005		
BLU FD	:006	12	13		14	15	16	17	18	19	20	21	22	23				
MET	:004						RED	FD06										
RED	CDR	SLEEP				DSO 493	DSO 612	POST SLEEP		H/O		CREW CONF	EXERCISE					
	MS1	SLEEP				DSO 493	POST SLEEP			H/O		CREW CONF	HPP RUN S1-S2					
	MS2	SLEEP				DSO 493	DSO 612	POST SLEEP		H/O		CREW CONF	EXERCISE					
BLUE	PLT	EXERCISE	MEAL		TP IW PR SUP	FILTER CLEANING		SAN S CK	NC9A MULT AXIS RCS BURN	TRK MNVR	H/O	PRE SLEEP	CREW CONF	PRE SLEEP	SLEEP			
	MS3	HPP RUN R1-R2		MEAL		HPS EIE APT TEU P	HPP RUN P1-P2	EXERCISE		HPS EIE APT TEU P	HPP RUN P3	H/O	PRE SLEEP	CREW CONF	PRE SLEEP	SLEEP		
	MS4	VTR OPS	TVIEW	TVIEW	TVIEW	MEAL	VTR OPS	VTR OPS	VTR OPS	VTR OPS	VTR OPS	H/O	PRE SLEEP	CREW CONF	PRE SLEEP	SLEEP		
DAY/NIGHT	72		73		74		75		76		77		78		79		80	
ORBIT																		
EARTH TRACE																		
TDRS																		
ATT	-ZLV -XV																	
NOTES:	<p> @MONITOR LATENT VIRUS REACT @H/O BLUE TO RED @-ZLV, +XV @ENERGY UTILIZATION @CABIN TEMP SURVEY @MANUAL --- COAL </p>																	

GMT (D:H:M)		MET (D:H:M)		CST (D:H:M)		FD/ DOY	BETA	MOON	HOUSTON DATE		FLIGHT	EDITION	PUB. DATE																						
305:16:46/ 306:04:46		005:00:00/ 005:12:00		305:10:46/ 305:22:46		R6/305 CST	-51.1		NOVEMBER 1, 1994		STS-66	FINAL	09/14/94																						
CST :305		RED FD :006		MET :005		0		11		12		13		14		15		16		17		18		19		20		21		22		12			
RED	CDR	MEAL	HPS EIE APT TEU P	HPP RUN T1-T2		SAMS CK	TRK M NVR	ZLV	M NVR	PRE SLEEP		H/O	SLEEP																						
	MS1	MEAL	VTR OPS	VTR OPS	EXERCISE		P/TVO9	POPS	VTR OPS	VTR DNLK	VTR OPS	PRE SLEEP		H/O	SLEEP																				
	MS2	MEAL	VIEW COCS	VIEW COCS	NO PHS	VTR OPS	VTR OPS	VTR OPS	TPW PR SUP	PRE SLEEP		H/O	SLEEP																						
BLUE	PLT	SLEEP				DSO 493				POST SLEEP	H/O	POST SLEEP	NC10▲	MULT AXIS RCS BURN	DTO 66	TPW PR SDN	VTR OPS	VTR OPS	VTR OPS																
	MS3	SLEEP				DSO 493				POST SLEEP	H/O	POST SLEEP	HPP RUN T3-T4				HPS EIE APT TEU P	HPP RUN U1-U2																	
	MS4	SLEEP				DSO 493				POST SLEEP	H/O	POST SLEEP	VTR OPS	POST SLEEP	ADD TAL IN ALG SY	VTR OPS	VTR OPS	VIEW COCS	PSA/TUM V104																
DAY/NIGHT		ORBIT		EARTH TRACE		TDRS		ATT		NOTES:																									
		80		81		82		83		84		85		86		87		88																	
										-ZLV +XVV		-ZLV +XVV																							
						SPAS COMM				◎CABIN AIR MONITOR ◎-ZLV, +XVV		◎MONITOR LATENT VIRUS REACT ◎H/O RED TO BLUE		◎CABIN TEMP SURVEY		▶ SAMS DISK		◆ P/TV104 OPS ATMOS		◆ P/TV104 OPS ATMOS		▶ VTR CHANGE													

GMT (D:H:M)		MET (D:H:M)		CST (D:H:M)		FD/ DOY	BETA	MOON	HOUSTON DATE		FLIGHT	EDITION	PUB. DATE			
306:04:46/ 306:16:46		005:12:00/ 006:00:00		305:22:46/ 306:10:46		87/305 CST	-53.4		NOVEMBER 1, 1994		STS-66	FINAL	09/14/94			
CST	:305	23	0	CST:306	1	2	3	4	5	6	7	8	9	10	0	MET:006
BLU FD	:007	12	13	14	15	16	17	18	19	20	21	22	23			
MET	:005															
RED	CDR	SLEEP		DSO 493	DSO 612	POST SLEEP		CABIN	H/O	NC11A MULT AXIS RCS BURN	EXERCISE	MEAL	MULT AXIS RCS BURN			
	MS1	SLEEP		DSO 493	POST SLEEP			H/O	ADPTAL IN ALG SY	EXERCISE	HPS ELE ADPTU P	HPP RUN V1-V2	MEAL	PSA/ET/TM/VVO/9PS	VTR OPS	
	MS2	SLEEP		DSO 493	DSO 612	POST SLEEP		TRECCOS	H/O	VTR OPS	VTR OPS	TPWSDN	VTR OPS	VTR OPS	MEAL	VTR DNK
BLUE	PLT	VTR OPS	MEAL	ZLV	WDIR SMI VTR	TRK MNVR	ZLV	EXERCISE	H/O	SHERS CK	PRE SLEEP	SLEEP				
	MS3	HPP RUN U1-U2	MEAL	VTR OPS	HPP RUN U3-U4	EXERCISE			H/O	HPP PADM	PRE SLEEP	SLEEP				
	MS4	SETUP PAVENT	MEAL	TPWSDN	VTR DNK	VTR PLBK	EXERCISE	VTR OPS	VTR OPS	H/O	PRE SLEEP		SLEEP			
DAY/NIGHT ORBIT		88	89	90	91	92	93	94	95	96						
EARTH TRACE																
TDRS EW																
ATT		-ZLV +XVV -ZLV +YVV SPAS COMM -ZLV +XVV														
NOTES:		VTR CHANGE o -ZLV, +YVV v MCIU FLTR CHECK o HTR CONFIG o CABIN TEMP CNTL RECONFIG o PCS CONFIG o H/O BLUE TO RED o CABIN TEMP SURVEY o MONITOR LATENT VIRUS REACT o WASTE DUMP TERM o ENERGY UTILIZATION o -ZLV, +XVV ■ P/TV99 OPS ATMOS														



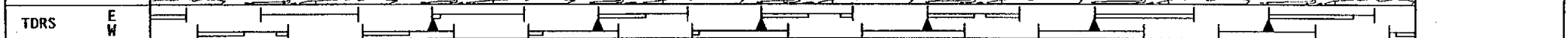
GMT (D:H:M)		MET (D:H:M)		CST (D:H:M)		FD/ DOY	BETA	MOON	HOUSTON DATE	FLIGHT	EDITION	PUB. DATE																		
307:04:46 / 307:16:46		006:12:00 / 007:00:00		306:22:46 / 307:10:46		BB/306 CST	-57.8		NOVEMBER 2, 1994	STS-66	FINAL	09/14/94																		
CST	:306	23	0	CST:307	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	MET:007	
BLU FD	:008	12	13																											
MET	:006																													
RED	CDR	SLEEP		DSO 493	DSO 612	POST SLEEP		EXERCISE	H/O	PRNF MED	HPP DEACT/STOW	VTR OPS	VTR OPS	FAM CONF	MEAL	TRK	MNV													
	MS1	SLEEP		DSO 493	POST SLEEP		P/TV06	P/TV06 OPS	H/O	ADPTAL ALG SY	VTR OPS	VTR OPS	PS/TU10A OS	PSA/TUM OS	FAM CONF	MEAL	OFF DUTY													
	MS2	SLEEP		DSO 493	DSO 612	POST SLEEP		VIEW	VIEW	H/O	P/TV06	P/TV06 OPS	EXERCISE	FAM CONF	MEAL	OFF DUTY														
BLUE	PLT	MEAL		NC13▲	MULT AXIS RCS BURN	VTR OPS	SAMS CR	EXERCISE	DTO 600	H/O	PRE SLEEP		SLEEP																	
	MS3	HPP RUN W1	MEAL	HPP RUN W2	HPP RUN X1-X2	HPP PADM	VTR OPS	VTR OPS	VTR OPS	H/O	PSTP ABLEW DTPR MUSDN	PRE SLEEP		SLEEP																
	MS4	MEAL	EXERCISE	DTO 677 SETUP	H/O	PRE SLEEP	PRE SLEEP		SLEEP																					
DAY/NIGHT	ORBIT		104	105	106	107	108	109	110	111	112																			
EARTH TRACE																														
TDRS																														
ATT	-ZLV +XV																													
NOTES:	<ul style="list-style-type: none"> ⊖ -ZLV, +XV ◆ VTR CHANGE ⊙ MONITOR LATENT VIRUS REACT ◆ VTR CHANGE ◆ VTR CHANGE ⊙ ENERGY UTILIZATION ▶ MCIU FLTR CHECK ⊙ MICR CAPT DEVICE ⊙ CABIN TEMP SURVEY ⊙ H/O BLUE TO RED ■ P/TV103 OPS ATMOS ■ P/TV103 OPS ATMOS <div style="border: 1px solid black; padding: 5px; display: inline-block; margin-top: 10px;"> * SOLAR ECLIPSE 6/19:32 MET </div>																													

GMT (D:H:M)	MET (D:H:M)	CST (D:H:M)	FD/ DOY	BETA	MOON	HOUSTON DATE	FLIGHT	EDITION	PUB. DATE
307:16:46/ 308:04:46	007:00:00/ 007:12:00	307:10:46/ 307:22:46	R8/307 CST	-60.0		NOVEMBER 3, 1994	STS-66	FINAL	09/14/94

CST :307	11	12	13	14	15	16	17	18	19	20	21	22	12
RED FD :008	0	1	2	3	4	5	6	7	8	9	10	11	
MET :007							BLU	FD09					

RED	CDR	OFF DUTY	PRE SLEEP	SLEEP	
	MS1	OFF DUTY	EXERCISE	PRE SLEEP	SLEEP
	MS2	OFF DUTY	PRE SLEEP	SLEEP	
BLUE	PLT	SLEEP	POST SLEEP	OFF DUTY	
	MS3	SLEEP	POST SLEEP	OFF DUTY	
	MS4	SLEEP	POST SLEEP	OFF DUTY	

DAY/NIGHT	ORBIT	112	113	114	115	116	117	118	119	120
-----------	-------	-----	-----	-----	-----	-----	-----	-----	-----	-----



ATT	-ZLV +XVW	ISPAS COMM
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NOTES: @-ZLV, +XVW @CABIN AIR MONITOR @CABIN TEMP SURVEY @MONITOR LATENT VIRUS REACT @H/O RED TO BLUE

GMT (D:H:M)		MET (D:H:M)		CST (D:H:M)		FD/ DOY	BETA	MOON	HOUSTON DATE	FLIGHT	EDITION	PUB. DATE					
308:04:46 / 308:16:46		007:12:00 / 008:00:00		307:22:46 / 308:10:46		89/307 CST	-62.1	☉	NOVEMBER 3, 1994	STS-66	FINAL	09/14/94					
CST :307	23	0	CST:308	1	2	3	4	5	6	7	8	9	10	0	MET:008		
BLU FD :009	12	13	14	15	RED FD09	16	17	18	19	20	21	22	23				
MET :007																	
RED	CDR	SLEEP		DSO 493	POST SLEEP		FCS C/O	H/O	EXERCISE		PROV MED	ZLV	MNV	TRK	MNV		
	MS1	SLEEP		DSO 493	POST SLEEP		TPW PR SDN	H/O	ADP TAL IN ALG SY	VTR OPS	VTR OPS	P/TV06 OPS	EXERCISE		VTR OPS	VTR OPS	
	MS2	SLEEP		DSO 493	POST SLEEP		FCS C/O	H/O	VIEW	VTR OPS	DTO 680	VTR OPS	VTR OPS	VTR DNLK	VTR PLBK	P/TV10	PAVENT
BLUE	PLT	OFF DUTY	ZLV	MNV	NC14▲ MULT AXIS RCS BURN	MEAL	EXERCISE		FCS C/O	H/O	SPAS CK	PRE SLEEP		SLEEP			
	MS3	OFF DUTY	EXERCISE		TPW PR SUP	MEAL	DTO 680		VTR OPS	PS APT MUL	P/TV06	PO/PTS	H/O	AOPP	PRE SLEEP		SLEEP
	MS4	OFF DUTY	ADP TAL IN ALG SY	TESS-COS	UE SV FEEN T	VTR OPS	MEAL	VTR OPS	P/TV06 OPS	VTR OPS	EXERCISE	VTR OPS	DTO 677	VTR OPS	PRE SLEEP		SLEEP
DAY/NIGHT	120		121		122		123		124		125		126		127		128
ORBIT																	
EARTH TRACE																	
TDRS																	
ATT																	
NOTES:	<p> ◎-ZLV, +XVV ◎MONITOR LATENT VIRUS REACT ▶ SAMS DISK ▶ APU HTR ACT ◎RECUMBENT SEATING SYSTEM ▼ MCIU FLTR CHECK ◎MICR CAPT DEVICE ◎H/O BLUE TO RED ○ APU HTR RECONFIG ◎CABIN TEMP SURVEY ◎-ZLV, +YVV ◎ WASTE DUMP TERM ◎LOAD FUTURE START -ZLV, +XVV MNVR </p>																

GMT (D:H:M)	MET (D:H:M)	CST (D:H:M)	FD/ DOY	BETA	MOON	HOUSTON DATE	FLIGHT	EDITION	PUB. DATE						
308:16:46/ 309:04:46	008:00:00/ 008:12:00	308:10:46/ 308:22:46	R9/308 CST	-64.1	●	NOVEMBER 4, 1994	STS-66	FINAL	09/14/94						
CST :308															
RED FD :009															
MET :008															
	0	1	2	3	4	5	6	7	8	9	10	11	12		
RED	CDR	MEAL	NC15A MULT AXIS RCS BURN			PRE SLEEP	H/O	SLEEP							
	MS1	MEAL	PSA TV104	VTR OPS	VTR OPS	TP IM PR SU P	PRE SLEEP	H/O	SLEEP						
	MS2	MEAL	TVIEW -COS	VTR OPS	VTR OPS	EXERCISE	NHS AWR EAT MTEL ELL	PRE SLEEP	H/O	SLEEP					
BLUE	PLT			SLEEP		DSO 493	POST SLEEP	H/O	POST SLEEP	NC16A		SPAS RETRIEVE			
	MS3			SLEEP		DSO 493	POST SLEEP	H/O	POST SLEEP	TP IM PR SU N	EXERCISE		SPAS RETRIEVE		
	MS4			SLEEP		DSO 493	POST SLEEP	H/O	POST SLEEP	VTR ADP R LIN ALG PSY OPS	VTR OPS	VTR DNK	VTR OPS	TVIEW -COS	VTR OPS
DAY/NIGHT	[Day/Night Cycle: Night from 0 to 12, Day from 12 to 24]														
ORBIT	128	129	130	131	132	133	134	135							
EARTH TRACE	[Orbit Trace Diagram]														
TDRS	[TDRS Contact Diagram]														
ATT	-ZLV +XVV SPAS COAL/RNDZ														
NOTES:	▲ PRE-LOADED -ZLV MNVR ■ P/TV104 OPS ATMOS ■ P/TV104 OPS ATMOS ● CABIN AIR MONITOR ● CABIN TEMP SURVEY ● MONITOR LATENT VIRUS REACT ● H/O RED TO BLUE COAL COAL														

GMT (D:H:M)		MET (D:H:M)		CST (D:H:M)		FD/ DOY	BETA	MOON	HOUSTON DATE	FLIGHT	EDITION	PUB. DATE							
309:04:46/ 309:16:46		008:12:00/ 009:00:00		308:22:46/ 309:10:46		B10/308 CST	-66.0	●	NOVEMBER 4, 1994	STS-66	FINAL	09/14/94							
CST	:308	23	0	CST:309	1	2	3	4	5	6	7	8	9	10	0	MET:009			
BLU FD	:010	12	13	14	15	16	17	18	19	20	21	22	23						
MET	:008				RED	FD10	16												
RED	CDR	SLEEP			DSO 493	POST SLEEP		H/O	SPAS RETRIEVE			P/TVO1 OPS CS	CPG MRP DOWN	IMU MNR	AMNVR	AMNVR	AMNVR	AMNVR	MEAL
	MS1	SLEEP			DSO 493	POST SLEEP		H/O	SPAS RETRIEVE			SPAS BERTH	RMS PARK	ADPTAL IN ALG	P/TVO1	PEVENT	VTR PLBK		MEAL
	MS2	SLEEP			DSO 493	POST SLEEP		H/O	DTO 668	SETUP	STILL	TPW PRSDN	DTO 668	EXERCISE			HEAVEN	MEAL	
BLUE	PLT	NC17▲ NHA NC18▲ NCCA MFA NCCA			SPAS RETRIEVE			H/O	SPAS RETRIEVE			GRAPPLE		PRE SLEEP			SLEEP		
	MS3	SPAS RETRIEVE		MEAL		SPAS RETRIEVE			H/O	SPAS RETRIEVE			PRE SLEEP		SLEEP				
	MS4	VTR OBS	P/TVO1	DTO 677	MEAL		TPW PRSDN	H/O	SRPTRIEVE	P/TVO1	P/TVO1 OPS CS			PRE SLEEP		SLEEP			
DAY/NIGHT	[Day/Night Cycle]																		
ORBIT	136 137 138 139 140 141 142 143																		
EARTH TRACE	[Earth Trace Map]																		
TDRS	[TDRS Schedule]																		
ATT	NC17 SPAS RNDZ NC18 SPAS RNDZ IMF SPAS RNDZ IT1 SPAS RNDZ -ZLV -XVV IMU MAS MOON -ZLV +XVV																		
NOTES:	@MICR CAPT DEVICE @MONITOR LATENT VIRUS REACT @H/O BLUE TO RED Δ MCIU FLTR CHECK @ADV LOWER BODY RESTR TEST @CABIN TEMP SURVEY																		

GMT (D:H:M)		MET (D:H:M)		CST (D:H:M)		FD/ DOY	BETA	MOON	HOUSTON DATE	FLIGHT	EDITION	PUB. DATE		
309:16:46 / 310:04:46		009:00:00 / 009:12:00		309:10:46 / 309:22:46		R10/309 CST	-67.8	●	NOVEMBER 5, 1994	STS-66	FINAL	09/14/94		
CST	:309	11	12	13	14	15	16	17	18	19	20	21	22	12
RED FD	:010	0	1	2	3	4	5	6	7	8	9	10	11	
MET	:009							BLU	FD11					
RED	CDR	MEAL	P/TV06 OPS	PS/TV06	FILTER CLEANING	DTO 683	PRE SLEEP	H/O	PRE SLEEP		SLEEP			
	MS1	MEAL	DTO 668 STOW	DTO 683	P/TV100 OPS MAS	P/TV06 OPS	PRE SLEEP	H/O	PRE SLEEP		SLEEP			
	MS2	MEAL	DTO 700-7 STOW	PS/TV06	NO PHS - R	TP/TV06 SUP	PRE SLEEP	H/O	PRE SLEEP		SLEEP			
BLUE	PLT				SLEEP		DSO 493	DSO 612	H/O	POST SLEEP	IMU	EXERCISE		SAMS CK
	MS3				SLEEP		DSO 493	POST SLEEP	H/O	POST SLEEP	DTO 668	DTO 683	PSM / A TUH V 9 3 I	
	MS4				SLEEP		DSO 493	POST SLEEP	H/O	POST SLEEP	ADP TAL IN ALG SY	P/TV06 OPS	PSS / EA TTM VUS OP 4	P / T V 0 4 S A M S I
DAY/NIGHT														
ORBIT	144	145	146	147	148	149	150	151						
EARTH TRACE														
TDRS														
ATT	-ZLV +XVV IMU -ZLV +XVV													
NOTES:	◎ADV LOWER BODY RESTR TEST ◎INTERLIMB EXERCISE SESSION ◎H/O RED TO BLUE ◎-ZLV, +XVV ◎INTERLIMB EXERCISE SESSION ◎REAL TIME NAV ◎CABIN AIR MONITOR ◎MONITOR LATENT VIRUS REACT ◎CABIN TEMP SURVEY ► SAMS DISK ◎INTERLIMB EXERCISE SESSION ◎ENERGY UTILIZATION ▽ P/TV93 OPS MAHRSI													

GMT (D:H:M)		MET (D:H:M)		CST (D:H:M)		FD/ DOY	BETA	MOON	HOUSTON DATE	FLIGHT	EDITION	PUB. DATE															
310:04:46/ 310:16:46		009:12:00/ 010:00:00		309:22:46/ 310:10:46		B11/309 CST	-69.5		NOVEMBER 5, 1994	STS-66	FINAL	09/14/94															
CST	:309	23	0	CST:310	1	2	3	4	5	6	7	8	9	10	0	MET:010											
BLU FD	:011	12	13	14	15	16	17	18	19	20	21	22	23														
MET	:009																										
RED	CDR	SLEEP		DSO 493	DSO 612	POST SLEEP		RCS HOT	FIREF	POST SLEEP	H/O	ROTOR	MONITOR	SNUSLIM	PCOIN	PCOIN	ROTOR	MONITOR	SNUSLIM	DEORB PREP BRIEF	STAMP	MEAL	ROTOR	MONITOR	SNUSLIM		
	MS1	SLEEP		DSO 493	POST SLEEP		SNUSLIM	H/O	ADP ALIN	PS AEDT	SNUSLIM	PSS / TV98	ROTOR	MONITOR	SNUSLIM	DEORB PREP BRIEF	SNUSLIM	MEAL	SNUSLIM	ROTOR	MONITOR	SNUSLIM					
	MS2	SLEEP		DSO 493	DSO 612	POST SLEEP		RCS HOT	FIREF	POST SLEEP	H/O	EXERCISE		DEORB PREP BRIEF	ROTOR	MONITOR	SNUSLIM	MEAL									
BLUE	PLT	P/TV10	PAVENT	MEAL	TP / TV10	IMU	MNV	RCS HOT	FIREF	SNUSLIM	H/O	MOD	TP / TV10	DTO 666	PRE SLEEP		SLEEP										
	MS3	P/TV06	PO / TV06	MEAL	PSS / TV03	P/TV03 OPS STES		R / TV03	H/O	PSP / TV02	P/TV02 OPS PCG-TES		PRE SLEEP		SLEEP												
	MS4	DTO 677	MEAL	STES VDA DEACT		EXERCISE		H/O	PCG-TES DEACT	PRE SLEEP		SLEEP															
DAY/NIGHT	ORBIT		152	153	154	155	156	157	158	159																	
EARTH TRACE																											
TDRS																											
ATT	-ZLV +XVV												IMU	-ZLV +XVV		ROTOR	-ZSI	ROTOR	-ZSI	ROTOR	-ZSI	ROTOR	-ZSI				
NOTES:	▽ MCIU FLTR CHECK			⊙ MONITOR LATENT VIRUS REACT			⊙ H/O BLUE TO RED			⊙ CABIN TEMP SURVEY			■ P/TV98 OPS SUSIM														
	⊙ MICR CAPT DEVICE			⊙ ENERGY UTILIZATION			⊙ -ZLV, +XVV			⊙ ESCAPE ACT																	

GMT (D:H:M)		MET (D:H:M)		CST (D:H:M)		FD/ DOY	BETA	MOON	HOUSTON DATE	FLIGHT	EDITION	PUB. DATE						
310:16:46 / 311:04:46		010:00:00 / 010:12:00		310:10:46 / 310:22:46		R11/310 CST	-70.9		NOVEMBER 6, 1994	STS-66	FINAL	09/14/94						
CST	:310	11	12	13	14	15	16	17	18	19	20	21	22	12				
RED FD	:011	0	1	2	3	4	5	6	7	8	9	10	11					
MET	:010																	
RED	CDR	EXERCISE		BRNDR CHD	ROTOR	INSTR	SNUSLILM	DSO 493	ROTOR	INSTR	SNUSLILM	SUSIM ALIGN	IMU MNR	INSTR	PRE SLEEP	H/O	PRE SLEEP	SLEEP (6.0)
	MS1	SNUSLILM	EXERCISE		SNUSLILM	ERG STOW	SUSIM ALIGN	PRE SLEEP	ESCAPE	PRE SLEEP	H/O	PRE SLEEP	SLEEP (6.0)					
	MS2	ROTOR	INSTR	SNUSLILM	NO PPS	ERG STOW	TPW PR SUP	PRE SLEEP	H/O	PRE SLEEP	SLEEP (6.0)							
BLUE	PLT	SLEEP		DSO 493	POST SLEEP	H/O	POST SLEEP	DTO 664	DEACT	OCAC	PGWRP	WDI AUN SMI TPT E	CABIN STOW	CABIN	MEAL	SL DEACT		
	MS3	SLEEP		DSO 493	POST SLEEP	H/O	POST SLEEP	PPAW DR MDN	OCAC	CABIN STOW	MEAL	PSS / TUB V 101						
	MS4	SLEEP		DSO 493	POST SLEEP	H/O	POST SLEEP	ADP TAL LIN ALG SY	PHS GBT SIO CAW	CABIN STOW	MEAL	SL DEACT						
DAY/NIGHT ORBIT		160	161	162	163	164	165	166	167									
EARTH TRACE																		
TDRS E W																		
ATT		-ZSI ROTOR	-ZSI ROTOR	-ZSI ROTOR	SUSIM	IMU	PTC											
NOTES:		@CABIN AIR MONITOR @MONITOR LATENT VIRUS REACT @CABIN TEMP SURVEY ► WASTE DUMP TERM ■ ESCAPE SUN OVRD ■ ESCAPE SUN REINST @MONITOR LATENT VIRUS REACT @H/O RED TO BLUE																

GMT (D:H:M)		MET (D:H:M)		CST (D:H:M)		FD/ DOY	BETA	MOON	HOUSTON DATE	FLIGHT	EDITION	PUB. DATE				
311:04:46/ 311:16:46		010:12:00/ 011:00:00		310:22:46/ 311:10:46		12/310 CST	-72.1		NOVEMBER 6, 1994	STS-66	FINAL	09/14/94				
CST	:310			CST:311	1	2	3	4	5	6	7	8	9	10	0	MET:011
FD	:012	12	23	13	14	15	16	17	18	19	20	21	22	23		
MET	:010															
RED	CDR	SLEEP	POST SLEEP	POST SLEEP	DEORBIT PREP											
	MS1	SLEEP	POST SLEEP	POST SLEEP	DEORBIT PREP											
	MS2	SLEEP	POST SLEEP	POST SLEEP	DEORBIT PREP											
BLUE	PLT	SL DEACT	CABIN STOW	DSO 603C	DEORBIT PREP											
	MS3		CABIN STOW	DSO 603C	DEORBIT PREP											
	MS4	SL DEACT	CABIN STOW	DSO 603C	DEORBIT PREP											
DAY/NIGHT ORBIT	168		169		170		171		172		173		174		175	
EARTH TRACE																
TDRS E W																
ATT	PTC -ZLV +YVV -XSI IMU/VERIF COMM DEORBIT															
NOTES:	<ul style="list-style-type: none"> ⊙ -ZLV, +YVV ⊙ FLORINEF ⊙ KU STOW ⊙ MONITOR LATENT VIRUS REACT ◆ SSBV DEACT ⊙ ORTHOSTATIC FUNCTION <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px;">*DEORBIT BURN 10/18:46</div> <div style="border: 1px solid black; padding: 2px;">*KSC LANDING 10/19:46</div> </div>															

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DETAILED TIMELINE

DETAILED
TIMELINE

DETAILED TIMELINE

STS-66 (RED FD01)

CDR

MS1

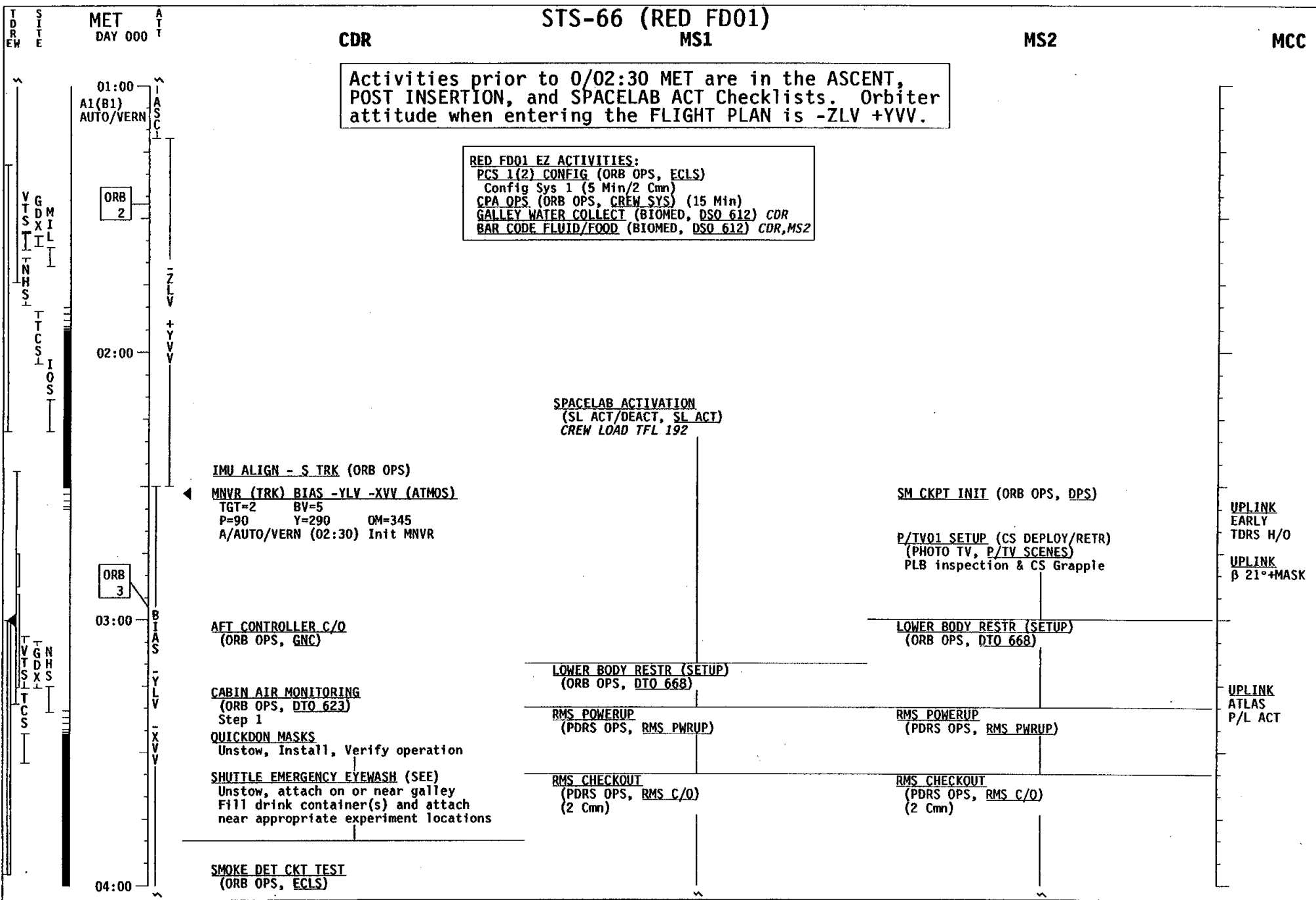
MS2

MCC

MET DAY 000

Activities prior to 0/02:30 MET are in the ASCENT, POST INSERTION, and SPACELAB ACT Checklists. Orbiter attitude when entering the FLIGHT PLAN is -ZLV +YVV.

RED FD01 EZ ACTIVITIES:
 PCS 1(2) CONFIG (ORB OPS, ECLS)
 Config Sys 1 (5 Min/2 Cmn)
 CPA OPS (ORB OPS, CREW SYS) (15 Min)
 GALLEY WATER COLLECT (BIOMED, DSO 612) CDR
 BAR CODE FLUID/FOOD (BIOMED, DSO 612) CDR,MS2



TDR SITE MET ATT
EW E DAY 000 T

STS-66 (BLUE FD01)

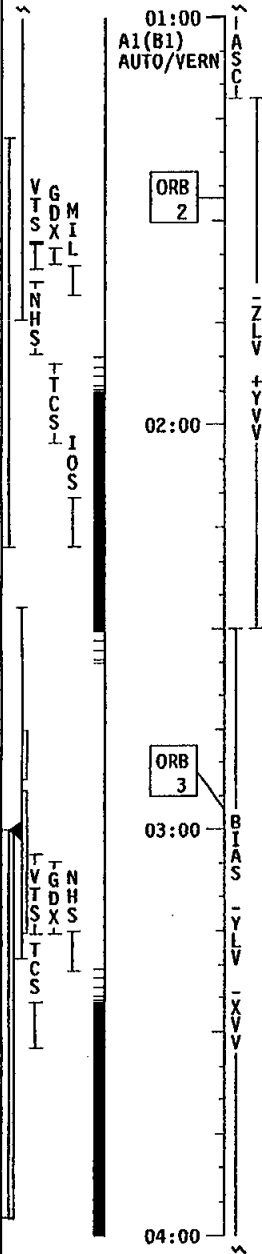
PLT

MS3

MS4

MCC

Activities prior to 0/02:30 MET are in the ASCENT, POST INSERTION, and SPACELAB ACT Checklists. Orbiter attitude when entering the FLIGHT PLAN is -ZLV +YVV.



KU-BD ANT DEPLOY
(ORB OPS, COMM/INST)

KU-BD ACIVATION (COMM mode)
(ORB OPS, COMM/INST)

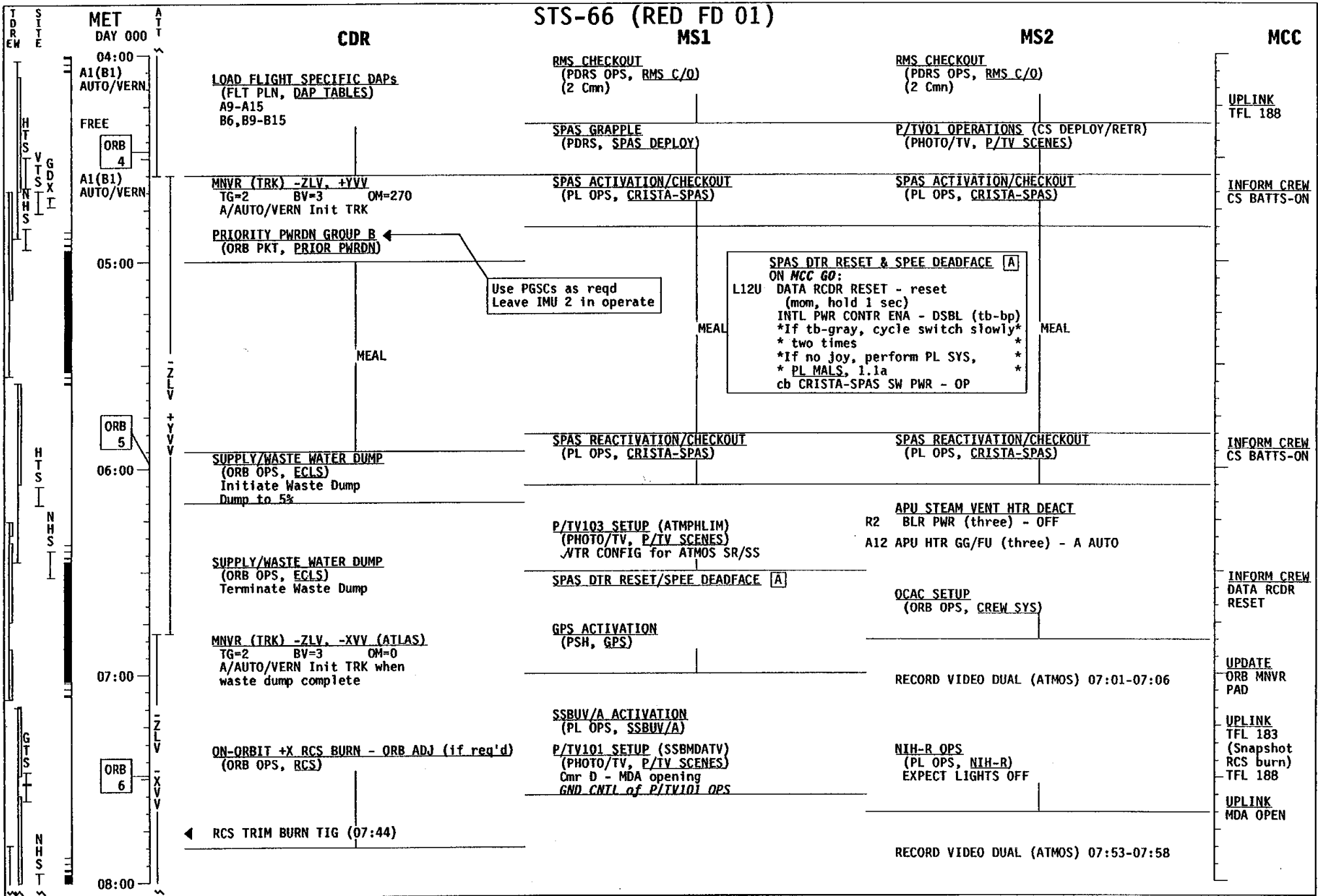
SPACELAB ACTIVATION
(SL ACT/DEACT, SL ACT)

UPLINK
EARLY
TDRS H/O

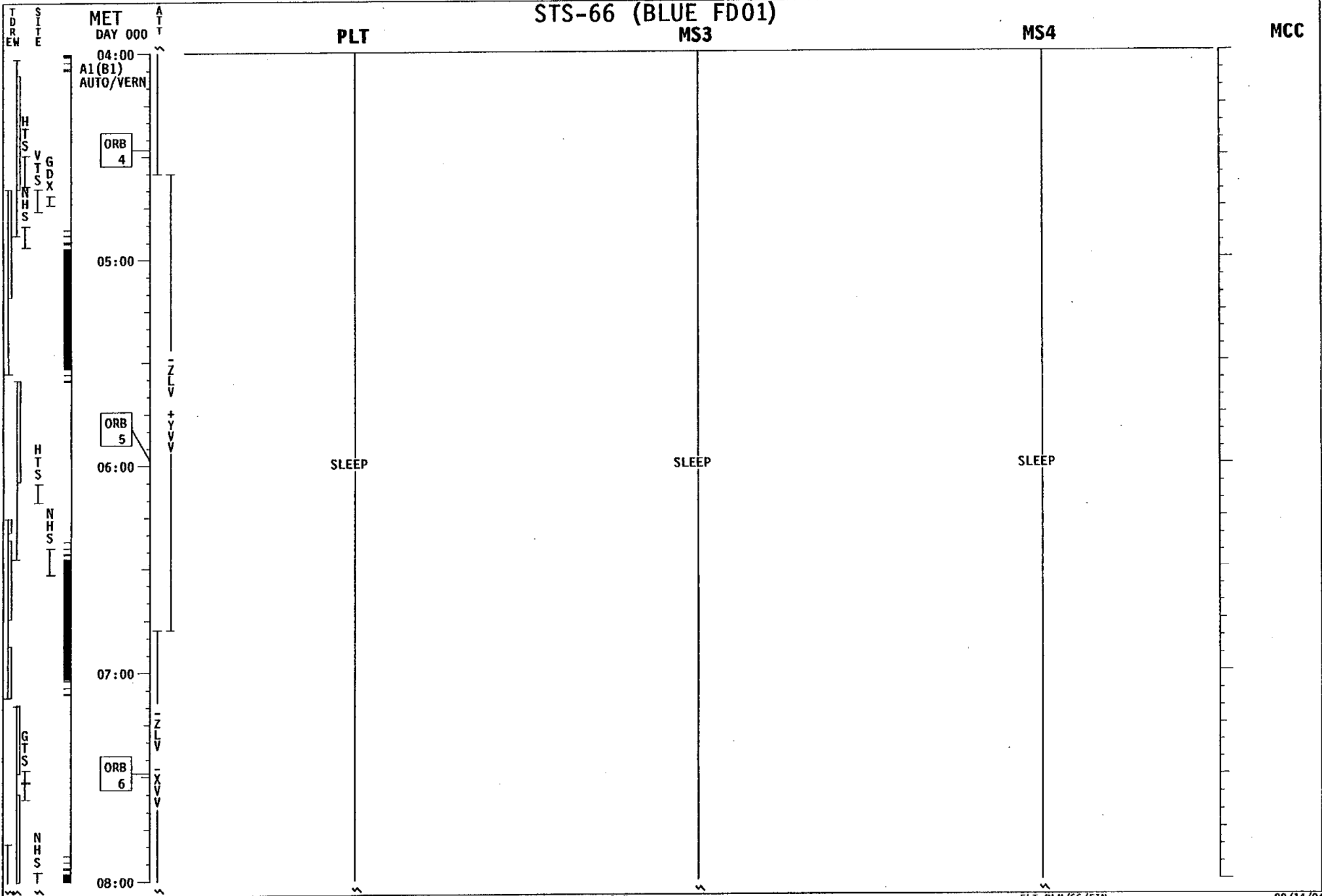
PRE SLEEP

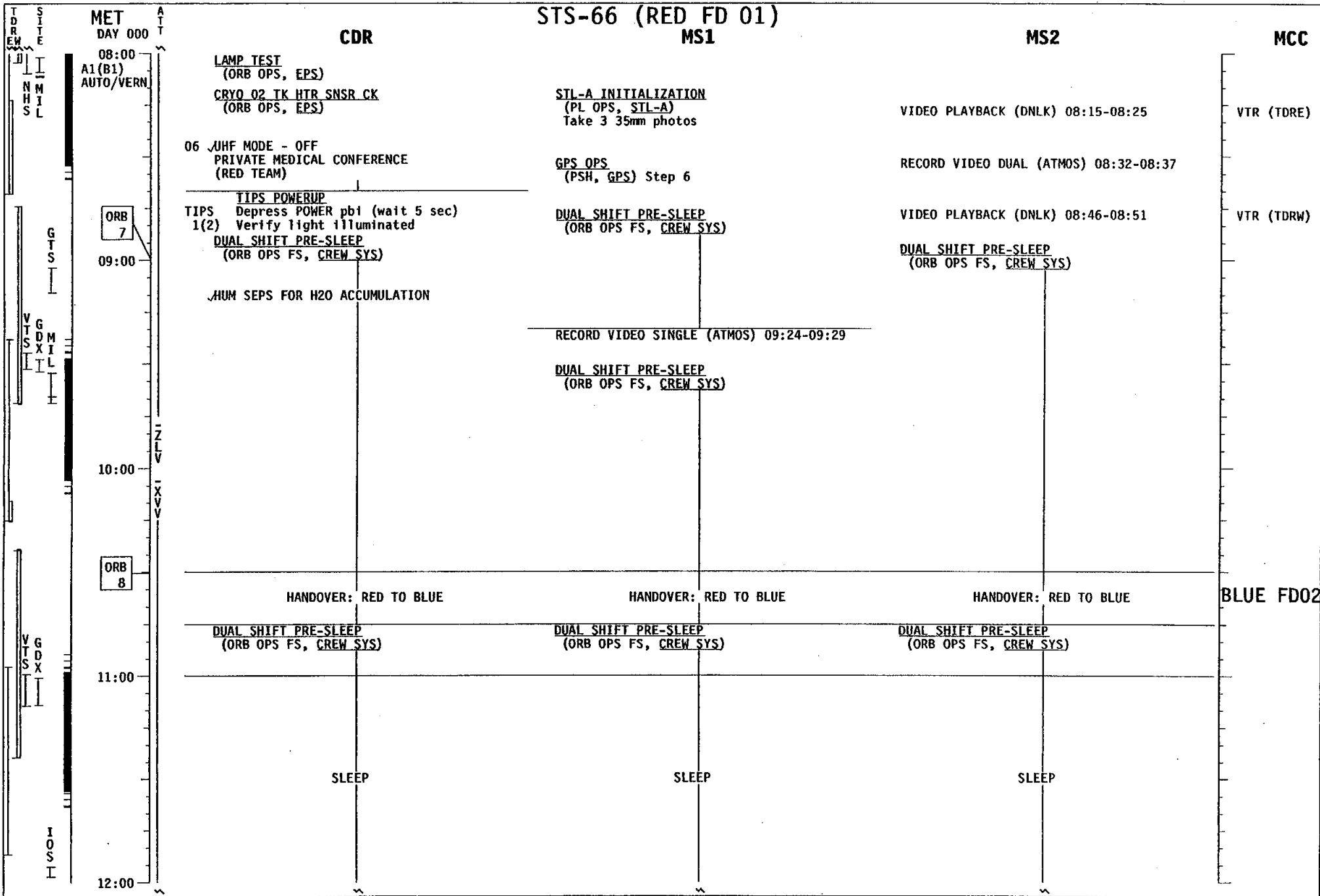
PRE SLEEP

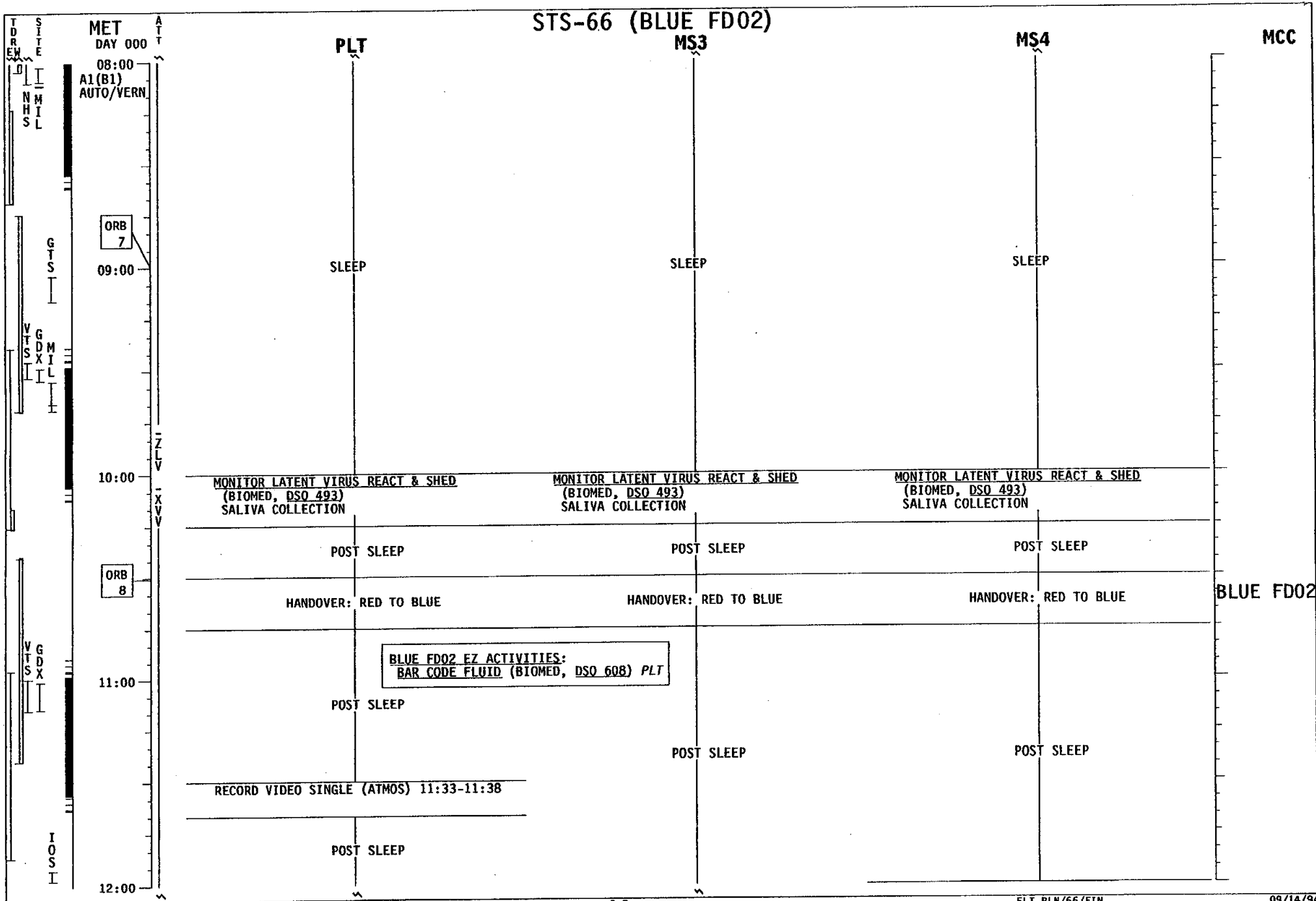
PRE SLEEP



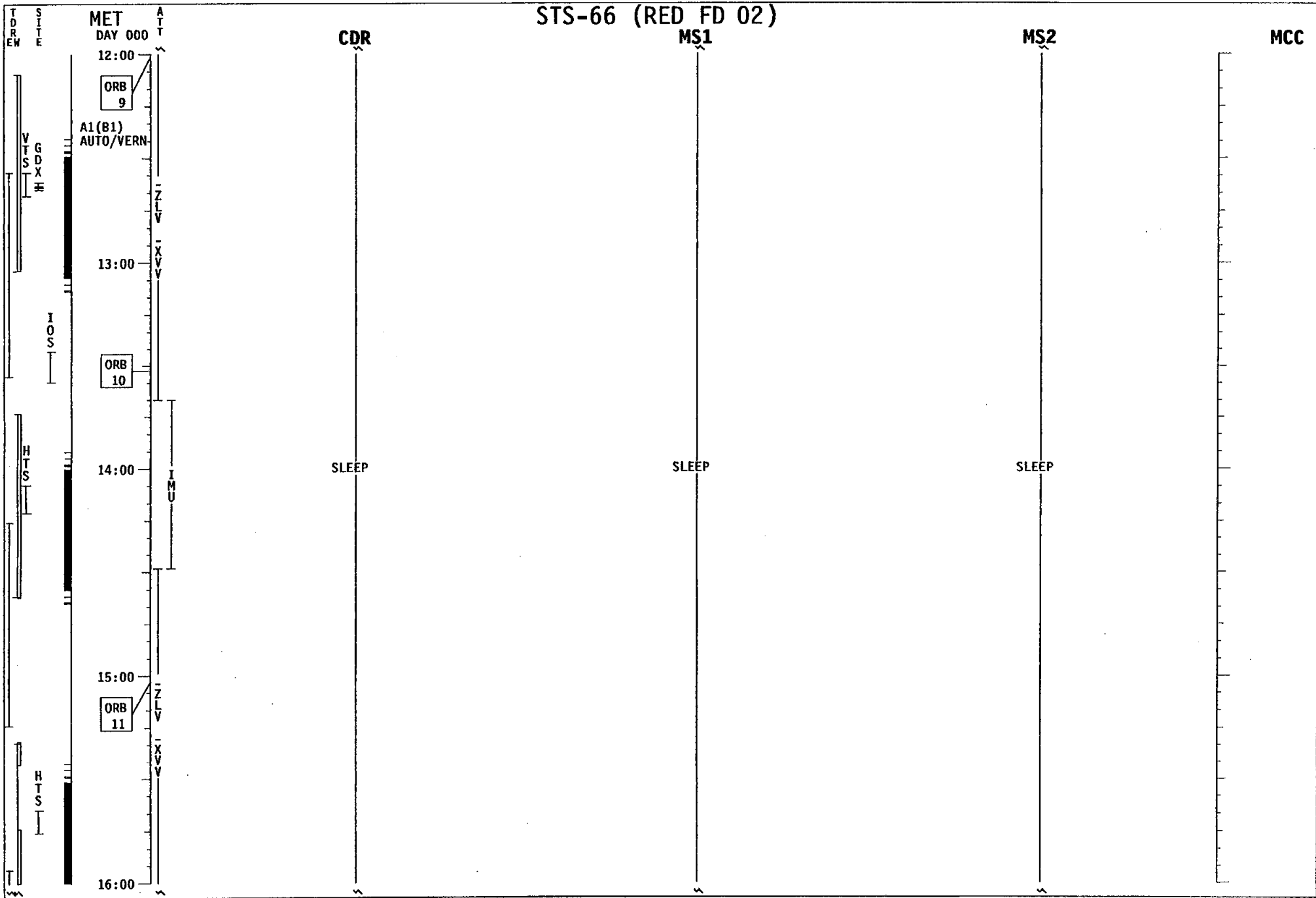
STS-66 (BLUE FD01)

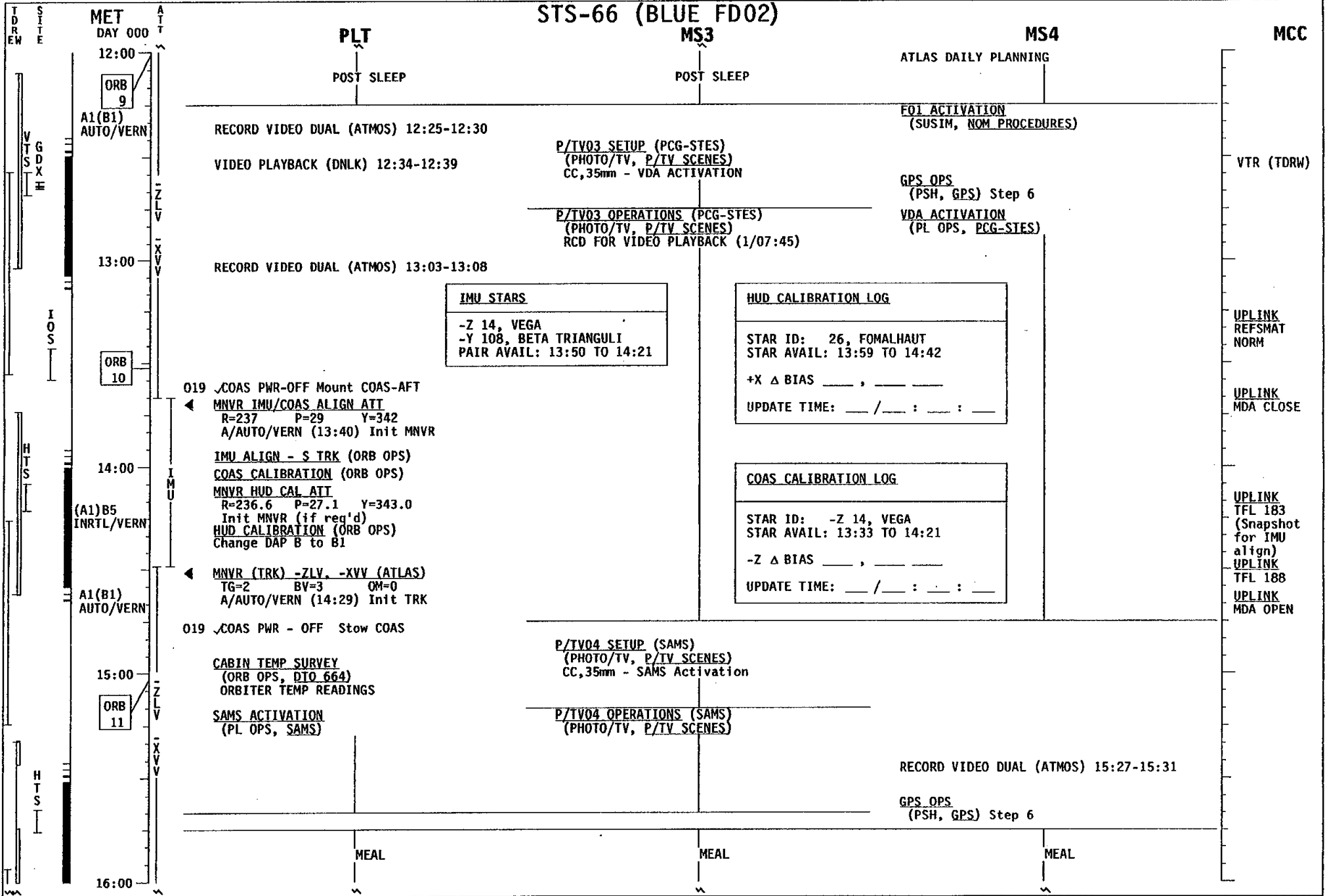




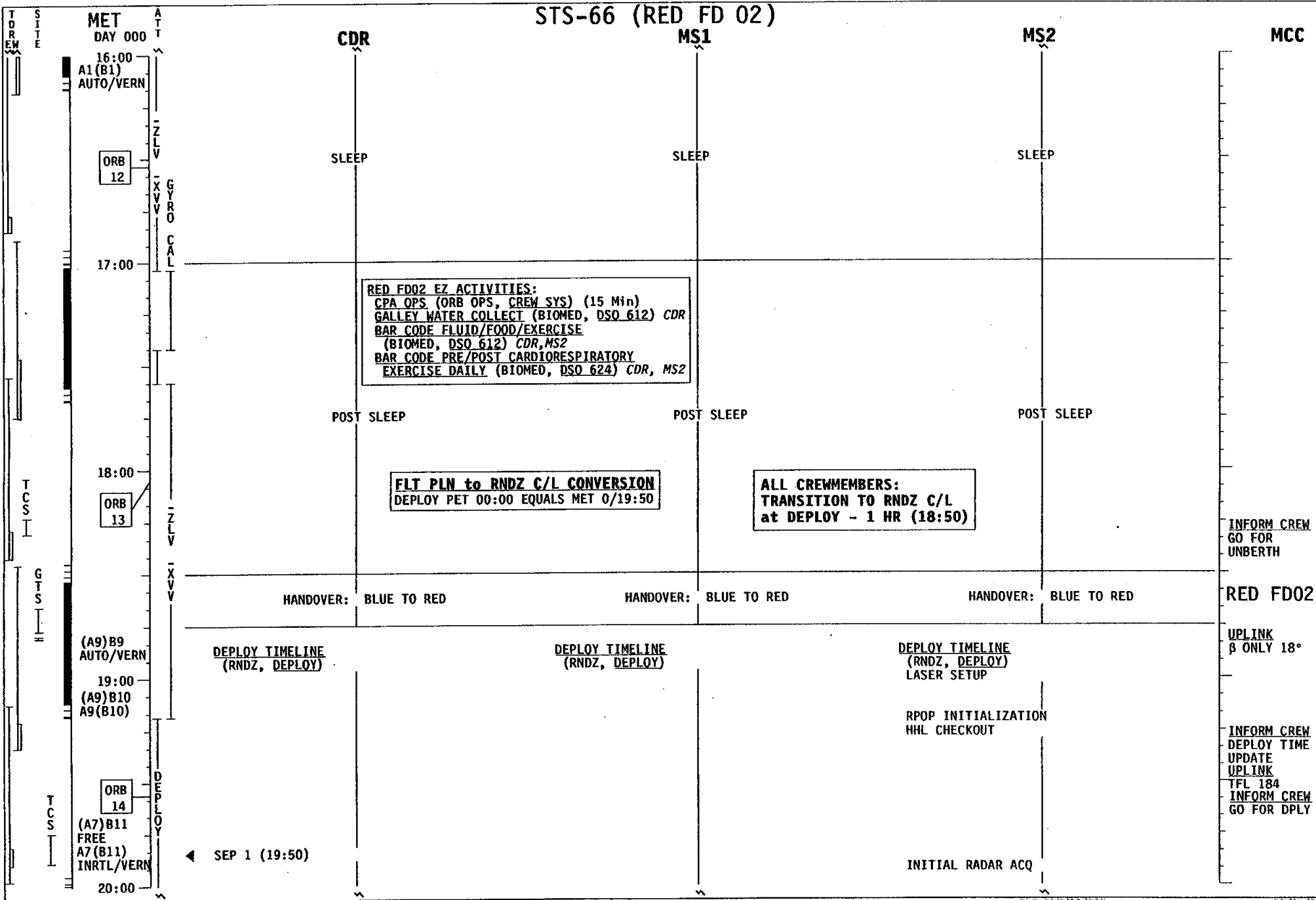


STS-66 (RED FD 02)

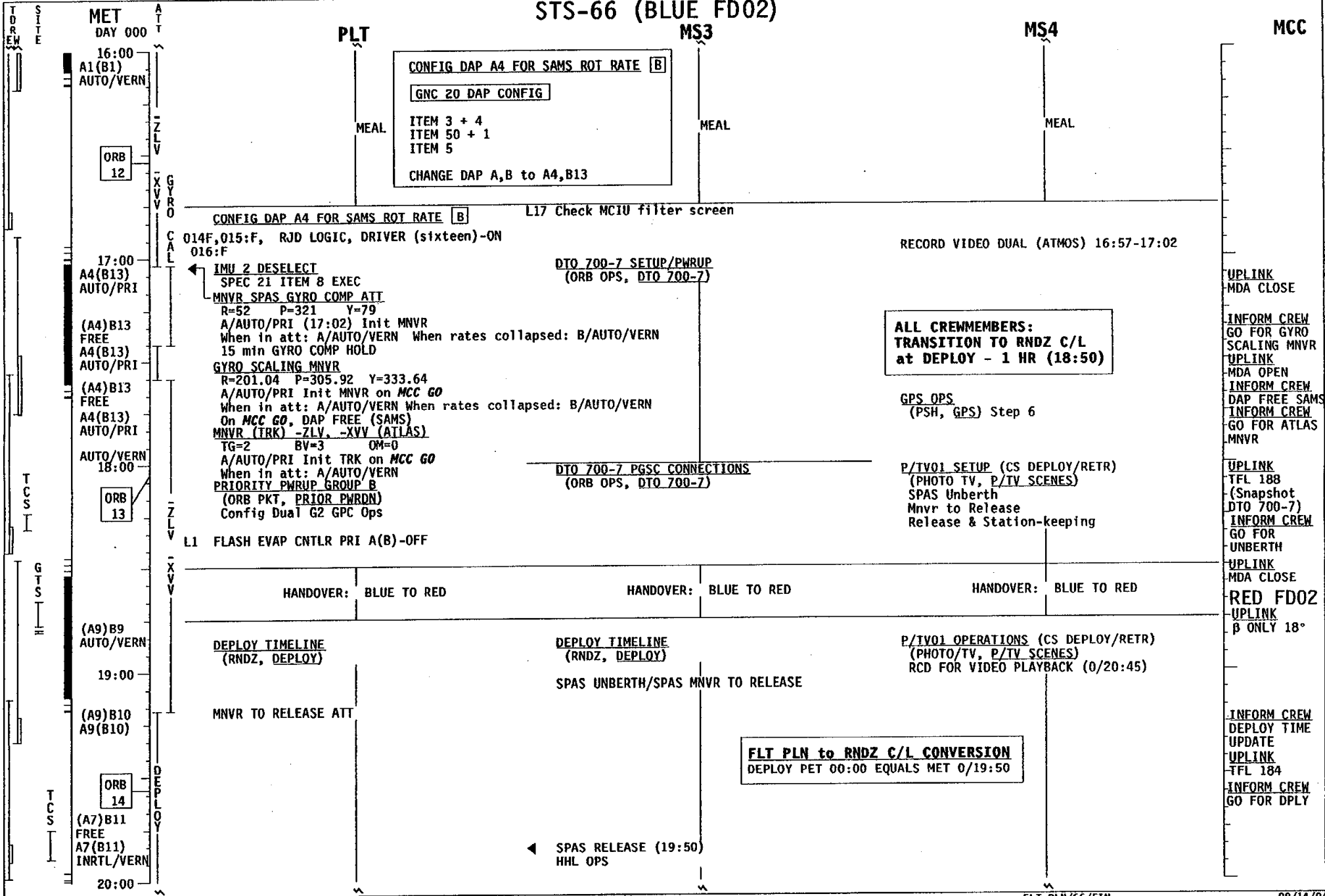


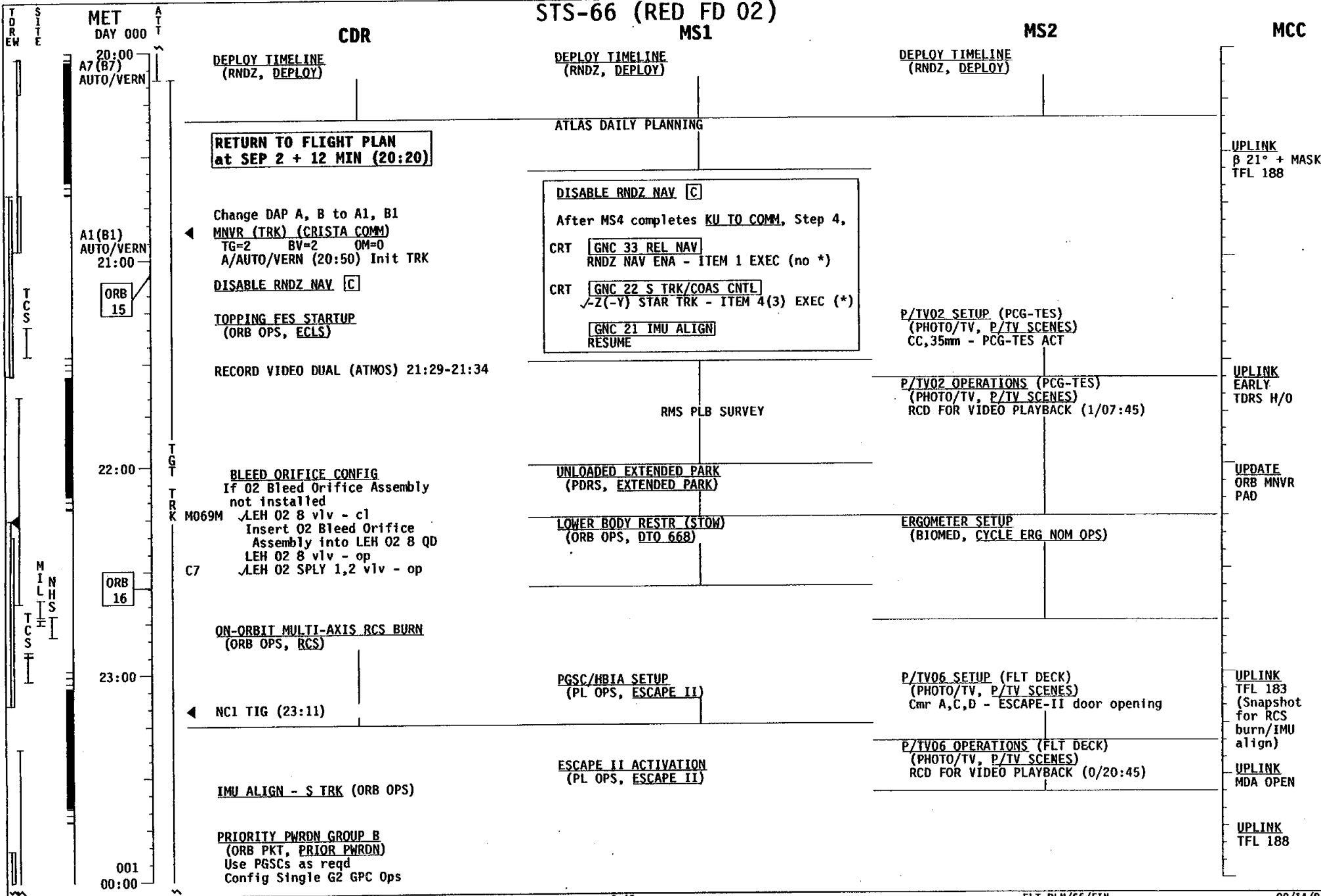


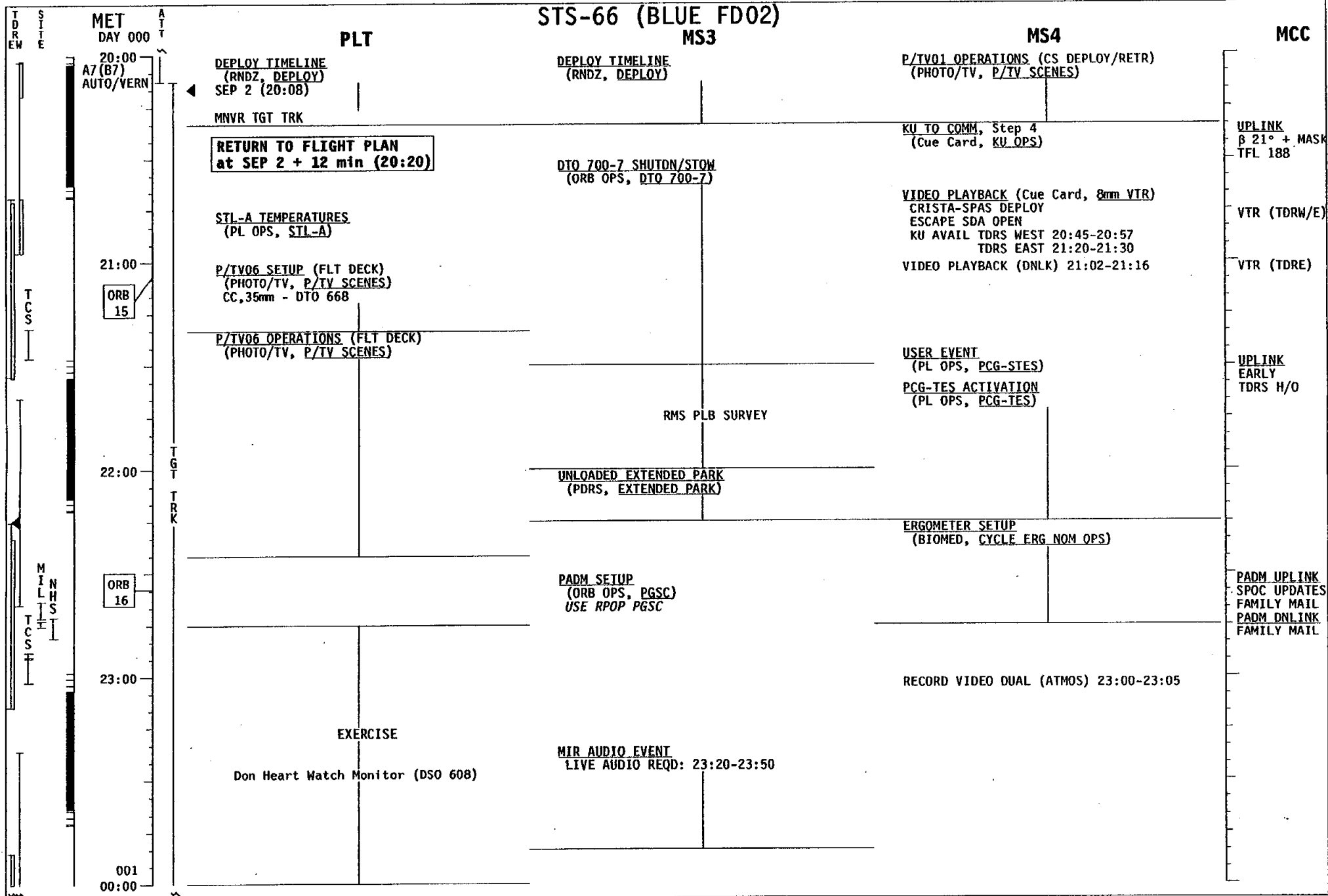
STS-66 (RED FD 02)

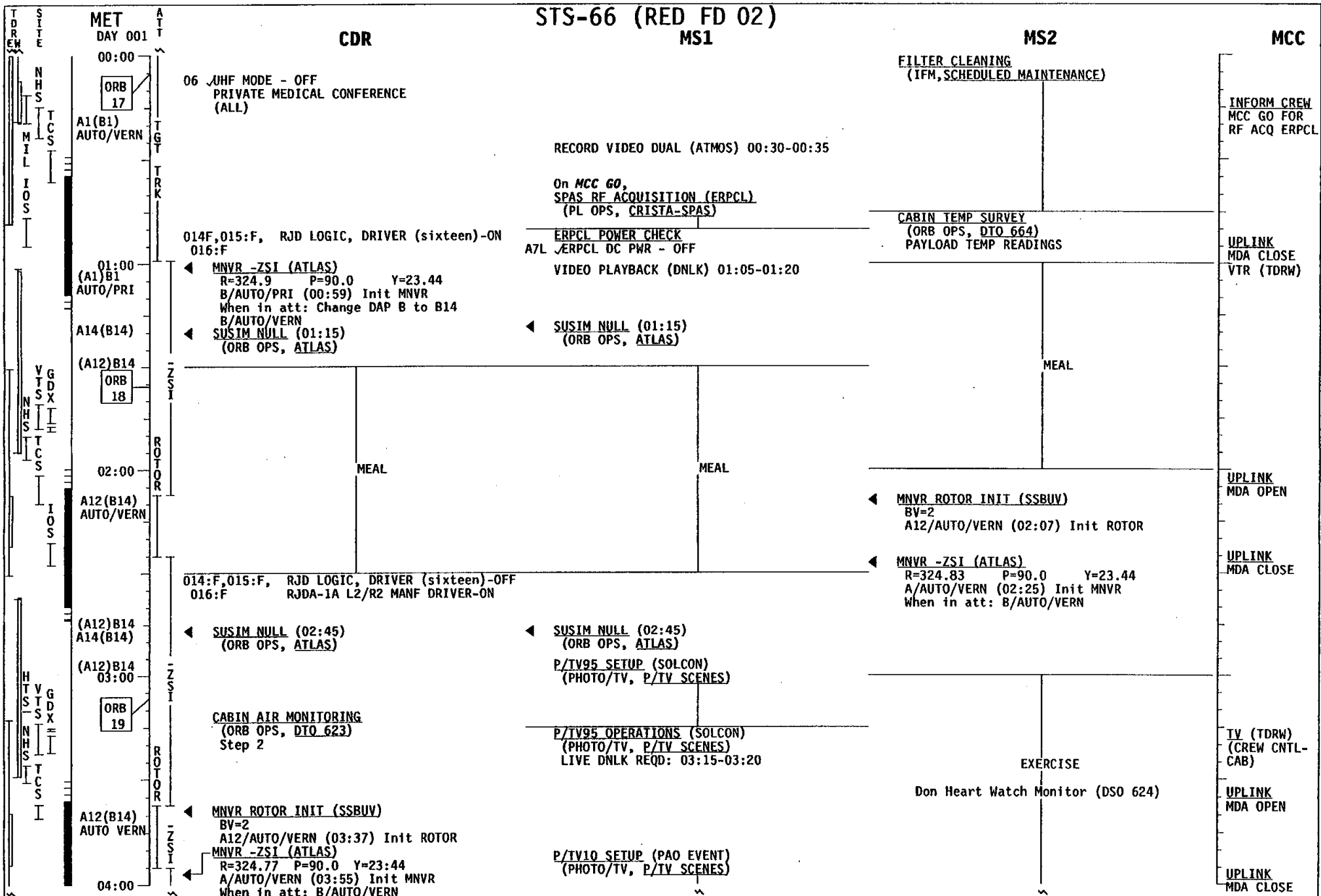


STS-66 (BLUE FD02)









MET DAY 001
00:00
ORB 17
A1(B1) AUTO/VERN
01:00
(A1)B1 AUTO/PRI
A14(B14)
(A12)B14 ORB 18
02:00
A12(B14) AUTO/VERN
(A12)B14 A14(B14)
(A12)B14 A14(B14)
03:00
ORB 19
A12(B14) AUTO VERN
04:00

06 UHF MODE - OFF
PRIVATE MEDICAL CONFERENCE (ALL)

014F,015:F, RJD LOGIC, DRIVER (sixteen)-ON
016:F

◀ MNVN -ZSI (ATLAS)
R=324.9 P=90.0 Y=23.44
B/AUTO/PRI (00:59) Init MNVN
When in att: Change DAP B to B14
B/AUTO/VERN
◀ SUSIM NULL (01:15)
(ORB OPS, ATLAS)

014:F,015:F, RJD LOGIC, DRIVER (sixteen)-OFF
016:F RJD A-1A L2/R2 MANF DRIVER-ON

◀ SUSIM NULL (02:45)
(ORB OPS, ATLAS)

CABIN AIR MONITORING
(ORB OPS, DTG 623)
Step 2

◀ MNVN ROTOR INIT (SSBUV)
BV=2
A12/AUTO/VERN (03:37) Init ROTOR
MNVN -ZSI (ATLAS)
R=324.77 P=90.0 Y=23.44
A/AUTO/VERN (03:55) Init MNVN
When in att: B/AUTO/VERN

CDR

STS-66 (RED FD 02)
MS1

RECORD VIDEO DUAL (ATMOS) 00:30-00:35

On MCC GO,
SPAS RE ACQUISITION (ERPCL)
(PL OPS, CRISTA-SPAS)

ERPCL POWER CHECK
A7L ERPCL DC PWR - OFF
VIDEO PLAYBACK (DNLK) 01:05-01:20

◀ SUSIM NULL (01:15)
(ORB OPS, ATLAS)

◀ SUSIM NULL (02:45)
(ORB OPS, ATLAS)
P/TV95 SETUP (SOLCON)
(PHOTO/TV, P/TV SCENES)

P/TV95 OPERATIONS (SOLCON)
(PHOTO/TV, P/TV SCENES)
LIVE DNLK REQD: 03:15-03:20

P/TV10 SETUP (PAO EVENT)
(PHOTO/TV, P/TV SCENES)

MS2

FILTER CLEANING
(IFM, SCHEDULED MAINTENANCE)

CABIN TEMP SURVEY
(ORB OPS, DTG 664)
PAYLOAD TEMP READINGS

MEAL

◀ MNVN ROTOR INIT (SSBUV)
BV=2
A12/AUTO/VERN (02:07) Init ROTOR

◀ MNVN -ZSI (ATLAS)
R=324.83 P=90.0 Y=23.44
A/AUTO/VERN (02:25) Init MNVN
When in att: B/AUTO/VERN

EXERCISE

Don Heart Watch Monitor (DSO 624)

MCC

INFORM CREW
MCC GO FOR
RF ACQ ERPCL

UPLINK
MDA CLOSE
VTR (TDRW)

UPLINK
MDA OPEN

UPLINK
MDA CLOSE

TV (TDRW)
(CREW CNTL-
CAB)

UPLINK
MDA OPEN

UPLINK
MDA CLOSE

STS-66 (BLUE FD02)

PLT

MS3

MS4

MCC

DUAL SHIFT PRE-SLEEP
(ORB OPS FS, CREW SYS)

DUAL SHIFT PRE-SLEEP
(ORB OPS FS, CREW SYS)

DUAL SHIFT PRE-SLEEP
(ORB OPS FS, CREW SYS)

UPLINK
FUEL CELL
PURGE

MET DAY 001

00:00

ORB 17

A1(B1)
AUTO/VERN

01:00

ORB 18

02:00

03:00

ORB 19

04:00

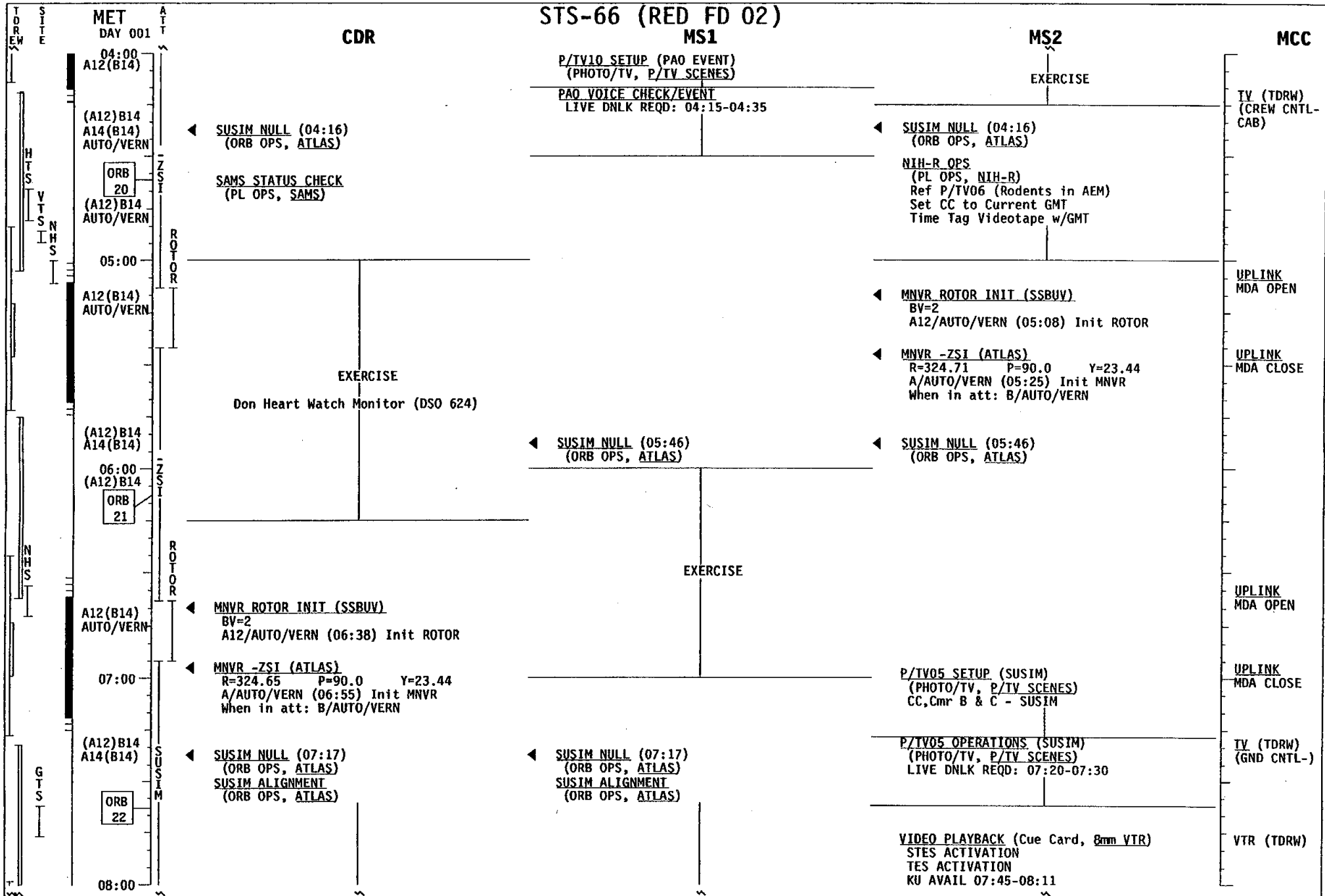
TDR EM
SITE
NHS
MIL
IOS
TCS
VGD
TSDX
NHS
TCS
IOS
HTS
VTS
GDX
NHS
TCS
IOS

ATT
TG
TRK
INS
ROTOR
INS
ROTOR
INS

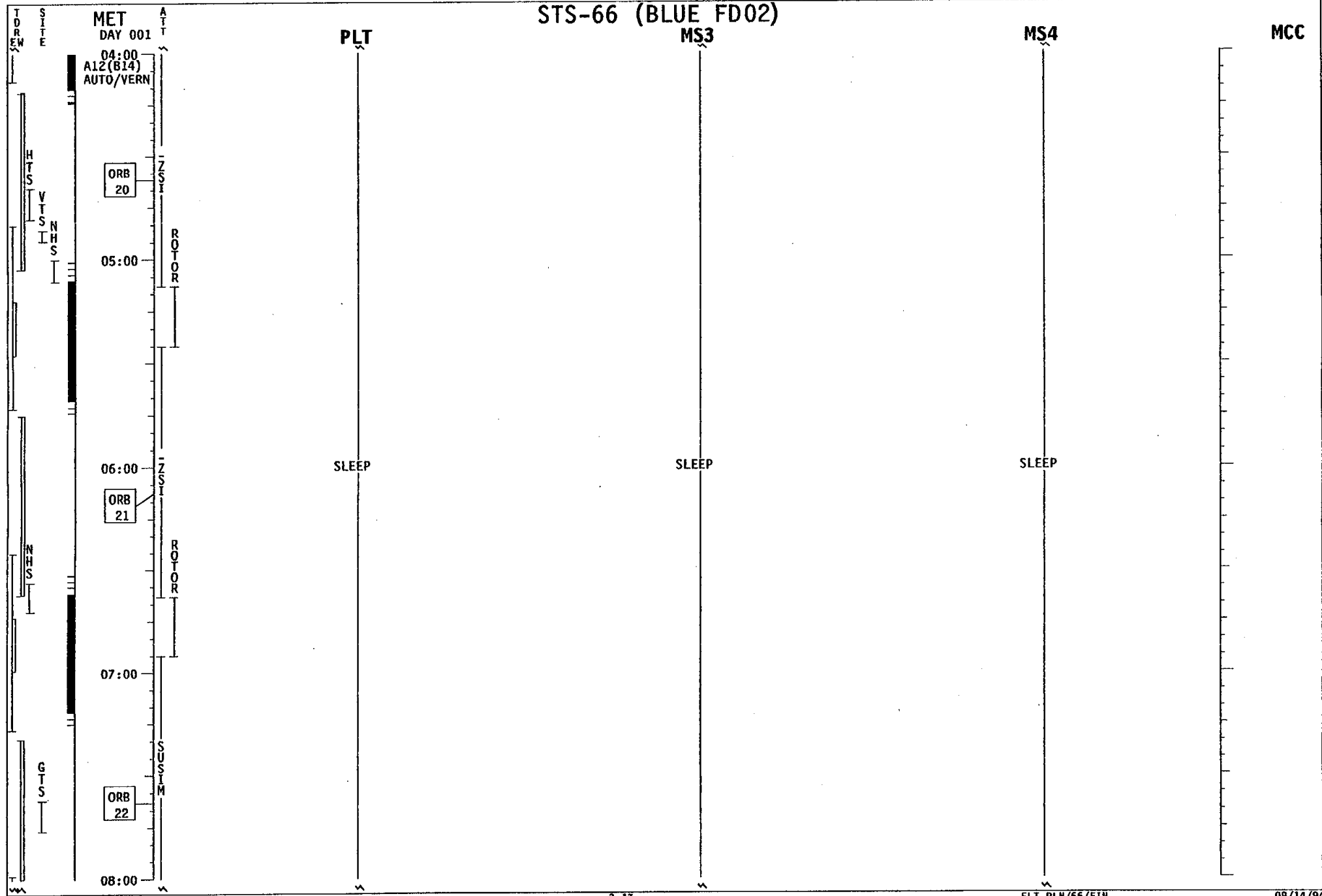
SLEEP

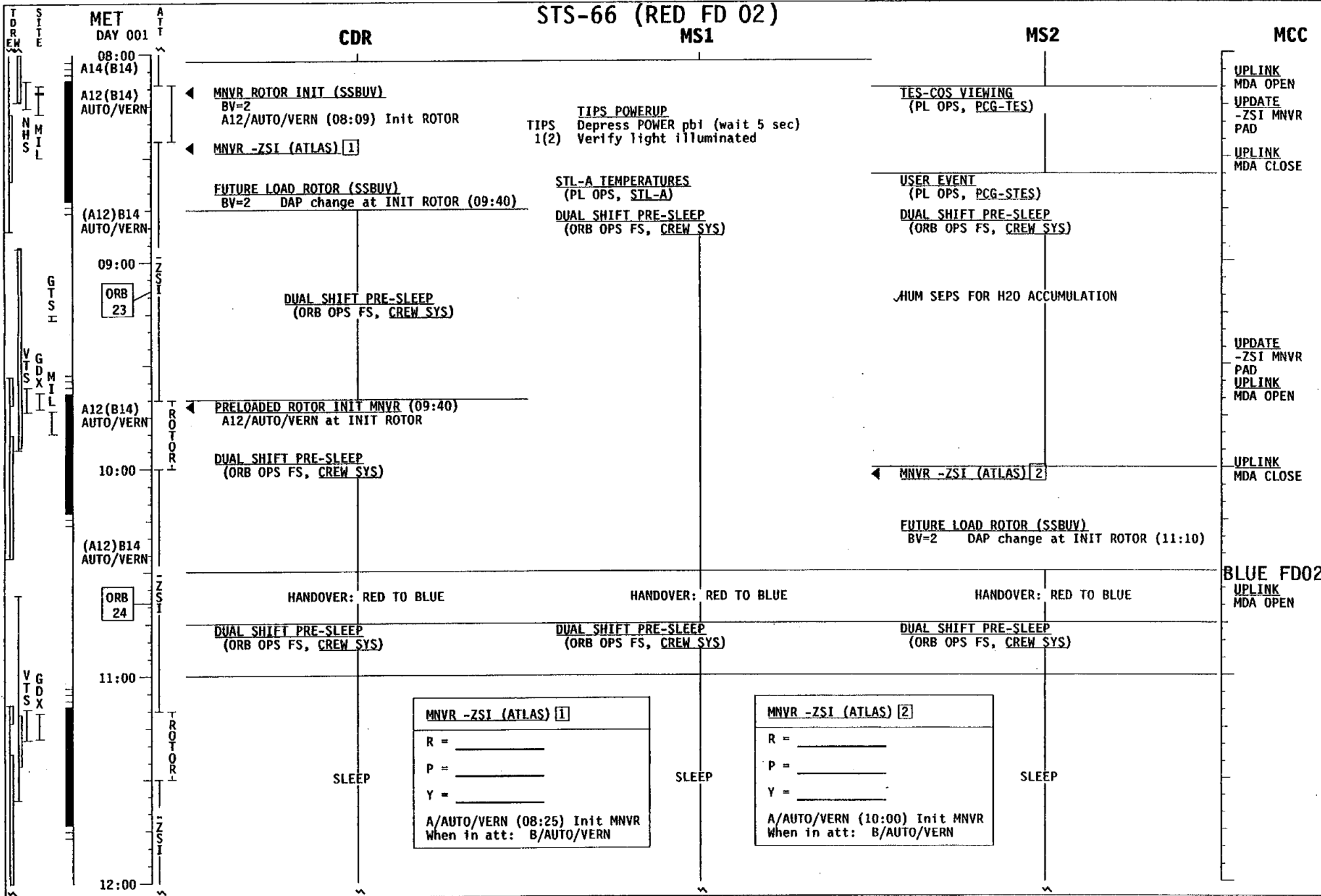
SLEEP

SLEEP

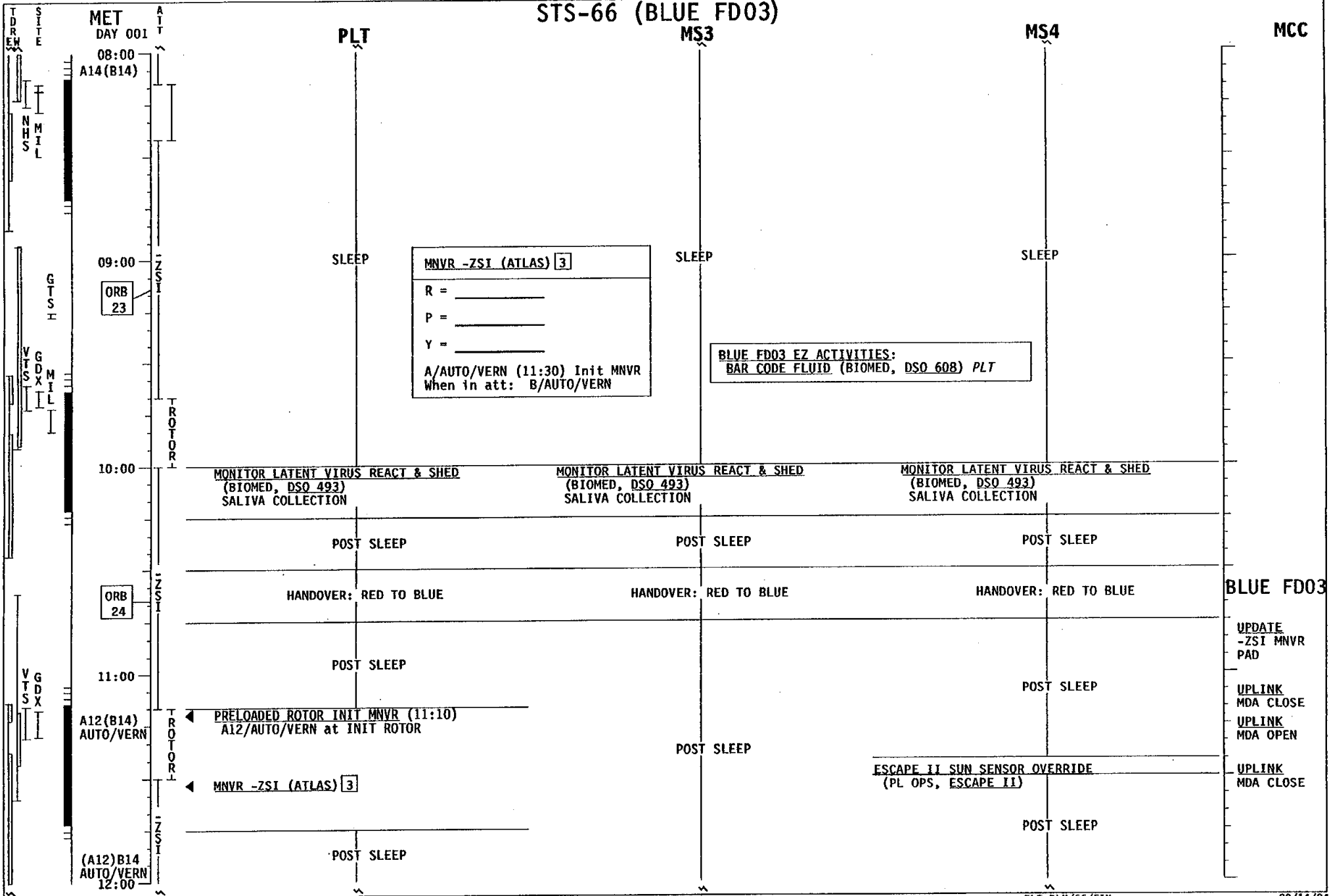


STS-66 (BLUE FD02)

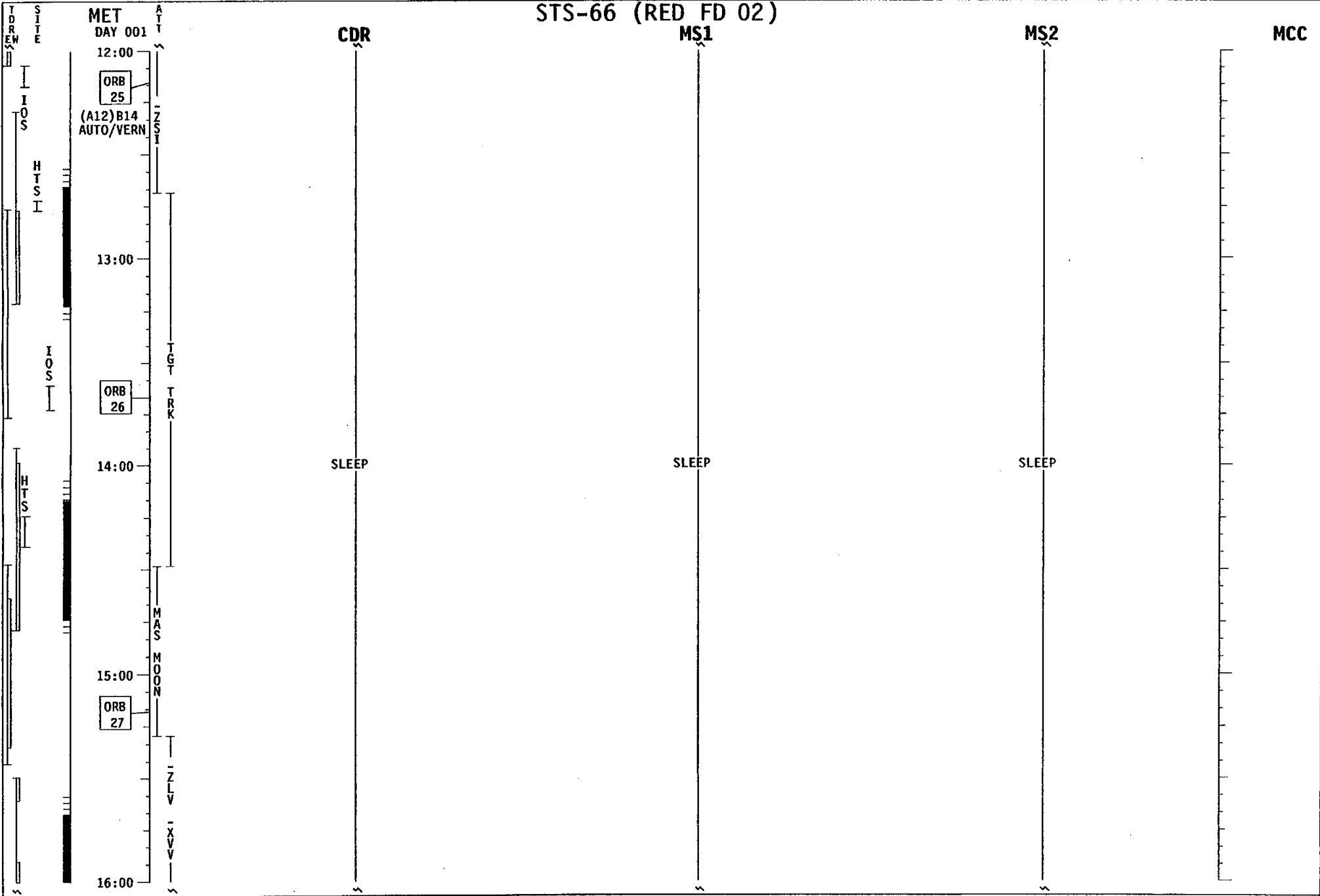


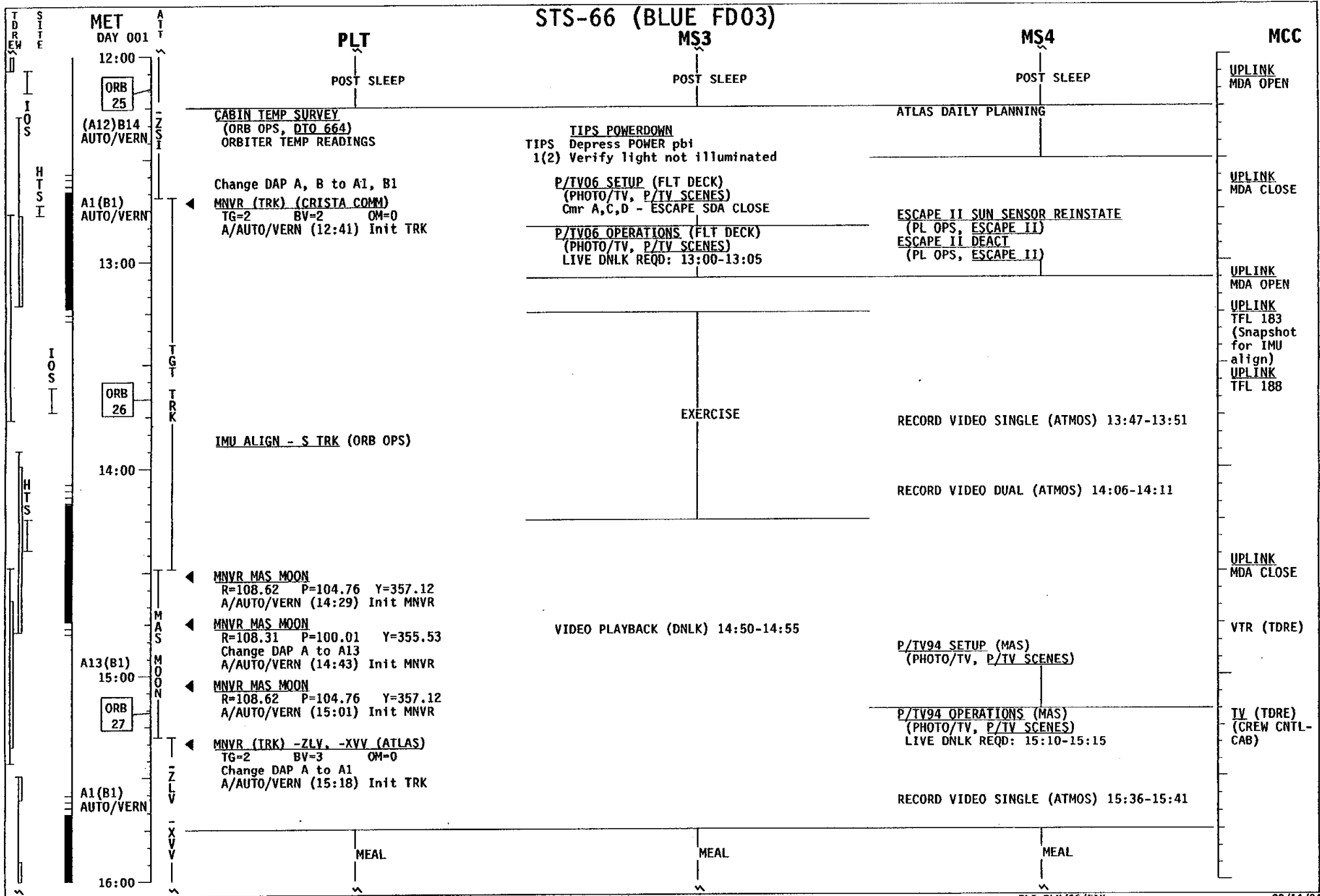


STS-66 (BLUE FD03)

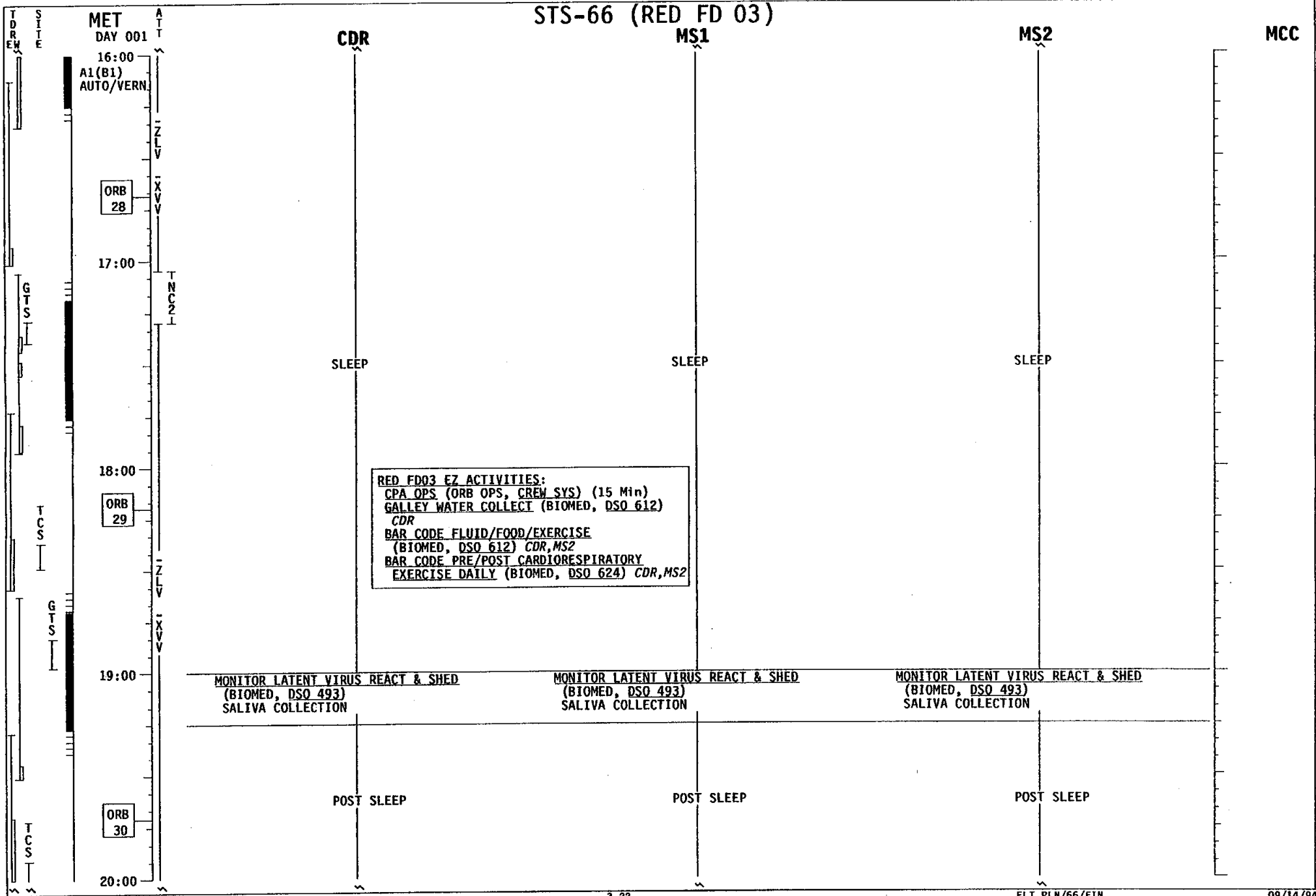


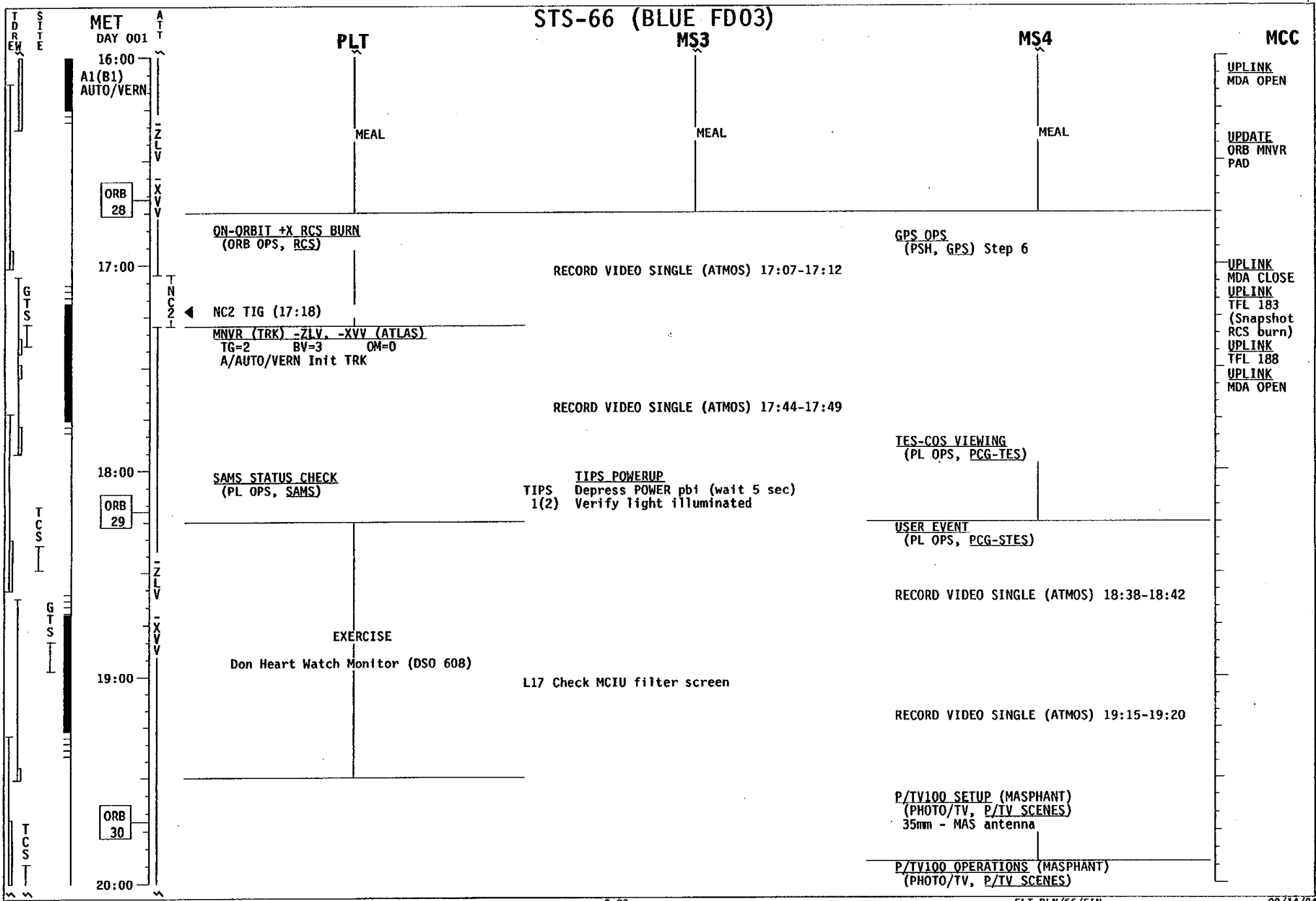
STS-66 (RED FD 02)



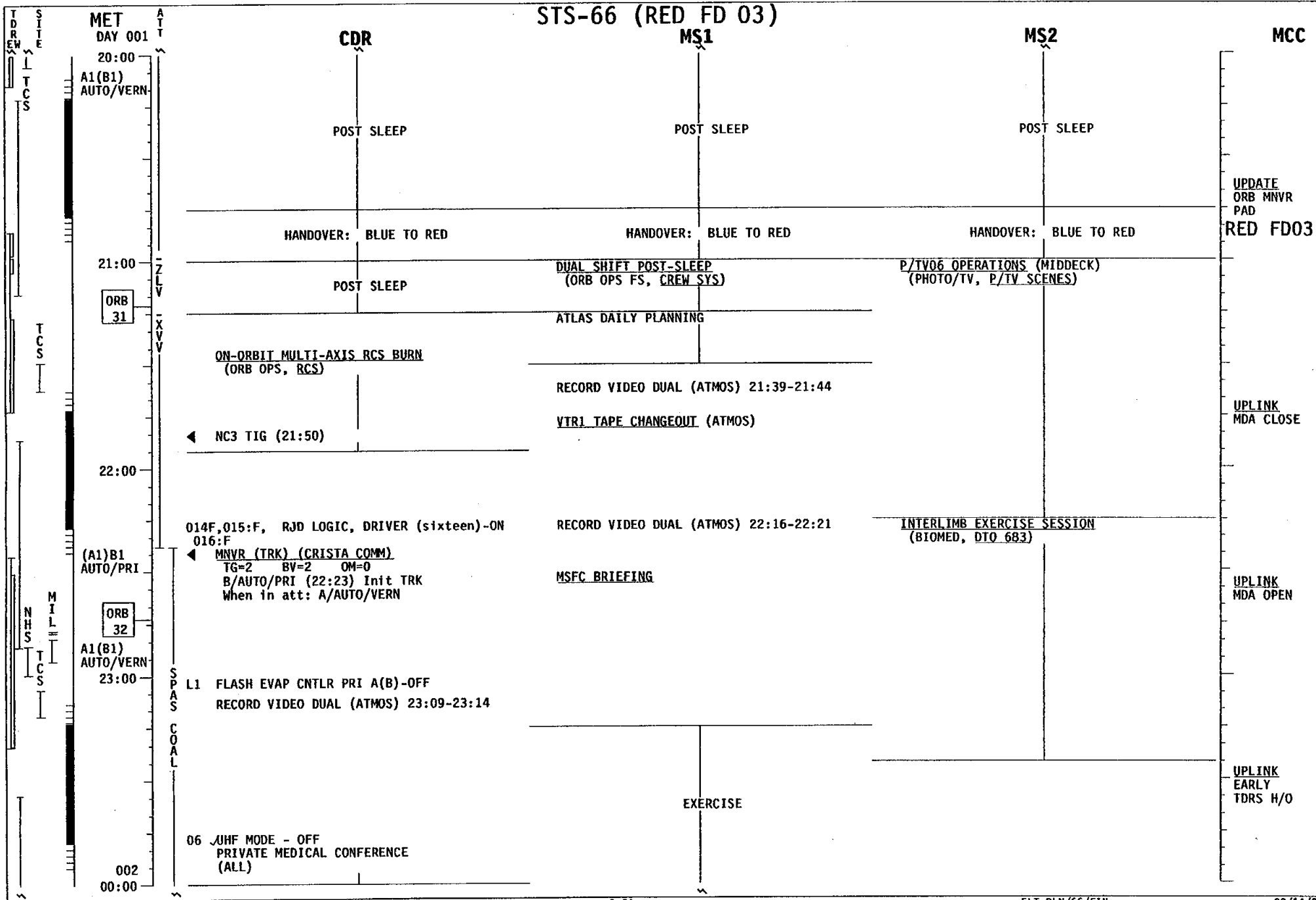


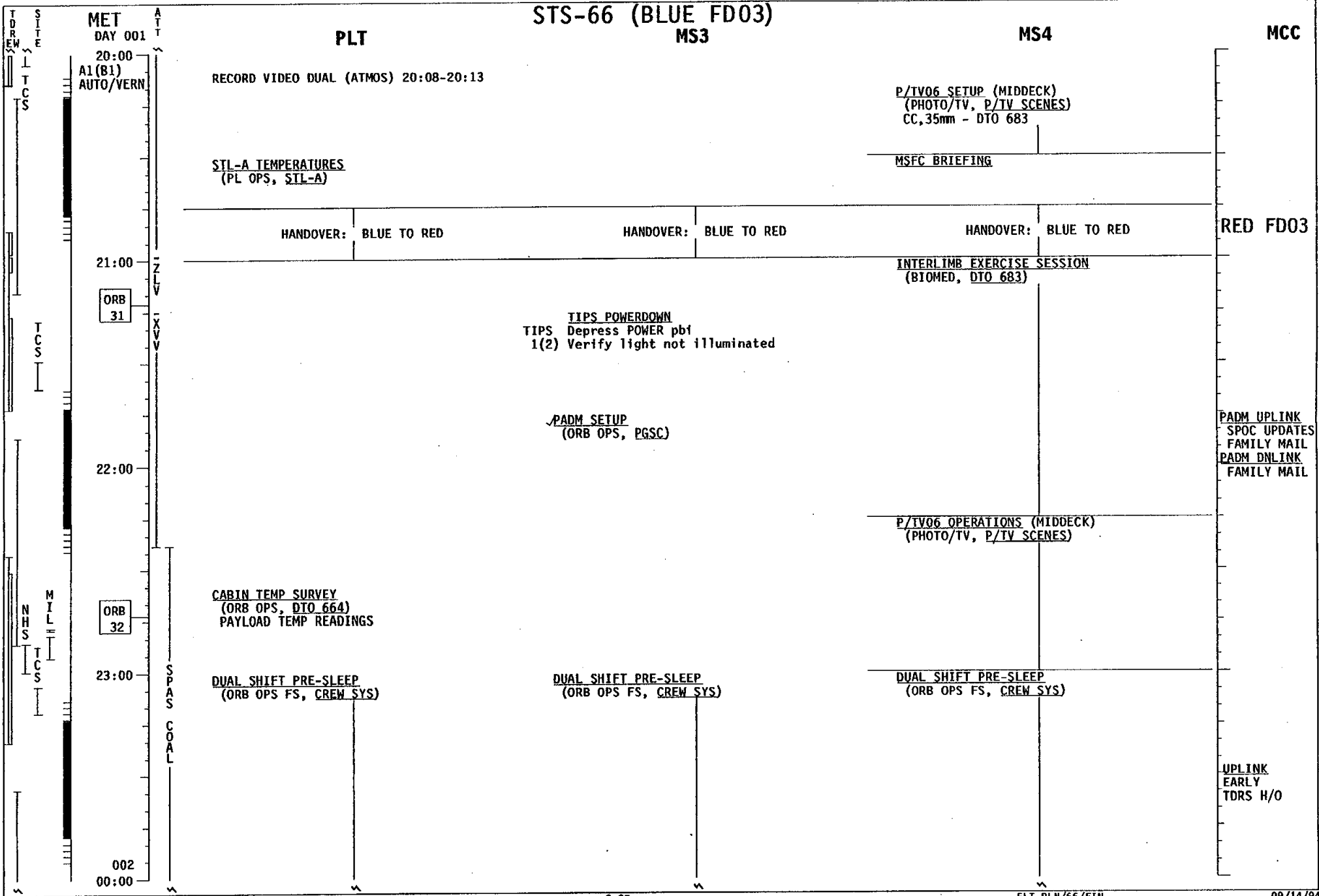
STS-66 (RED FD 03)

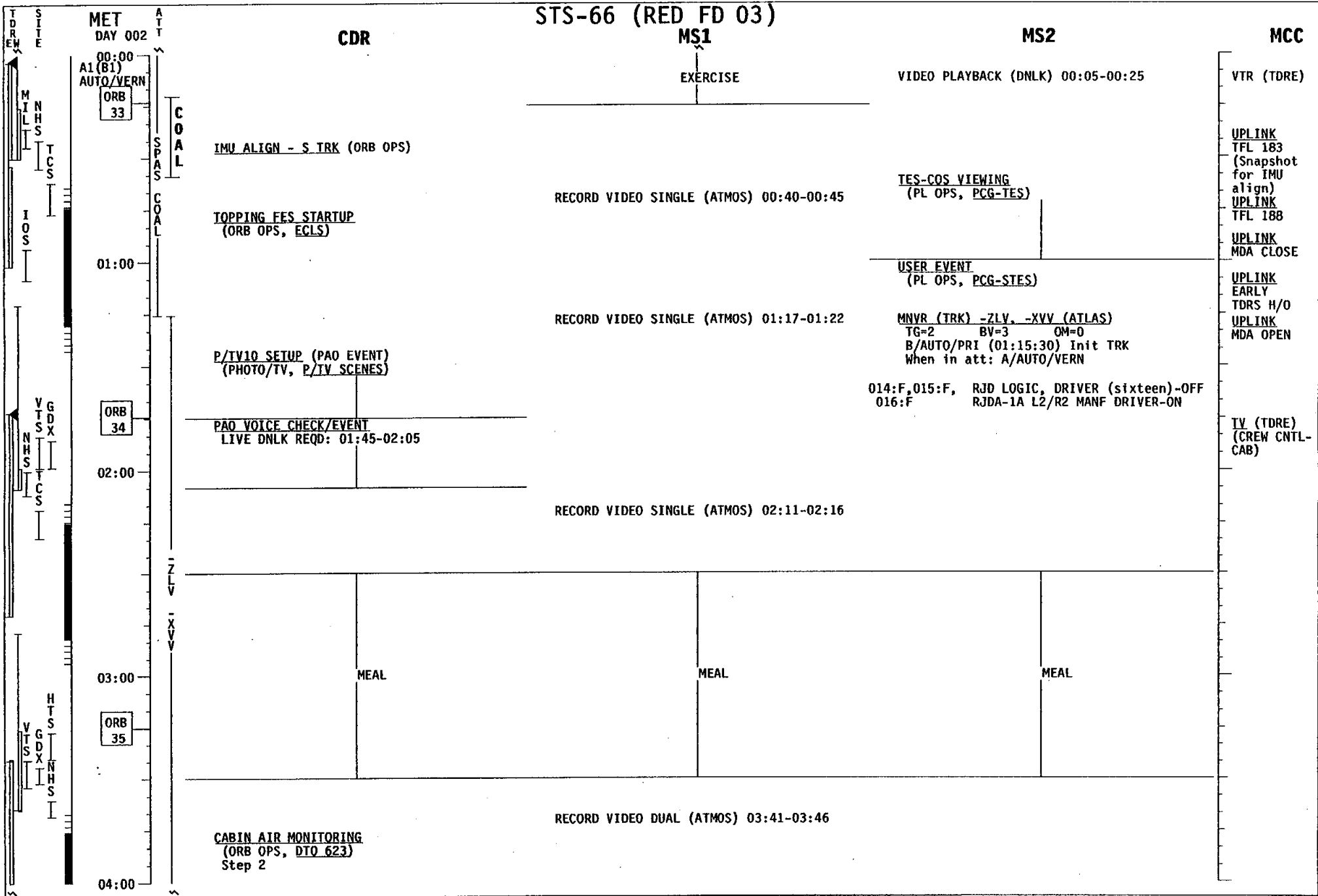




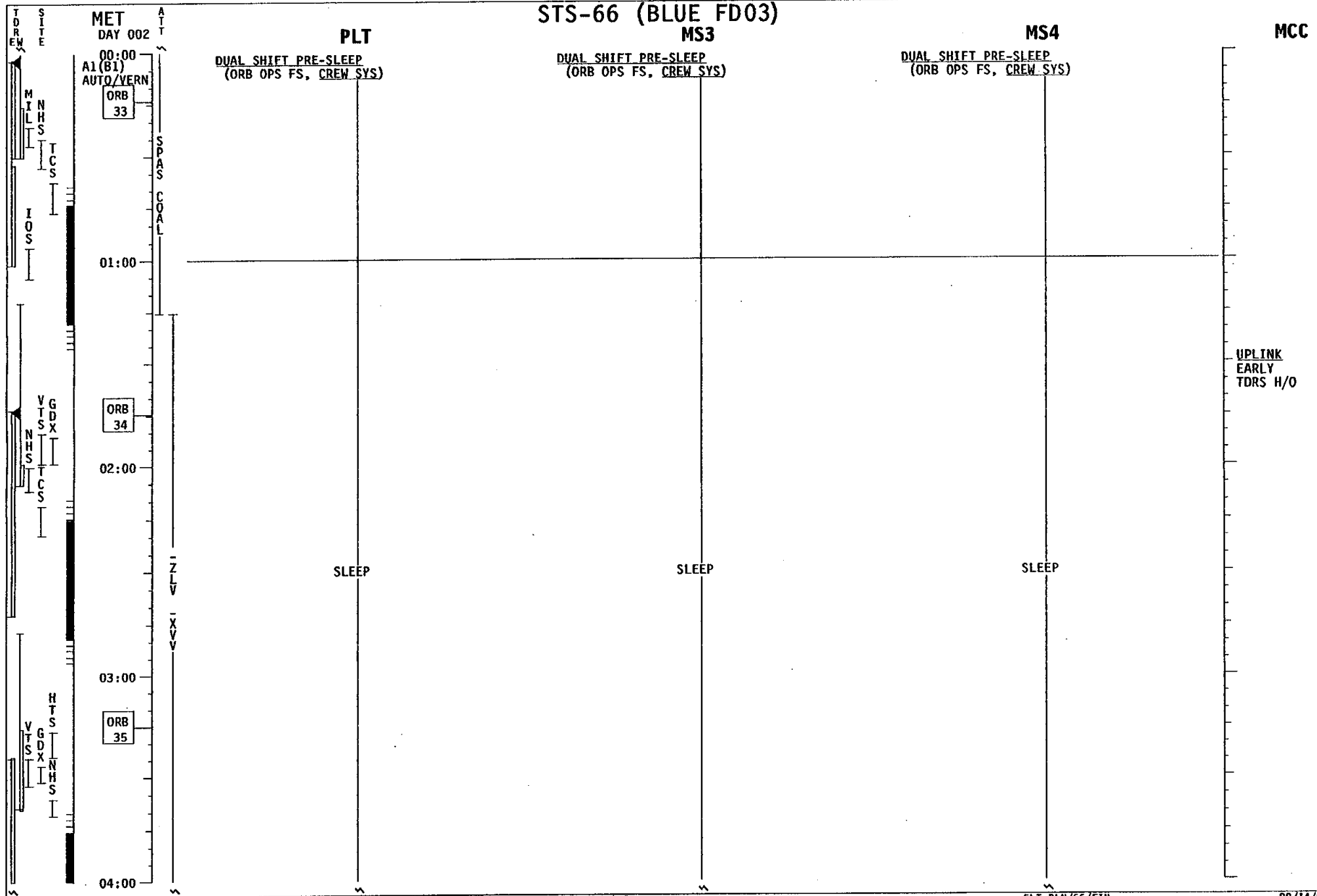
STS-66 (RED FD 03)







STS-66 (BLUE FD03)



TDR SITE MET DAY 002
 04:00
 A1(B1)
 AUTO/VERN.
 HTS
 NHTS
 05:00
 SAMS STATUS CHECK
 (PL OPS, SAMS)
 RECORD VIDEO SINGLE (ATMOS) 05:49-05:54
 06:00
 GTS
 07:00
 NHTS
 MIL
 GTS
 08:00
 FUTURE LOAD TGT TRK MNVR (SPAS COMM)
 TG=2 BV=2 OM=0
 A/AUTO/VERN (10:26) Init TRK
 DUAL SHIFT PRE-SLEEP
 (ORB OPS FS, CREW SYS)

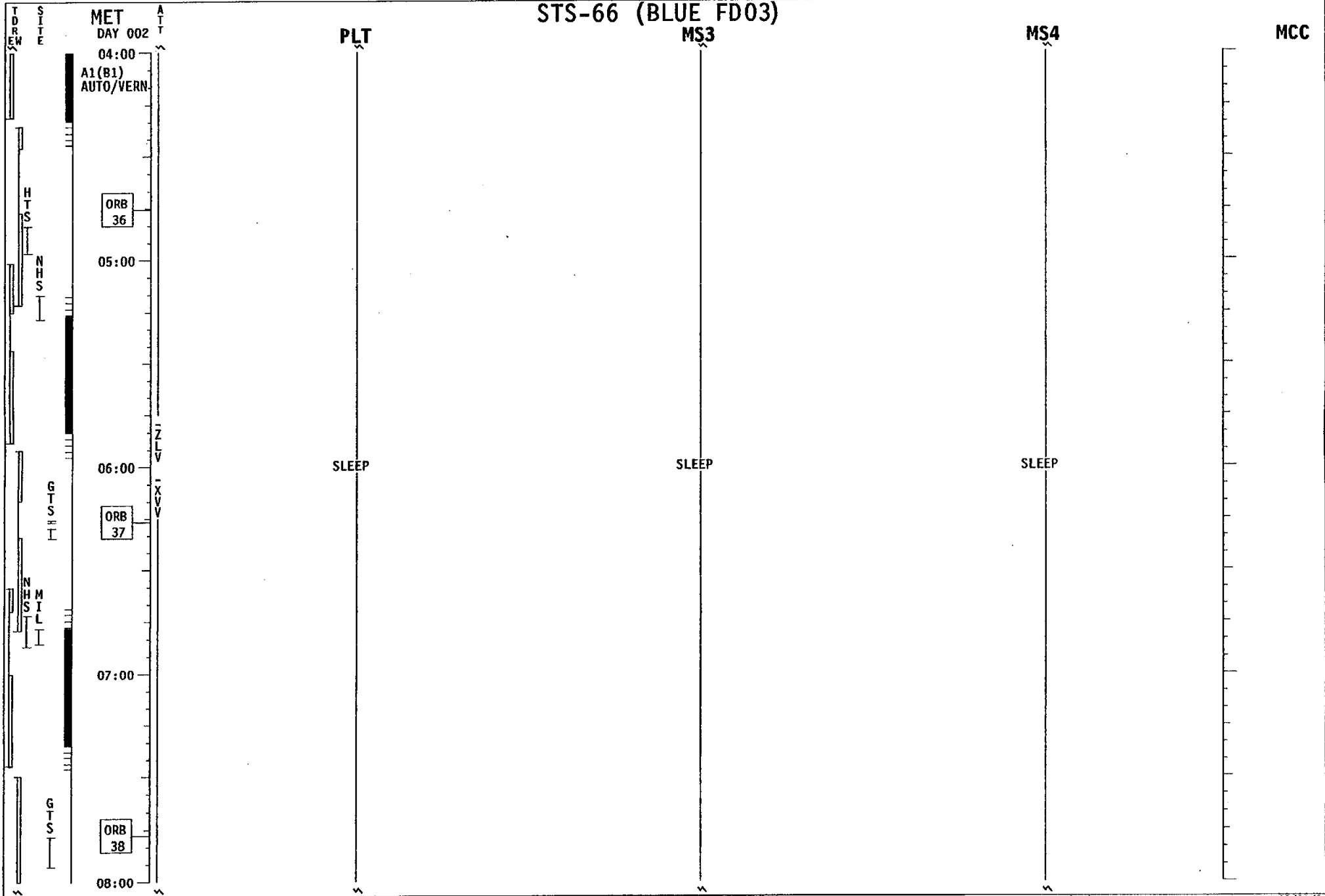
CDR
 RECORD VIDEO DUAL (ATMOS) 04:18-04:23
 SAMS STATUS CHECK
 (PL OPS, SAMS)
 RECORD VIDEO SINGLE (ATMOS) 05:49-05:54
 EXERCISE
 RECORD VIDEO SINGLE (ATMOS) 07:19-07:24
 FUTURE LOAD TGT TRK MNVR (SPAS COMM)
 TG=2 BV=2 OM=0
 A/AUTO/VERN (10:26) Init TRK
 DUAL SHIFT PRE-SLEEP
 (ORB OPS FS, CREW SYS)

STS-66 (RED FD 03)
MS1
 P/TV06 SETUP (MIDDECK)
 (PHOTO/TV, P/TV SCENES)
 CC, 35mm - Crewmember working w/PARE
 P/TV06 OPERATIONS (MIDDECK)
 (PHOTO/TV, P/TV SCENES)
 P/TV103 SETUP (ATMPHLIM)
 (PHOTO/TV, P/TV SCENES)
 70mm - Earthlimb at SR/SS
 P/TV103 OPERATIONS (ATMPHLIM)
 (PHOTO/TV, P/TV SCENES)
 P/TV103 OPERATIONS (ATMPHLIM)
 (PHOTO/TV, P/TV SCENES)
 EXERCISE
 RECORD VIDEO SINGLE (ATMOS) 06:43-06:47
 RECORD VIDEO SINGLE (ATMOS) 07:19-07:24
 STL-A TEMPERATURES
 (PL OPS, STL-A)
 DUAL SHIFT PRE-SLEEP
 (ORB OPS FS, CREW SYS)

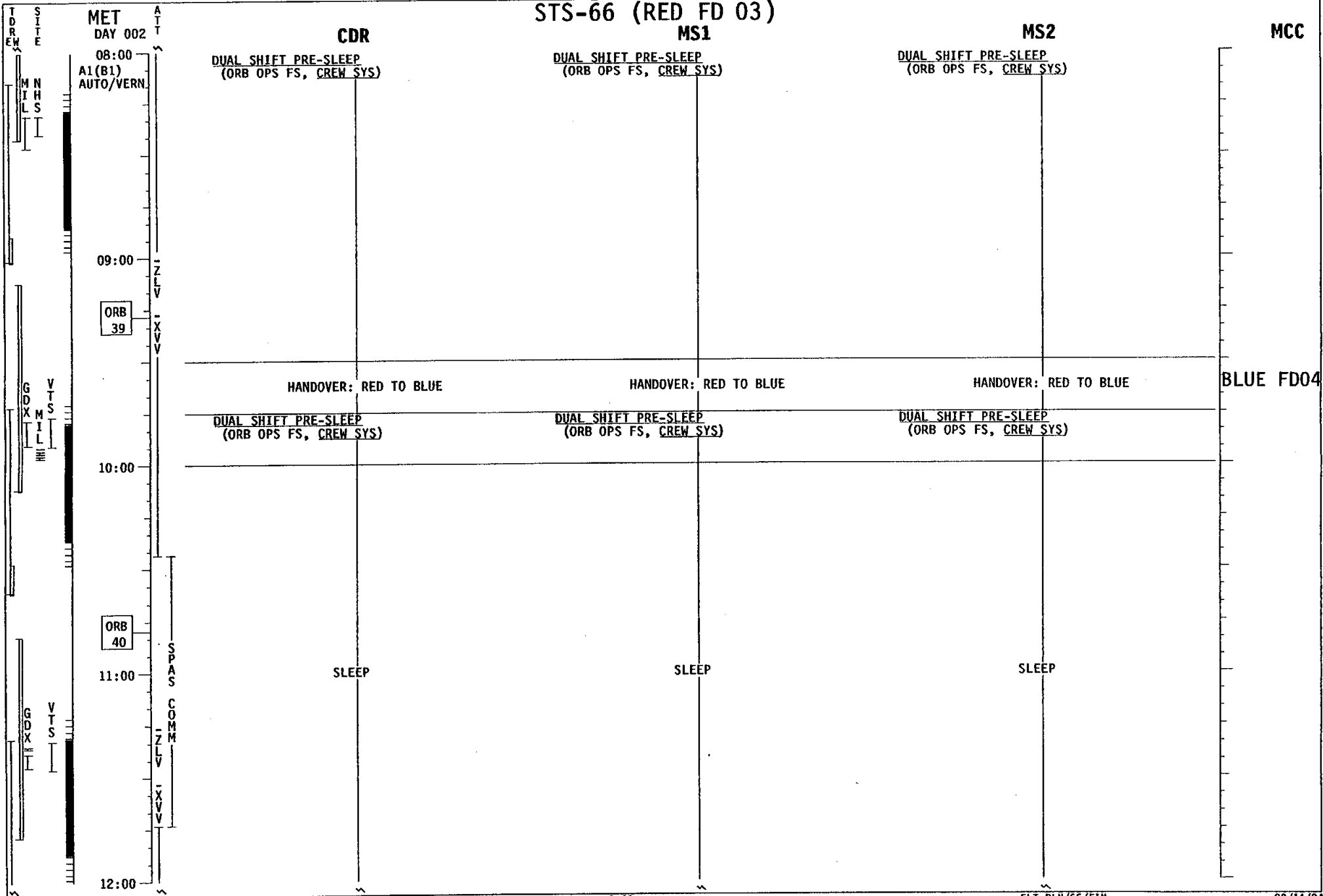
MS2
 NIH-R OPS
 (PL OPS, NIH-R)
 Ref P/TV06 (Rodents in AEM)
 Time Tag Videotape w/GMT
 RECORD VIDEO SINGLE (ATMOS) 05:12-05:17
 VIDEO PLAYBACK (DNLK) 05:28-05:38
 TES-COS VIEWING
 (PL OPS, PCG-TES)
 LIVE DNK REQD: 05:55-6:07
 USER EVENT
 (PL OPS, PCG-STES)
 TIPS POWERUP
 TIPS Depress POWER pbi (wait 5 sec)
 1(2) Verify light illuminated
 DUAL SHIFT PRE-SLEEP
 (ORB OPS FS, CREW SYS)

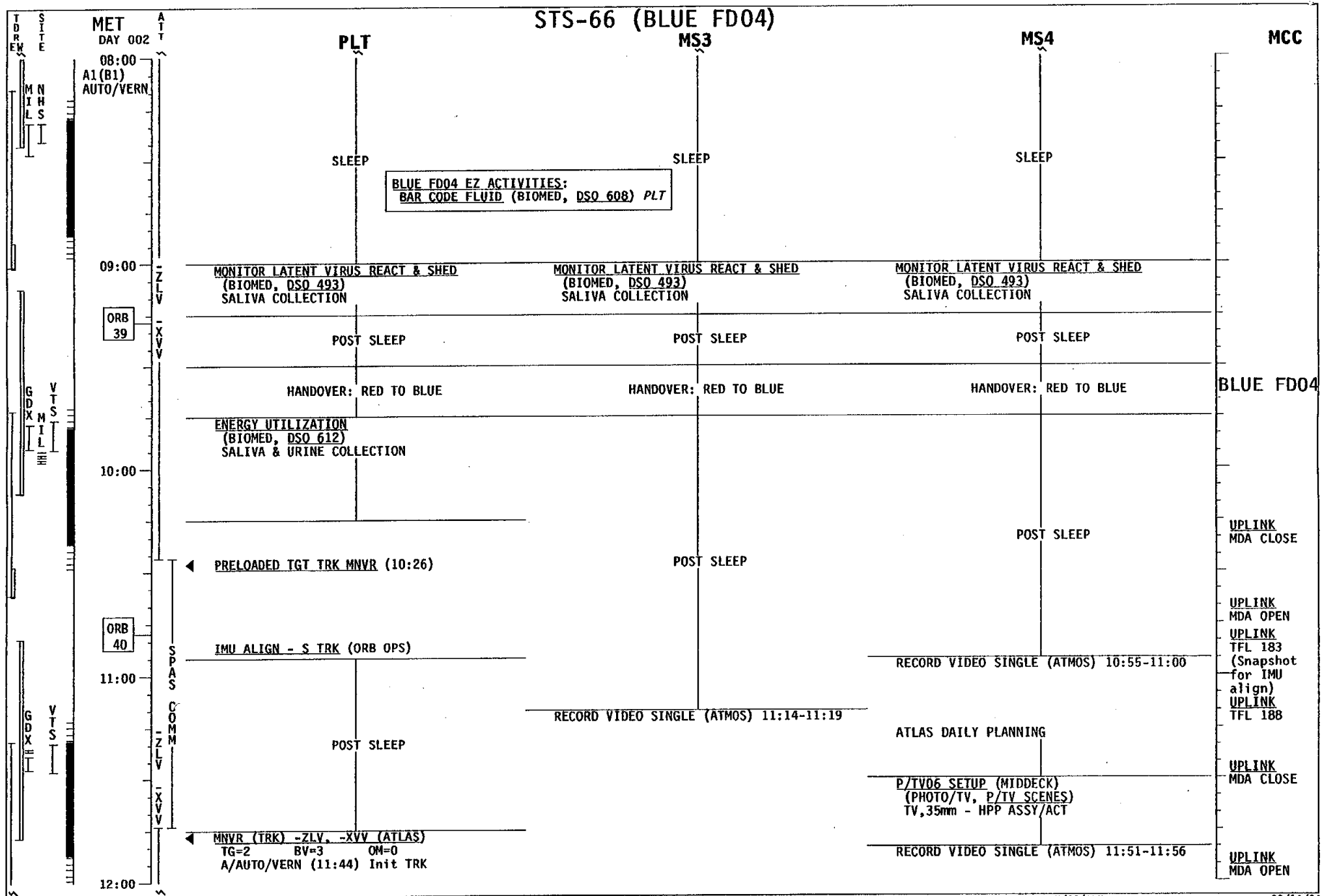
MCC
 VTR(TDRE)

STS-66 (BLUE FD03)

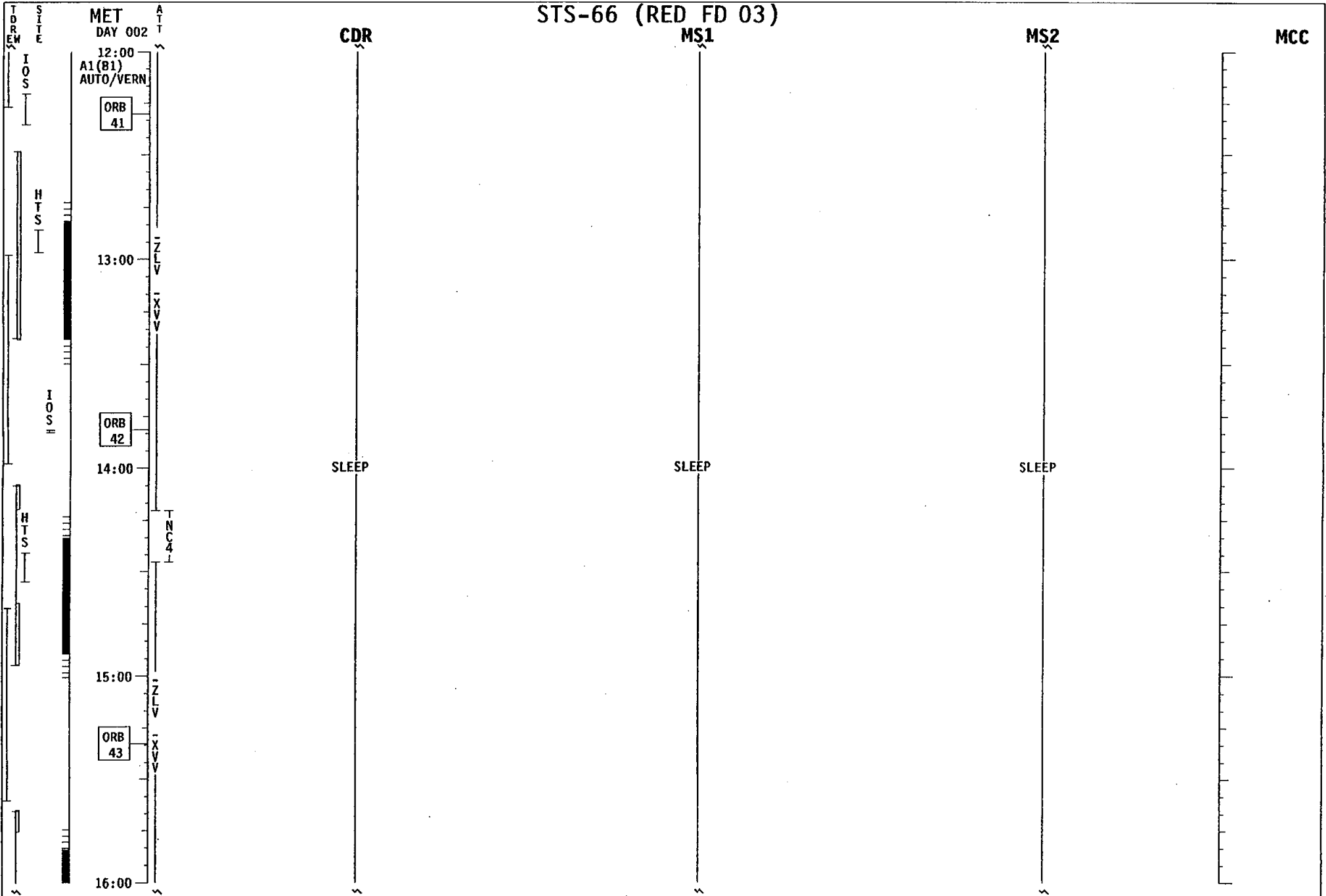


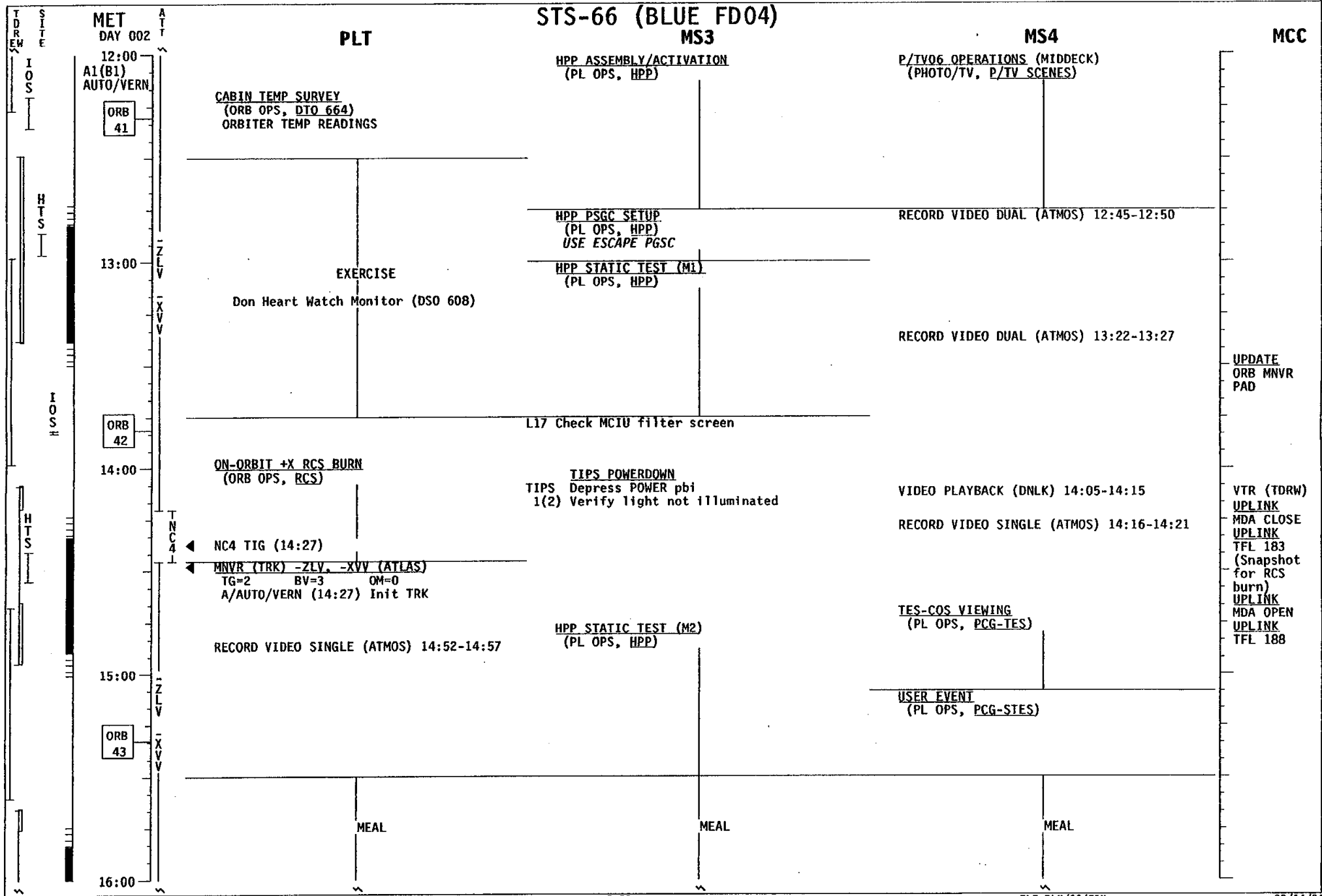
STS-66 (RED FD 03)



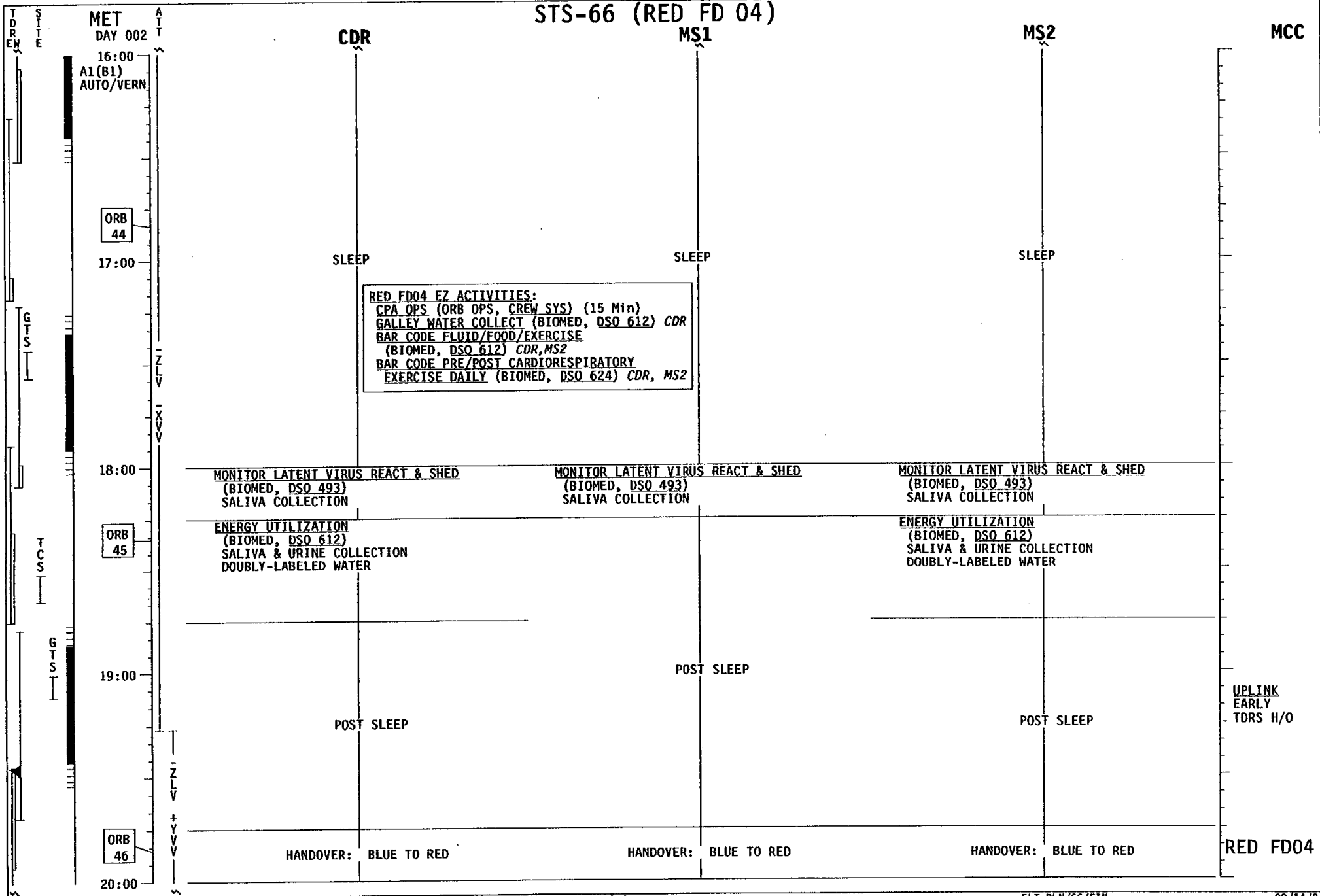


STS-66 (RED FD 03)

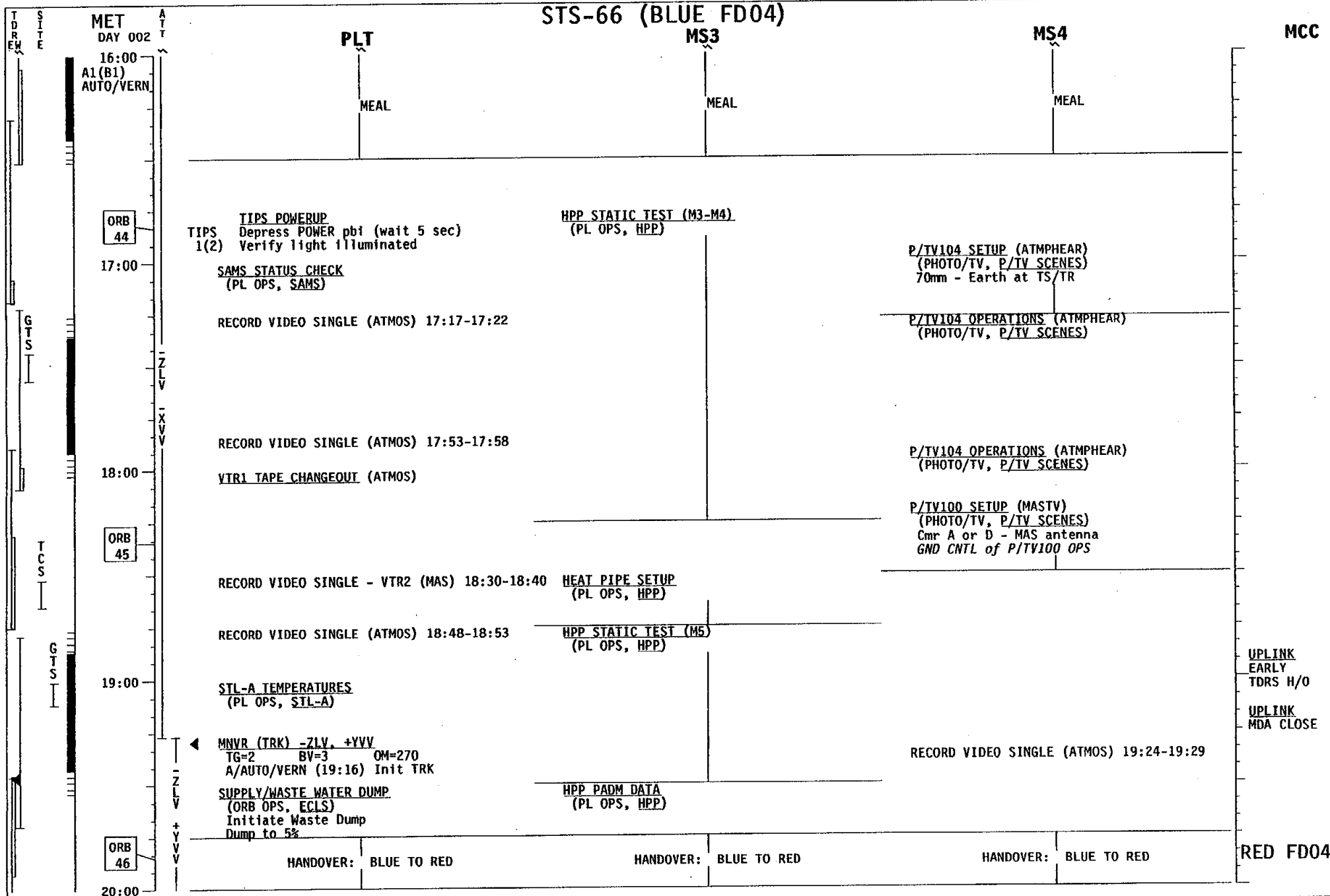


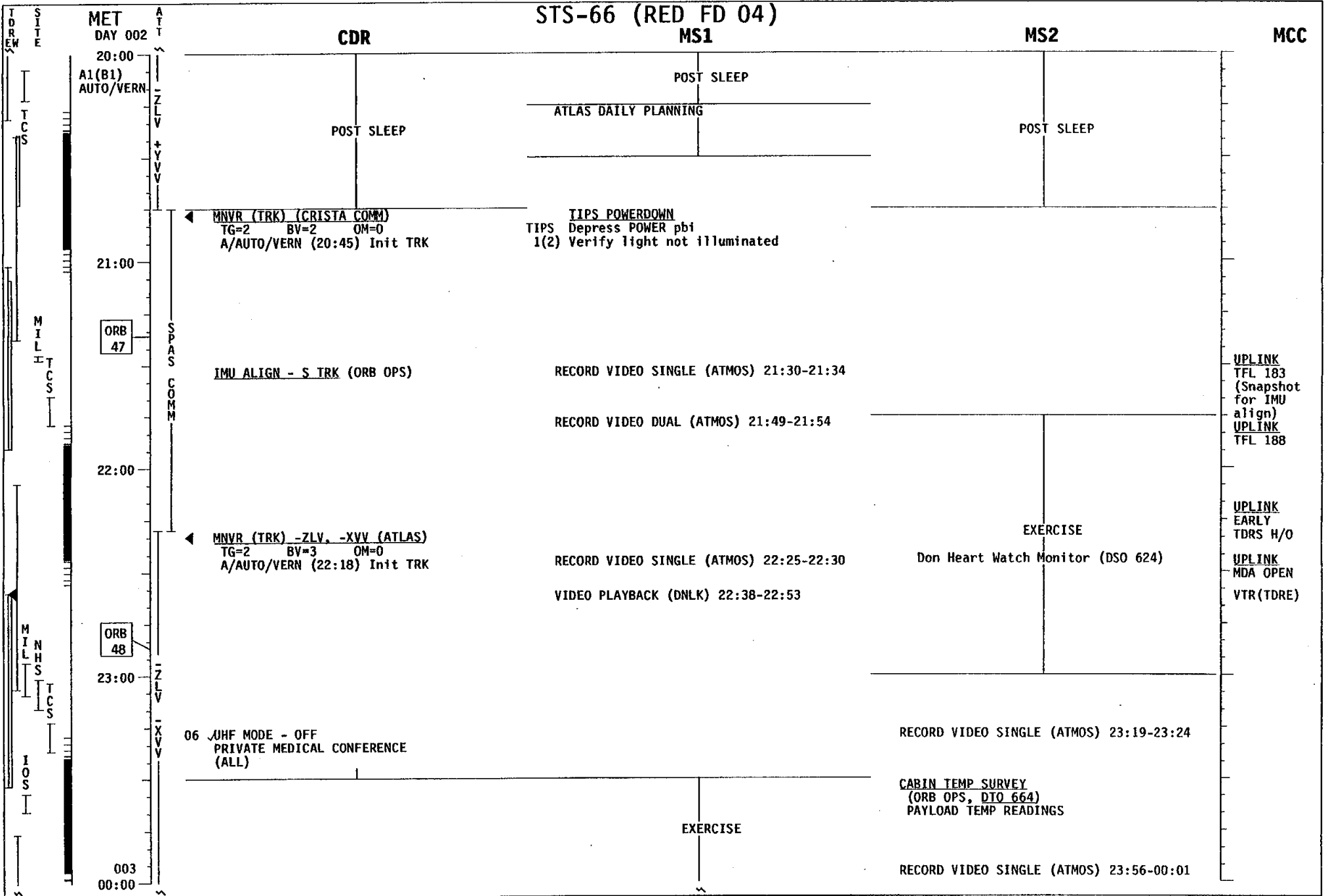


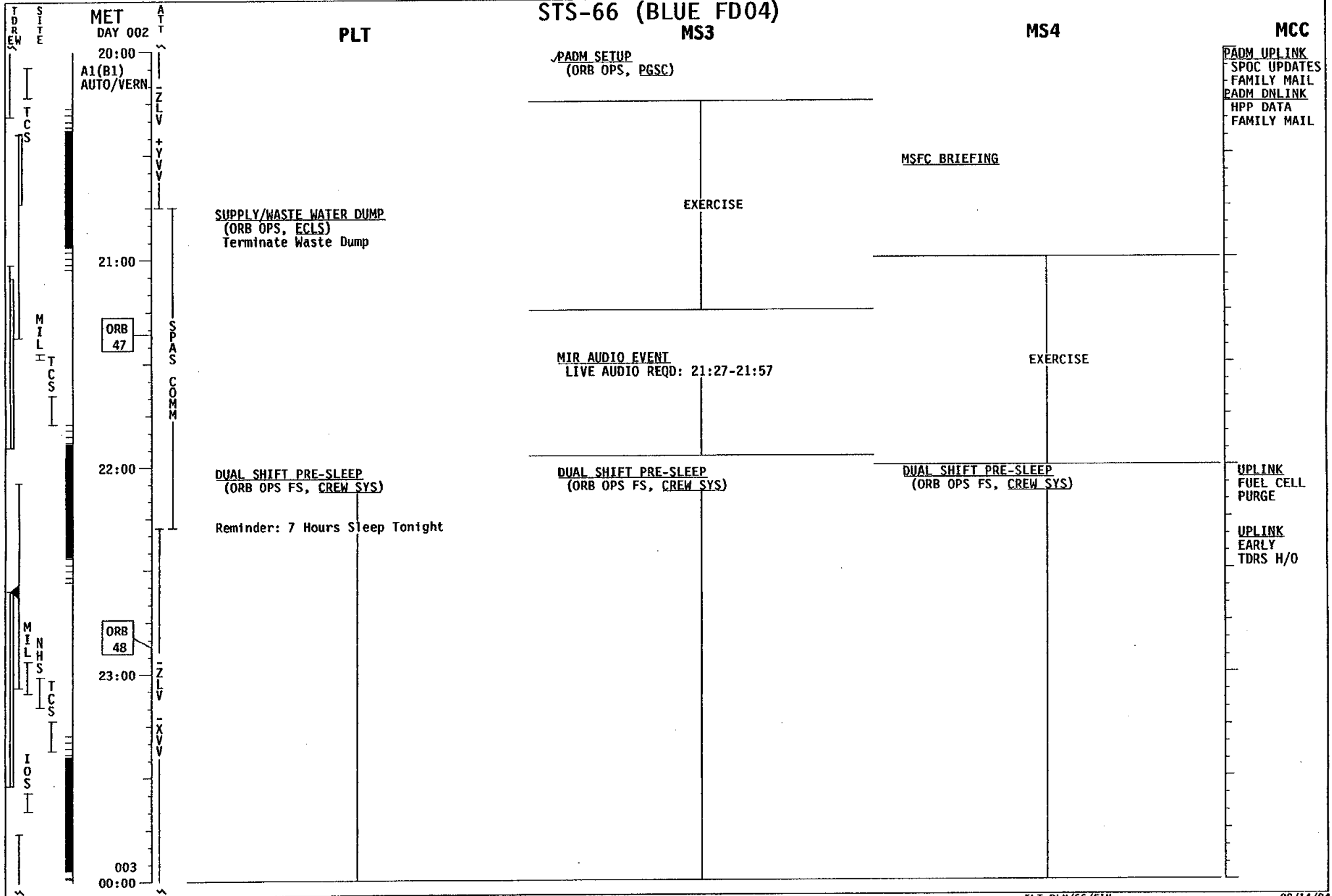
STS-66 (RED FD 04)

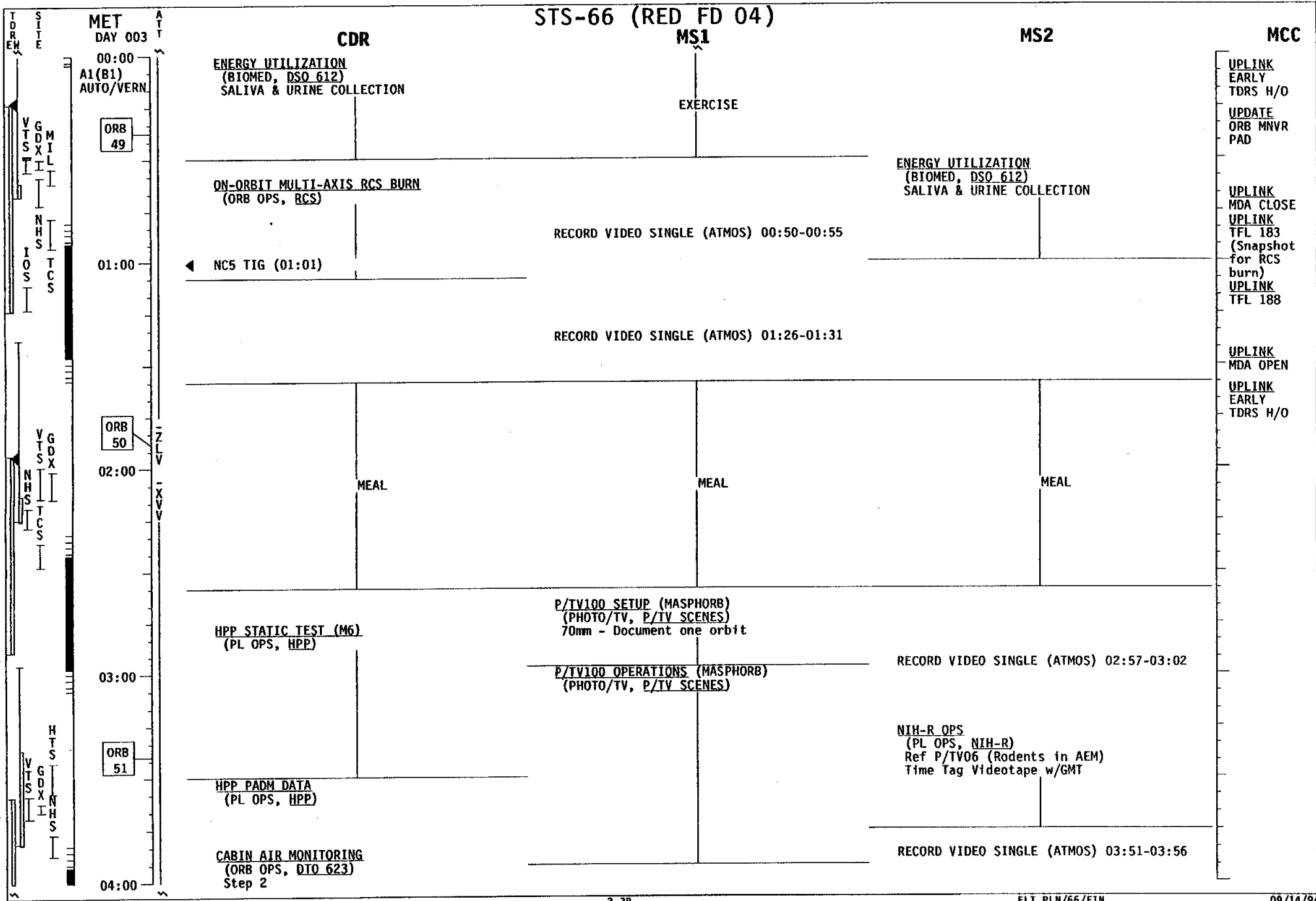


STS-66 (BLUE FD04)

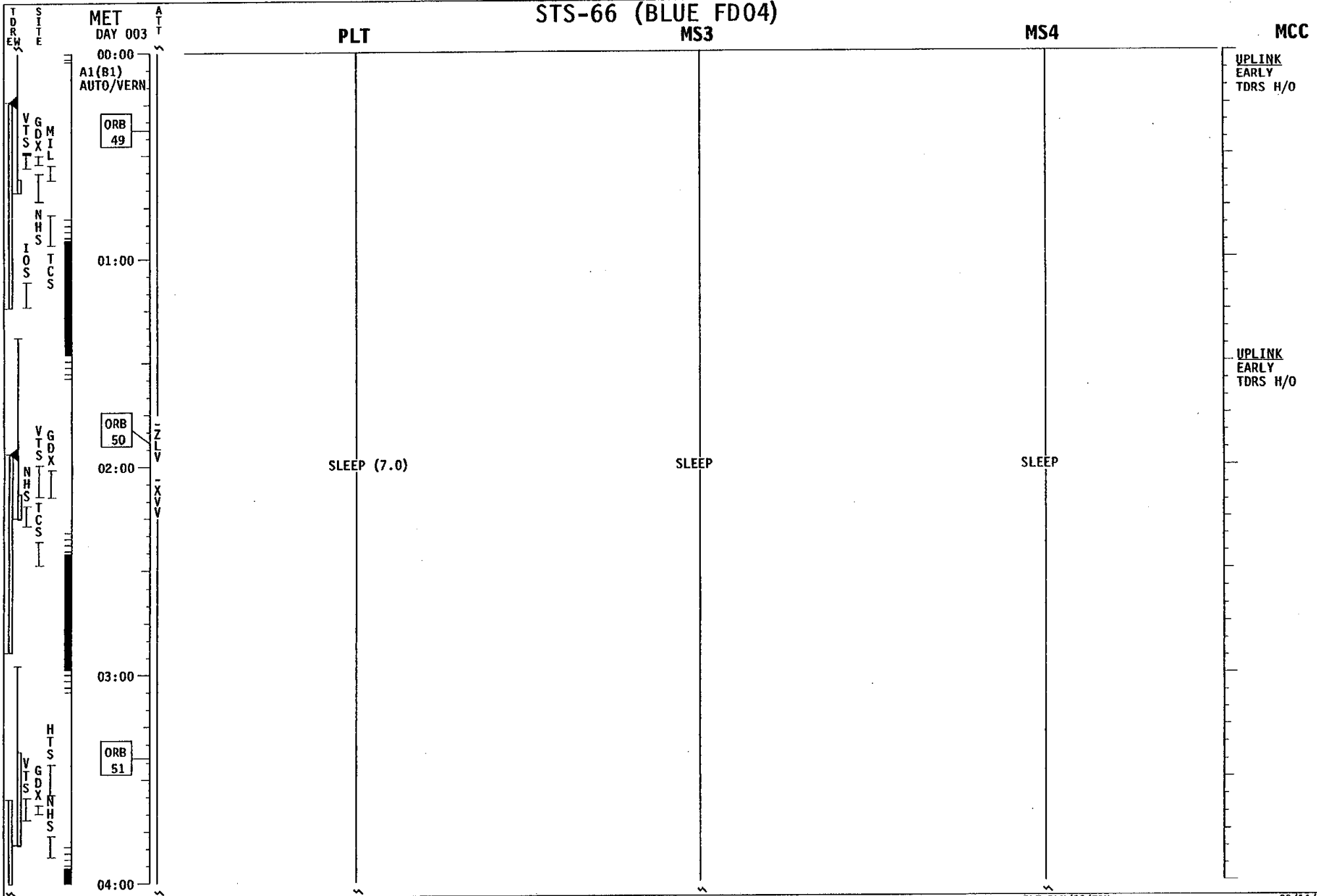


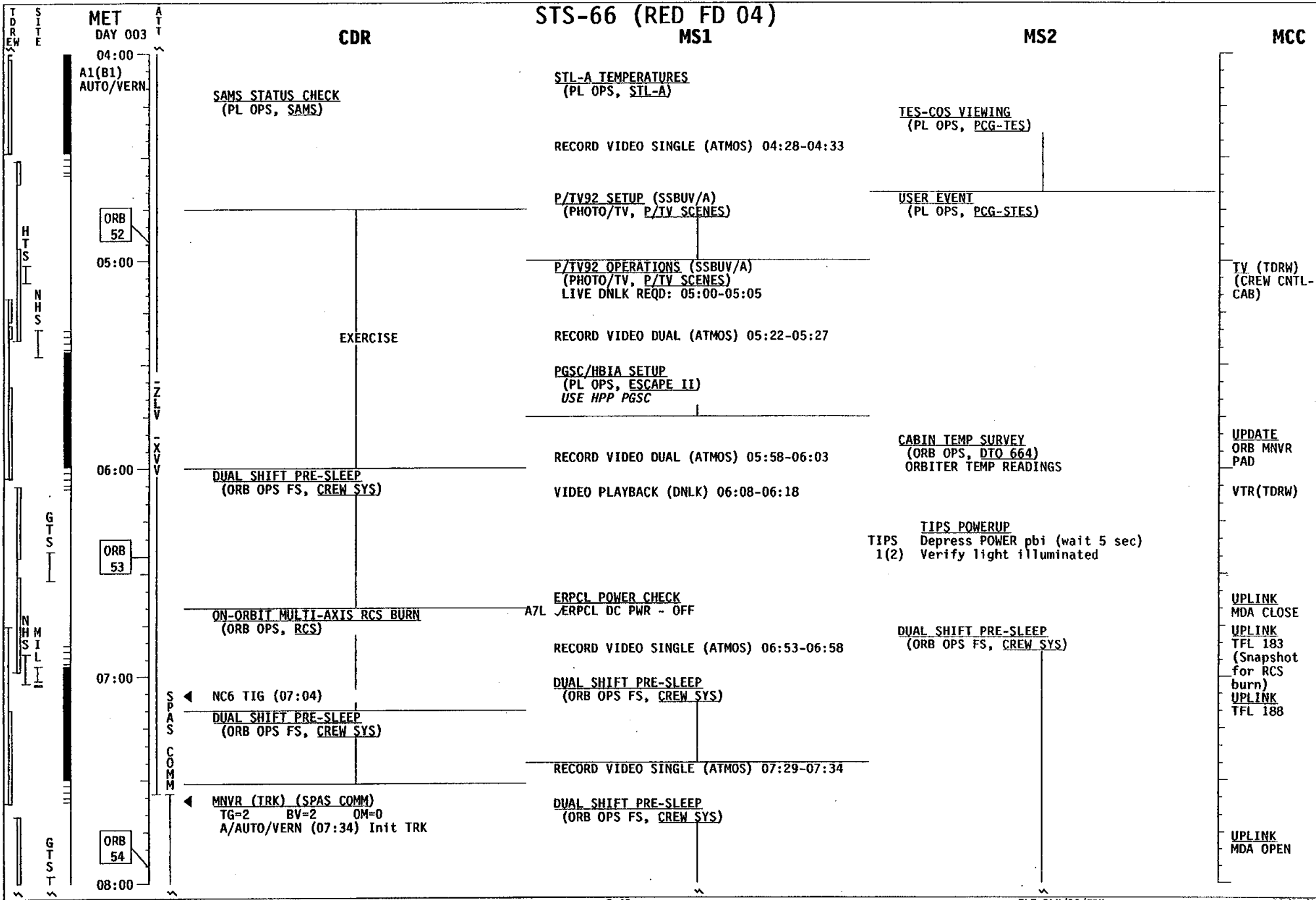




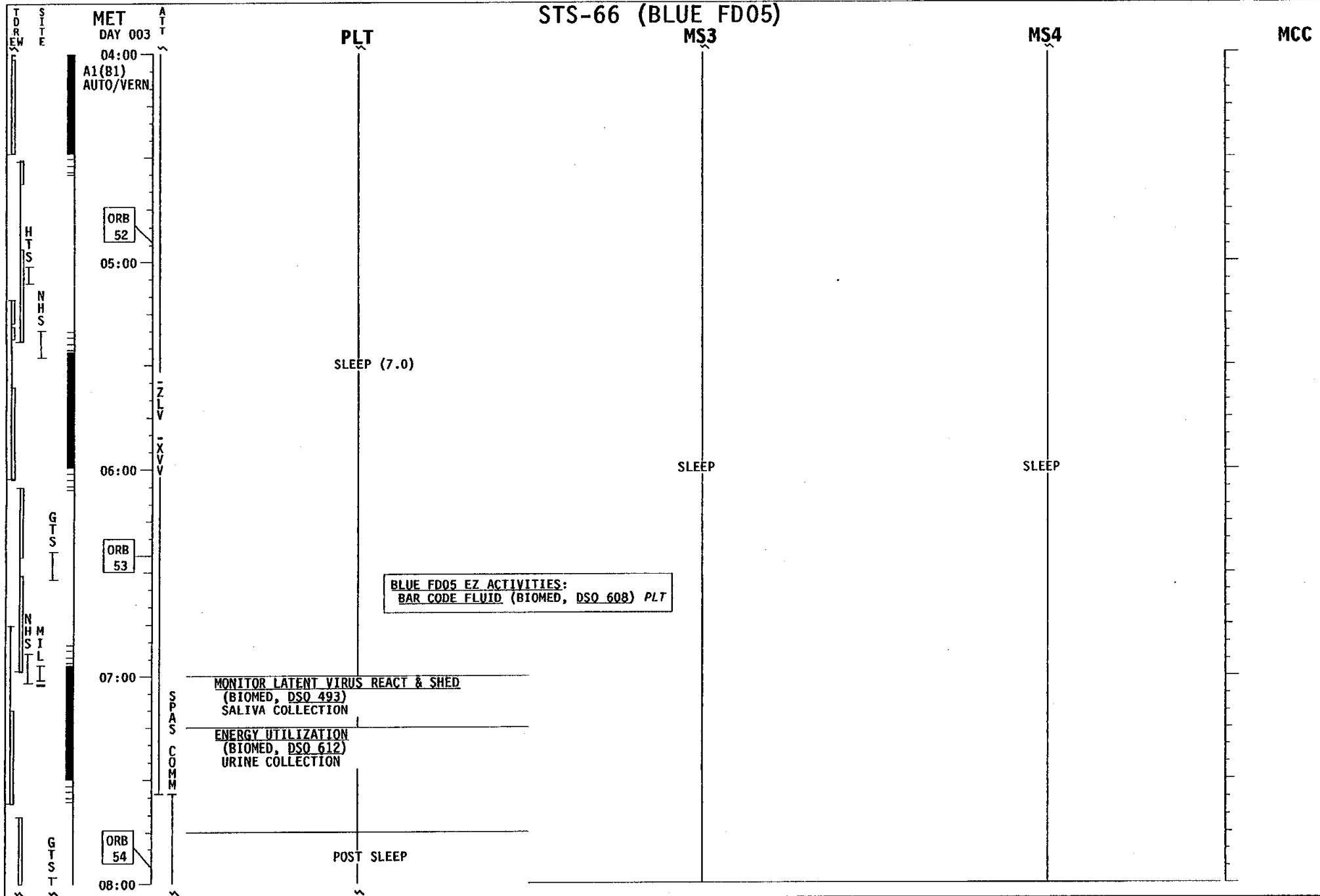


STS-66 (BLUE FD04)

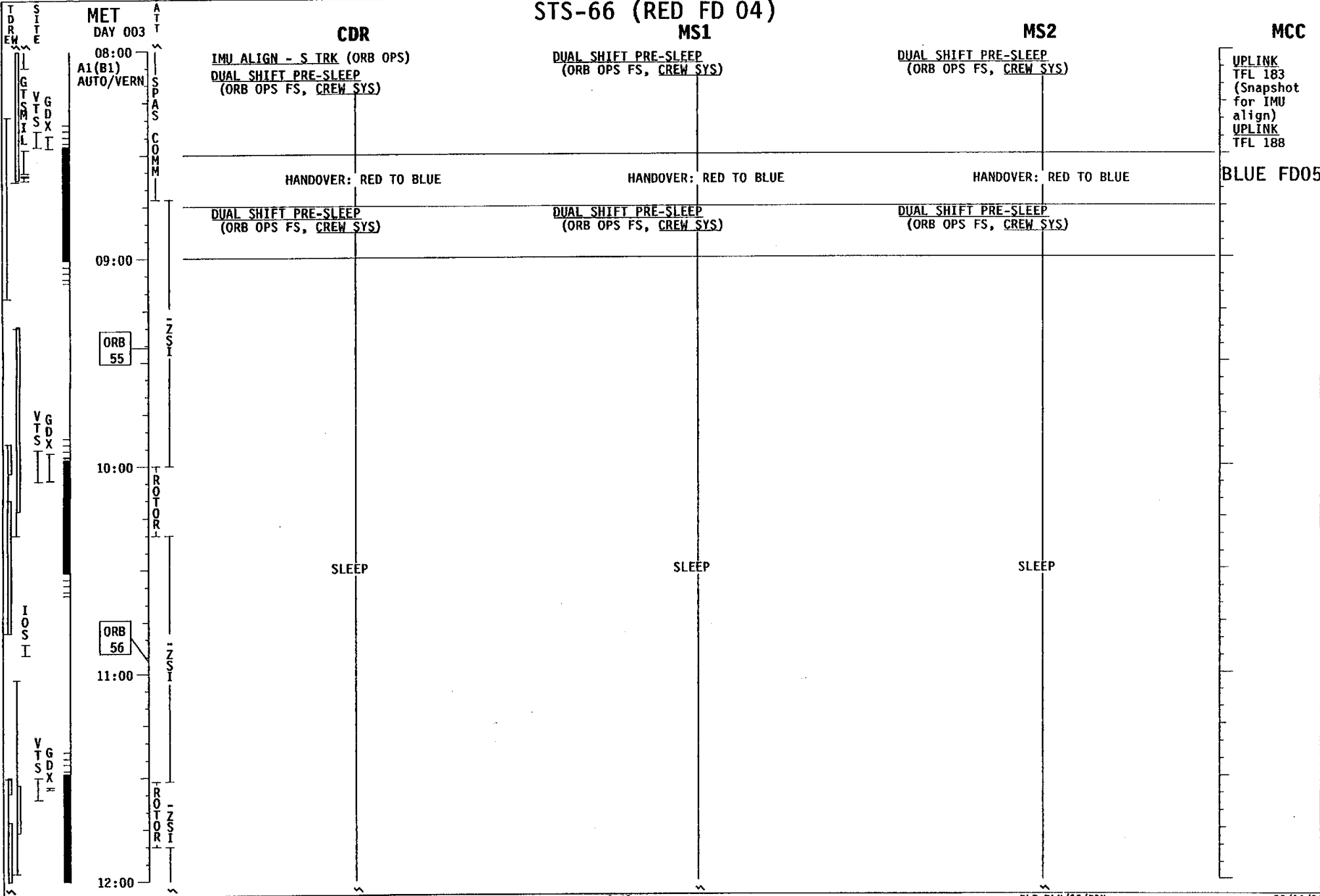


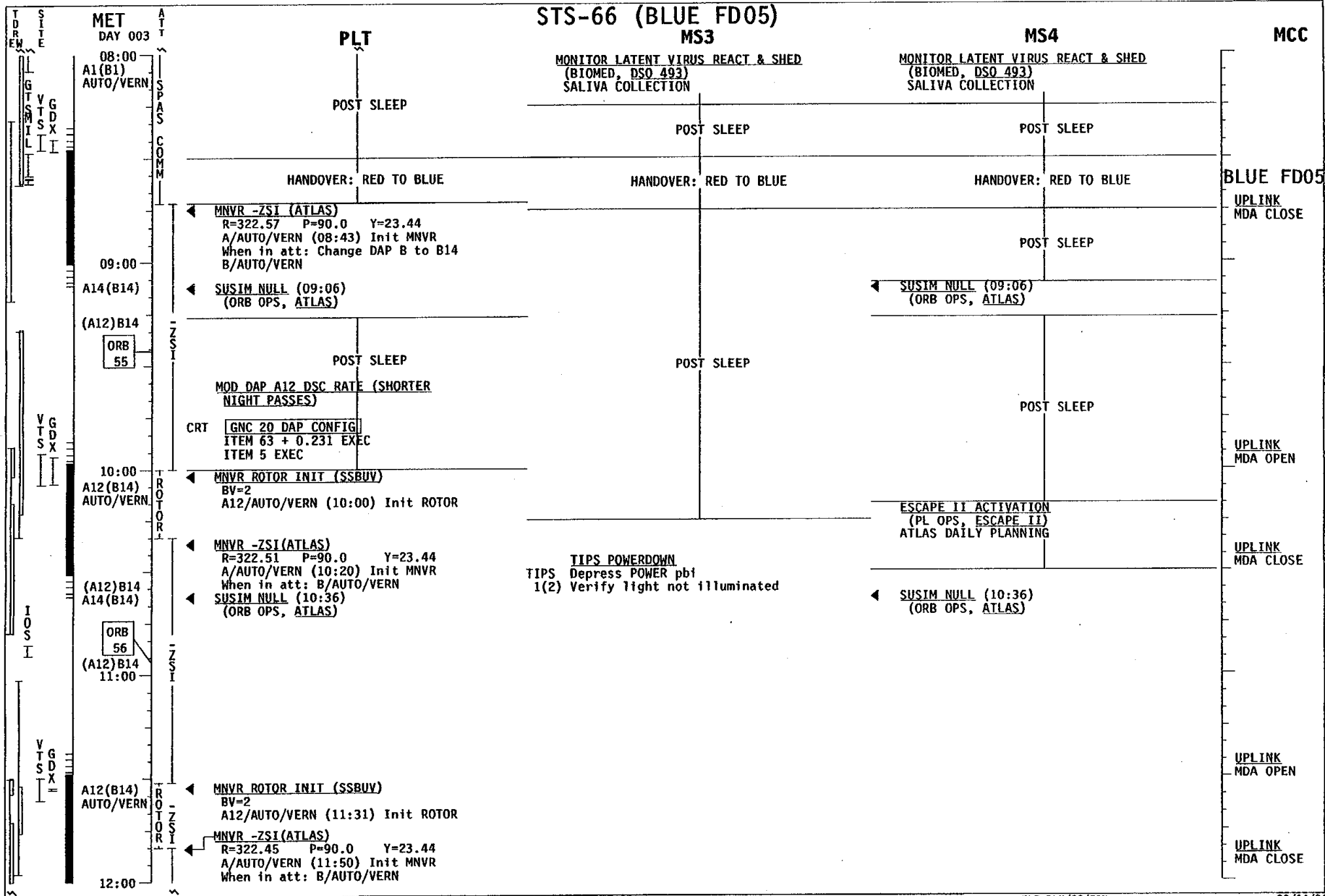


STS-66 (BLUE FD05)

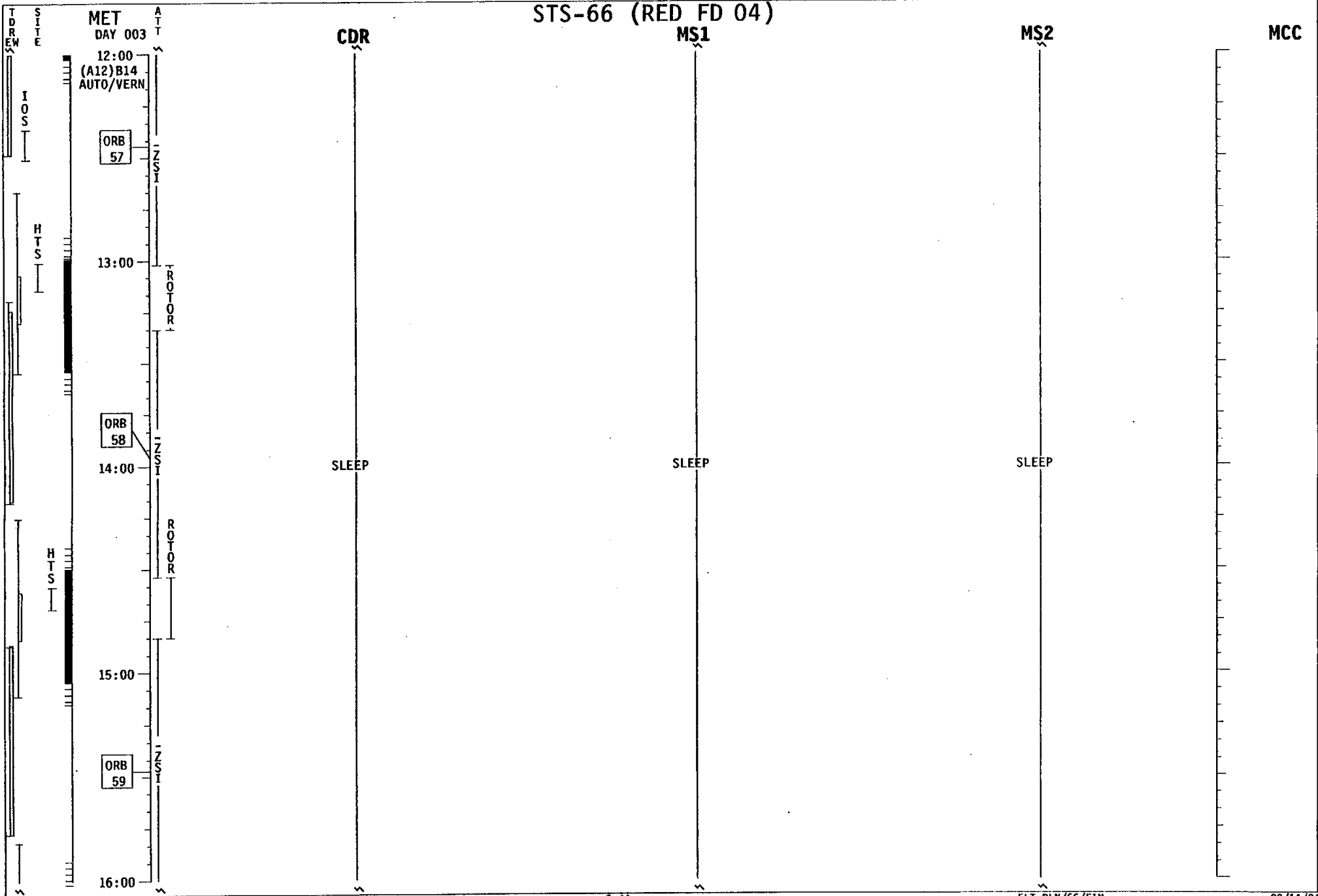


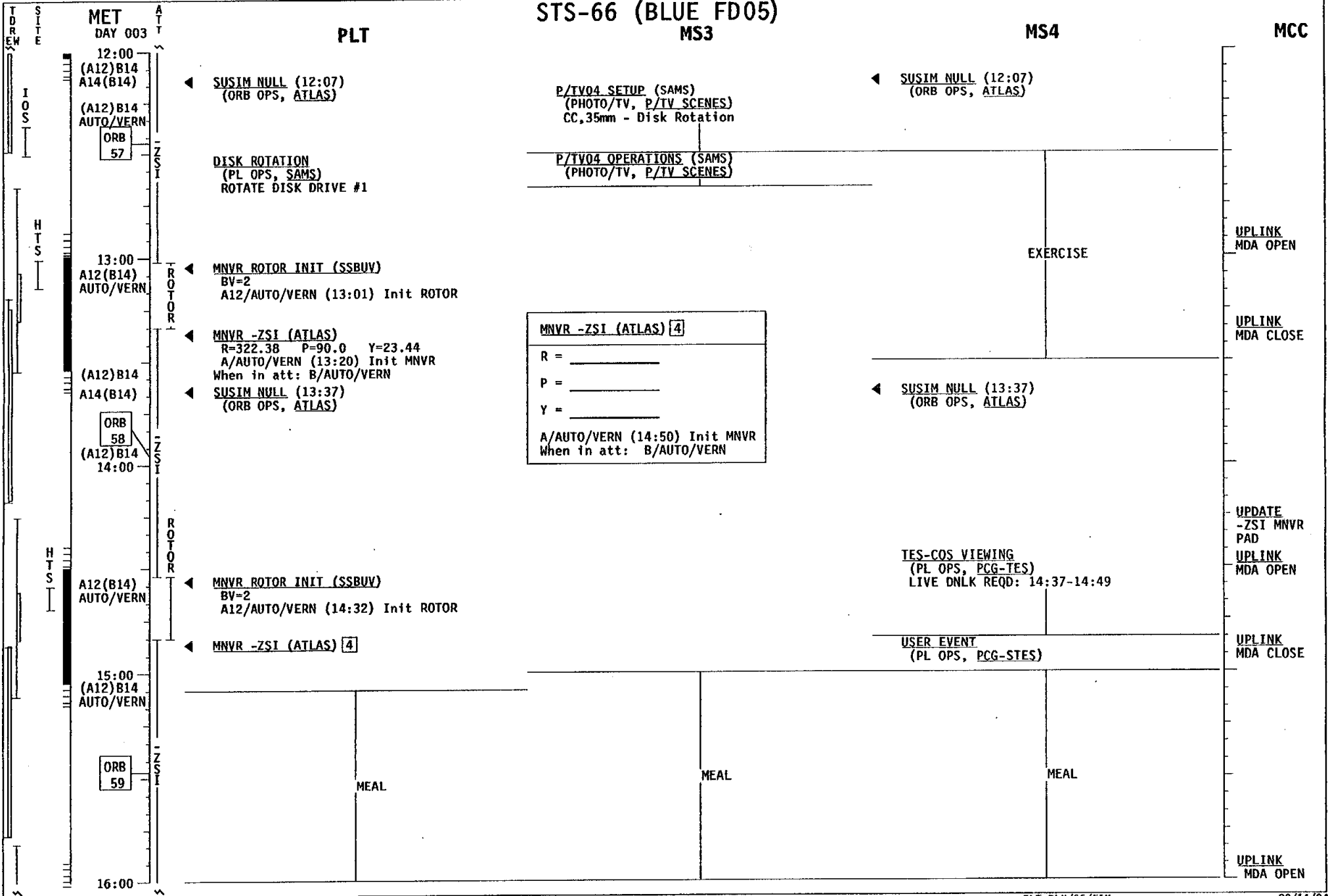
STS-66 (RED FD 04)



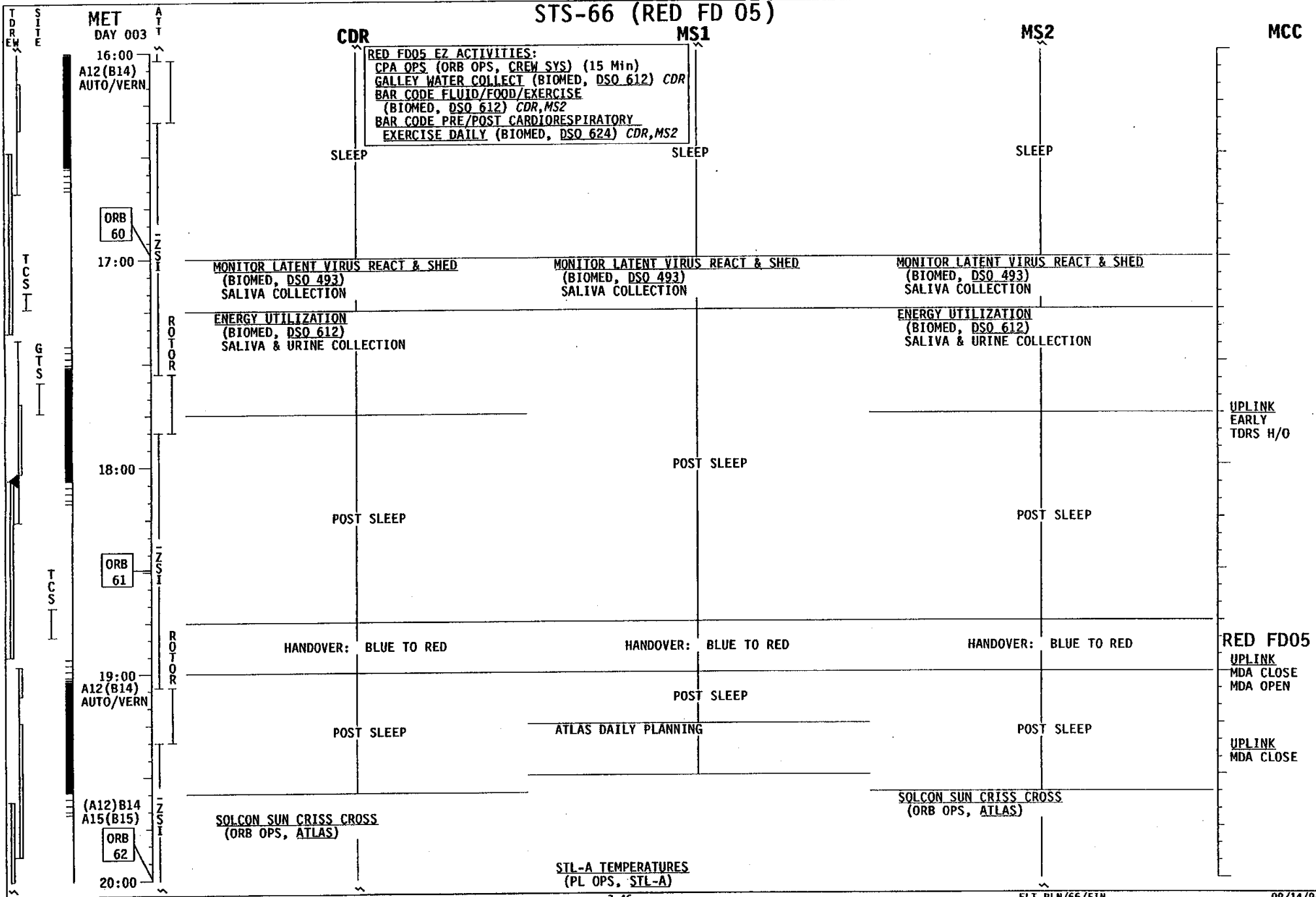


STS-66 (RED FD 04)





STS-66 (RED FD 05)



TDRS
SITE

TCS

GTS

TCS

MET
DAY 003

PLT

STS-66 (BLUE FD05)
MS3

MS4

MCC

16:00
A12(B14)
AUTO/VERN

◀ MNVR ROTOR INIT (SSBUV)
BV=2
A12/AUTO/VERN (16:02) Init ROTOR

(A12)B14

◀ MNVR -ZSI (ATLAS)
R=322.26 P=90.0 Y=23.44
A/AUTO/VERN (16:20) Init MNVR
When in att: B/AUTO/VERN

A14(B14)

◀ SUSIM NULL (16:39)
(ORB OPS, ATLAS)

ORB
60

(A12)B14

17:00

A12(B14)
AUTO/VERN

◀ MNVR ROTOR INIT (SSBUV)
BV=2
A12/AUTO/VERN (17:33) Init ROTOR

18:00
(A12)B14
A14(B14)

◀ MNVR -ZSI (ATLAS)
R=322.20 P=90.0 Y=23.44
A/AUTO/VERN (17:50) Init MNVR
When in att: B/AUTO/VERN

(A12)B14
AUTO/VERN

◀ SUSIM NULL (18:09)
(ORB OPS, ATLAS)

ORB
61

SAMS STATUS CHECK
(PL OPS, SAMS)

HANDOVER: BLUE TO RED

HANDOVER: BLUE TO RED

HANDOVER: BLUE TO RED

RED FD05

19:00

◀ MNVR ROTOR INIT (SSBUV)
BV=2
A12/AUTO/VERN (19:04) Init ROTOR

P/TV10 SETUP (PAO EVENT)
(PHOTO/TV, P/TV SCENES)

ESCAPE II SUN SENSOR OVERRIDE
(PL OPS, ESCAPE II)

◀ MNVR -ZSI (ATLAS)
R= P= Y=
A/AUTO/VERN (19:20) Init MNVR
When in att: B/AUTO/VERN

PAO VOICE CHECK/EVENT
LIVE DNLC REQD: 19:30-19:50

TV (TDRW)
(CREW CNTRL-CAB)

ORB
62

EXERCISE
Don Heart Watch Monitor (DSO 608)

TIPS POWERDOWN
TIPS Depress POWER pbi
1(2) Verify light not illuminated

20:00

TIPS POWERUP
TIPS Depress POWER pbi (wait 5 sec)
1(2) Verify light illuminated

◀ SUSIM NULL (16:39)
(ORB OPS, ATLAS)

P/TV96 SETUP (SOLSPEC)
(PHOTO/TV, P/TV SCENES)

P/TV96 OPERATIONS (SOLSPEC)
(PHOTO/TV, P/TV SCENES)
LIVE DNLC REQD: 17:10-17:15

EXERCISE

L17 Check MCIU filter screen

◀ SUSIM NULL (18:09)
(ORB OPS, ATLAS)

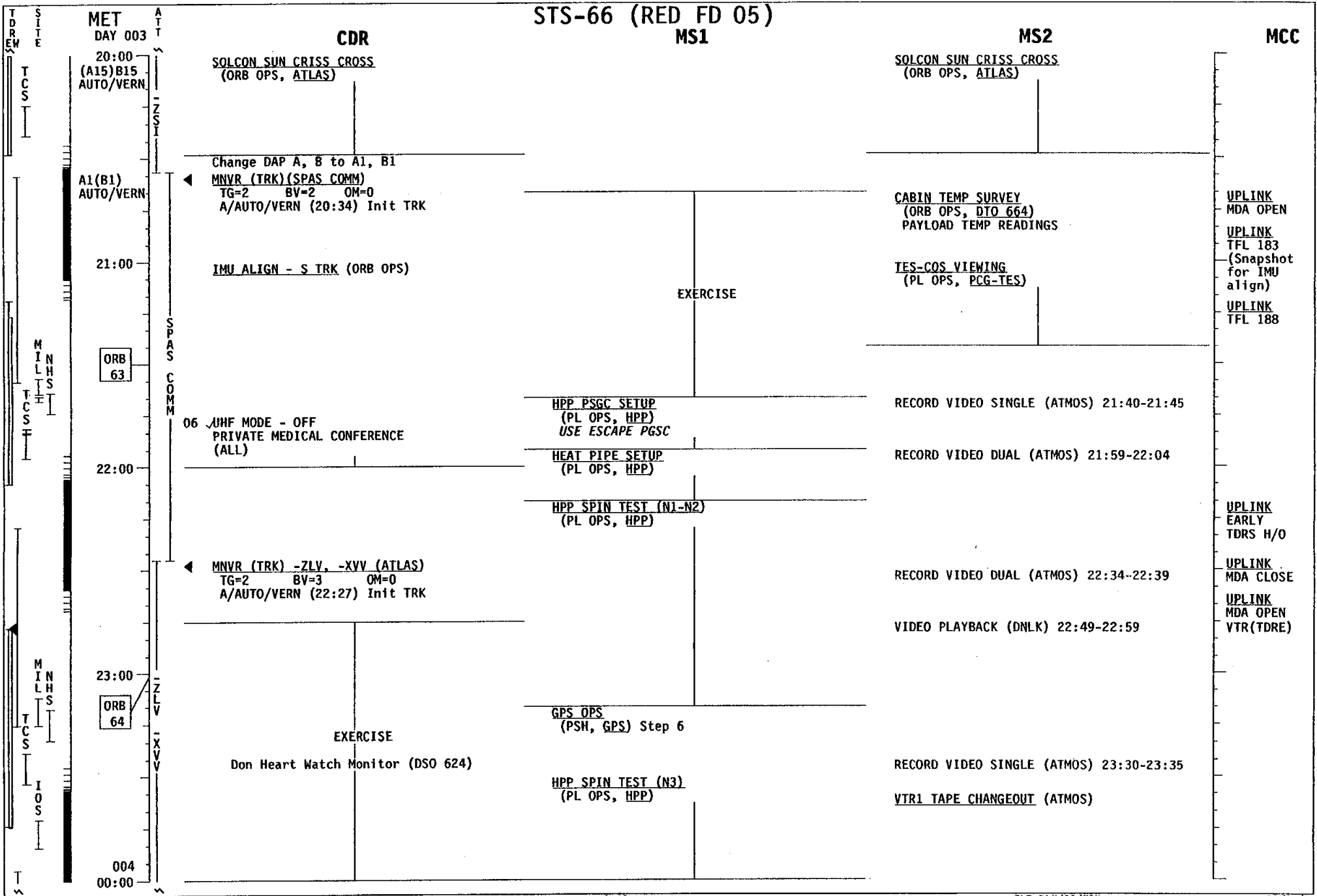
UPLINK
MDA CLOSE

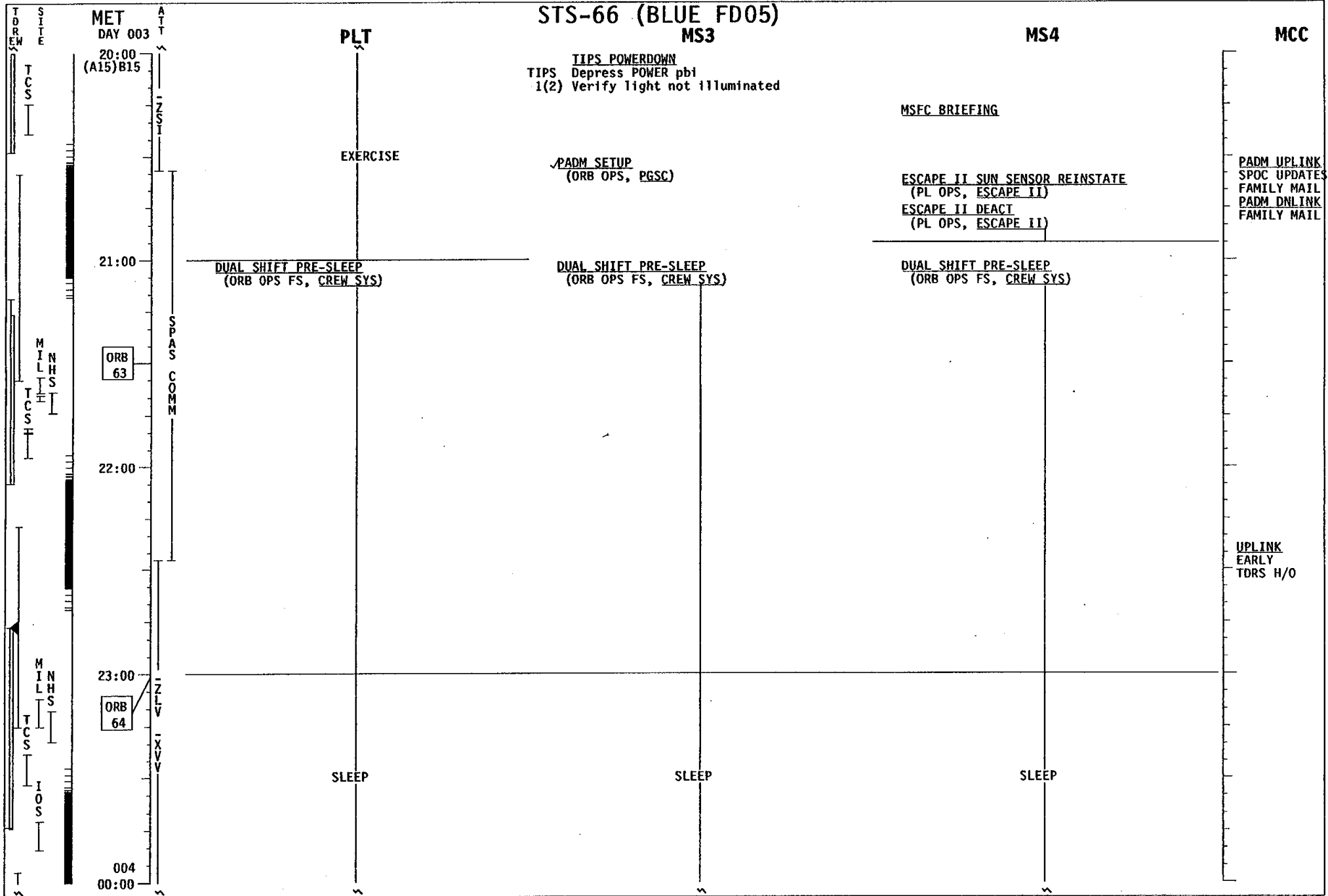
UPLINK
MDA OPEN

TV (TDRE)
(CREW CNTRL-CAB)

UPLINK
MDA CLOSE
MDA OPEN
UPLINK
EARLY
TDRS H/O
UPLINK
MDA CLOSE

UPLINK
MDA OPEN





TDRS
SITE
MET
DAY 004
00:00
A1 (81)
AUTO/VERN
ORB 65
ORB 66
ORB 67
01:00
02:00
03:00
04:00

VTX
GDS
NHS
TCS
IOS
VTX
GDS
NHS
TCS
HTS
VTX
NHS
TCS
HTS

ZLV
XVV

STS-66 (RED FD 05)

MS1

CDR

MS2

MCC

RECORD VIDEO SINGLE (ATMOS) 00:05-00:10

CABIN AIR MONITORING
(ORB OPS, DTO 623)
Step 2

ON-ORBIT MULTI-AXIS RCS BURN
(ORB OPS, RCS)

EXERCISE

Don Heart Watch Monitor (DSO 624)

UPLINK
EARLY
TDRS H/O
UPDATE
ORB MNVR
PAD

RECORD VIDEO SINGLE (ATMOS) 01:00-01:05

◀ NC7 TIG (01:11)

UPLINK
MDA CLOSE
UPLINK
TFL 183
(Snapshot
for RCS
burn)
UPLINK
TFL 188

MEAL

MEAL

MEAL

UPLINK
EARLY
TDRS H/O
UPLINK
MDA OPEN

RECORD VIDEO SINGLE (ATMOS) 02:31-02:36

HPP SPIN TEST (N4)
(PL OPS, HPP)

P/TV06 SETUP (MIDDECK)
(PHOTO/TV, P/TV SCENES)
CC,35mm - Crewmember Working w/PARE

NIH-R OPS
(PL OPS, NIH-R)
Ref P/TV06 (Rodents in AEM/AEM H2O Refill)
Time Tag Videotape w/GMT

03:00

P/TV06 OPERATIONS (MIDDECK)
(PHOTO/TV, P/TV SCENES)

RECORD VIDEO SINGLE (ATMOS) 03:06-03:11

AEM WATER REFILL
(PL OPS, NIH-R)

ORB 67

HEAT PIPE SETUP
(PL OPS, HPP)

P/TV103 SETUP (ATMPLIM)
(PHOTO/TV, P/TV SCENES)
70mm - Earthlimb at SR/SS

HPP SPIN TEST (N5-N6)
(PL OPS, HPP)
Take 3 35mm Photos of
Spin Test Config

P/TV103 OPERATIONS (ATMPLIM)
(PHOTO/TV, P/TV SCENES)

04:00

STS-66 (BLUE FD05)

MET
DAY 004
A1(B1)
AUTO/VERN

TDRS | **SITE** | **A/T**

00:00
ORB 65

VT SX | NH S | T C S | I O S

01:00

02:00
ORB 66

HT S | VT SX | NH S | T C S

03:00

04:00
ORB 67

HT S | VT S | NH S

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

Z
L
V
X
V
V

PLT

MS3

MS4

MCC

SLEEP

SLEEP

SLEEP

UPLINK
EARLY
TDRS H/O

UPLINK
EARLY
TDRS H/O

T D R E W
 S I T E
 J N H S
 A I (B1)
 A U T O / V E R N
 N H S
 G T S
 N H S
 M I L
 S A A S
 C O M M
 M
 M E T
 D A Y 004
 04:00
 05:00
 06:00
 07:00
 08:00

STS-66 (RED FD 05)

MS1

MS2

MCC

HPP SPIN TEST (N5-N6)
(PL OPS, HPP)

P/TV103 OPERATIONS (ATMPHLM)
(PHOTO/TV, P/TV SCENES)

RECORD VIDEO SINGLE (ATMOS) 04:01-04:06

P/TV103 OPERATIONS (ATMPHLM)
(PHOTO/TV, P/TV SCENES)

RECORD VIDEO SINGLE (ATMOS) 04:37-04:41

SAMS STATUS CHECK
(PL OPS, SAMS)

TIPS POWERUP
TIPS Depress POWER pbt (wait 5 sec)
1(2) Verify light illuminated

TES-COS VIEWING
(PL OPS, PCG-TES)
LIVE DNK REQD: 05:06-05:31

FUTURE LOAD MNVR (TRK) (SPAS COMM)
TG=2 BV=2 OM=0
A/AUTO/VERN (07:43) Init TRK

RECORD VIDEO SINGLE (ATMOS) 05:32-05:37

USER EVENT
(PL OPS, PCG-STES)

DUAL SHIFT PRE-SLEEP
(ORB OPS FS, CREW SYS)

DUAL SHIFT PRE-SLEEP
(ORB OPS FS, CREW SYS)

DUAL SHIFT PRE-SLEEP
(ORB OPS FS, CREW SYS)

RECORD VIDEO SINGLE (ATMOS) 06:07-06:12

DUAL SHIFT PRE-SLEEP
(ORB OPS FS, CREW SYS)

HANDOVER: RED TO BLUE

HANDOVER: RED TO BLUE

HANDOVER: RED TO BLUE

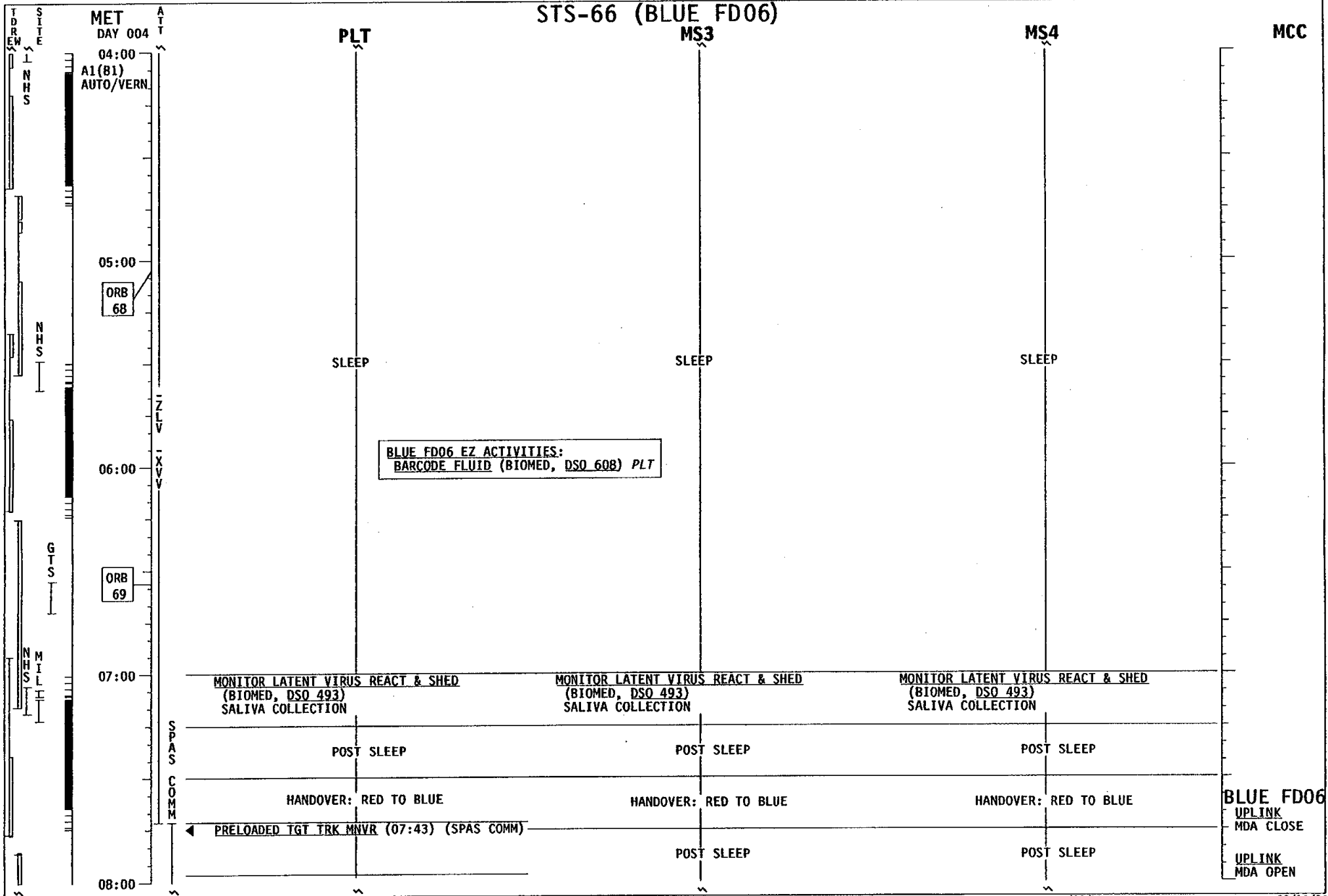
BLUE FD06

DUAL SHIFT PRE-SLEEP
(ORB OPS FS, CREW SYS)

DUAL SHIFT PRE-SLEEP
(ORB OPS FS, CREW SYS)

DUAL SHIFT PRE-SLEEP
(ORB OPS FS, CREW SYS)

STS-66 (BLUE FD06)



BLUE FD06 EZ ACTIVITIES:
 BARCODE FLUID (BIOMED, DSO 608) PLT

BLUE FD06
 UPLINK
 MDA CLOSE
 UPLINK
 MDA OPEN

STS-66 (RED FD 05)

CDR

MS1

MS2

MCC

MET
DAY 004

08:00
ORB 70

A1(B1)
AUTO/VERN

09:00

ORB 71

10:00

ORB 72

11:00

12:00

TDR EM
SITE
VTS
GDX
MIL
I OS
HTS

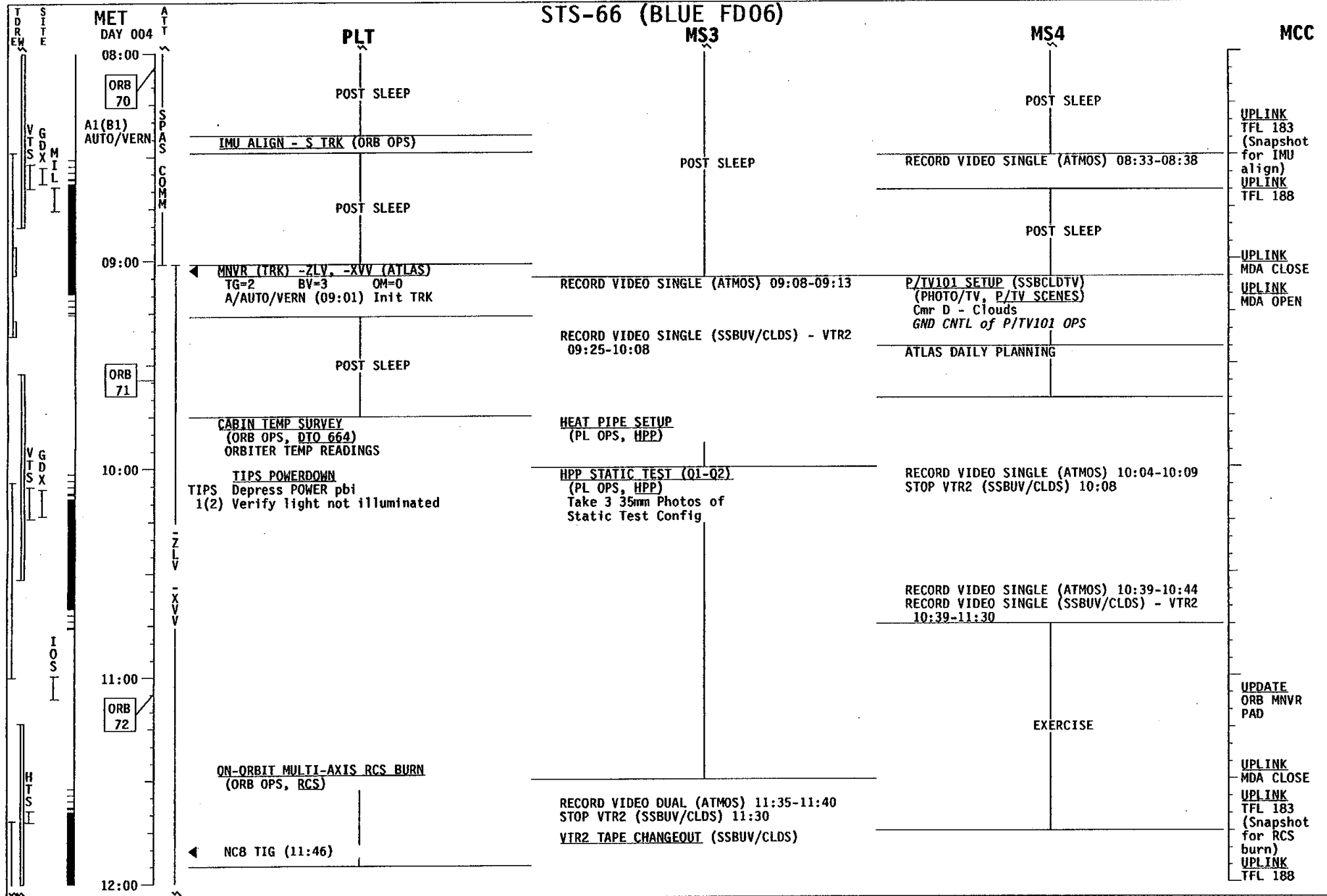
SPAS
COMM
ZLV
XVV

SLEEP

SLEEP

SLEEP

STS-66 (BLUE FD06)



STS-66 (RED FD 05)

T D R E H SITE
 MET DAY 004
 12:00
 A1(B1)
 AUTO/VERN
 I O S
 H T S
 13:00
 Z L V
 14:00
 X V V
 15:00
 16:00

CDR

MS1

MS2

MCC

SLEEP

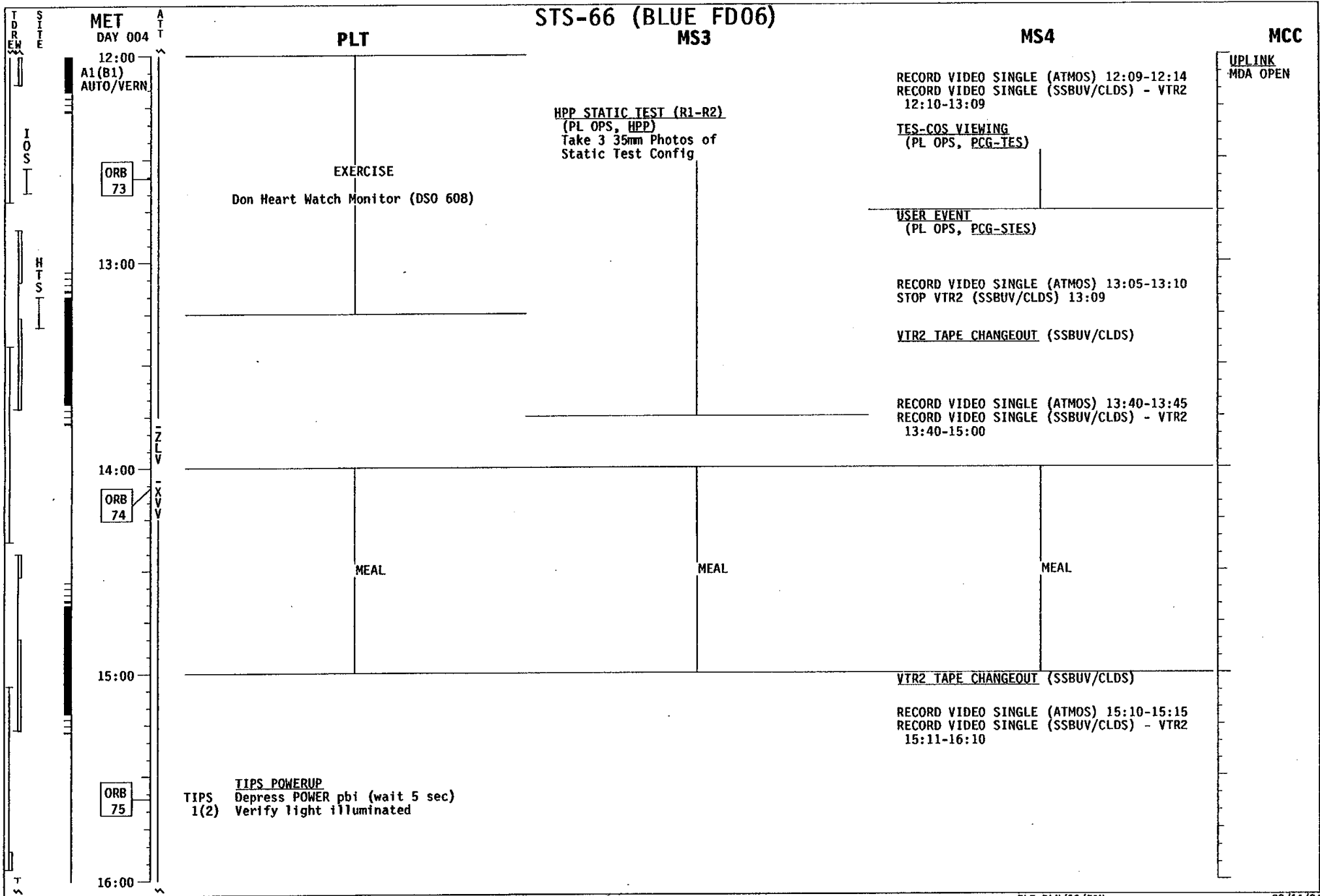
SLEEP

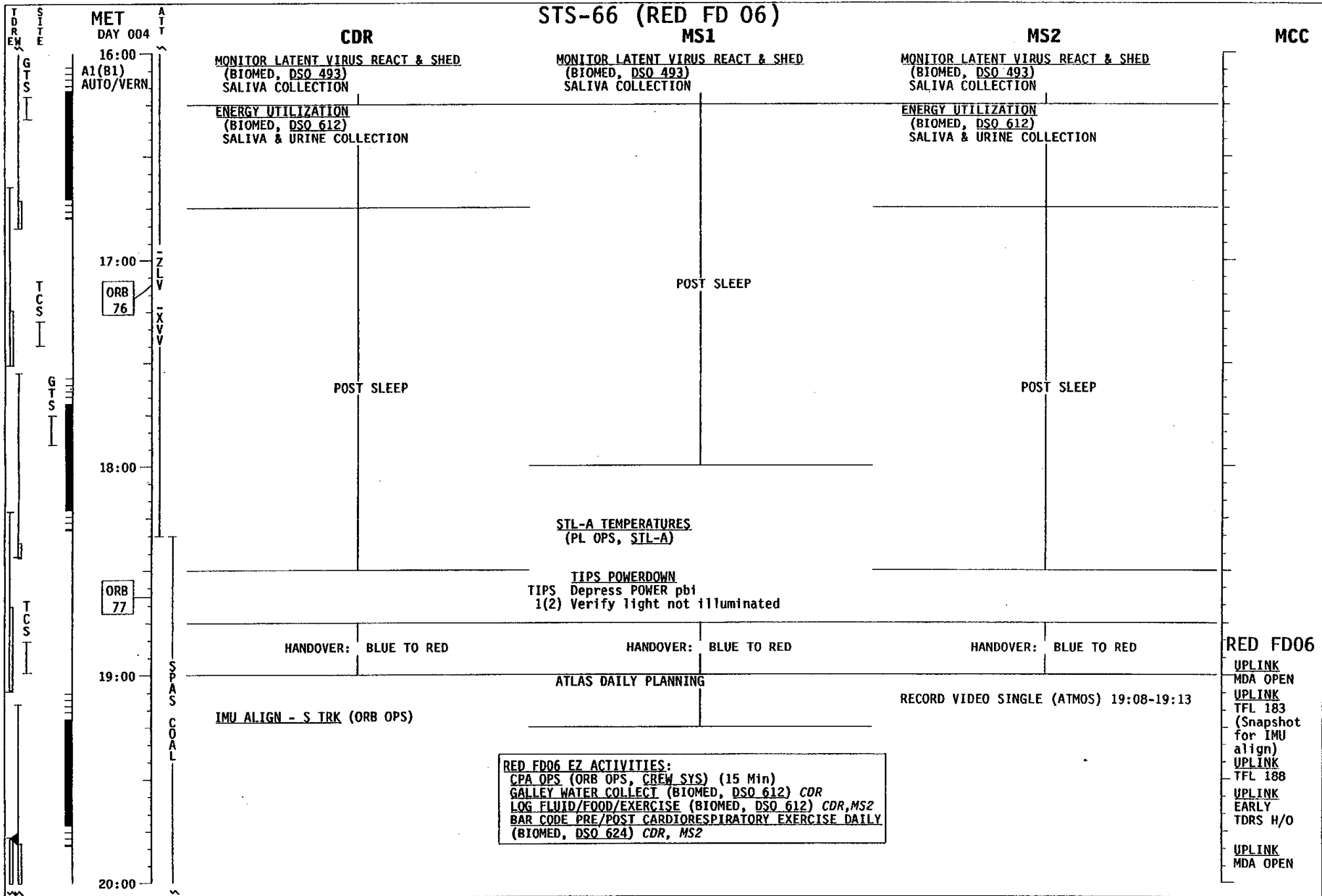
SLEEP

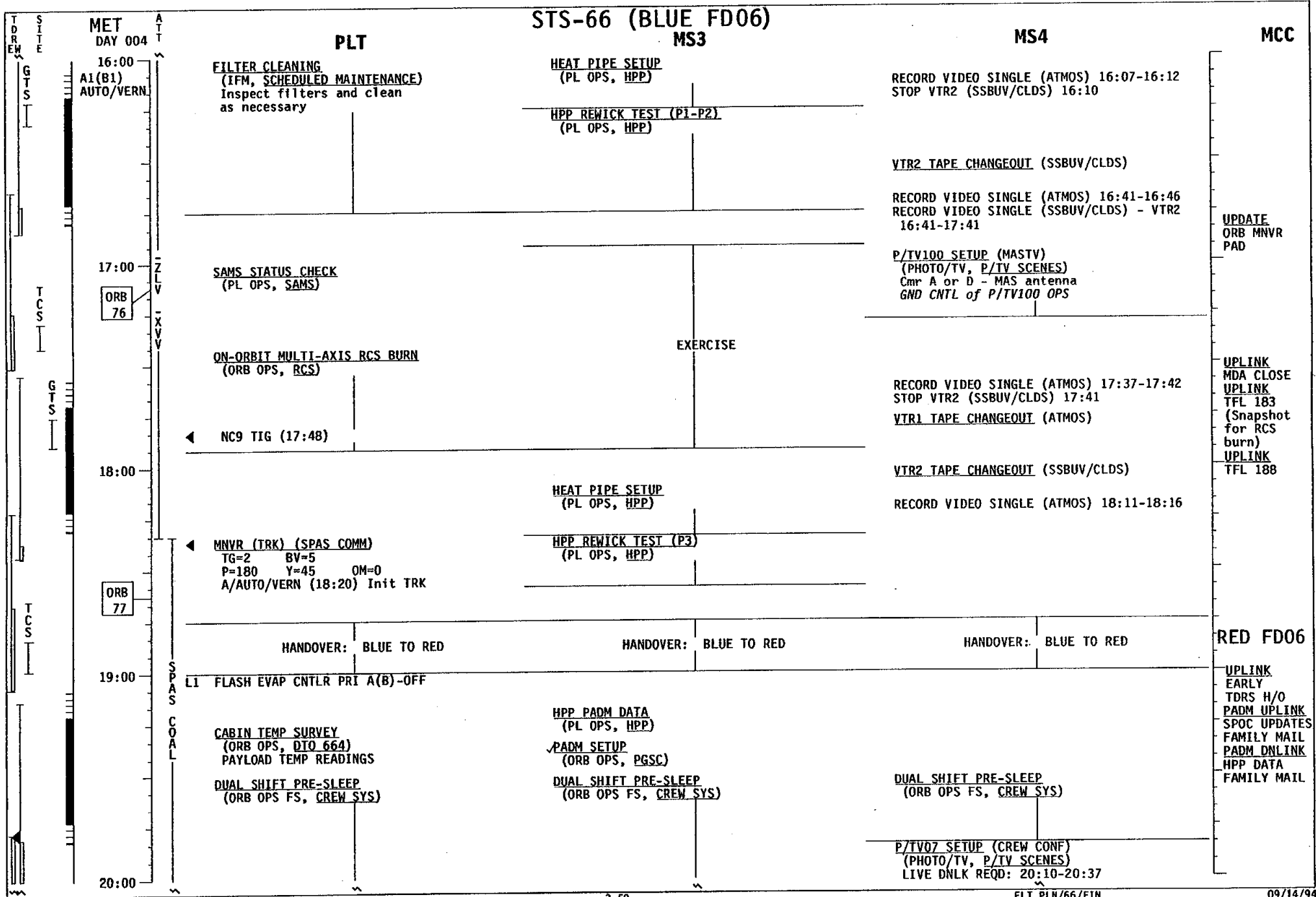
ORB 73

ORB 74

ORB 75







STS-66 (RED FD 06)

CDR

MS1

MS2

MCC

MET DAY 004
 20:00
 ORB 78
 A1(B1) AUTO/VERN
 COALS
 SPAS
 COALS
 21:00
 (A1)B1 AUTO/PRI
 A1(B1) AUTO/VERN
 ORB 79
 22:00
 ZLV
 +XVV
 23:00
 ORB 80
 005
 00:00

CREW CONF (A11)	CREW CONF (A11)	CREW CONF (A11)
TOPPING FES STARTUP (ORB OPS, ECLS)		RECORD VIDEO DUAL (ATMOS) 20:38-20:43
014F,015:F, RJD LOGIC, DRIVER (sixteen)-ON 016:F	MSFC BRIEFING	EXERCISE
◀ MNVR (TRK) -ZLV, +XVV (ATLAS) TG-2 BV=3 OM=180 B/AUTO/PRI (21:10) Init TRK When in att: A/AUTO/VERN	RECORD VIDEO DUAL (ATMOS) 21:13-21:18	Don Heart Watch Monitor (DSO 624)
06 JHF MODE - OFF PRIVATE MEDICAL CONFERENCE (ALL)	VIDEO PLAYBACK (DNLK) (ATMOS) 21:25-21:35	
FC PURGE - MANUAL (ORB OPS, EPS)		
	HEAT PIPE SETUP (PL OPS, HPP)	RECORD VIDEO SINGLE (ATMOS) 22:09-22:14
EXERCISE	HPP STATIC TEST (S1-S2) (PL OPS, HPP) Take 3 35mm Photos of Static Test Config	RECORD VIDEO SINGLE (ATMOS) 22:43-22:48
Don Heart Watch Monitor (DSO 624)		TES-CQS VIEWING (PL OPS, PCG-TES)
014:F,015:F, RJD LOGIC, DRIVER (sixteen)-OFF 016:F RJDA-1A L2/R2 MANF DRIVER-ON		RECORD VIDEO SINGLE (ATMOS) 23:40-23:45

UPLINK MDA CLOSE
 UPLINK MDA OPEN
 VTR(TDRW)

STS-66 (BLUE FD06)

MCC

PLT

MS3

MS4

DUAL SHIFT PRE-SLEEP
(ORB OPS FS, CREW SYS)

DUAL SHIFT PRE-SLEEP
(ORB OPS FS, CREW SYS)

P/TV07 SETUP (CREW CONF)
(PHOTO/TV, P/TV SCENES)

CREW CONF
(A11)

CREW CONF
(A11)

CREW CONF
(A11)

DUAL SHIFT PRE-SLEEP
(ORB OPS FS, CREW SYS)

DUAL SHIFT PRE-SLEEP
(ORB OPS FS, CREW SYS)

DUAL SHIFT PRE-SLEEP
(ORB OPS FS, CREW SYS)

SLEEP

SLEEP

SLEEP

MET
DAY 004

20:00

ORB
78

A1(B1)
AUTO/VERN

21:00

ORB
79

22:00

23:00

ORB
80

005

00:00

T D R E W
S I T E
T C S
M I N L H S
T C S
M I N L H S
T C S
I O S S

A T
S P A S
C O A L
Z L V
+ X V V

STS-66 (RED FD 06)

CDR

MS1

MS2

MCC

MET
DAY 005

00:00
A1(B1)
AUTO/VERN.

ORB
81

01:00

HEAT PIPE SETUP
(PL OPS, HPP)

RECORD VIDEO SINGLE (ATMOS) 01:10-01:15

TES-COS VIEWING
(PL OPS, PCG-TES)

HPP STATIC TEST (I1-I2)
(PL OPS, HPP)
Take 3 35mm Photos of
Static Test Config

RECORD VIDEO SINGLE (ATMOS) 01:44-01:49

USER EVENT
(PL OPS, PCG-STES)

02:00

ORB
82

NIH-R OPS
(PL OPS, NIH-R)

EXERCISE

RECORD VIDEO SINGLE (ATMOS) 02:41-02:46

03:00

CABIN AIR MONITORING
(ORB OPS, DIO 623)
Step 2

STL-A TEMPERATURES
(PL OPS, STL-A)

RECORD VIDEO DUAL (ATMOS) 03:15-03:20

SAMS STATUS CHECK
(PL OPS, SAMS)

← MNVR (TRK) (SPAS COMM)
TG=2 BV=5
P=180 Y=90 OM=90
A/AUTO/VERN (03:20) Init TRK

P/TV09 SETUP (ATLAS PLB)
(PHOTO/TV, P/TV SCENES)
35mm-PLB view w/o SPAS in bay

ORB
83

IMU ALIGN - S TRK (ORB OPS)

P/TV09 OPERATIONS (ATLAS PLB)
(PHOTO/TV, P/TV SCENES)

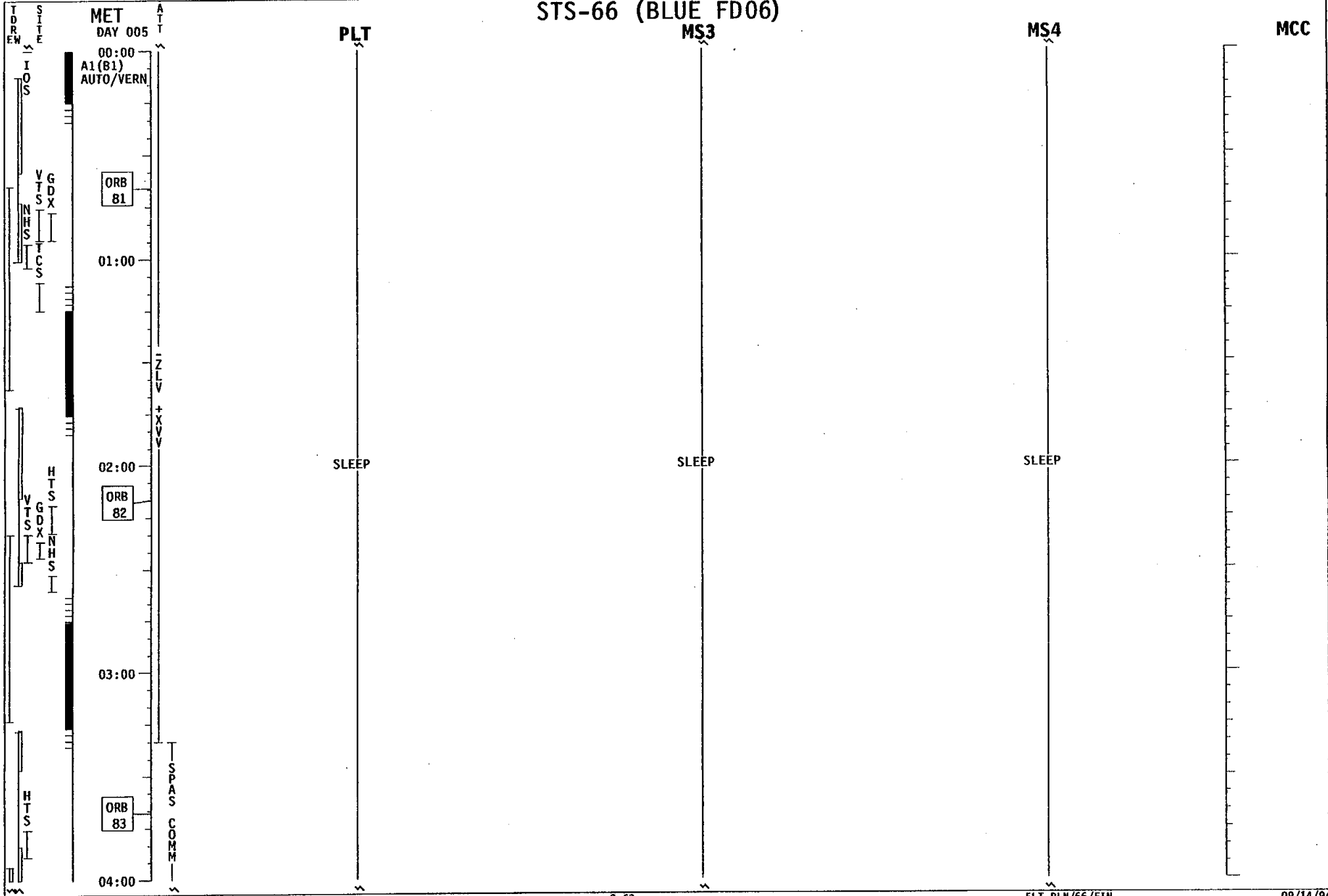
RECORD VIDEO SINGLE (ATMOS) 03:53-03:57

04:00

UPLINK
MDA CLOSE

UPLINK
MDA OPEN
UPLINK
TFL 183
(Snapshot
for IMU
align)
UPLINK
TFL 188

STS-66 (BLUE FD06)



STS-66 (RED FD 06)

CDR

MS1

MS2

MCC

MET DAY 005
 04:00
 A1(B1)
 AUTO/VERN
 05:00
 ORB 84
 06:00
 07:00
 ORB 85
 08:00

TDRS
 SITE
 NHSS
 GTS
 MIL
 NHSS
 GTS
 MIL
 NHSS

ATT
 SPAS
 COMM
 ZLV
 +XVV

← MNVR (TRK) -ZLV, +XVV (ATLAS)
 TG=2 BV=3 OM=180
 A/AUTO/VERN (04:35) Init TRK

DUAL SHIFT PRE-SLEEP
 (ORB OPS FS, CREW SYS)

RECORD VIDEO DUAL (ATMOS) 04:12-04:17

VIDEO PLAYBACK (DNLK) 04:31-04:41

RECORD VIDEO SINGLE (ATMOS) 04:45-04:50

DUAL SHIFT PRE-SLEEP
 (ORB OPS FS, CREW SYS)

TIPS POWERUP
 TIPS Depress POWER pbi (wait 5 sec)
 1(2) Verify light illuminated

DUAL SHIFT PRE-SLEEP
 (ORB OPS FS, CREW SYS)

UPLINK
 MDA CLOSE
 VTR(TDRE)

UPLINK
 MDA OPEN

UPLINK
 EARLY
 TDRS H/O

HANDOVER: RED TO BLUE

HANDOVER: RED TO BLUE

HANDOVER: RED TO BLUE

DUAL SHIFT PRE-SLEEP
 (ORB OPS FS, CREW SYS)

DUAL SHIFT PRE-SLEEP
 (ORB OPS FS, CREW SYS)

DUAL SHIFT PRE-SLEEP
 (ORB OPS FS, CREW SYS)

BLUE FD07

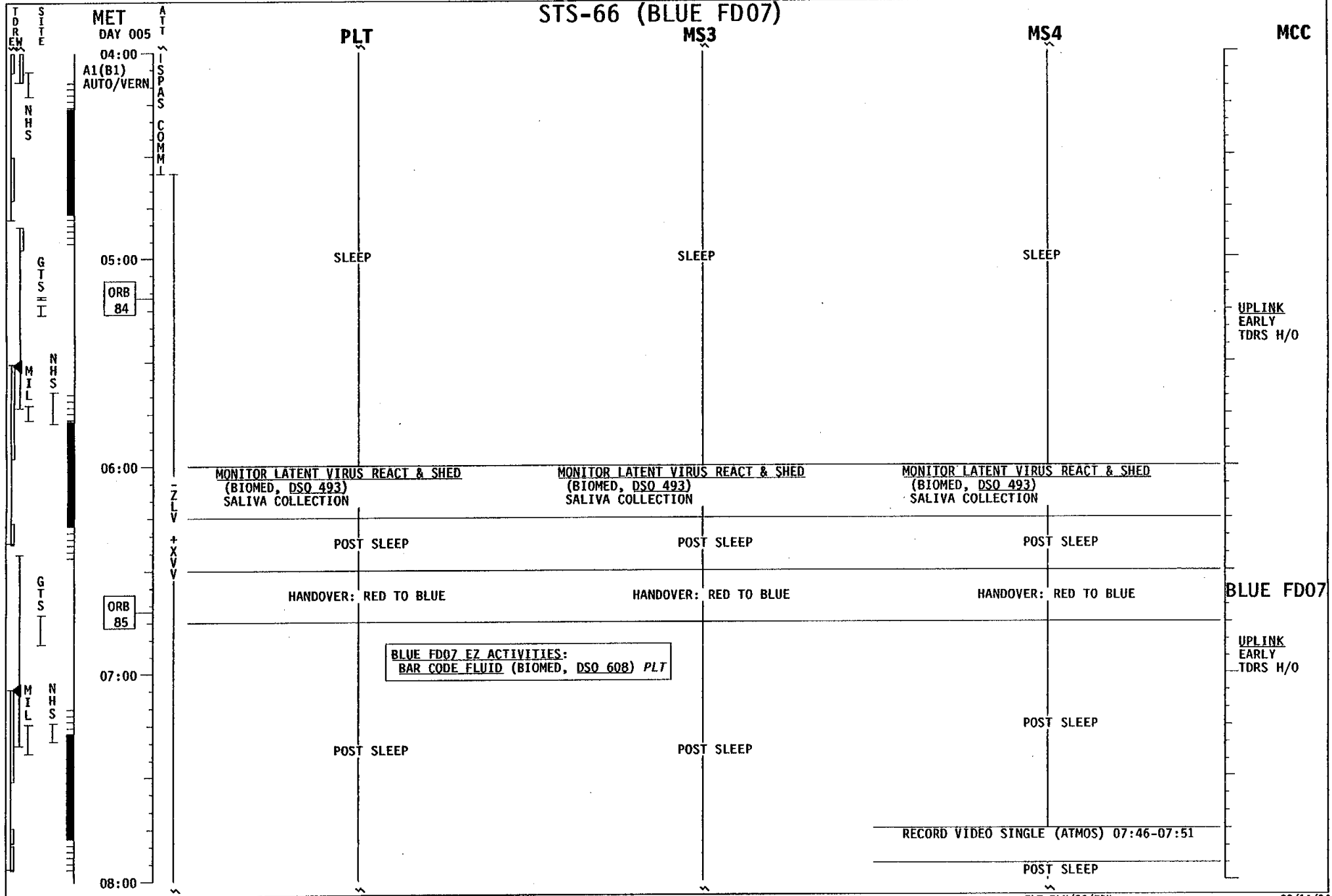
UPLINK
 EARLY
 TDRS H/O

SLEEP

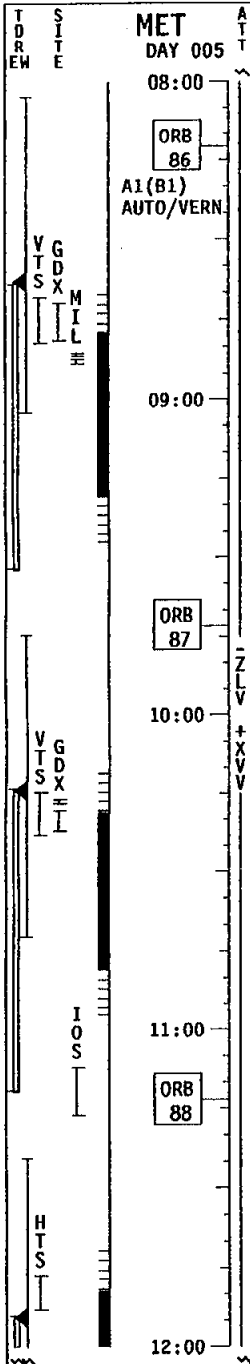
SLEEP

SLEEP

STS-66 (BLUE FD07)



STS-66 (RED FD 07)



CDR

SLEEP

MS1

SLEEP

MS2

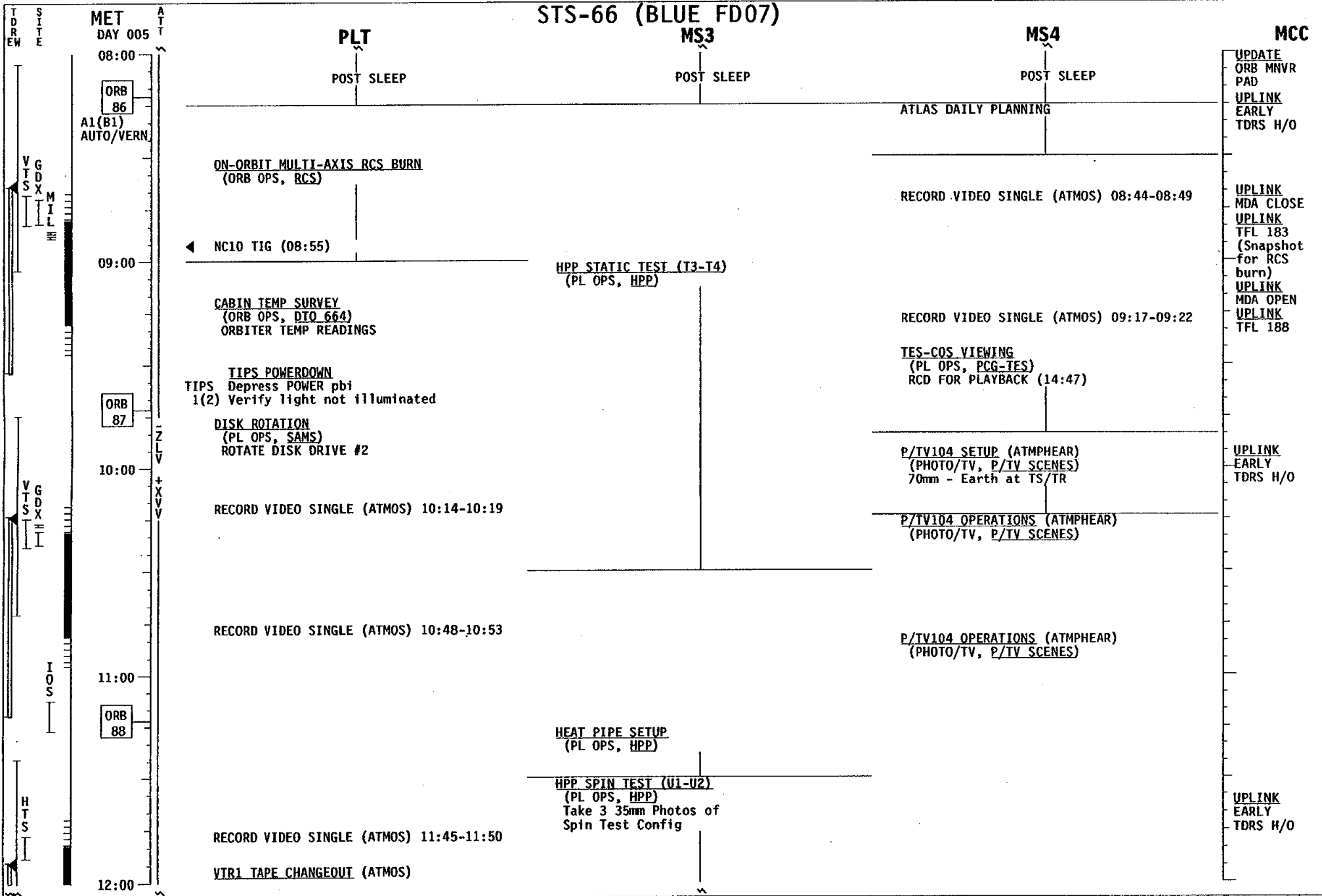
SLEEP

MCC

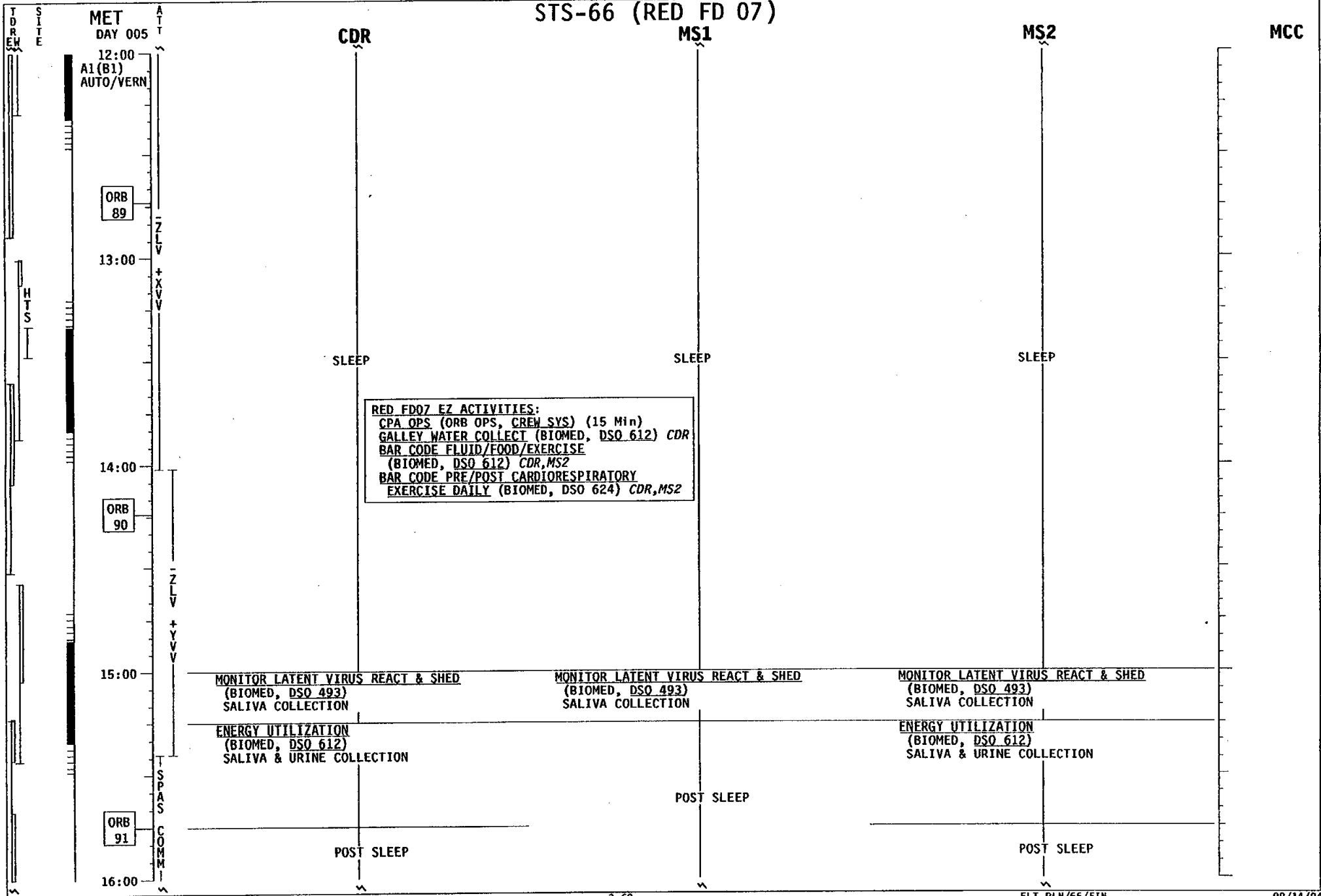
UPLINK
EARLY
TDRS H/O

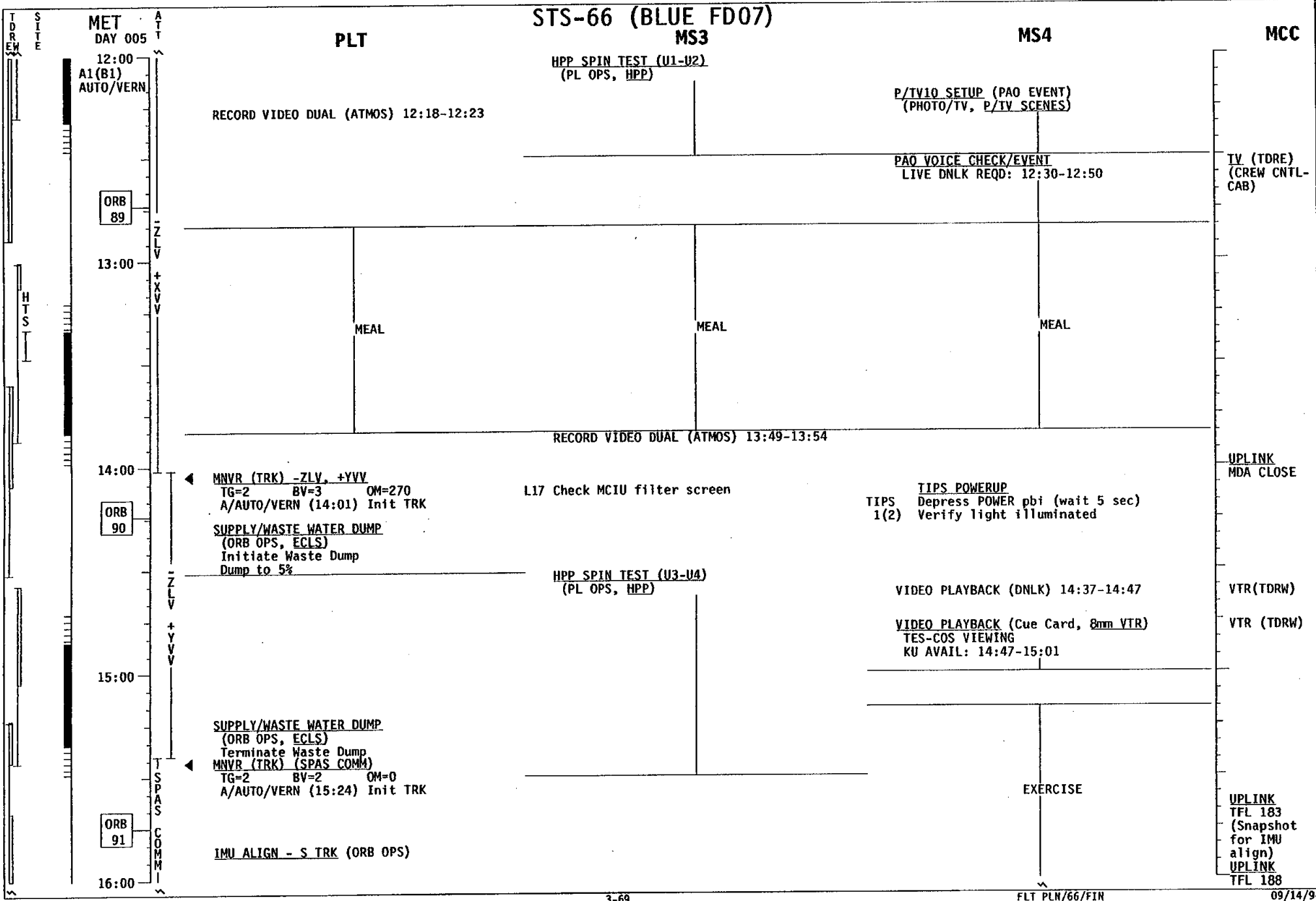
UPLINK
EARLY
TDRS H/O

UPLINK
EARLY
TDRS H/O



STS-66 (RED FD 07)





STS-66 (BLUE FD07)

PLT

MS3

MS4

MCC

MET DAY 005

12:00
A1(B1)
AUTO/VERN

RECORD VIDEO DUAL (ATMOS) 12:18-12:23

HPP SPIN TEST (U1-U2)
(PL OPS, HPP)

P/TV10 SETUP (PAO EVENT)
(PHOTO/TV, P/TV SCENES)

PAO VOICE CHECK/EVENT
LIVE DNK REQD: 12:30-12:50

TV (TDRE)
(CREW CNTL-CAB)

ORB 89

13:00

MEAL

MEAL

MEAL

RECORD VIDEO DUAL (ATMOS) 13:49-13:54

14:00

◀ MNVN (TRK) -ZLV, +YVV
TG=2 BV=3 OM=270
A/AUTO/VERN (14:01) Init TRK

L17 Check MCIU filter screen

TIPS POWERUP
TIPS Depress POWER pbi (wait 5 sec)
1(2) Verify light illuminated

UPLINK
MDA CLOSE

ORB 90

SUPPLY/WASTE WATER DUMP
(ORB OPS, ECLS)
Initiate Waste Dump
Dump to 5%

HPP SPIN TEST (U3-U4)
(PL OPS, HPP)

VIDEO PLAYBACK (DNLK) 14:37-14:47

VTR(TDRW)

15:00

◀ SUPPLY/WASTE WATER DUMP
(ORB OPS, ECLS)
Terminate Waste Dump
MNVN (TRK) (SPAS COMM)
TG=2 BV=2 OM=0
A/AUTO/VERN (15:24) Init TRK

VIDEO PLAYBACK (Cue Card, 8mm VTR)
TES-COS VIEWING
KU AVAIL: 14:47-15:01

VTR (TDRW)

ORB 91

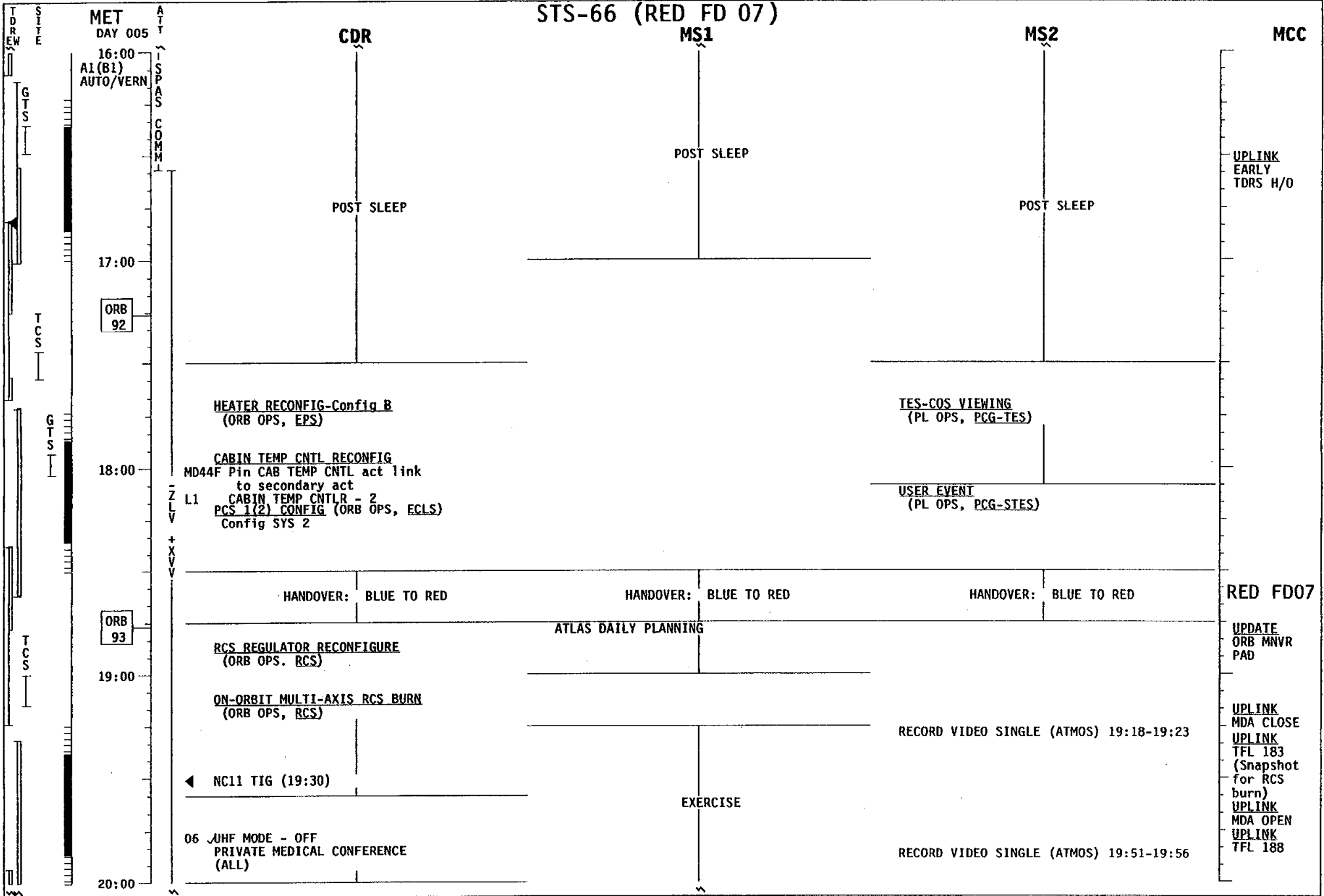
IMU ALIGN - S TRK (ORB OPS)

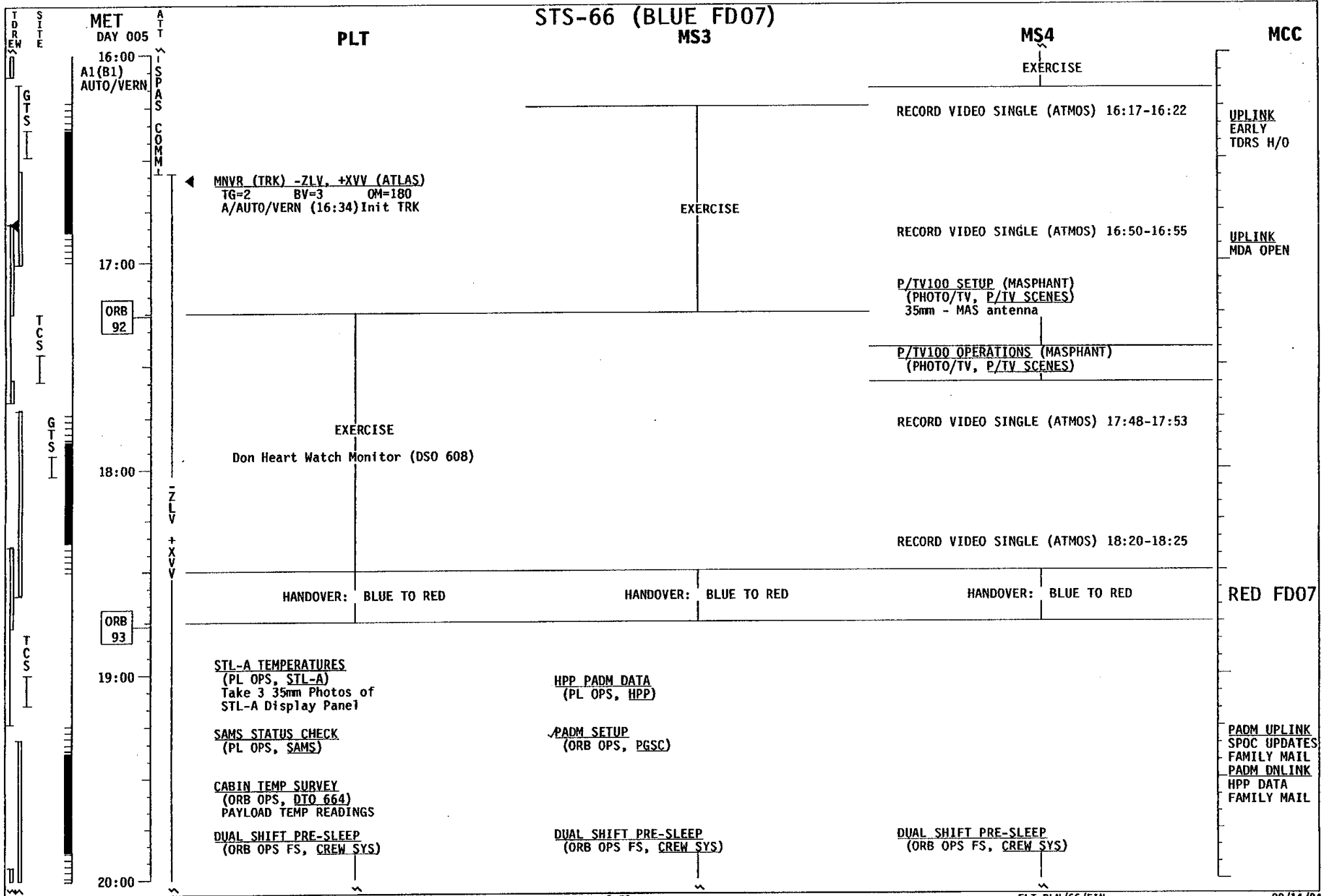
EXERCISE

UPLINK
TFL 183
(Snapshot for IMU align)
UPLINK
TFL 188

16:00

STS-66 (RED FD 07)





STS-66 (BLUE FD07)
MS3

PLT

MS4

MCC

MET DAY 005

16:00
A1(B1)
AUTO/VERN

← MNVR (TRK) -ZLV, +XV (ATLAS)
TG=2 BV=3 OM=180
A/AUTO/VERN (16:34) Init TRK

EXERCISE

EXERCISE

RECORD VIDEO SINGLE (ATMOS) 16:17-16:22

UPLINK
EARLY
TDRS H/O

RECORD VIDEO SINGLE (ATMOS) 16:50-16:55

UPLINK
MDA OPEN

P/TV100 SETUP (MASPHANT)
(PHOTO/TV, P/TV SCENES)
35mm - MAS antenna

P/TV100 OPERATIONS (MASPHANT)
(PHOTO/TV, P/TV SCENES)

RECORD VIDEO SINGLE (ATMOS) 17:48-17:53

EXERCISE

Don Heart Watch Monitor (DSO 608)

RECORD VIDEO SINGLE (ATMOS) 18:20-18:25

HANDOVER: BLUE TO RED

HANDOVER: BLUE TO RED

HANDOVER: BLUE TO RED

RED FD07

STL-A TEMPERATURES
(PL OPS, STL-A)
Take 3 35mm Photos of
STL-A Display Panel

HPP PADM DATA
(PL OPS, HPP)

SAMS STATUS CHECK
(PL OPS, SAMS)

PADM SETUP
(ORB OPS, PGSC)

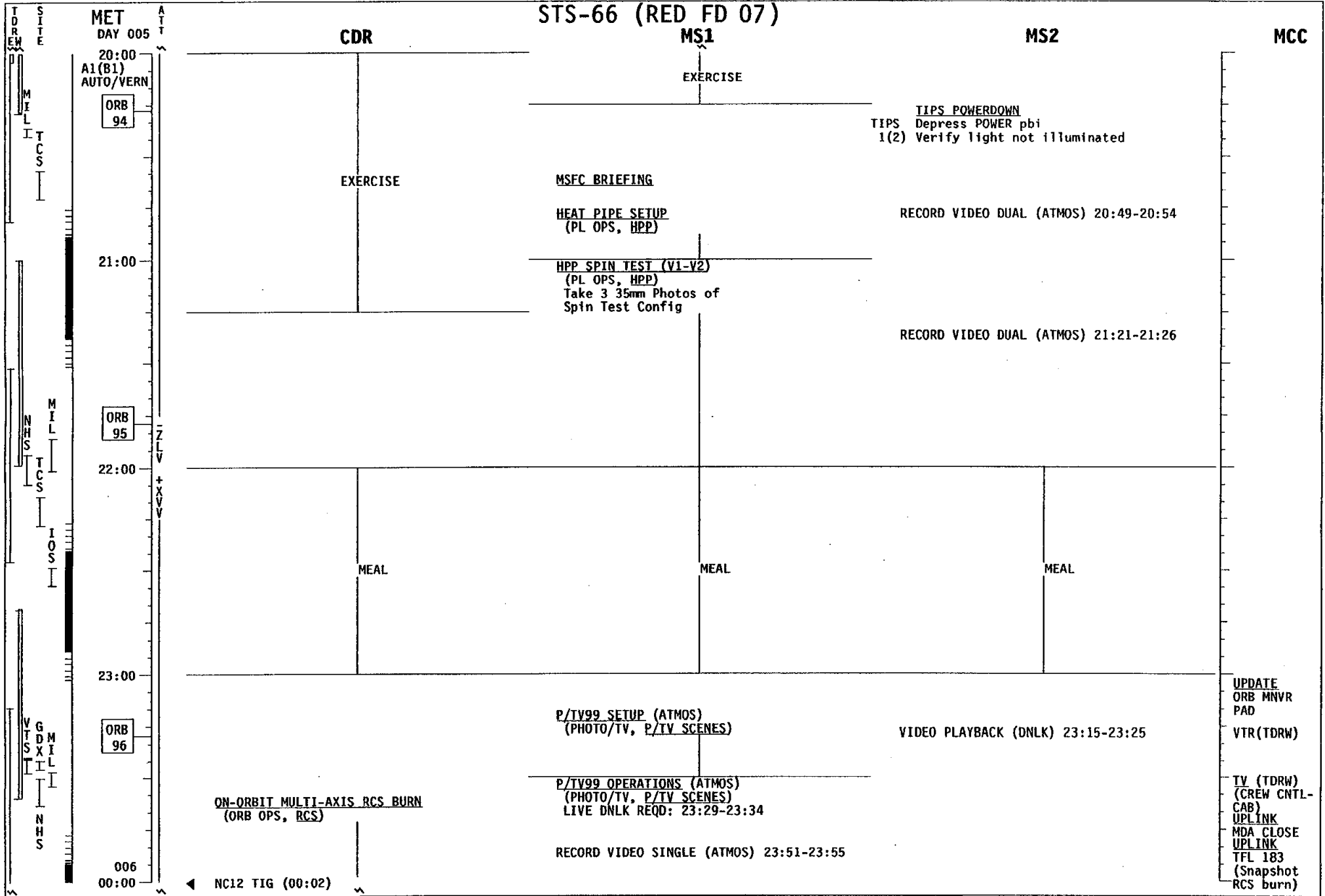
CABIN TEMP SURVEY
(ORB OPS, DIO 664)
PAYLOAD TEMP READINGS

DUAL SHIFT PRE-SLEEP
(ORB OPS FS, CREW SYS)

DUAL SHIFT PRE-SLEEP
(ORB OPS FS, CREW SYS)

DUAL SHIFT PRE-SLEEP
(ORB OPS FS, CREW SYS)

PADM UPLINK
SPOC UPDATES
FAMILY MAIL
PADM DNLINK
HPP DATA
FAMILY MAIL



TDR EN SITE
 MIL TCS
 NH S MIL TCS
 V T S M G D X I L
 T S I I I L
 N H S

MET DAY 005
 20:00
 A1(B1)
 AUTO/VERN
 ORB 94
 21:00
 ORB 95
 22:00
 ORB 96
 23:00
 006
 00:00

ATT
 ZLV
 +XVV

STS-66 (BLUE FD07)

PLT
 DUAL SHIFT PRE-SLEEP
 (ORB OPS FS, CREW SYS)

MS3
 DUAL SHIFT PRE-SLEEP
 (ORB OPS FS, CREW SYS)

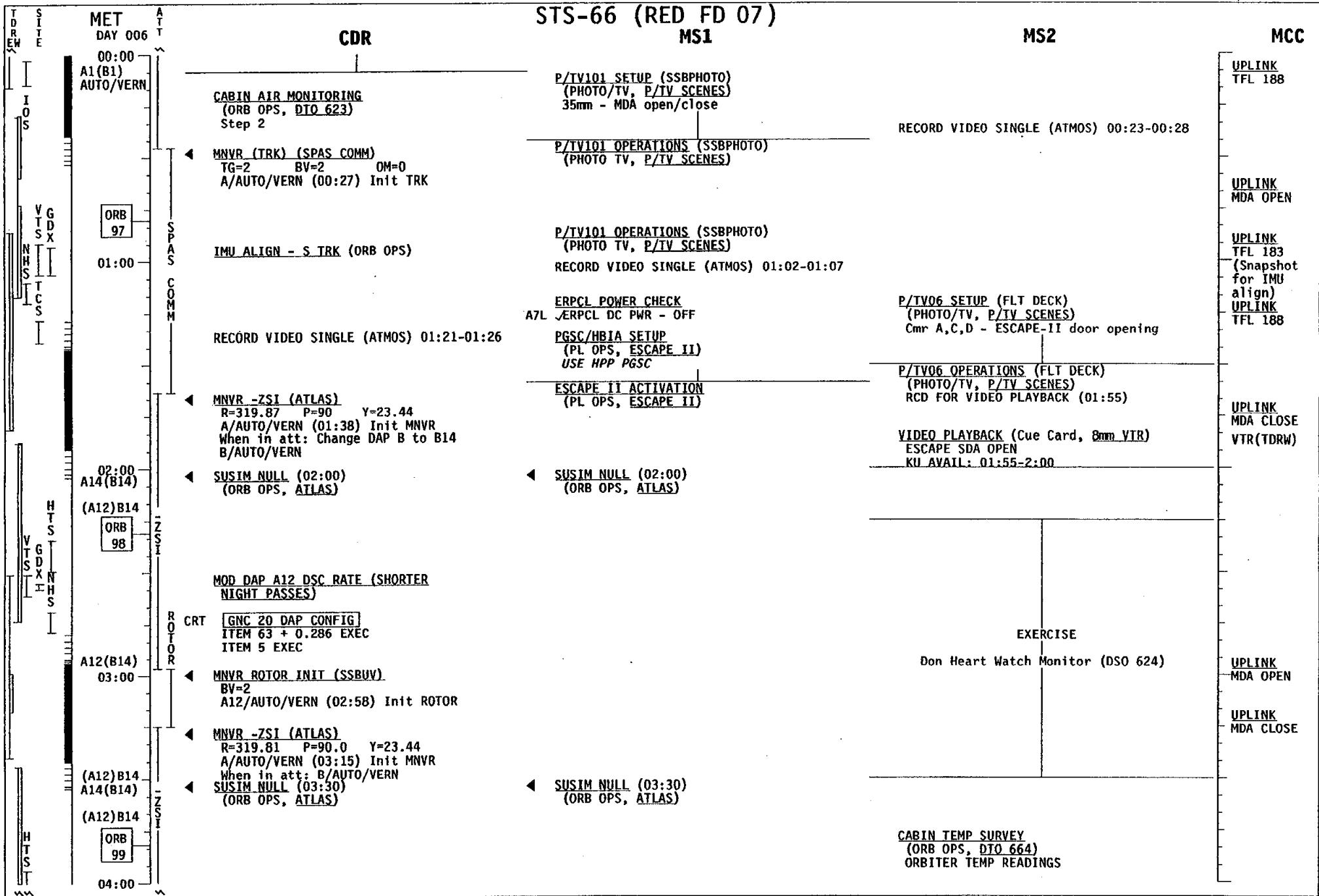
MS4
 DUAL SHIFT PRE-SLEEP
 (ORB OPS FS, CREW SYS)

MCC

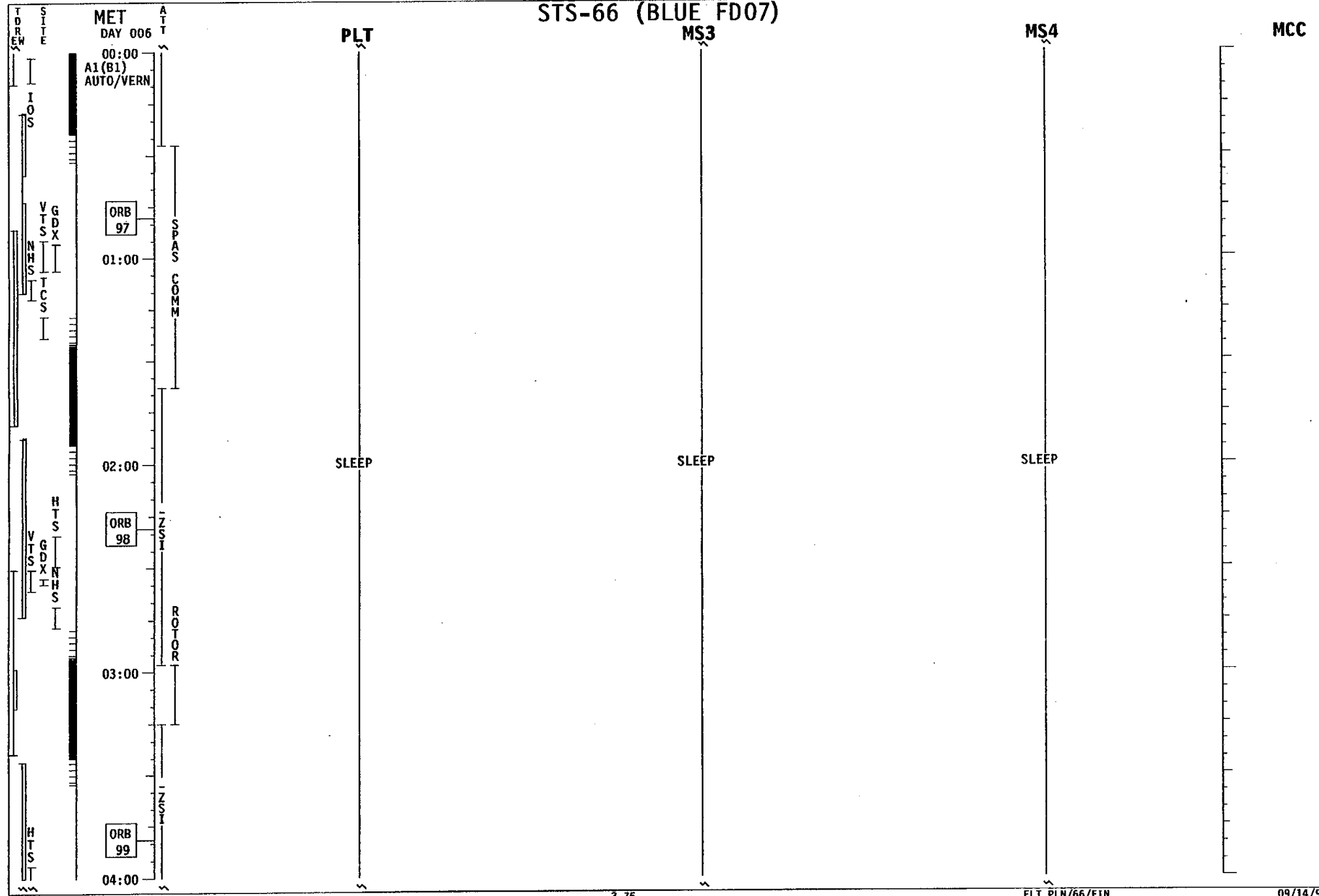
SLEEP

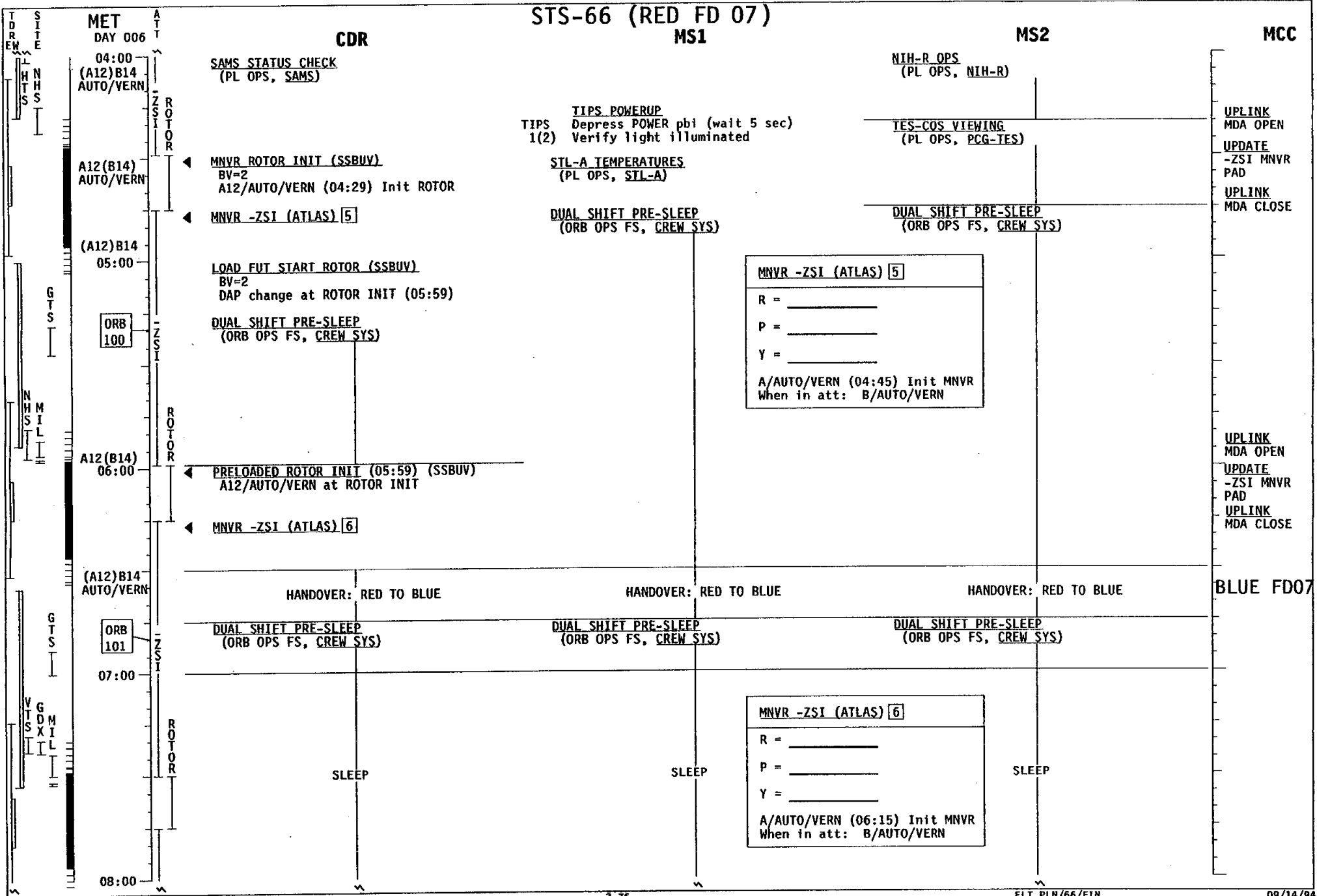
SLEEP

SLEEP

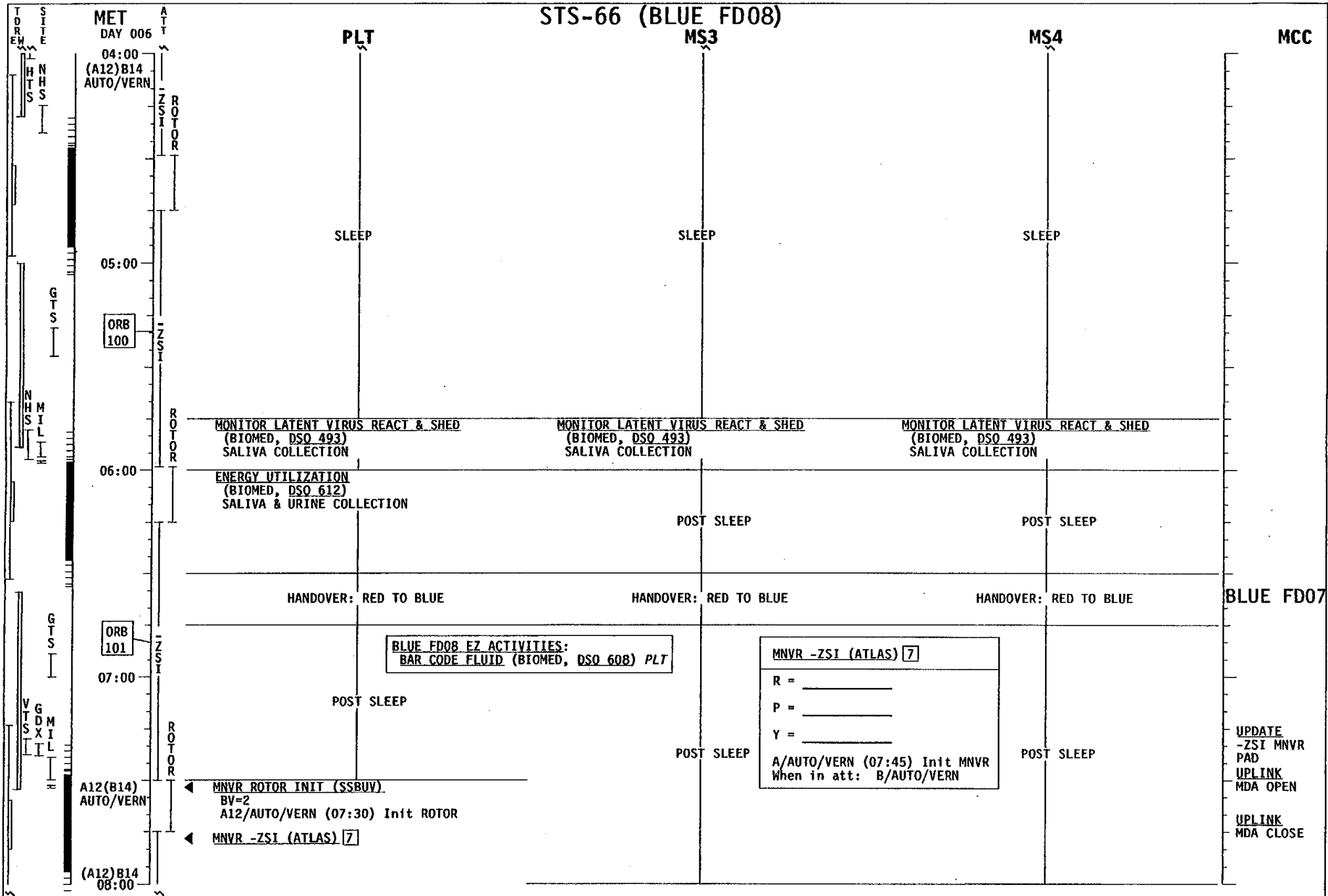


STS-66 (BLUE FD07)

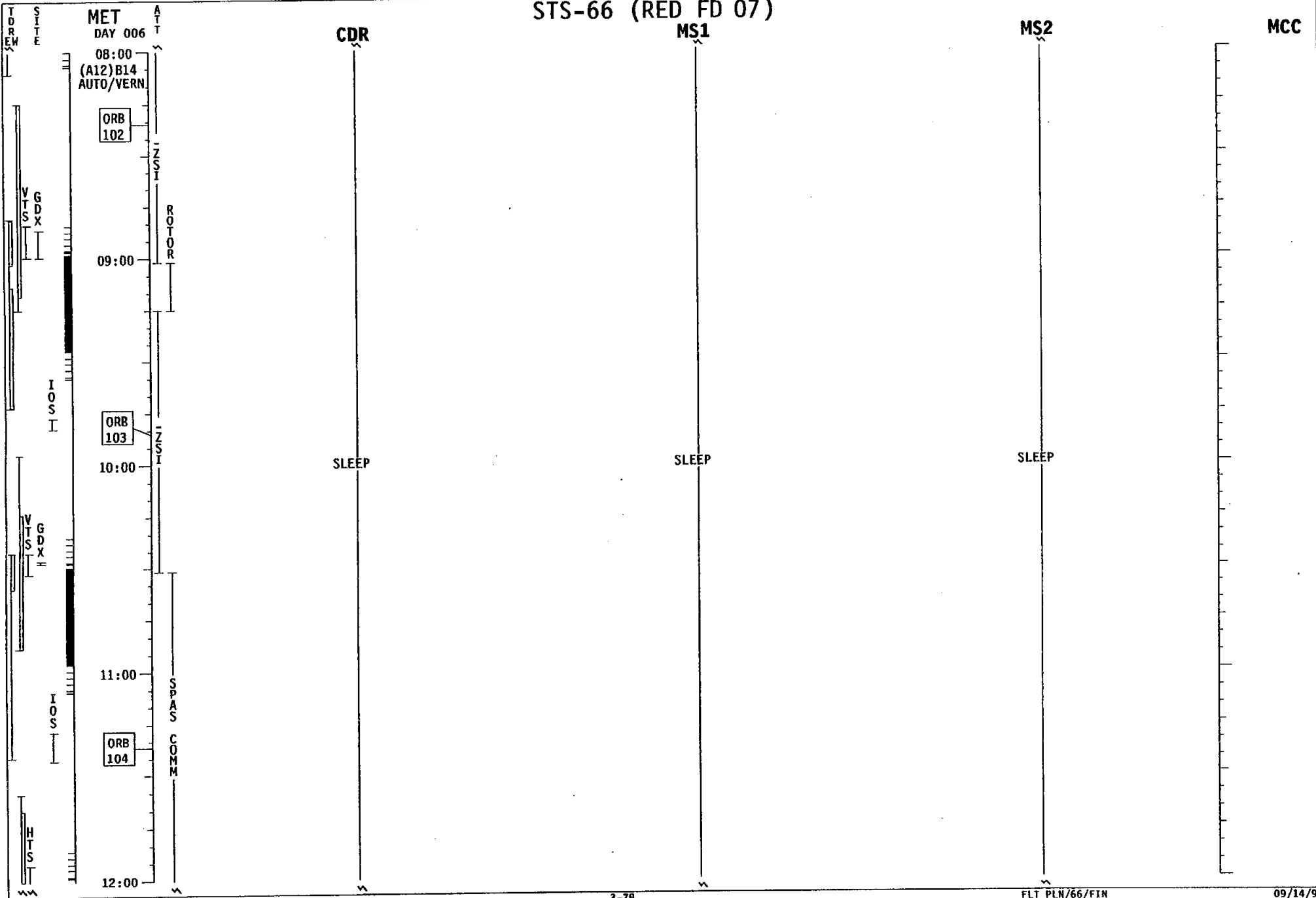


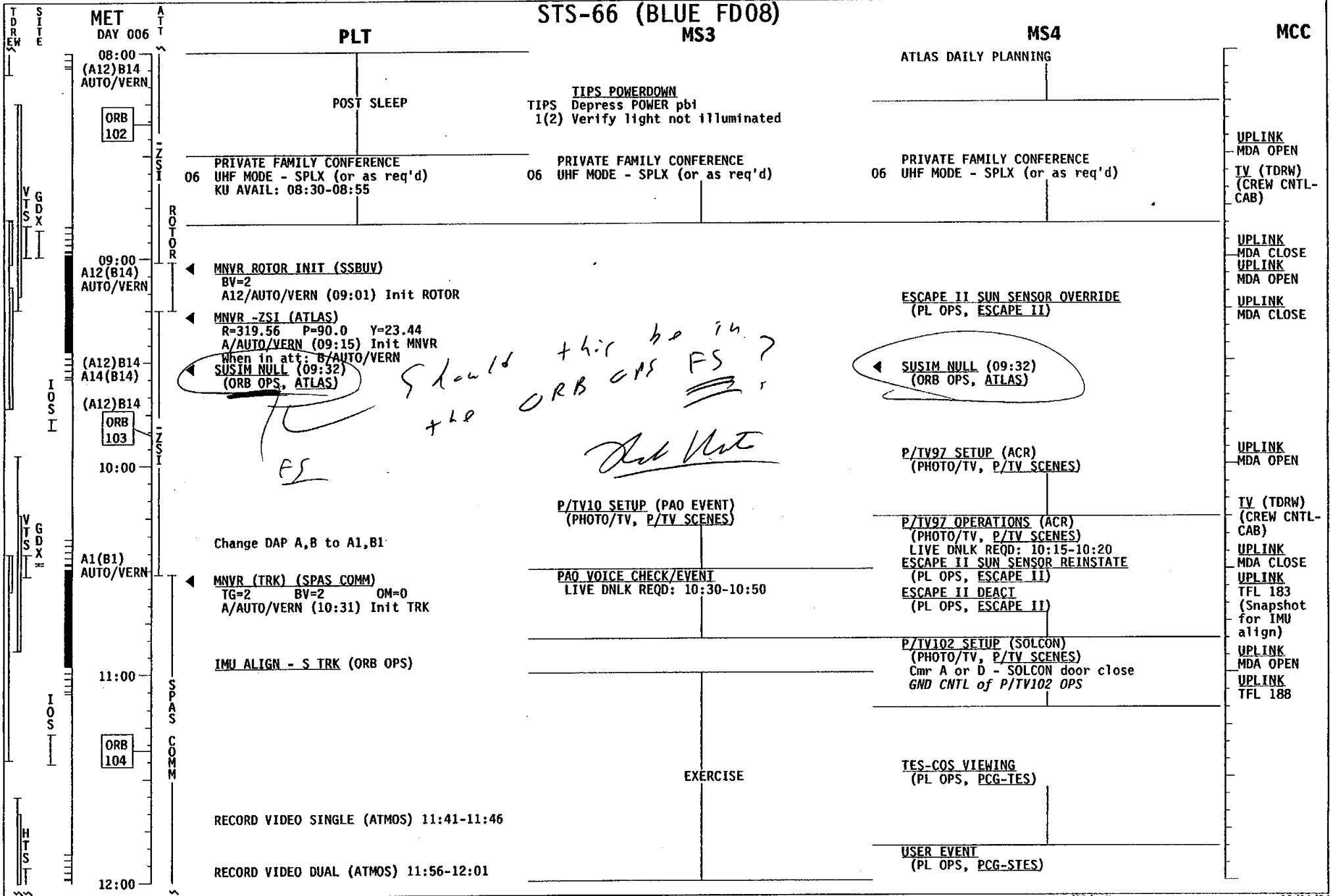


STS-66 (BLUE FD08)



STS-66 (RED FD 07)



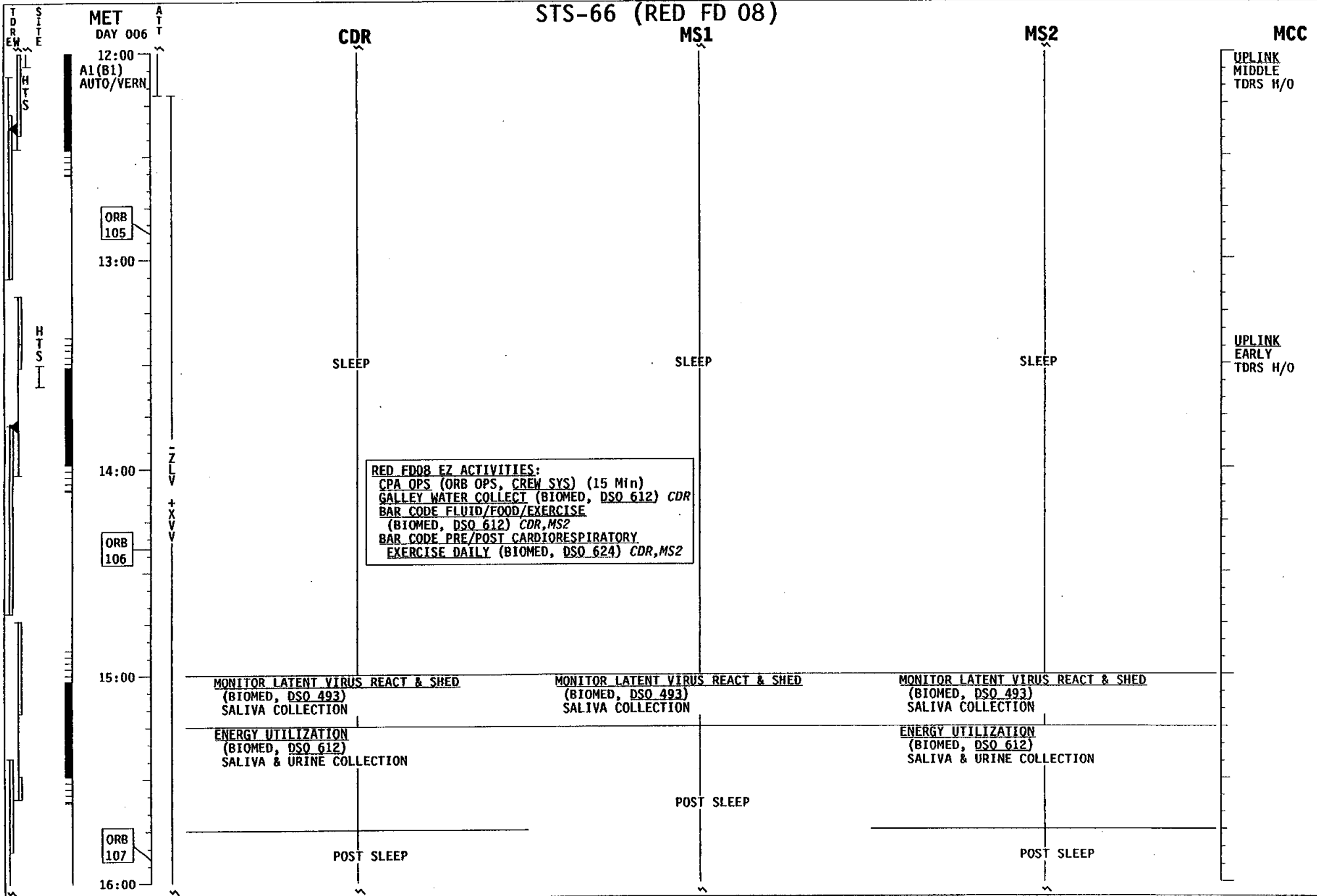


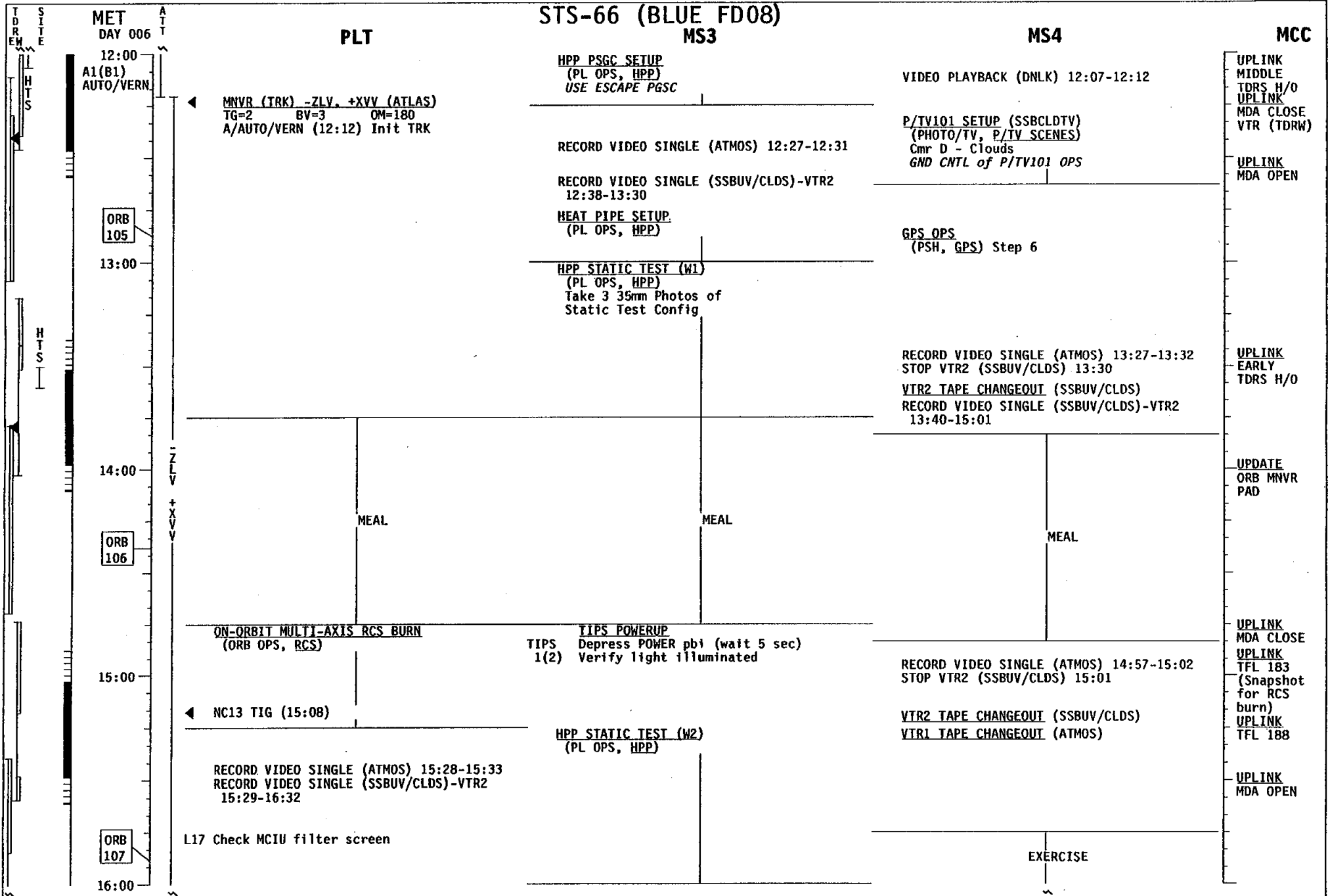
Should this be in the ORB ops FS?

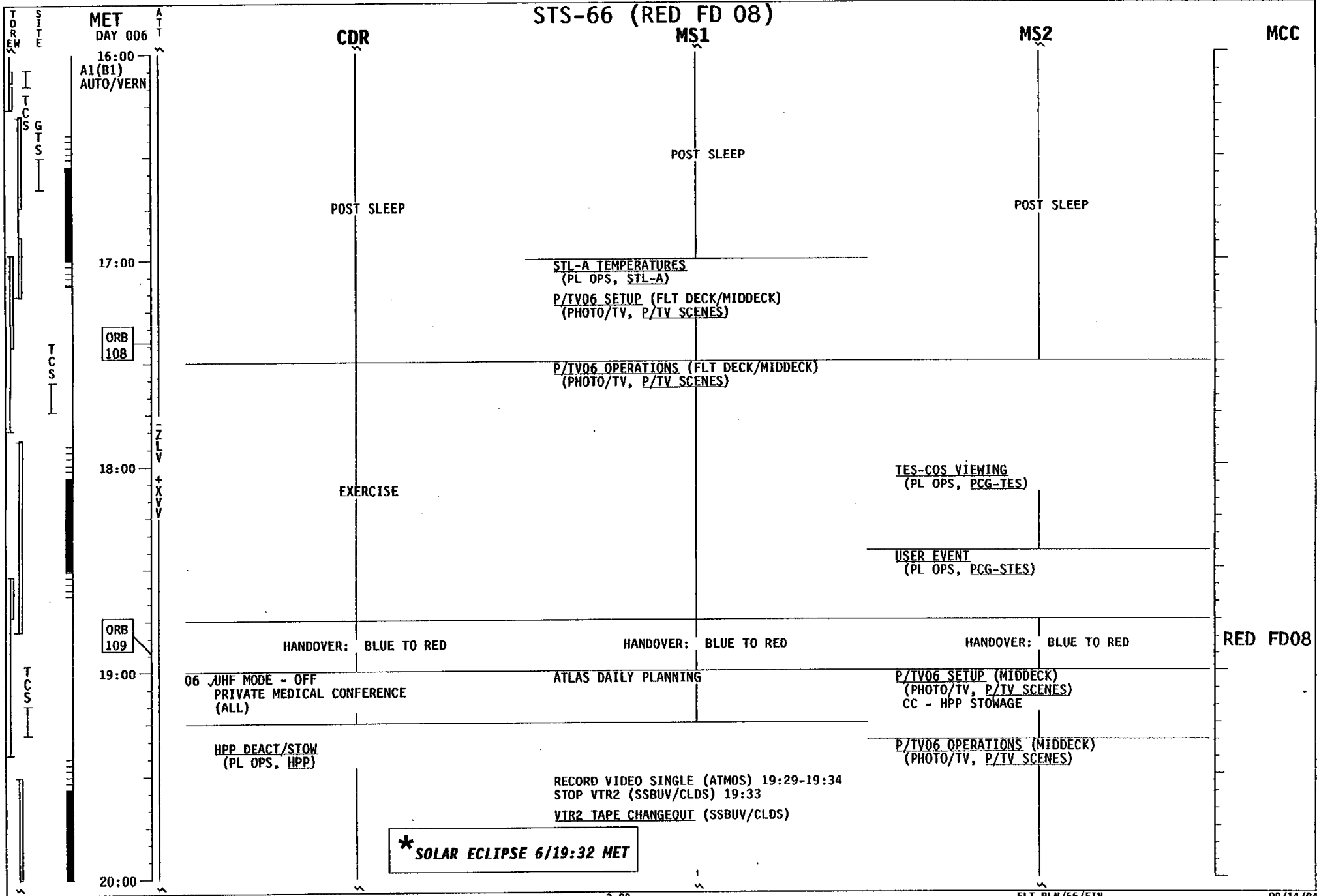
FS

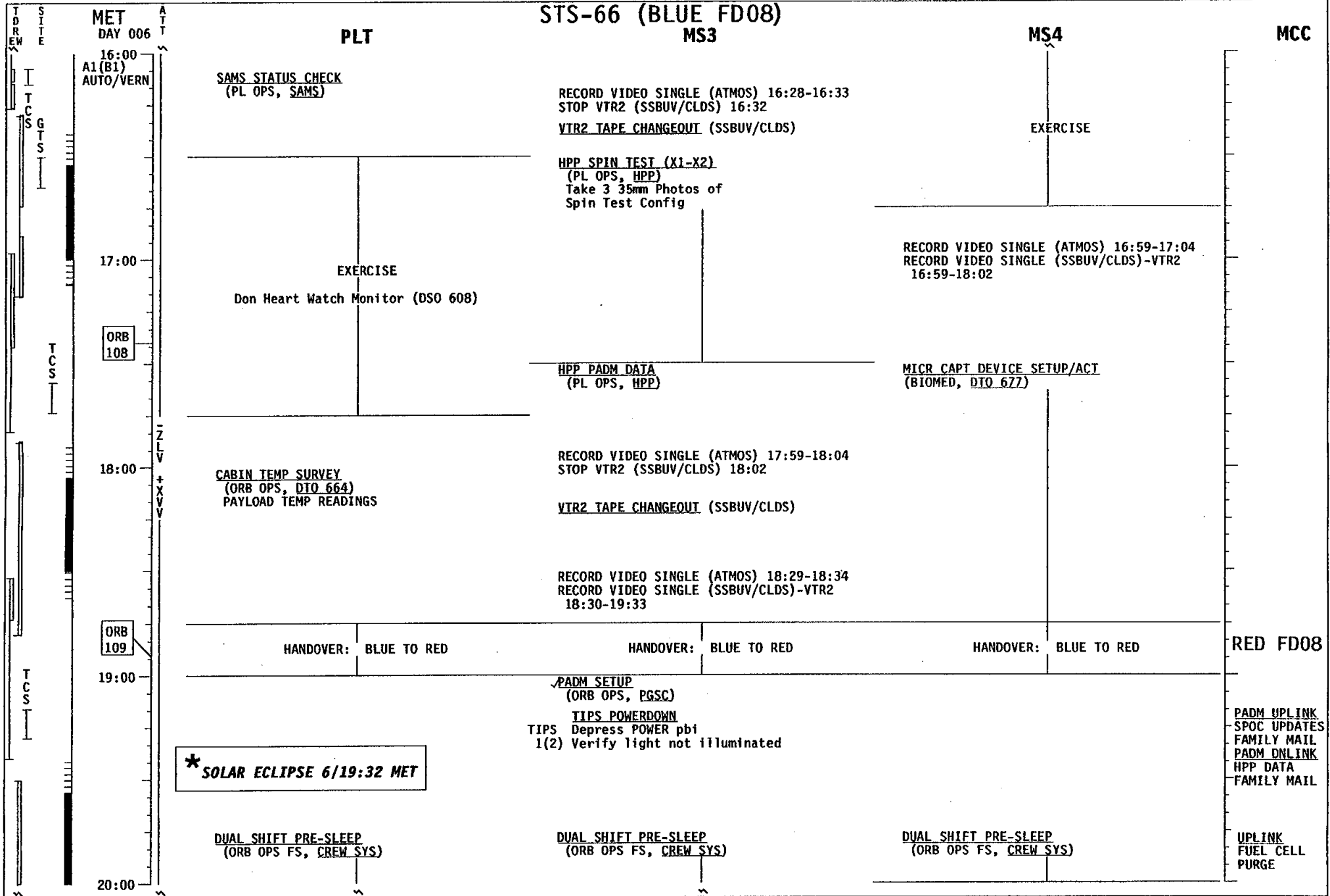
Del Vite

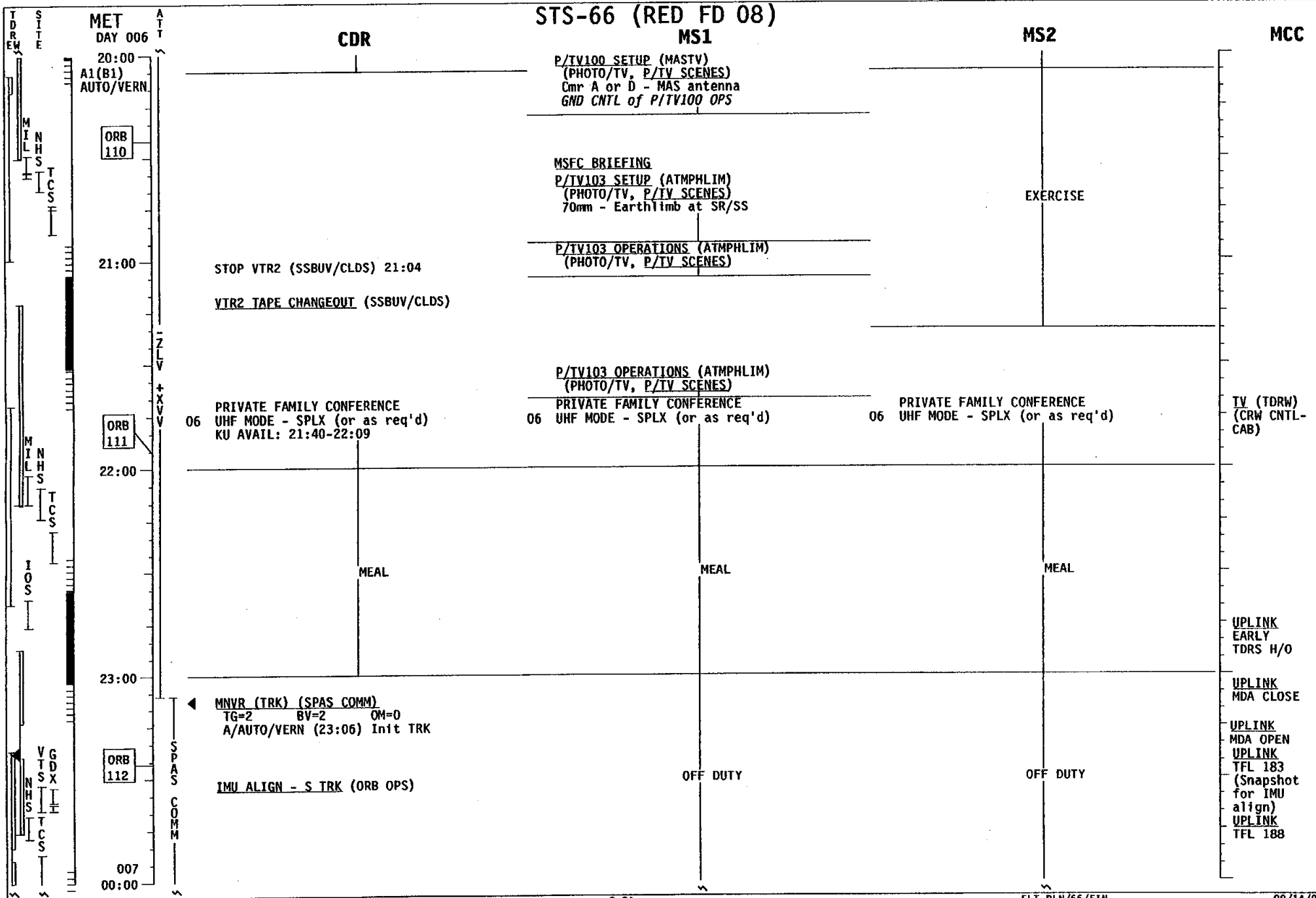
STS-66 (RED FD 08)



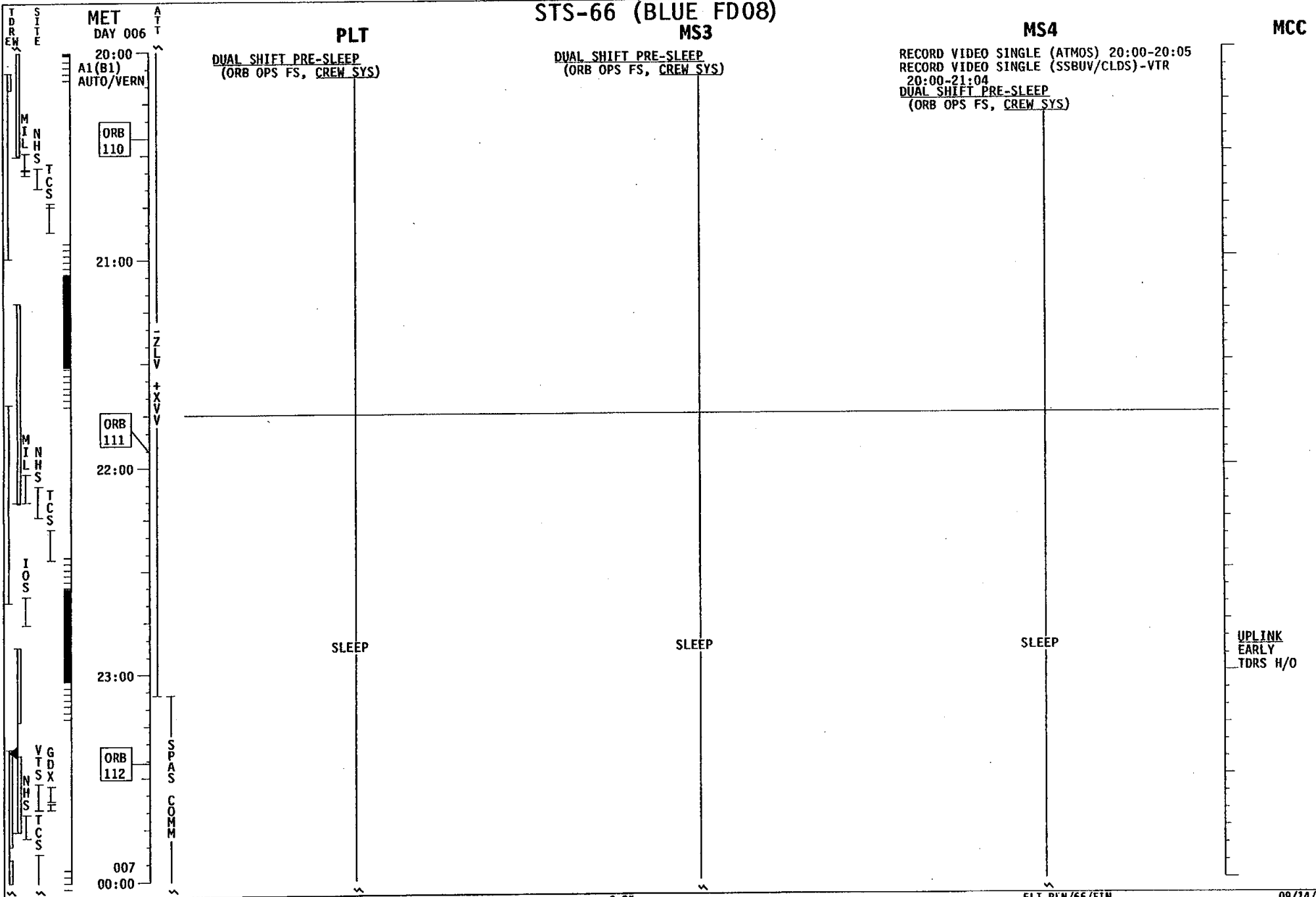




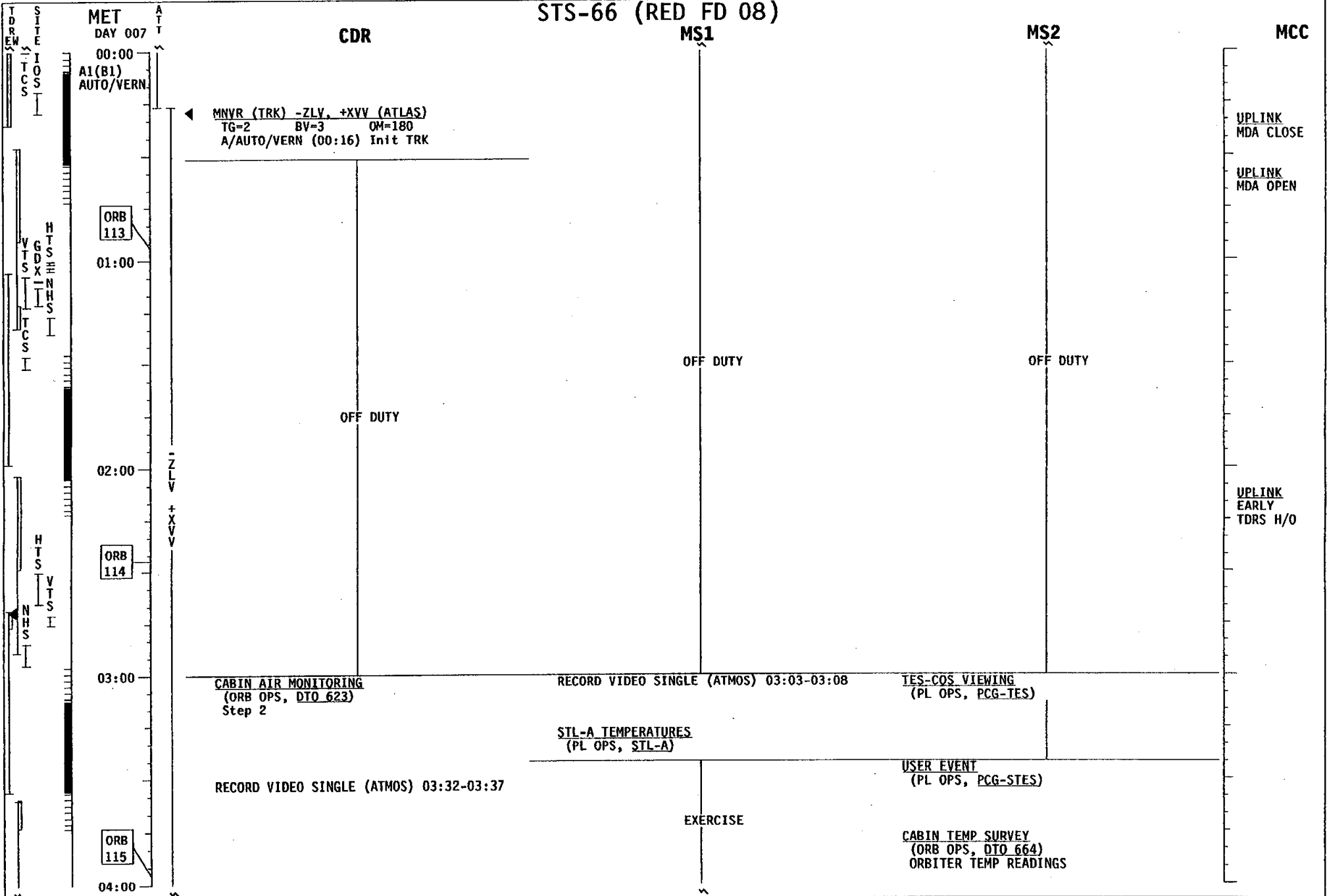




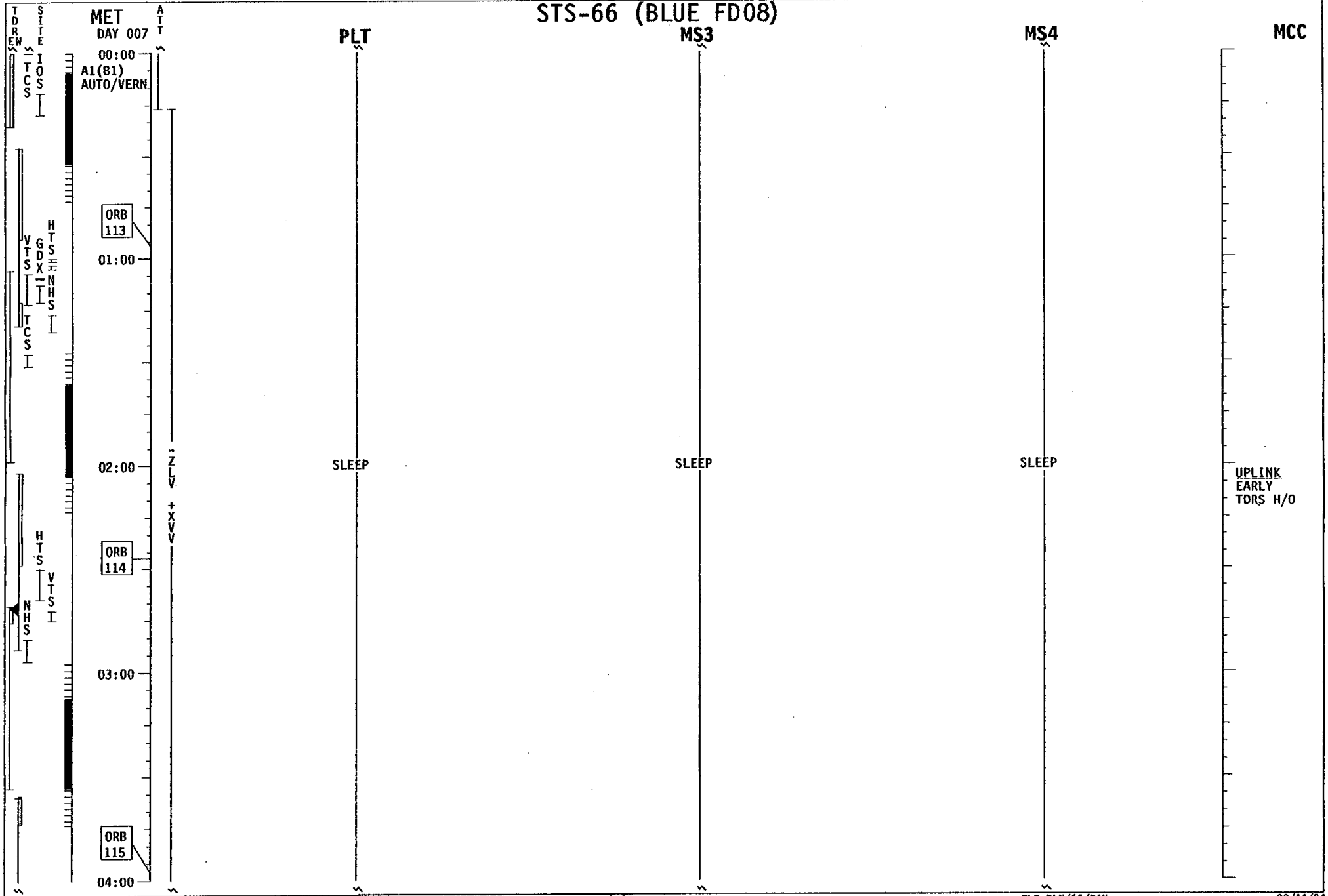
STS-66 (BLUE FD08)

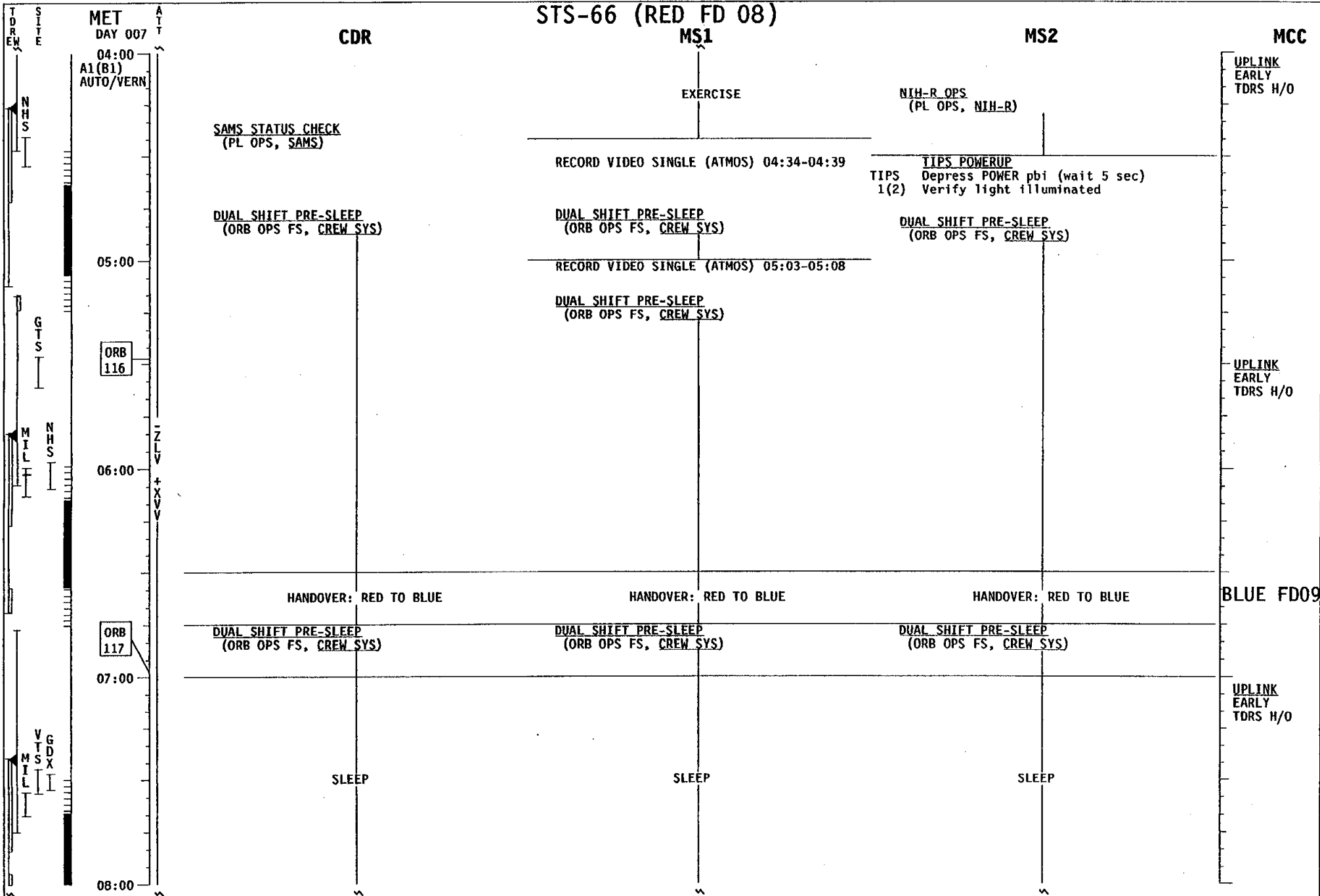


STS-66 (RED FD 08)

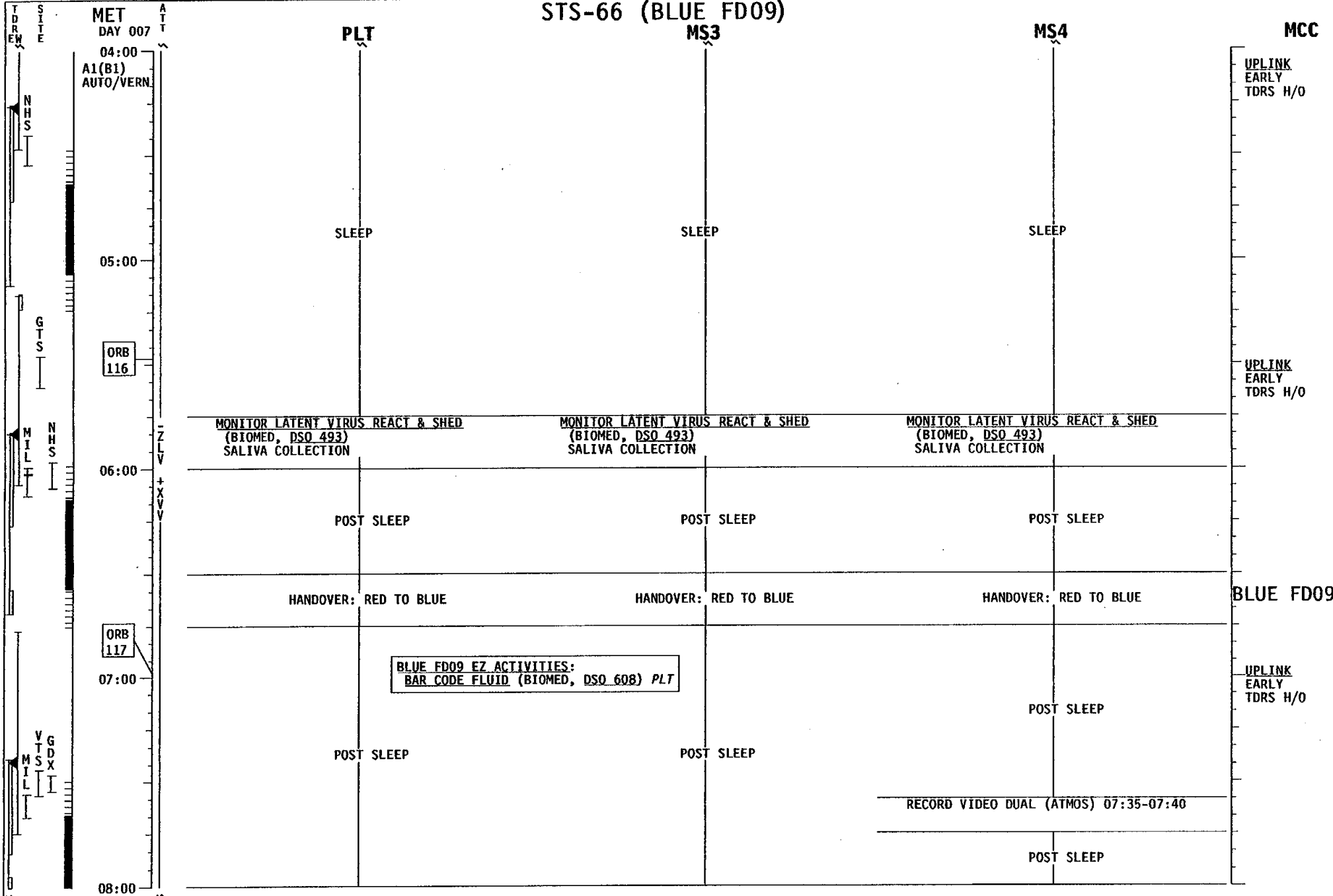


STS-66 (BLUE FD08)

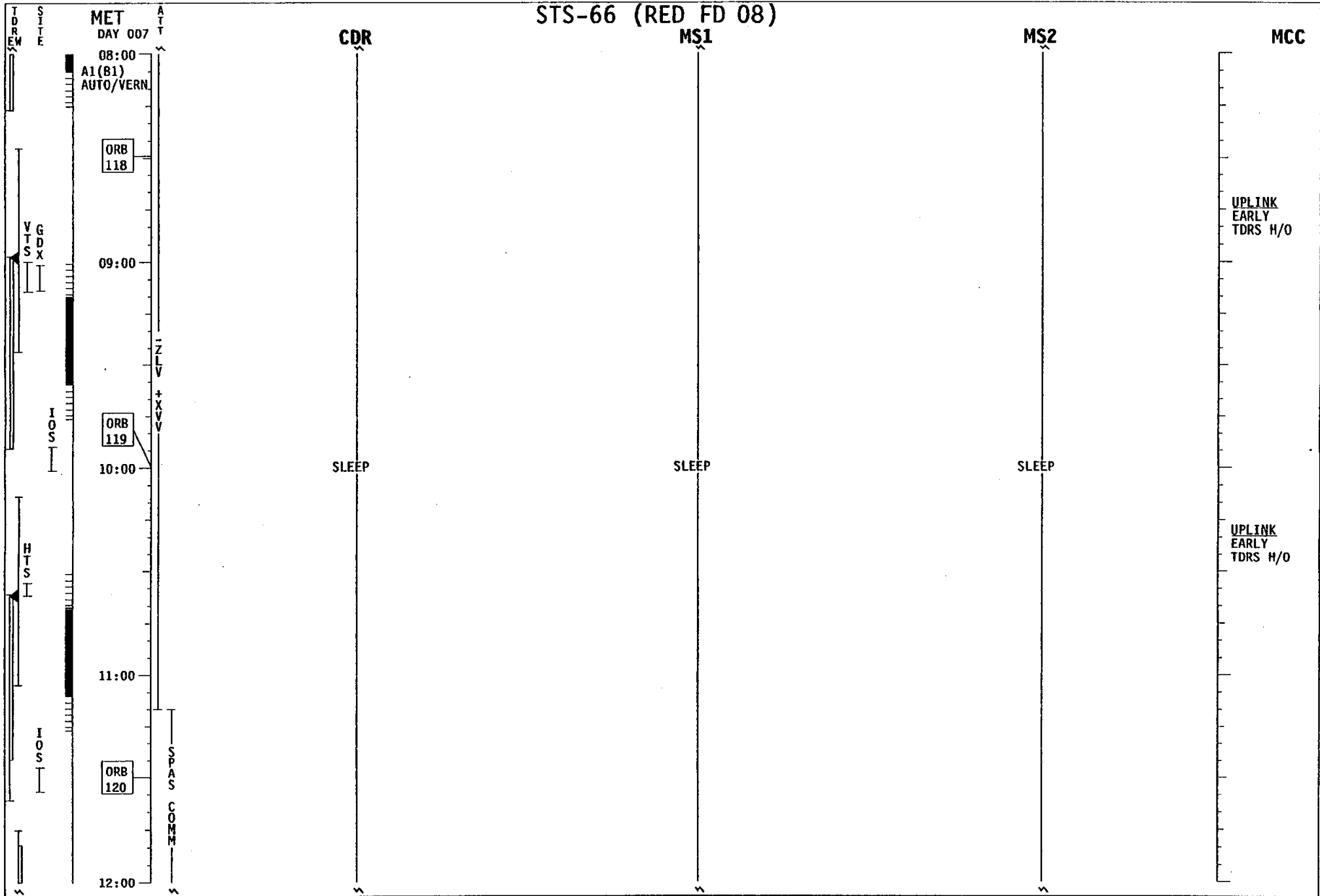


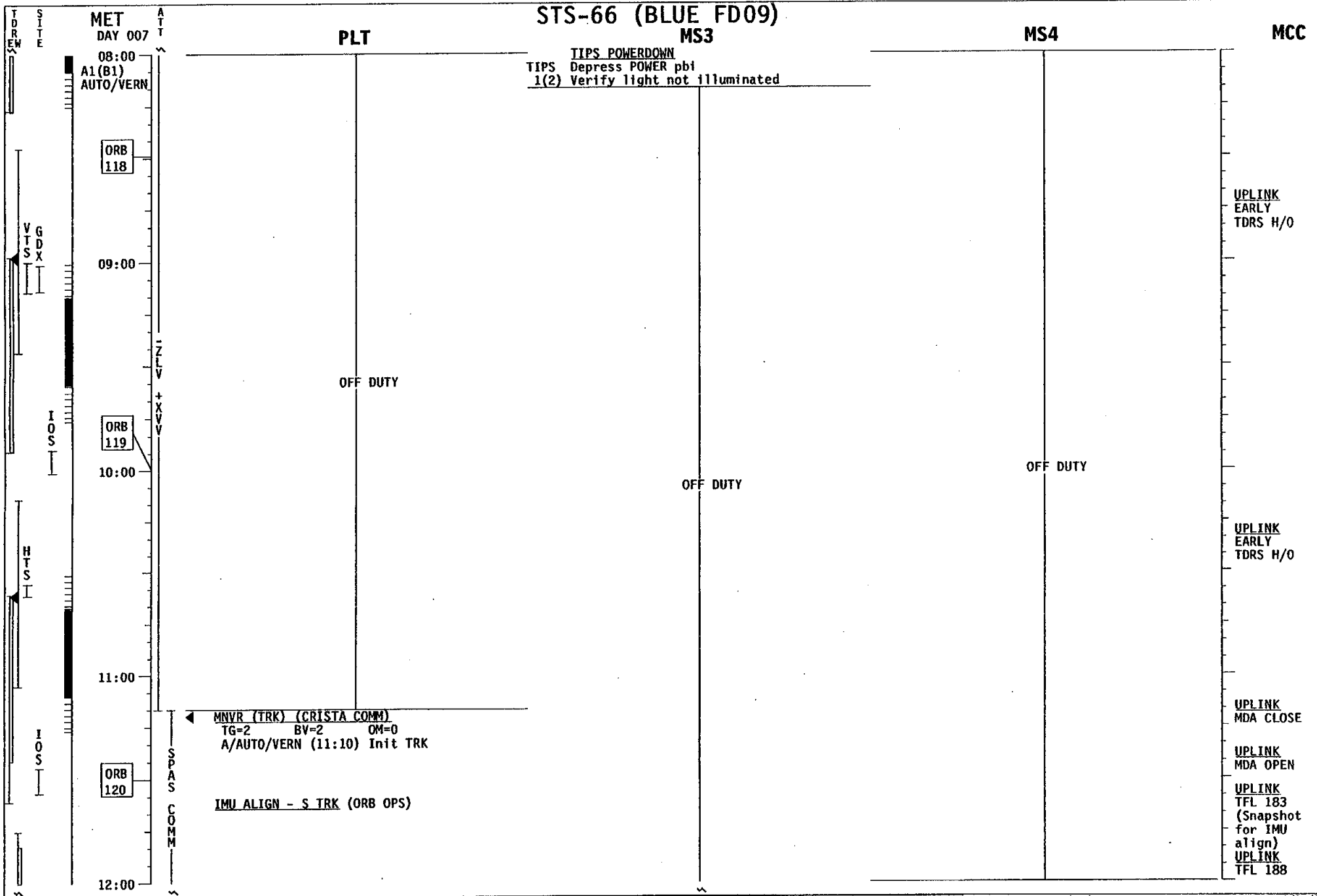


STS-66 (BLUE FD09)

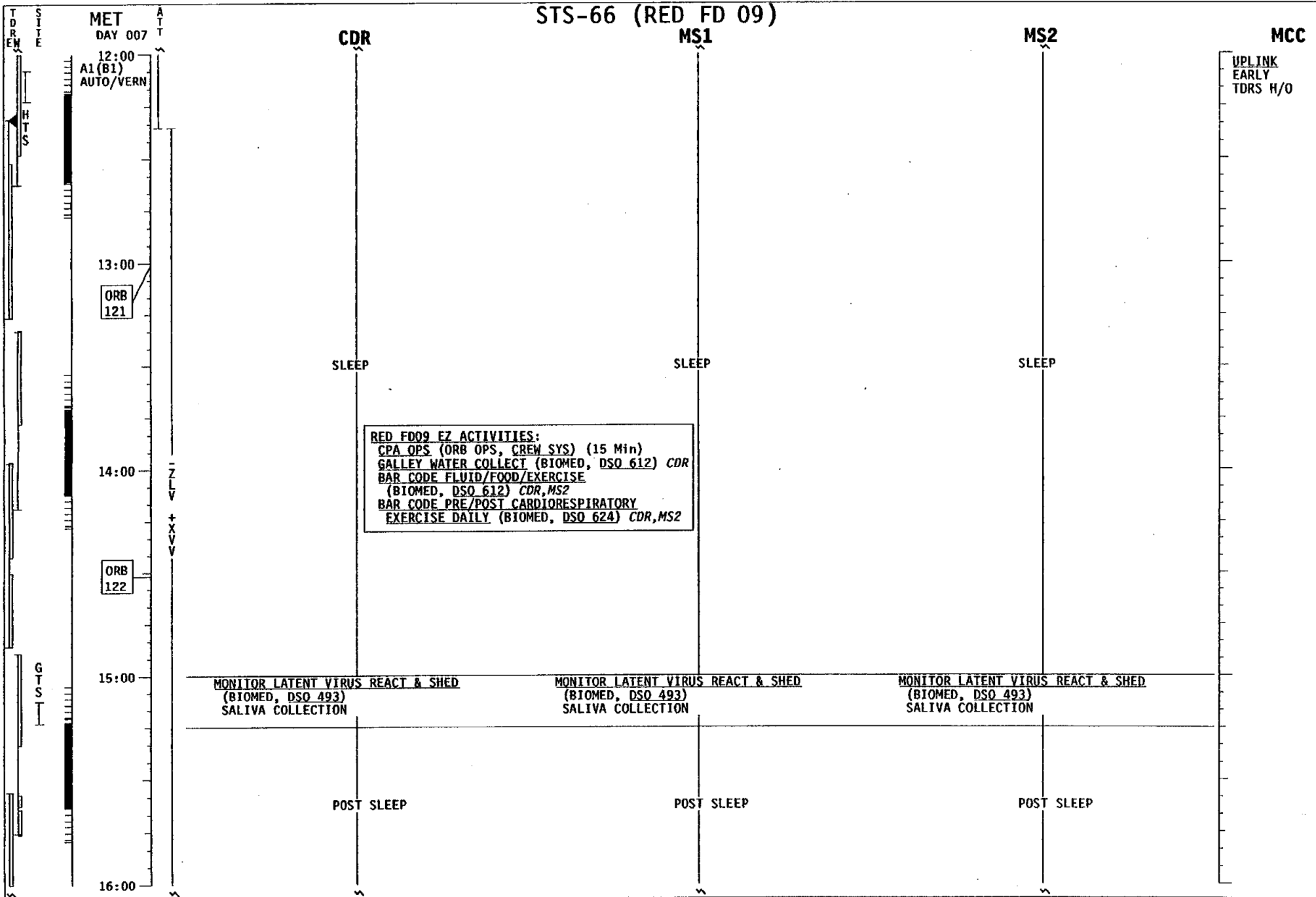


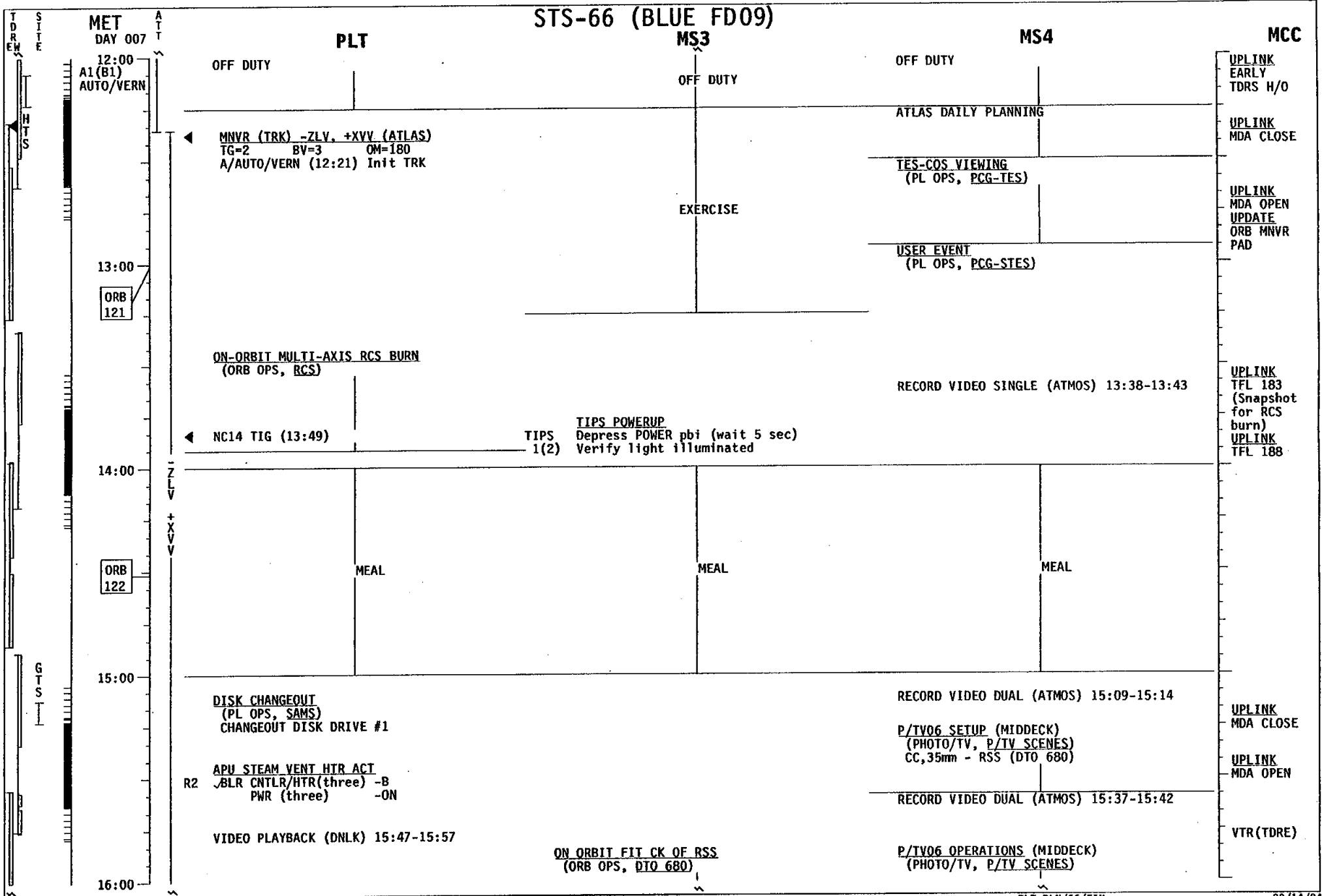
STS-66 (RED FD 08)



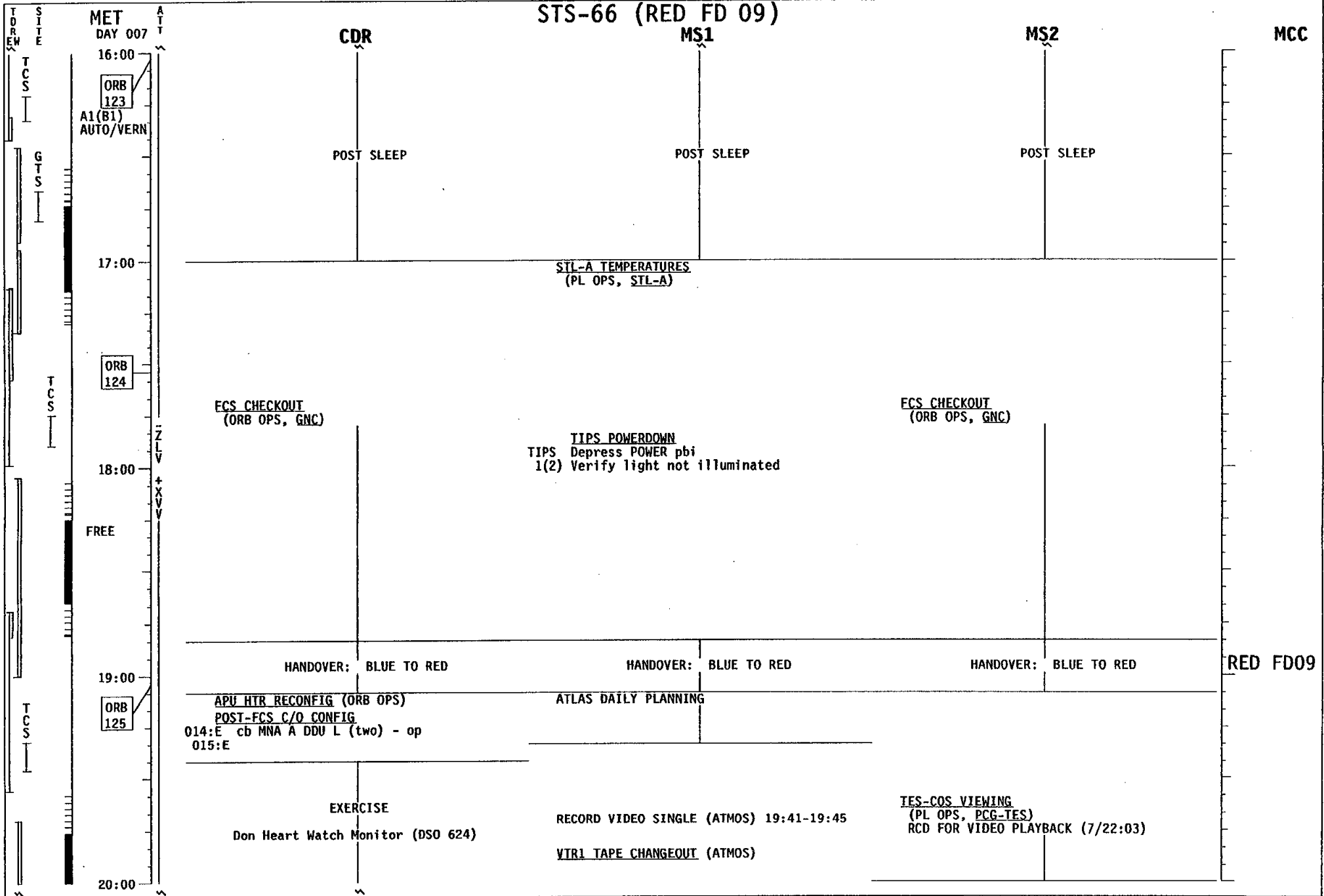


STS-66 (RED FD 09)





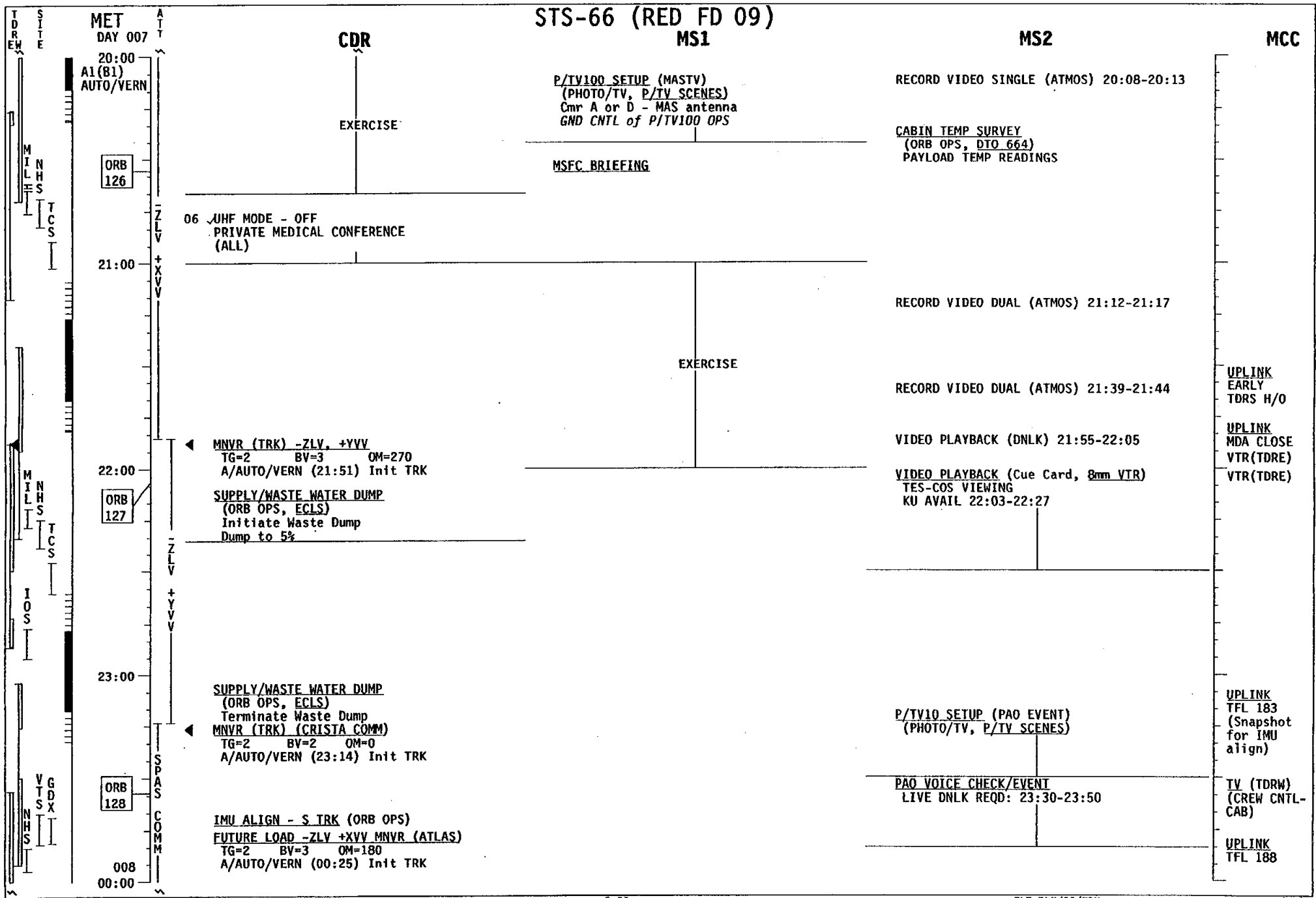
STS-66 (RED FD 09)



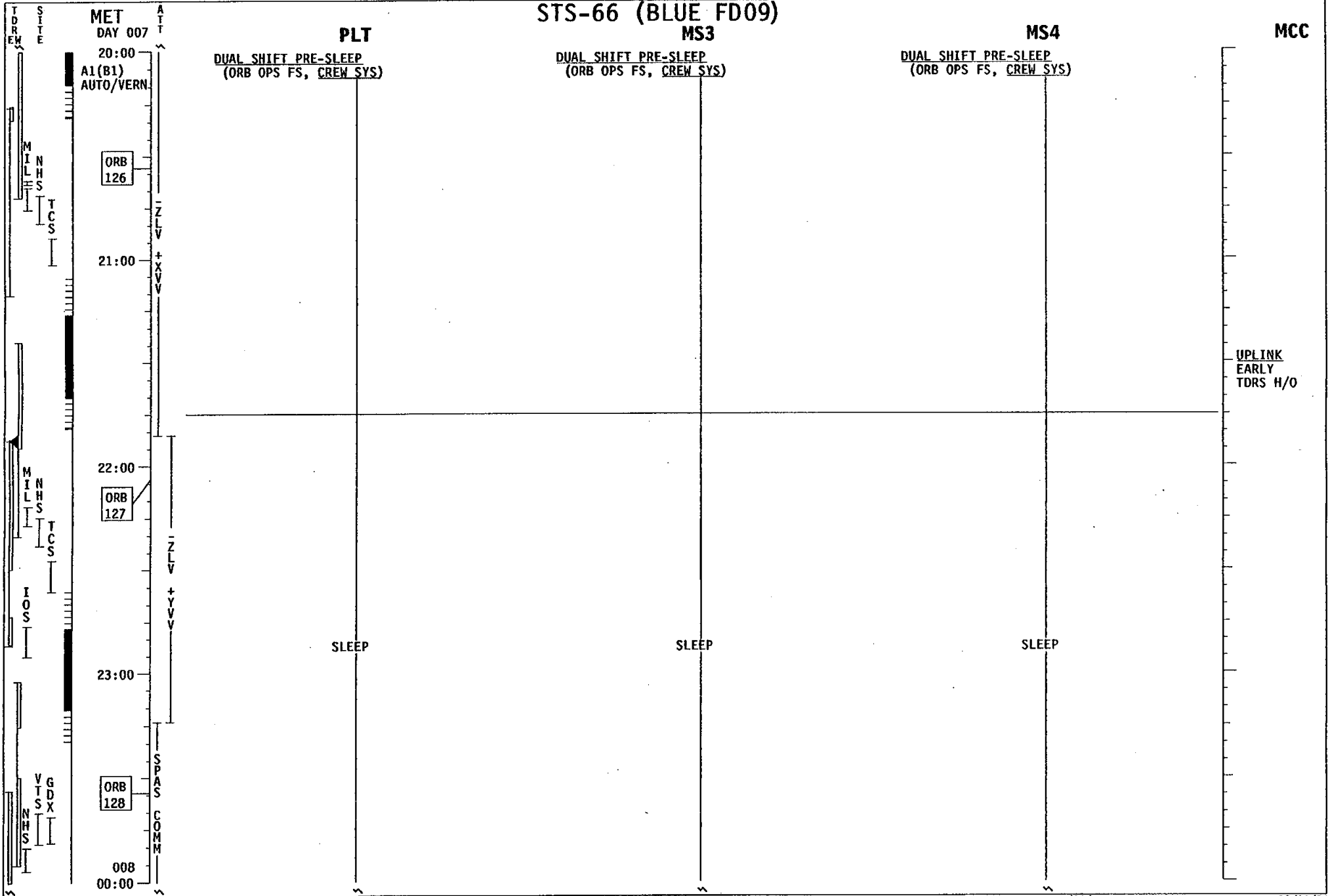
TDR SITE
 TCS
 MET DAY 007
 16:00
 ORB 123
 A1(B1)
 AUTO/VERN
 GTS
 17:00
 TCS
 ORB 124
 ZVV
 18:00
 FREE
 TCS
 19:00
 ORB 125
 TCS
 20:00

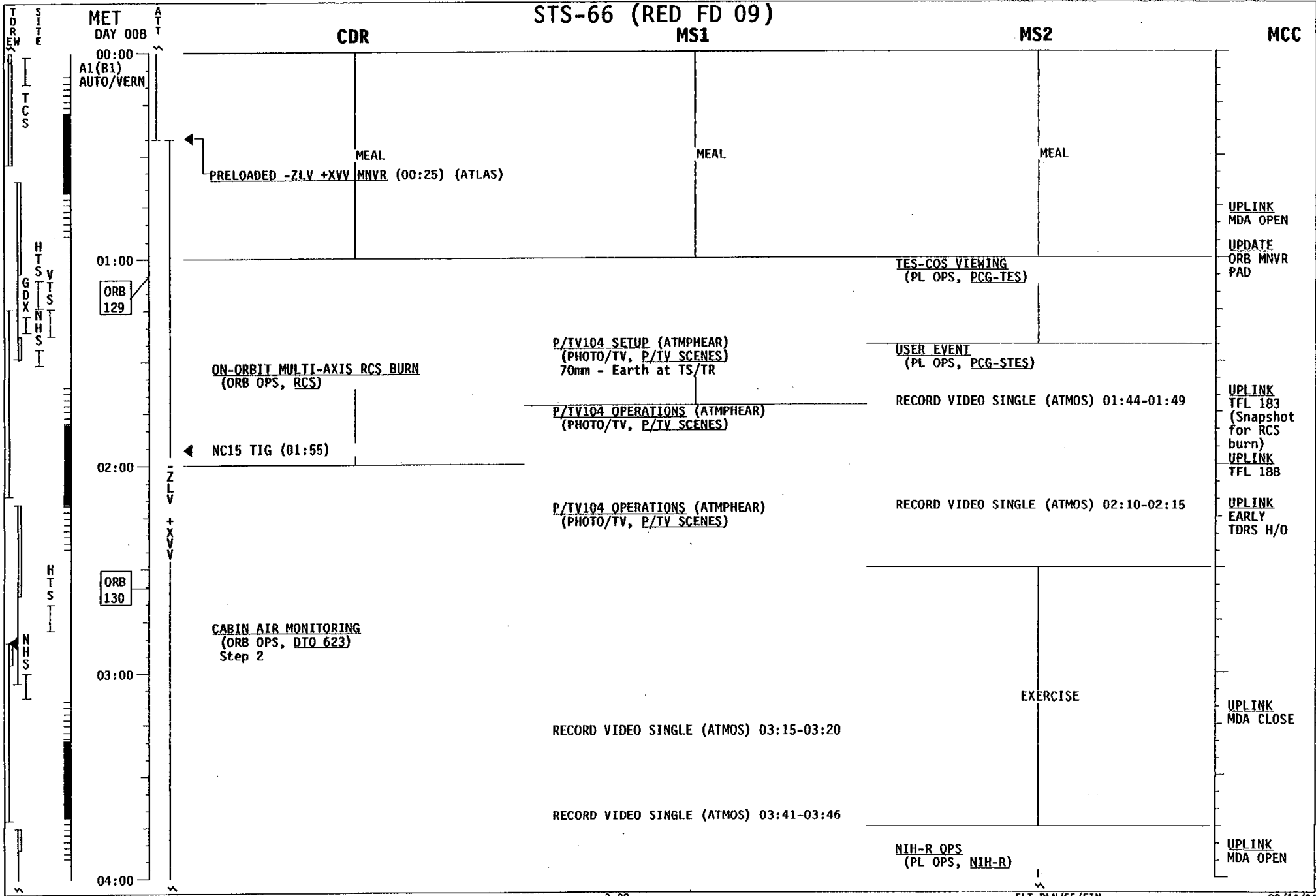
STS-66 (BLUE FD09)
MS3

PLT	MS3	MS4	MCC
	ON ORBIT FIT CK OF RSS (ORB OPS, DTO 680)	P/TV06 OPERATIONS (MIDDECK) (PHOTO/TV, P/TV SCENES)	
EXERCISE Don Heart Watch Monitor (DSO 608)		RECORD VIDEO SINGLE (ATMOS) 16:39-16:44	
	RECORD VIDEO SINGLE (ATMOS) 17:07-17:12		
PRE-FCS C/O CONFIG 014:E cb MNA DDU L (two) - c1 015:E	L17 Check MCIU filter screen		
FCS CHECKOUT (ORB OPS, GNC)	✓PADM SETUP (ORB OPS, PGSC)	EXERCISE	PADM UPLINK SPOC UPDATES FAMILY MAIL PADM DNLINK FAMILY MAIL
	P/TV06 SETUP (MIDDECK) (PHOTO/TV, P/TV SCENES) CC,35mm - DTO 677	RECORD VIDEO SINGLE (ATMOS) 18:10-18:15	
	P/TV06 OPERATIONS (MIDDECK) (PHOTO/TV, P/TV SCENES)	EVAL OF MICR CAPT DEVICE (DTO 677) (BIOMED, DTO 677) RECORD VIDEO SINGLE (ATMOS) 18:38-18:43	
HANDOVER: BLUE TO RED	HANDOVER: BLUE TO RED	HANDOVER: BLUE TO RED	RED FD09
SAMS STATUS CHECK (PL OPS, SAMS)	AUDIO EVENT LIVE AUDIO REQD: 19:05-19:22		
DUAL SHIFT PRE-SLEEP (ORB OPS FS, CREW SYS)	DUAL SHIFT PRE-SLEEP (ORB OPS FS, CREW SYS)	DUAL SHIFT PRE-SLEEP (ORB OPS FS, CREW SYS)	

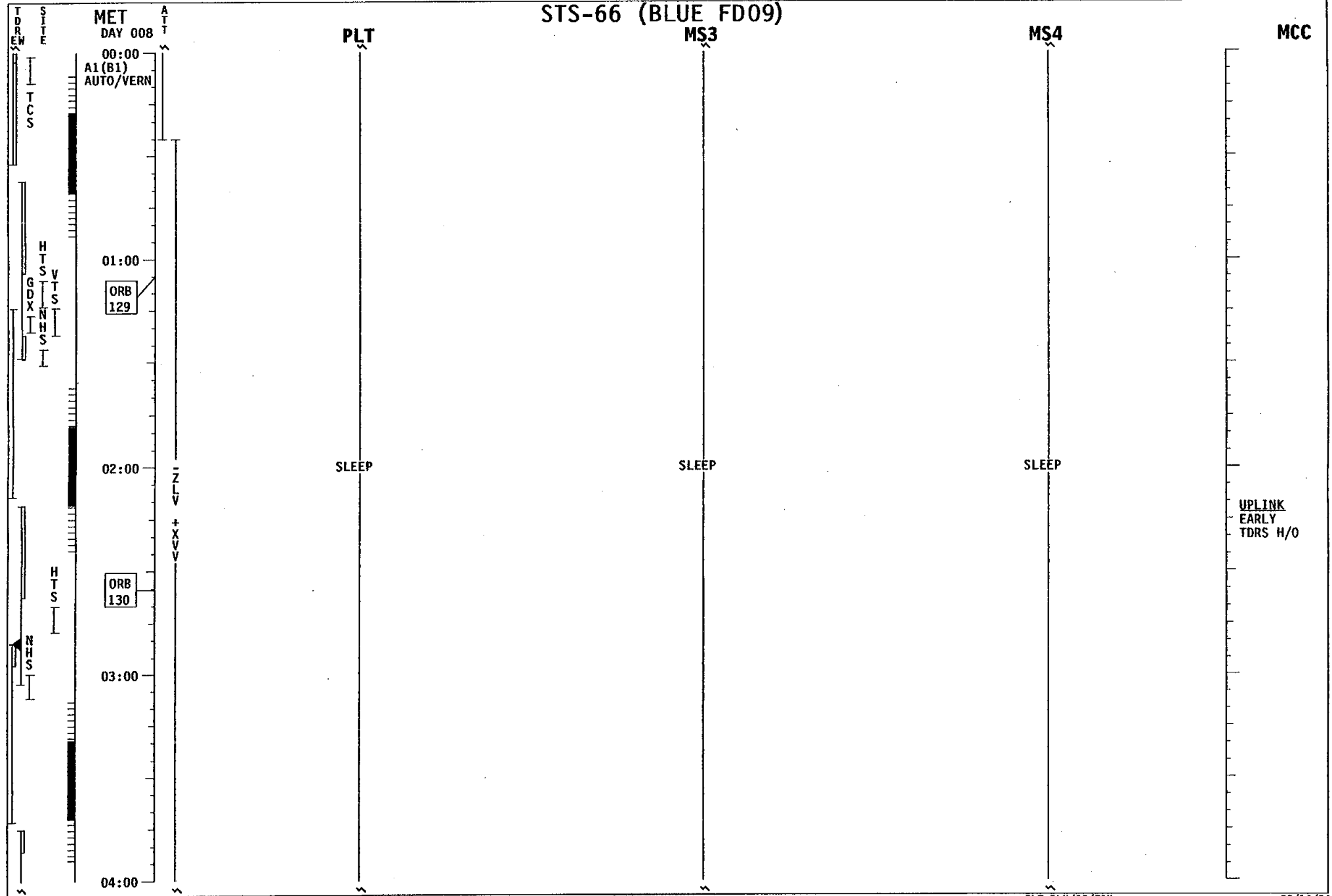


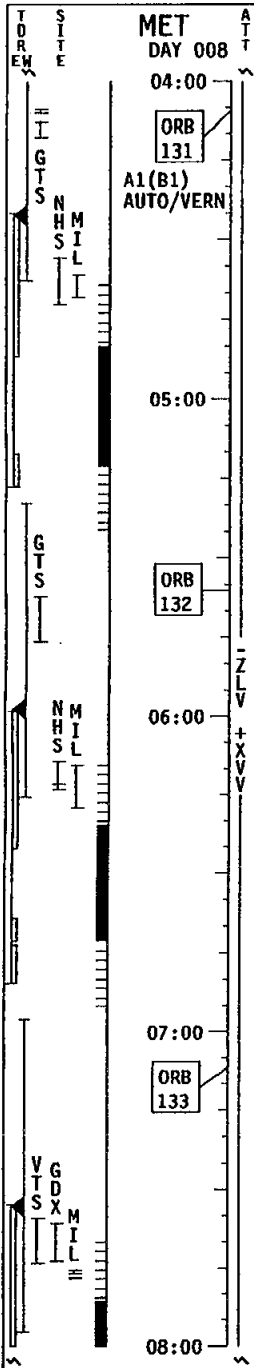
STS-66 (BLUE FD09)





STS-66 (BLUE FD09)





STS-66 (RED FD 09)

CDR

MS1

MS2

MCC

SAMS STATUS CHECK
(PL OPS, SAMS)

TIPS POWERUP
TIPS Depress POWER pbf (wait 5 sec)
1(2) Verify light illuminated

NIH-R OPS
(PL OPS, NIH-R)
AEM WATER REFILL
(PL OPS, NIH-R)

UPLINK EARLY TDRS H/O

DUAL SHIFT PRE-SLEEP
(ORB OPS FS, CREW SYS)

STL-A TEMPERATURES
(PL OPS, STL-A)

CABIN TEMP SURVEY
(ORB OPS, DTO 664)
ORBITER TEMP READINGS

RECORD VIDEO SINGLE (ATMOS) 04:46-04:51

DUAL SHIFT PRE-SLEEP
(ORB OPS FS, CREW SYS)

05:00

DUAL SHIFT PRE-SLEEP
(ORB OPS FS, CREW SYS)

RECORD VIDEO SINGLE (ATMOS) 05:11-05:16

06:00

DUAL SHIFT PRE-SLEEP
(ORB OPS FS, CREW SYS)

HANDOVER: RED TO BLUE

HANDOVER: RED TO BLUE

HANDOVER: RED TO BLUE

BLUE FD10

DUAL SHIFT PRE-SLEEP
(ORB OPS FS, CREW SYS)

DUAL SHIFT PRE-SLEEP
(ORB OPS FS, CREW SYS)

DUAL SHIFT PRE-SLEEP
(ORB OPS FS, CREW SYS)

07:00

SLEEP

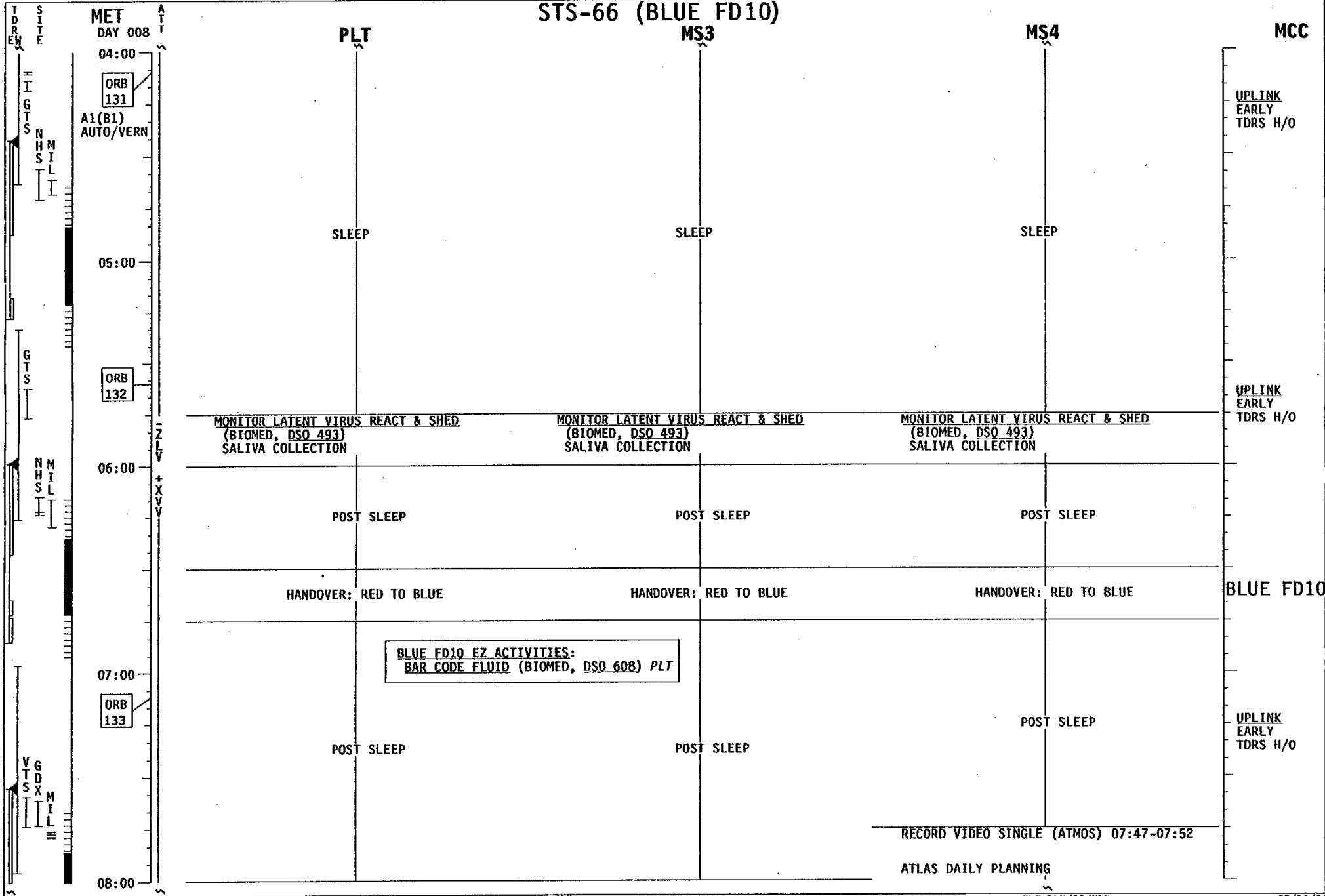
SLEEP

SLEEP

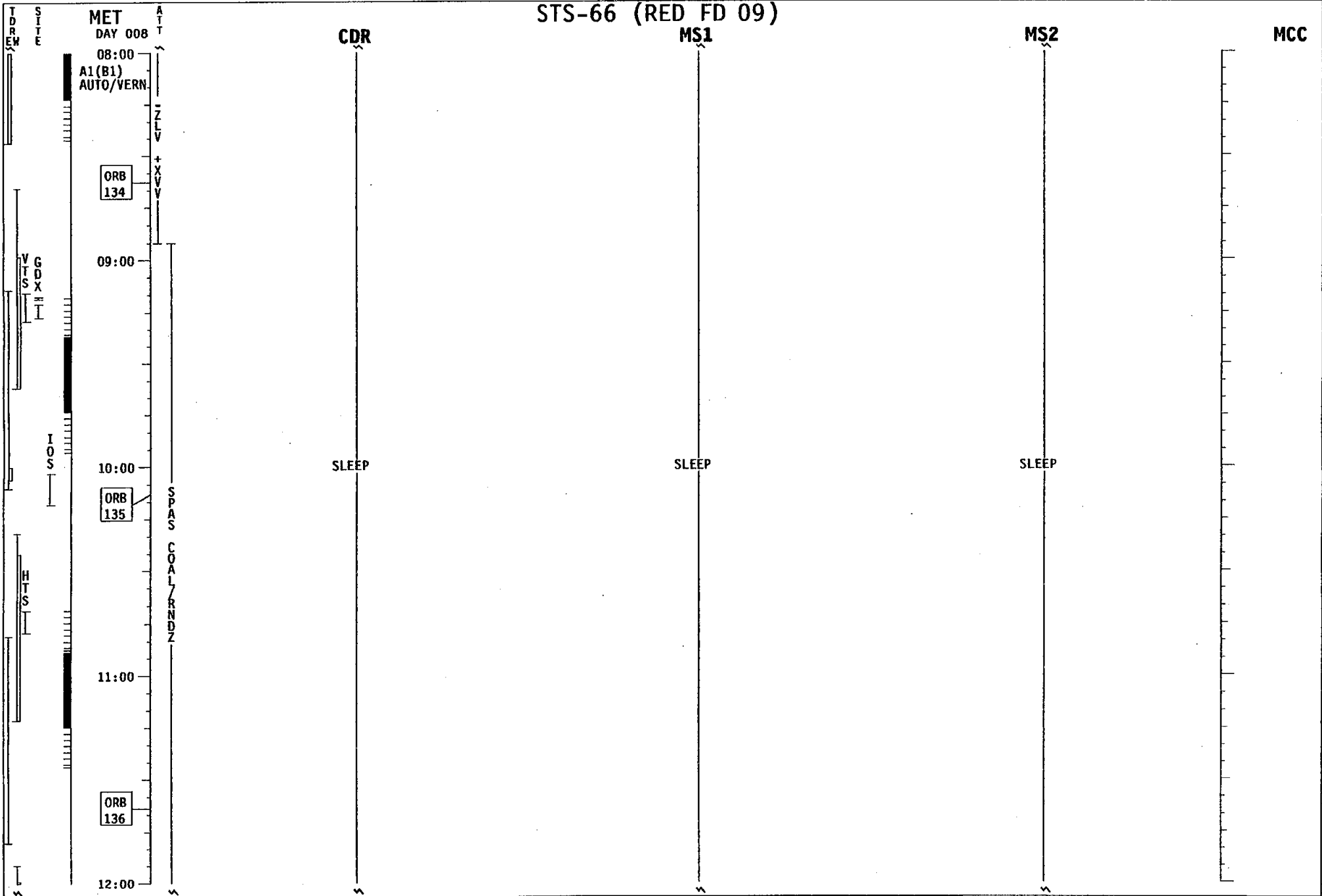
UPLINK EARLY TDRS H/O

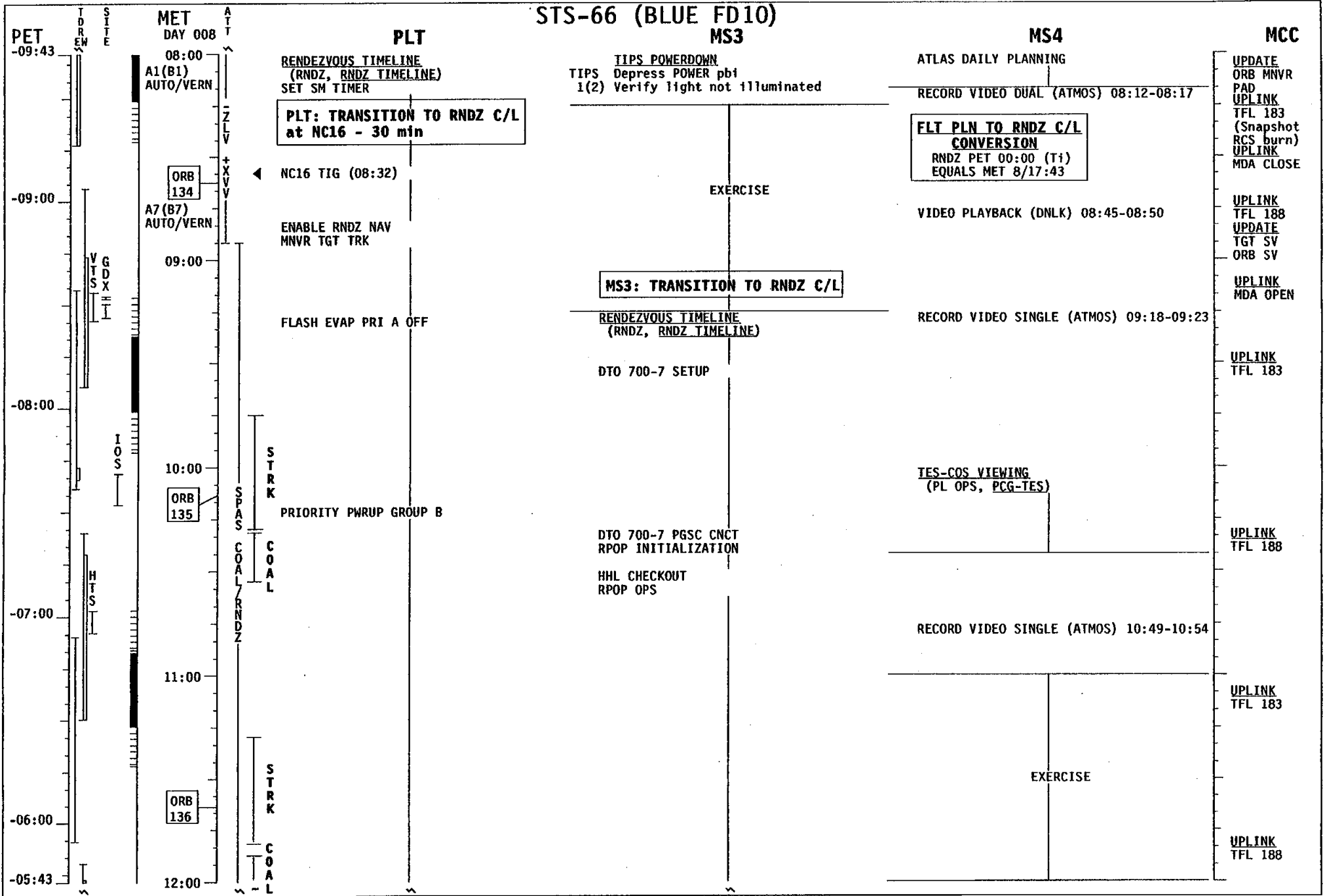
08:00

STS-66 (BLUE FD10)

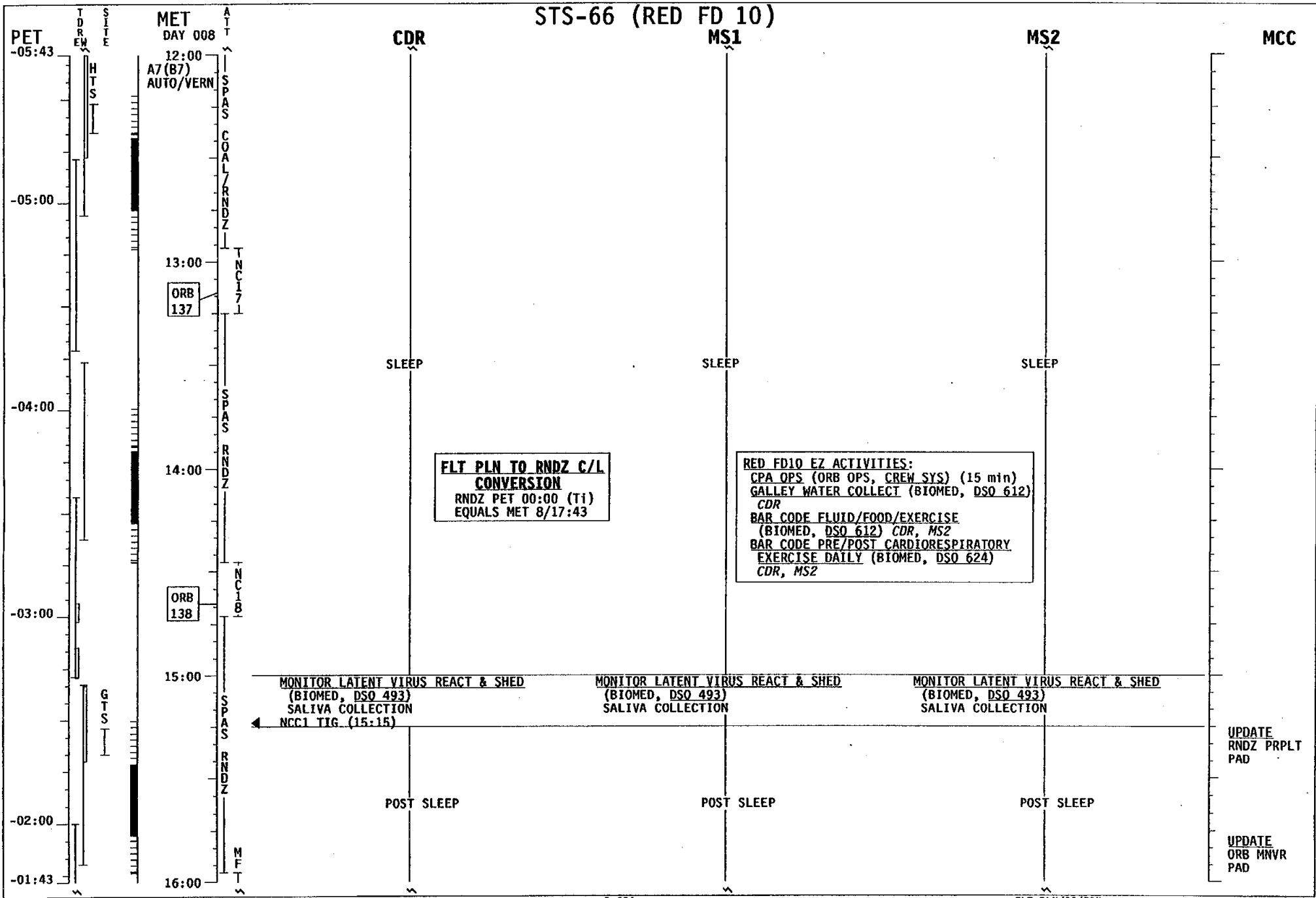


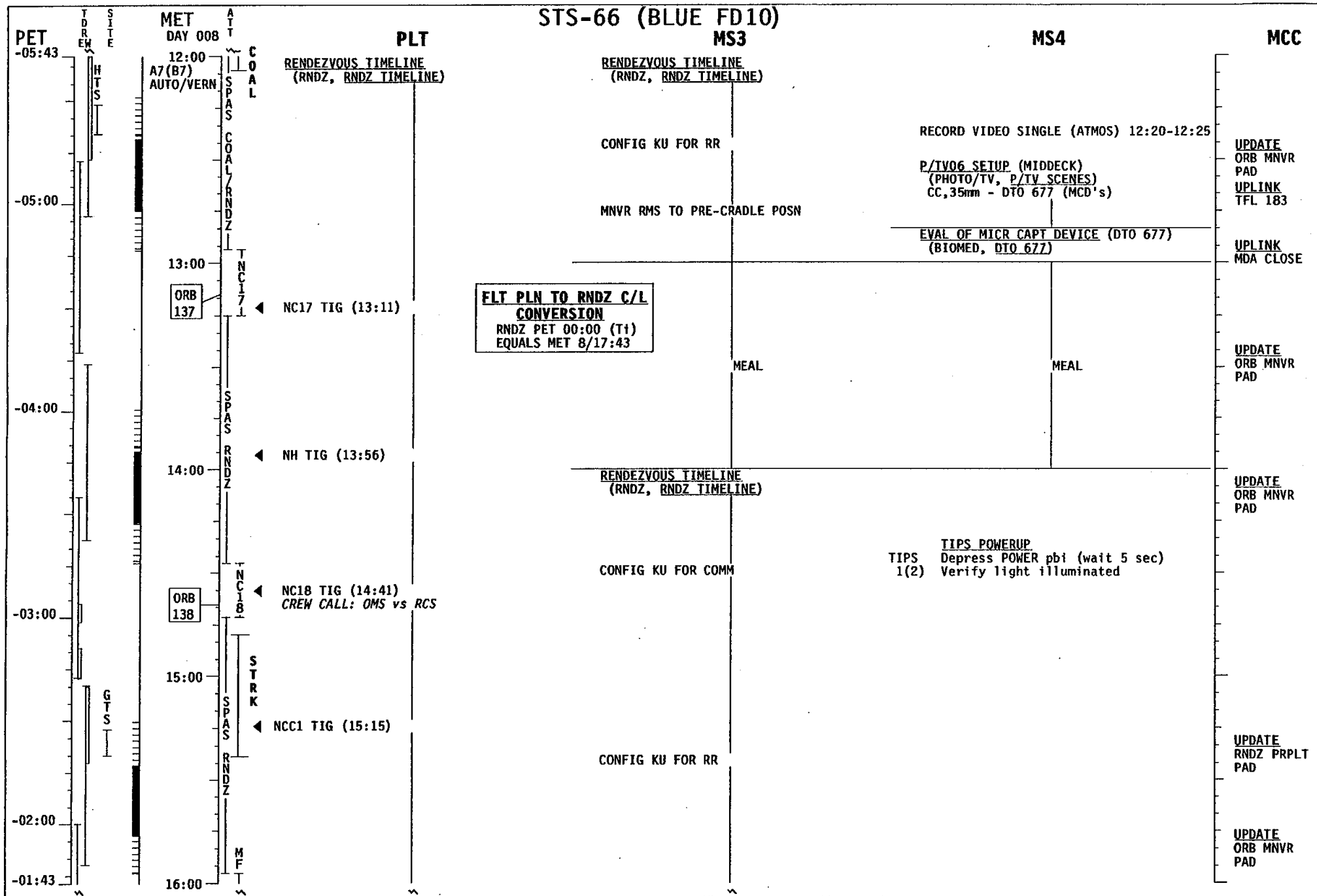
STS-66 (RED FD 09)



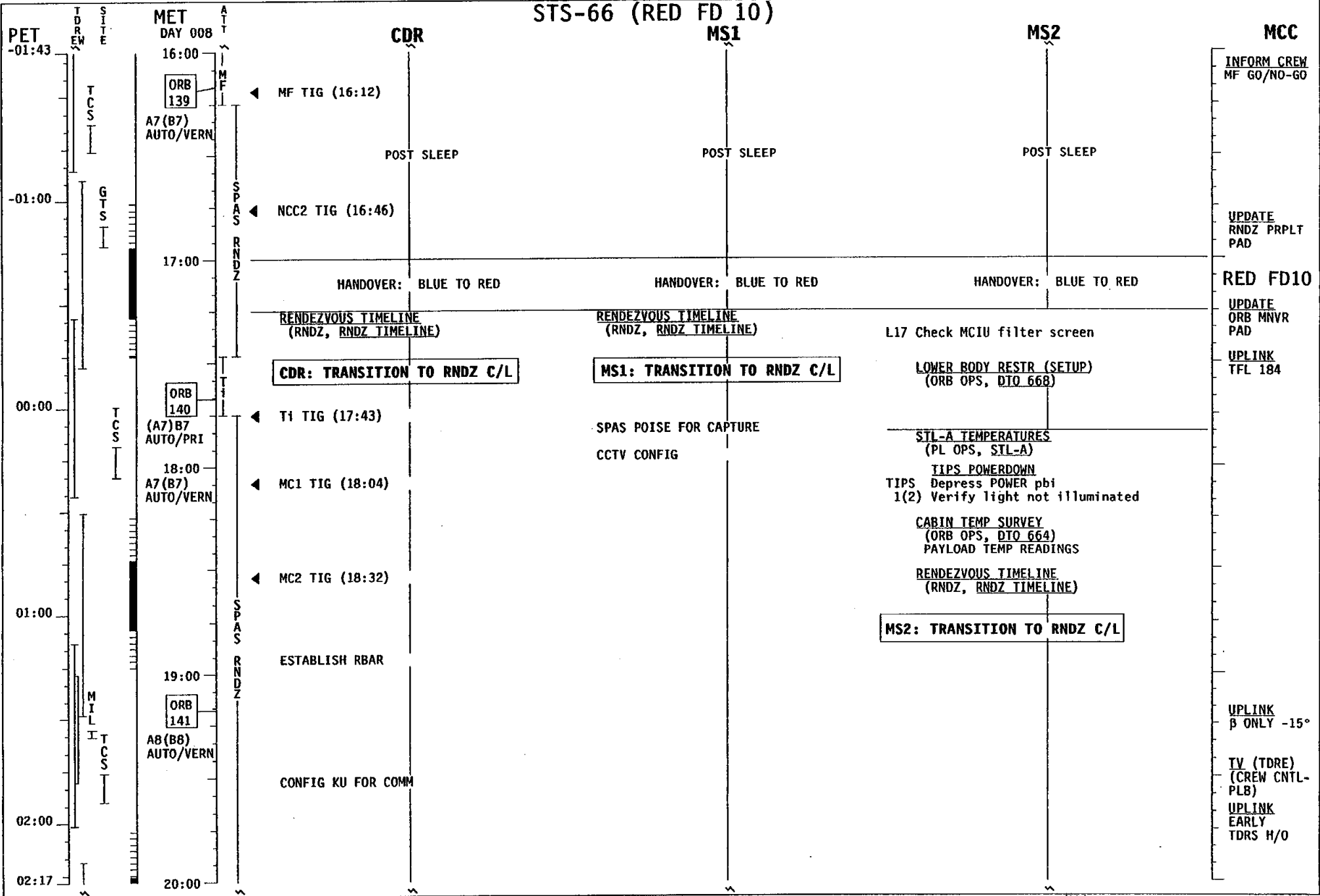


STS-66 (RED FD 10)

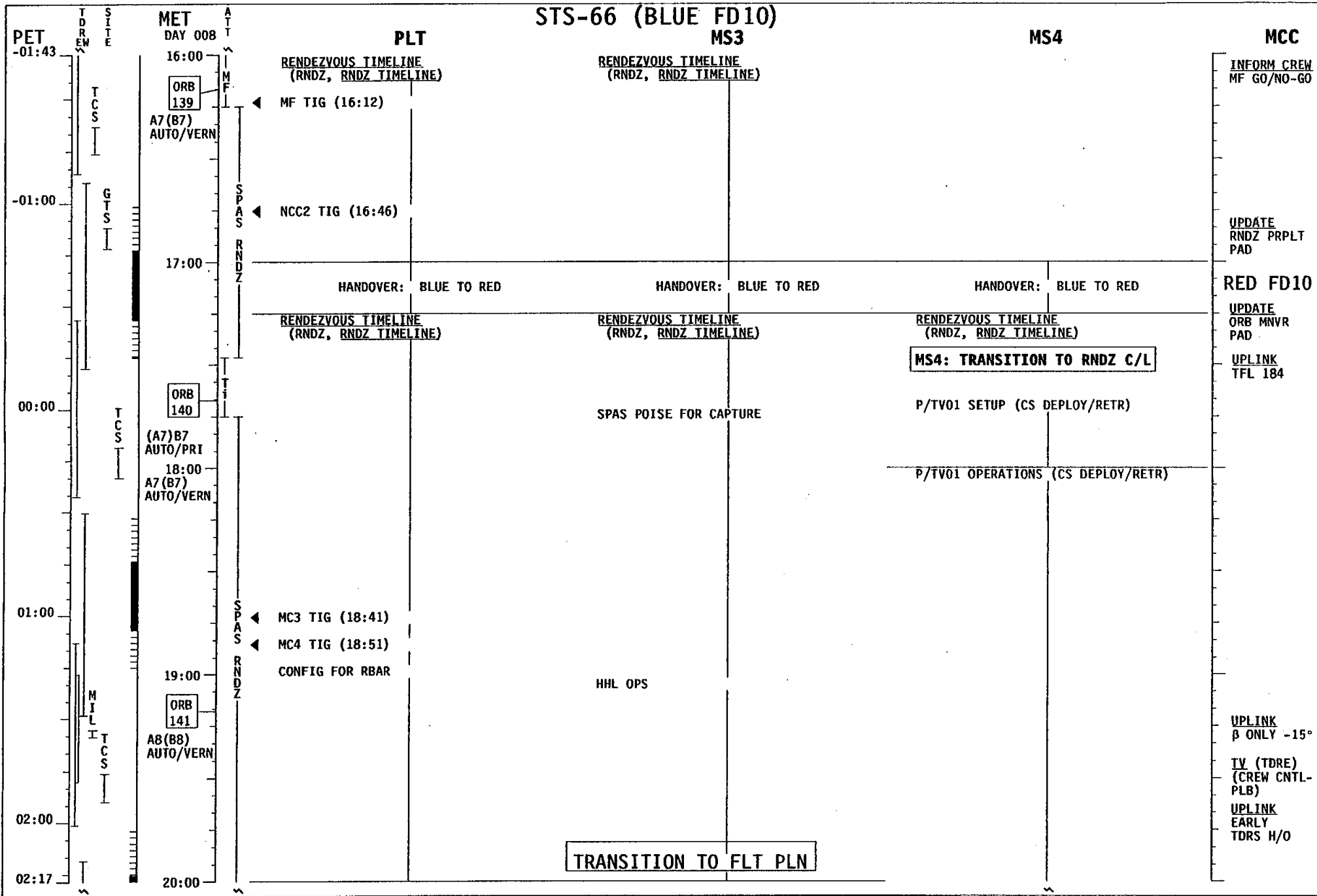




STS-66 (RED FD 10)



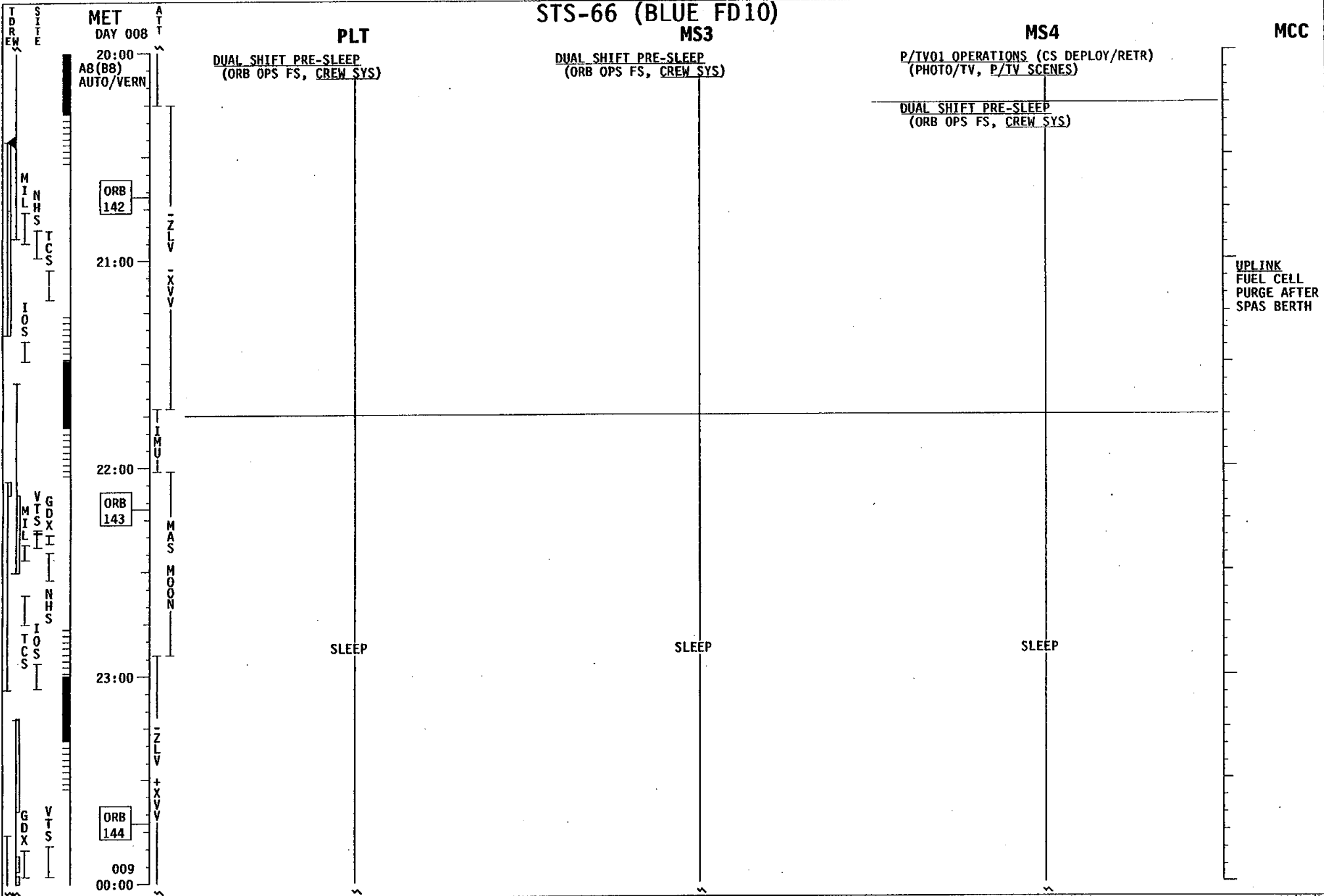
STS-66 (BLUE FD10)



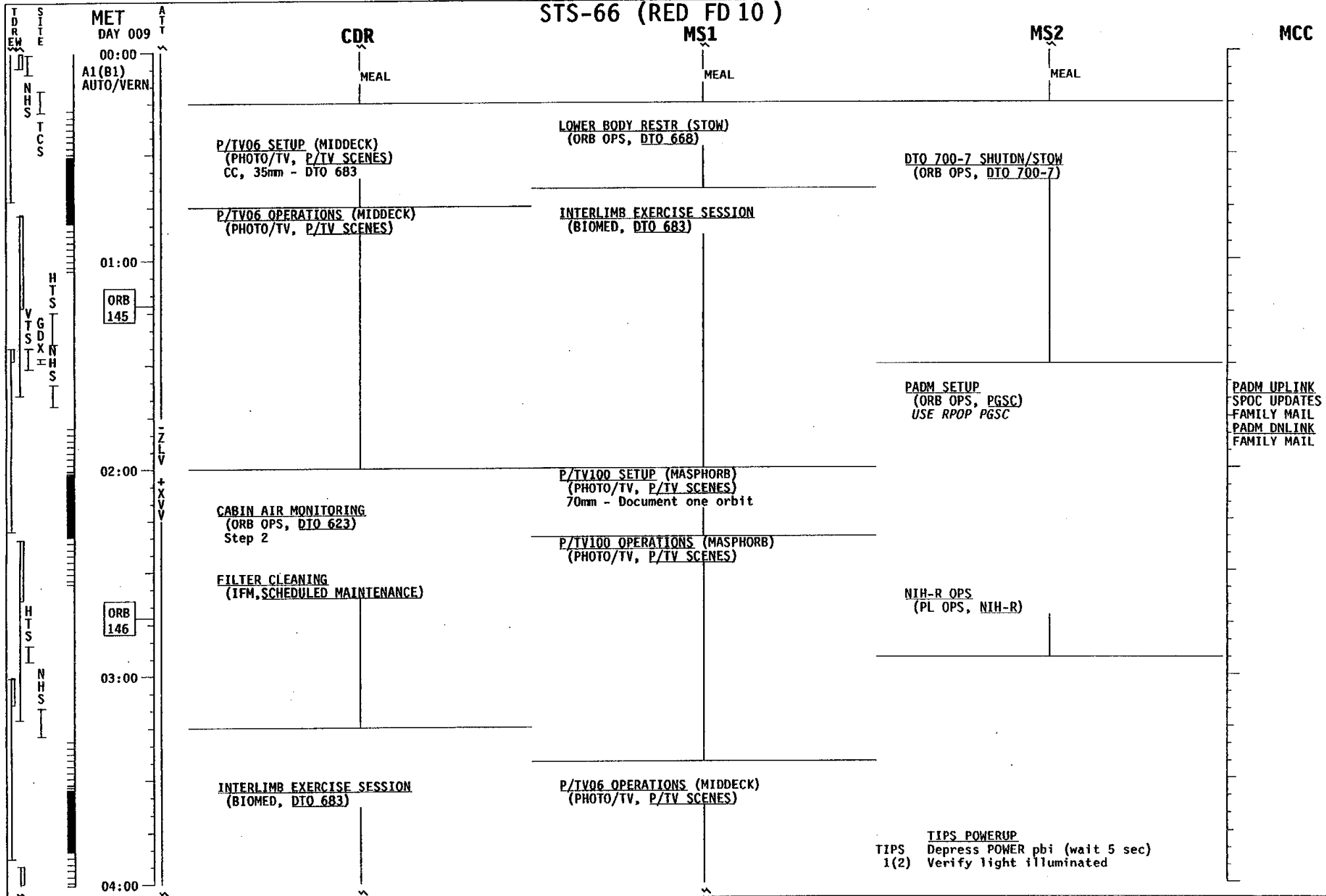
STS-66 (RED FD 10)

	MET DAY 008	CDR	MS1	MS2	MCC
TDR SITE 20:00 FREE A9(B10) AUTO/VERN (A9)B10 ORB 142 (A9)B9 FREE 21:00 (A9)B9 AUTO/VERN I O S A1(B1) AUTO/VERN 22:00 ORB 143 A13(B1) AUTO/VERN 23:00 A1(B1) AUTO/VERN 00:00 ORB 144 009 00:00	MET DAY 008 20:00 FREE A9(B10) AUTO/VERN (A9)B10 ORB 142 (A9)B9 FREE 21:00 (A9)B9 AUTO/VERN I O S A1(B1) AUTO/VERN 22:00 ORB 143 A13(B1) AUTO/VERN 23:00 A1(B1) AUTO/VERN 00:00 ORB 144 009 00:00	RENDEZVOUS TIMELINE (RNDZ, RNDZ TIMELINE) TRANSITION TO FLT PLN P/TV01 SETUP (CS DEPLOY/RETR) (PHOTO TV, P/TV SCENES) SPAS Berth P/TV01 OPERATIONS (CS DEPLOY/RETR) (PHOTO/TV, P/TV SCENES) RCD FOR VIDEO PLAYBACK (22:33) 06 UHF MODE - OFF PRIVATE MEDICAL CONFERENCE 06 UHF MODE - SPLX (or as reqd) PRIORITY PWRDN GROUP B (ORB PKT, PRIOR PWRDN) Use PGSCs as req'd Leave IMU 2 in operate Config Single G2 GPC Ops Change DAP A,B to A1,B1 MNVR IMU ALIGN ATT STAR PAIR (B1) A/AUTO/VERN (21:43) Init MNVR IMU ALIGN - S TRK (ORB OPS) MNVR MAS MOON R=10.88 P=55.57 Y=4.18 A/AUTO/VERN (22:01) Init MNVR MNVR MAS MOON R=10.99 P= 54.61 Y=9.08 Change DAP A to A13 A/AUTO/VERN (22:19) Init MNVR MNVR MAS MOON R=10.88 P=55.57 Y=4.18 A/AUTO/VERN (22:37) Init MNVR Change DAP A to A1 MNVR (TRK) -ZLV, +XVV (ATLAS) TG=2 BV=3 OM=180 A/AUTO/VERN (22:54) Init TRK MEAL	RENDEZVOUS TIMELINE (RNDZ, RNDZ TIMELINE) GRAPPLE (20:09) SPAS DEACTIVATION (PL OPS, CRISTA-SPAS) SPAS BERTH (PDRS, SPAS RETRIEVE) UNLOADED EXTENDED PARK (PDRS, EXTENDED PARK) ATLAS DAILY PLANNING P/TV10 SETUP (PAO EVENT) (PHOTO/TV, P/TV SCENES) PAO VOICE CHECK/EVENT LIVE DNK REQD: 22:08-22:28 VIDEO PLAYBACK (Cue Card, 8mm VTR) CRISTA-SPAS BERTH KU AVAIL TDRS EAST 22:33-22:54 MEAL	RENDEZVOUS TIMELINE (RNDZ, RNDZ TIMELINE) SPAS DEACTIVATION (PL OPS, CRISTA-SPAS) SPAS BERTH (PDRS, SPAS RETRIEVE) UNLOADED EXTENDED PARK (PDRS, EXTENDED PARK) EXERCISE TOPPING FES STARTUP (ORB OPS, ECLS) USER EVENT (PL OPS, PCG-STES) MEAL	UPLINK β ONLY 12° UPLINK TFL 188 INFORM CREW GO FOR SPAS DEACT UPLINK TFL 192 UPLINK β 21° + MASK TV (TDRW) (CREW CNTL- CAB) VTR (TDRE) UPLINK MDA OPEN

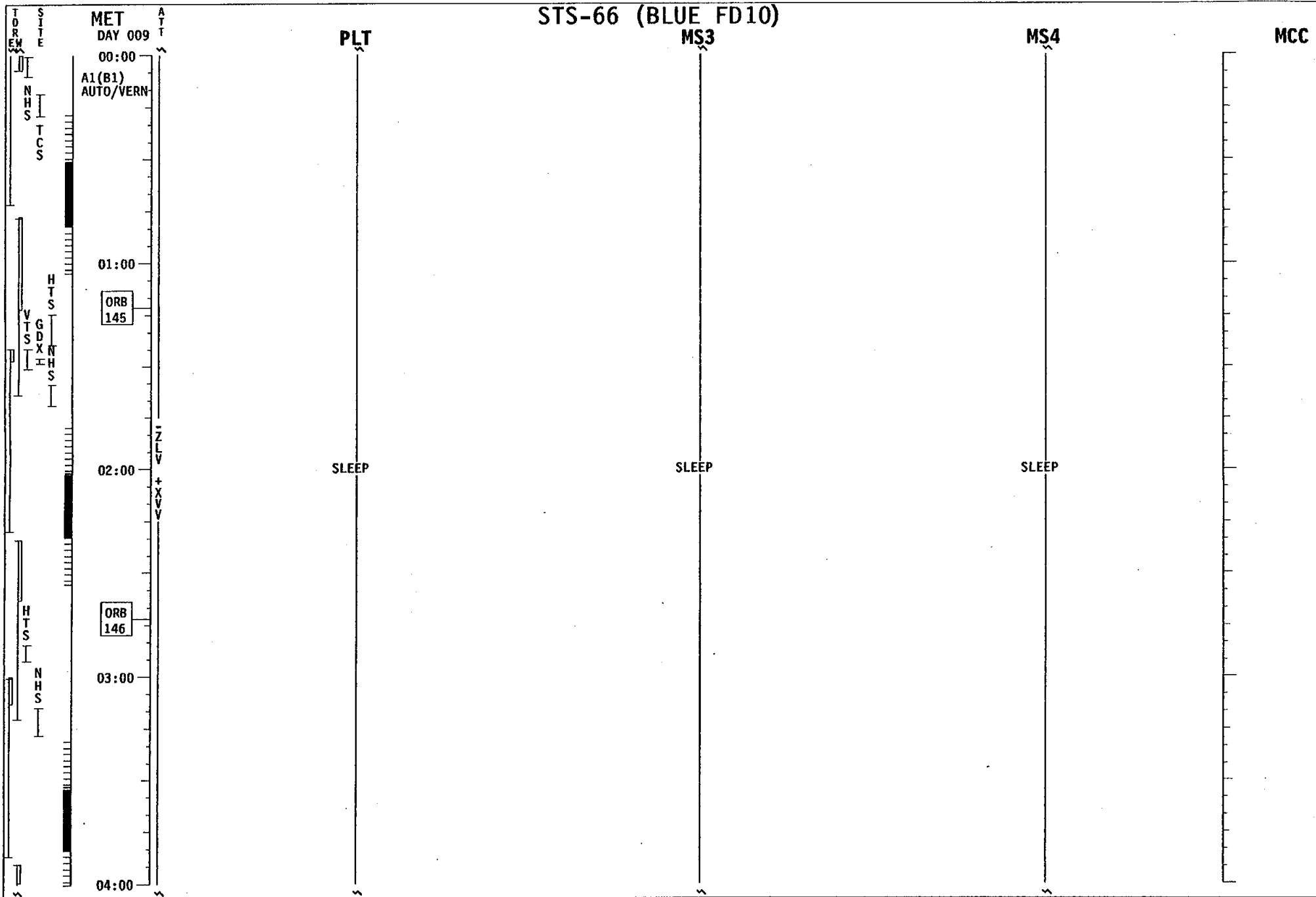
STS-66 (BLUE FD10)

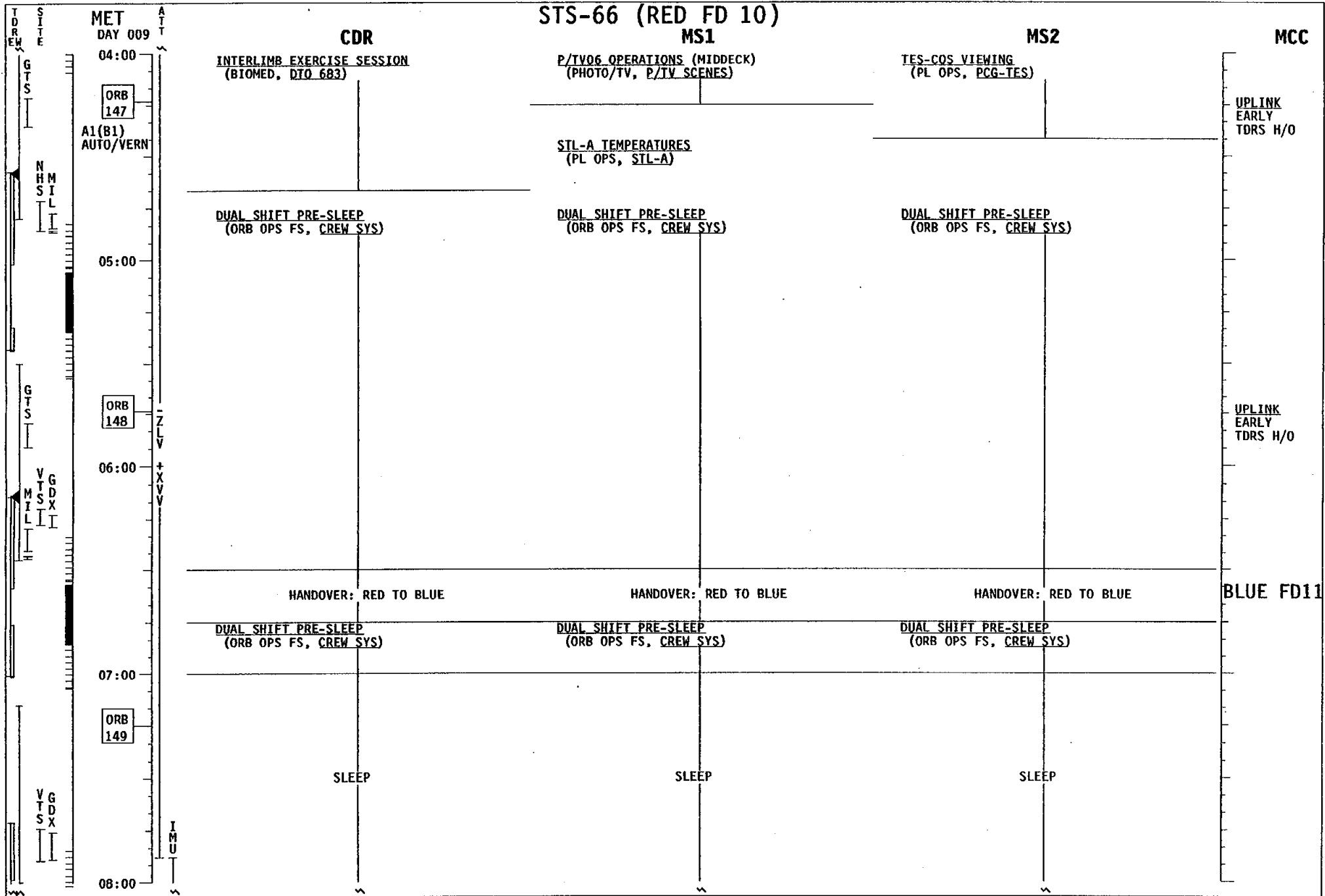


STS-66 (RED FD 10)

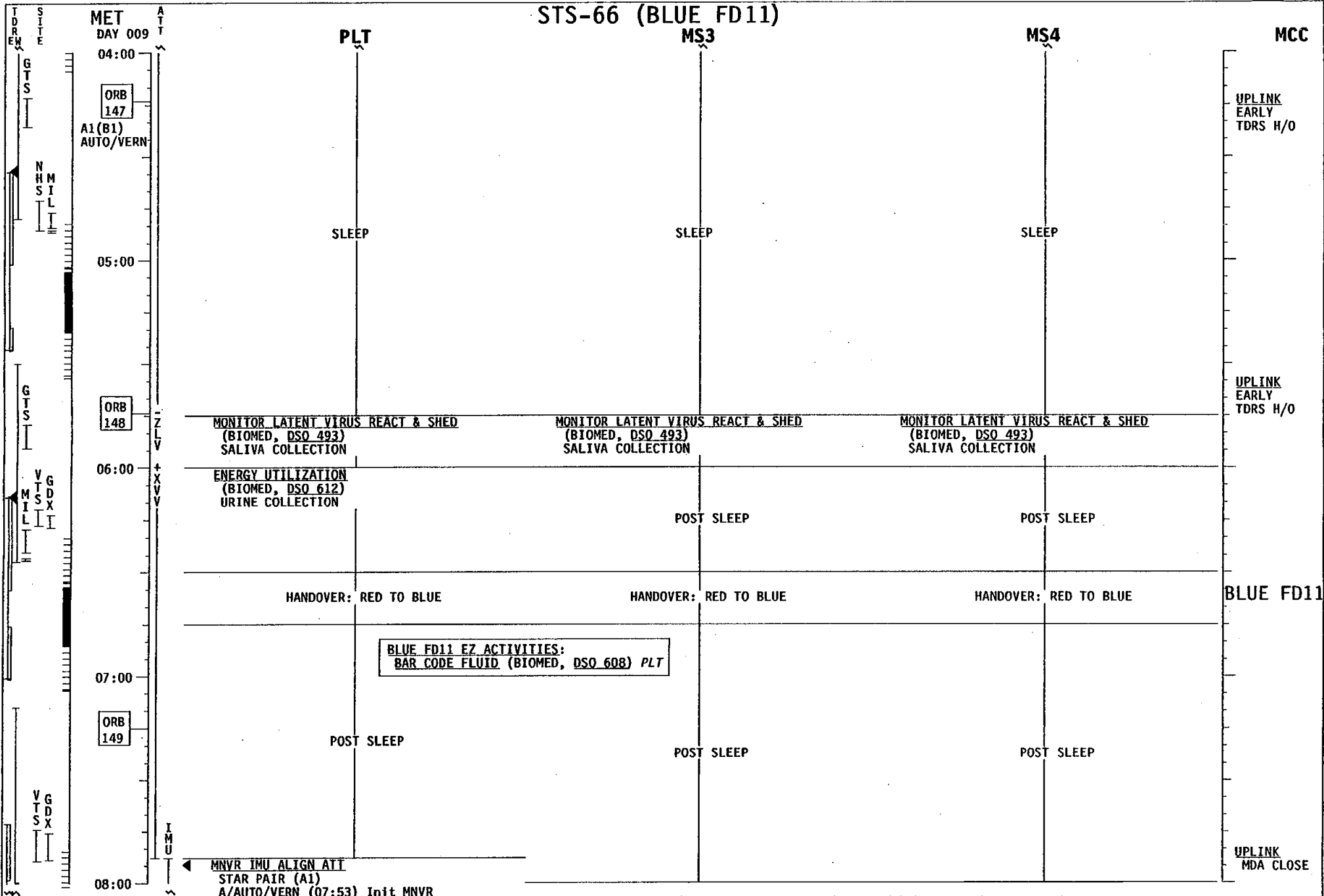


STS-66 (BLUE FD10)

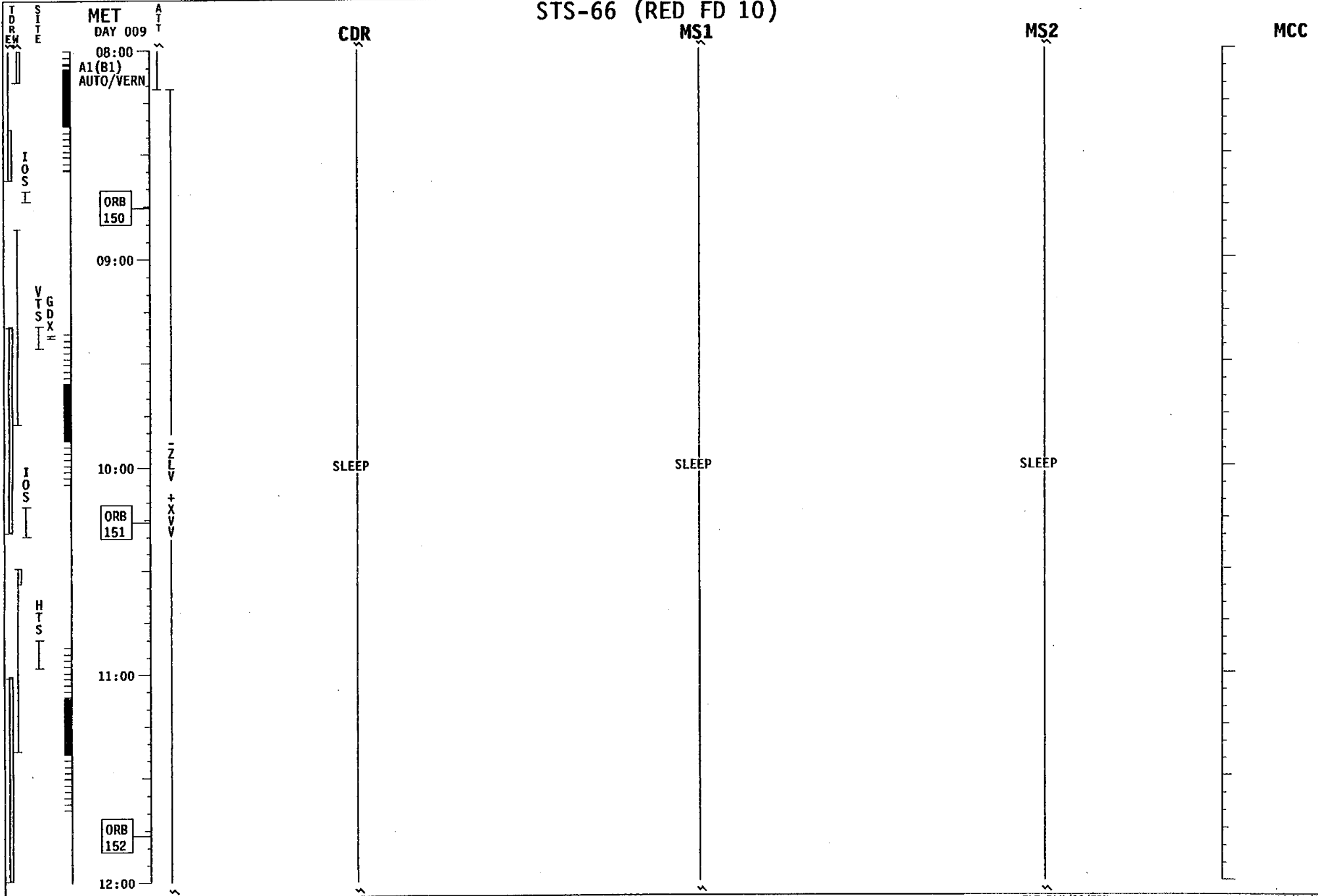


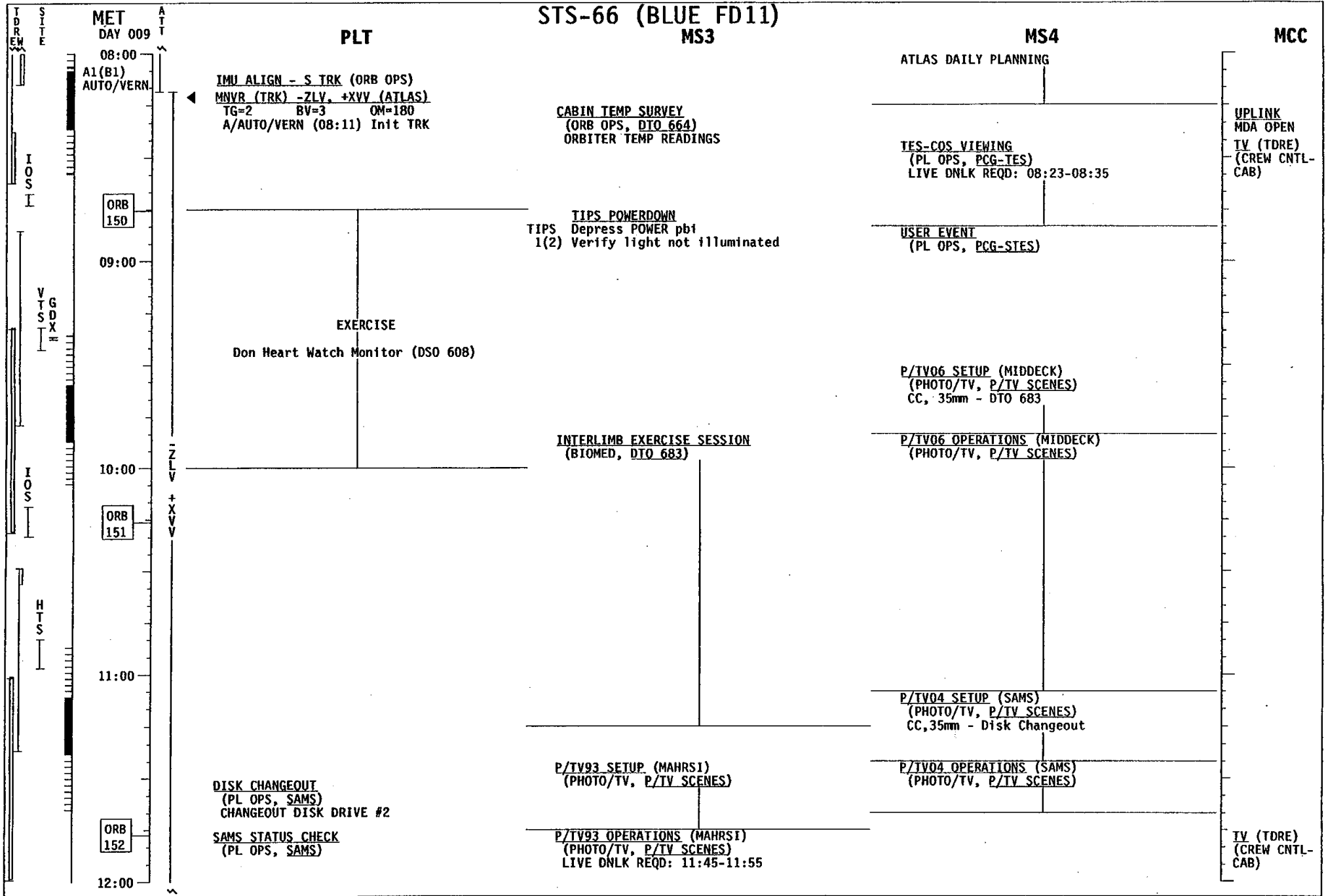


STS-66 (BLUE FD11)

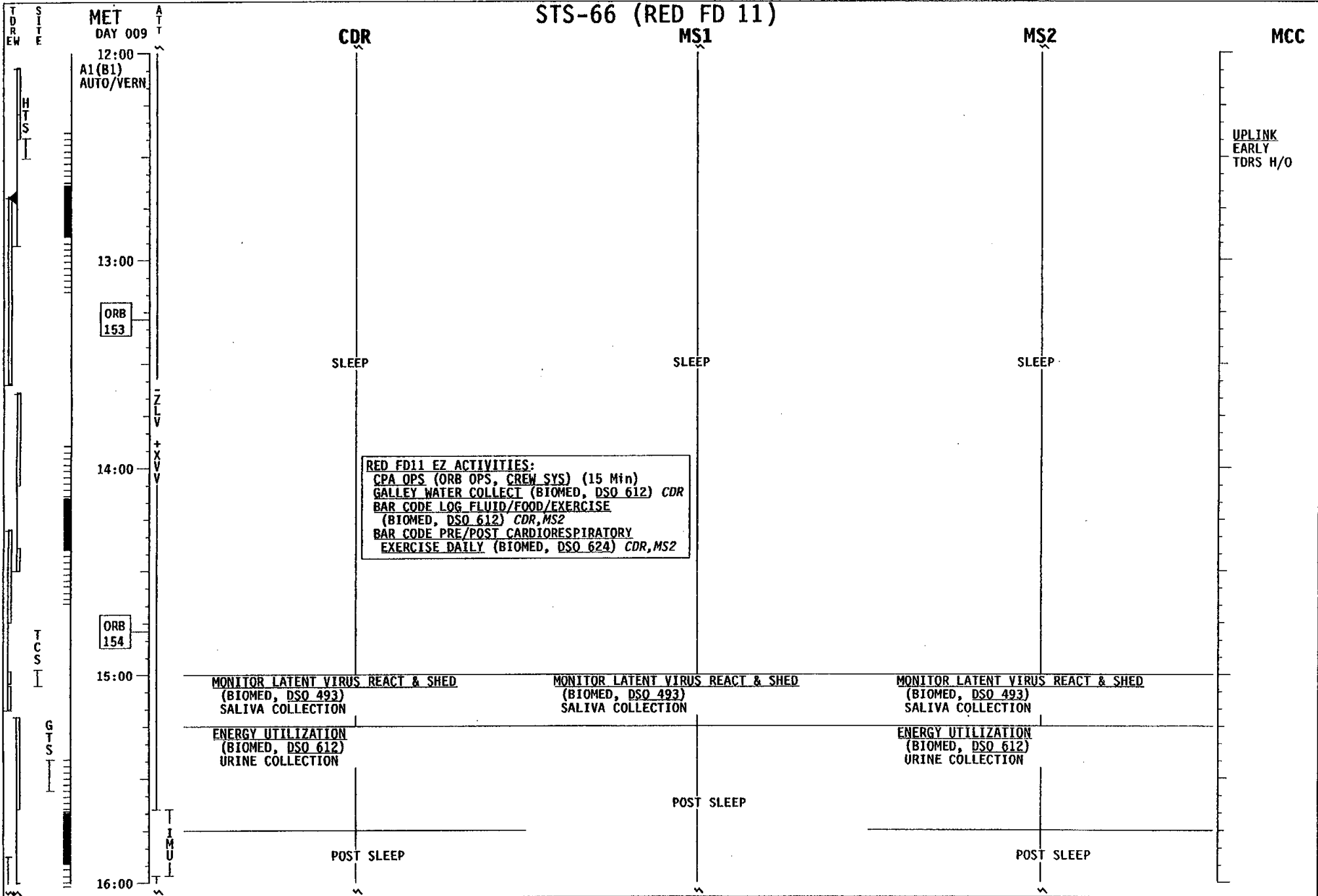


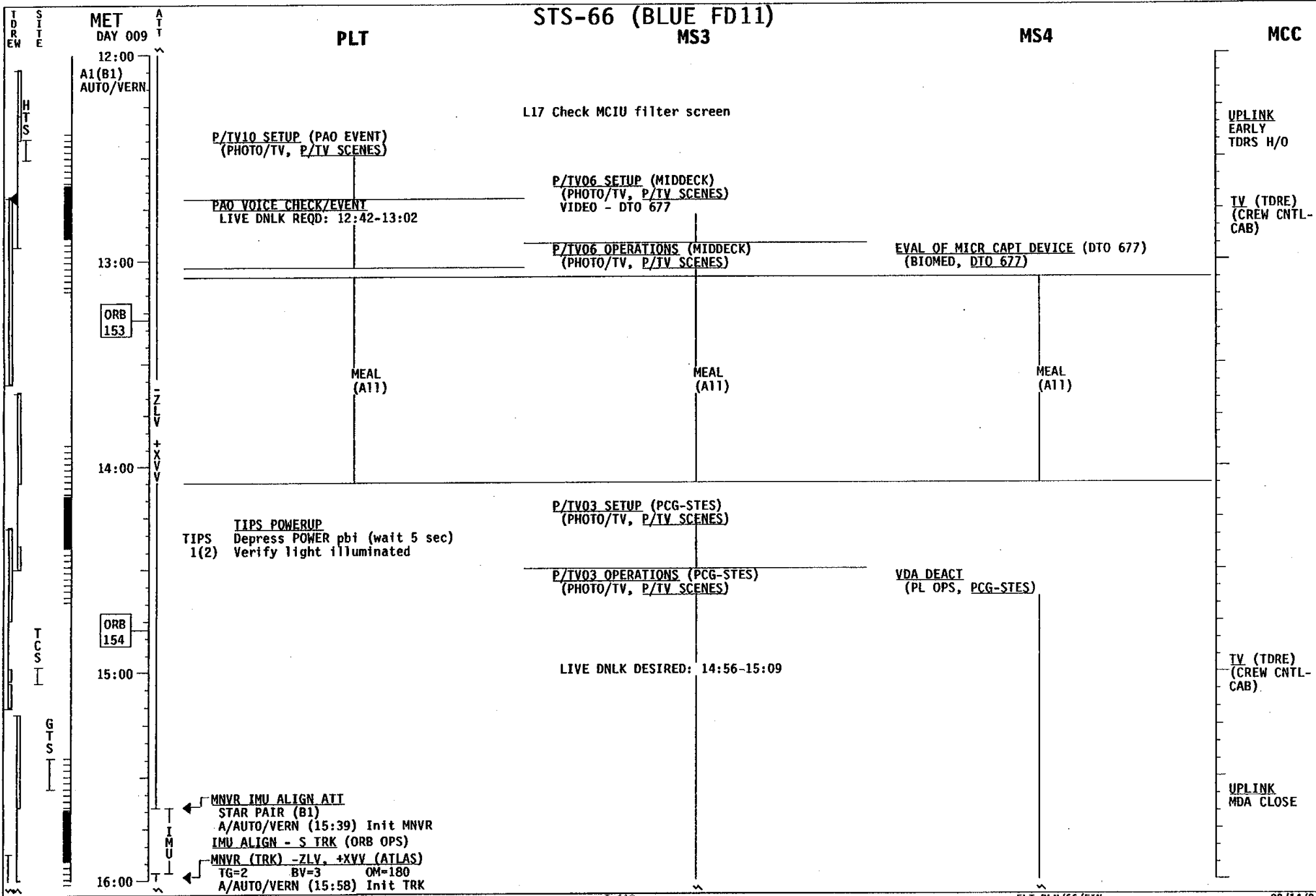
STS-66 (RED FD 10)



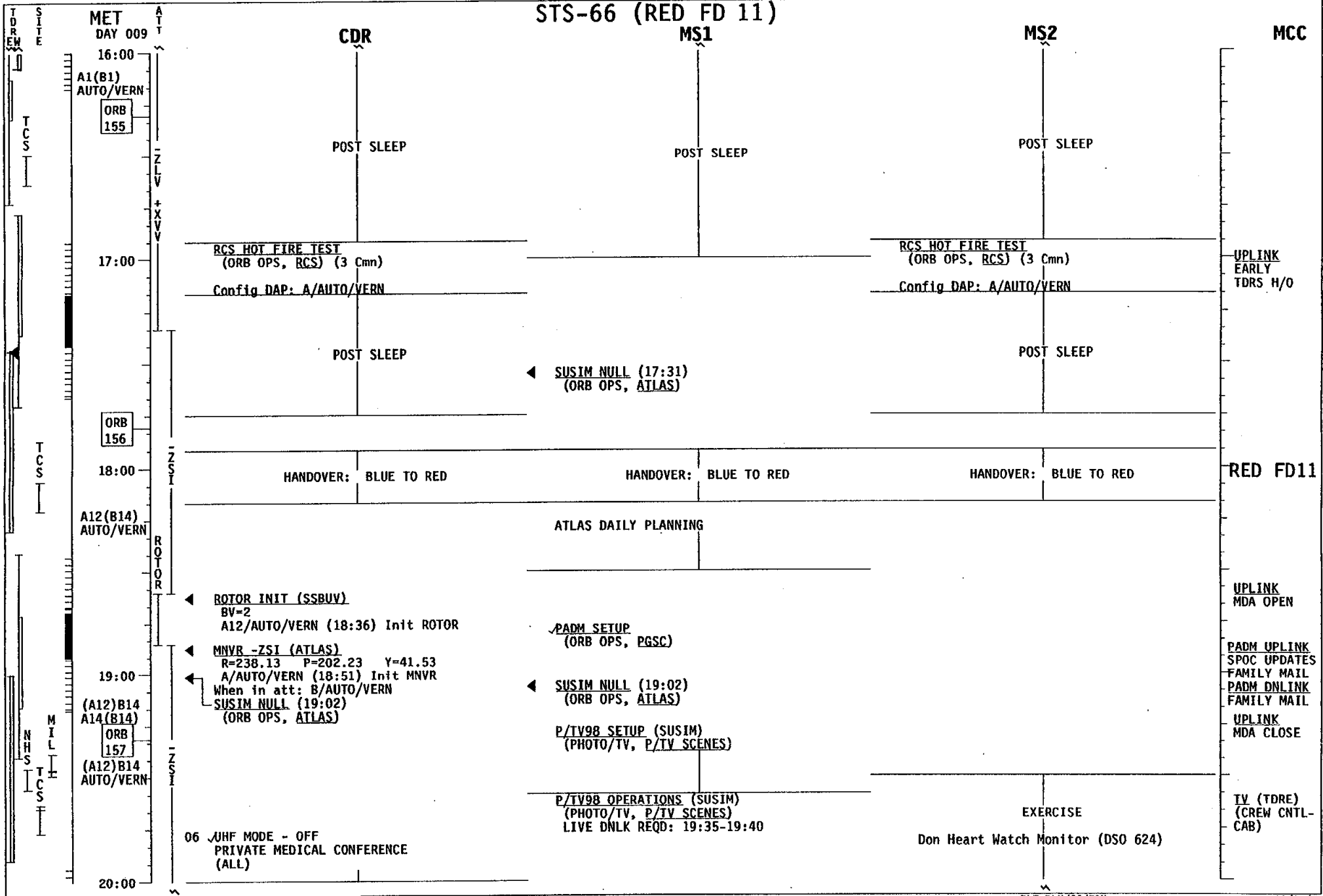


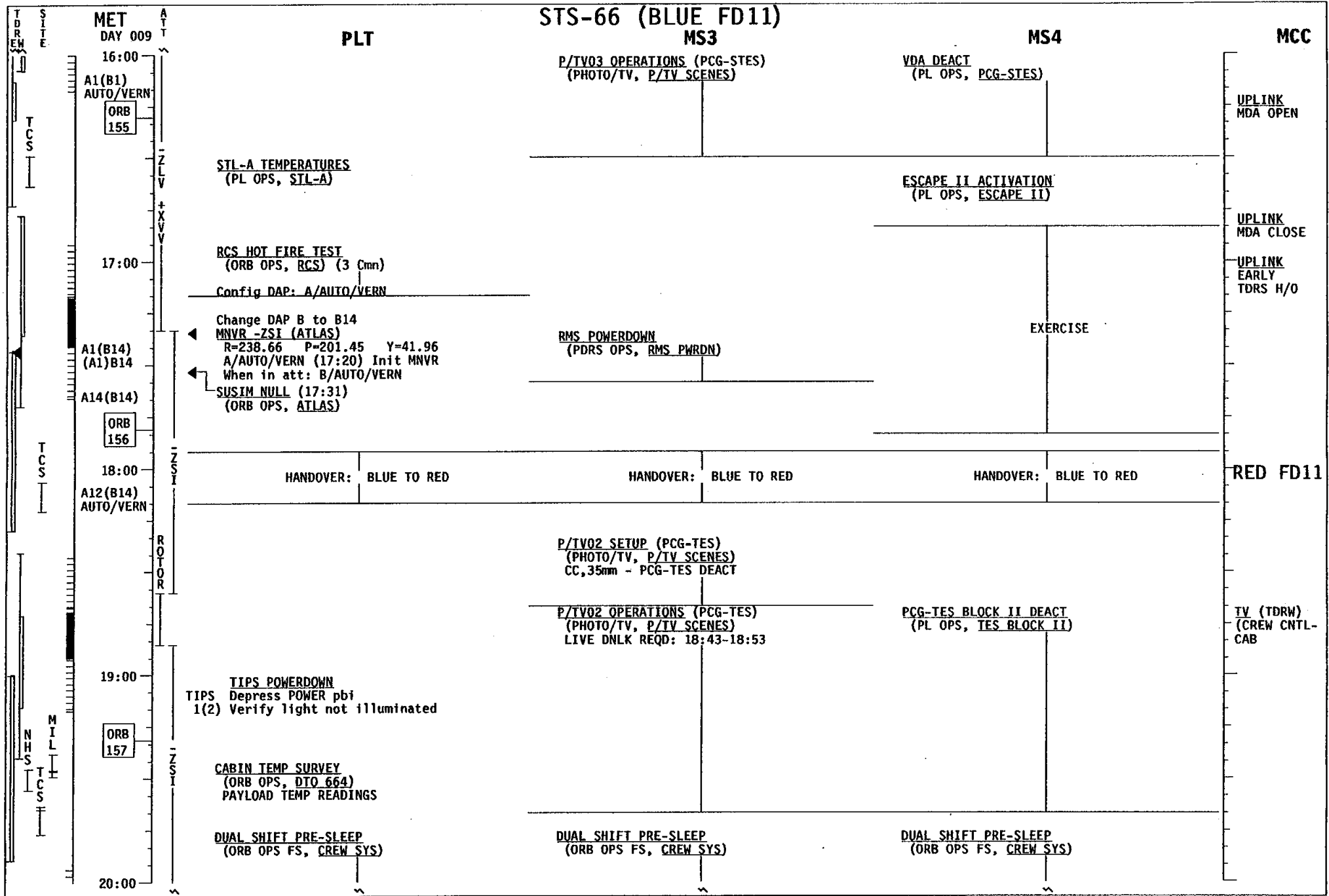
STS-66 (RED FD 11)

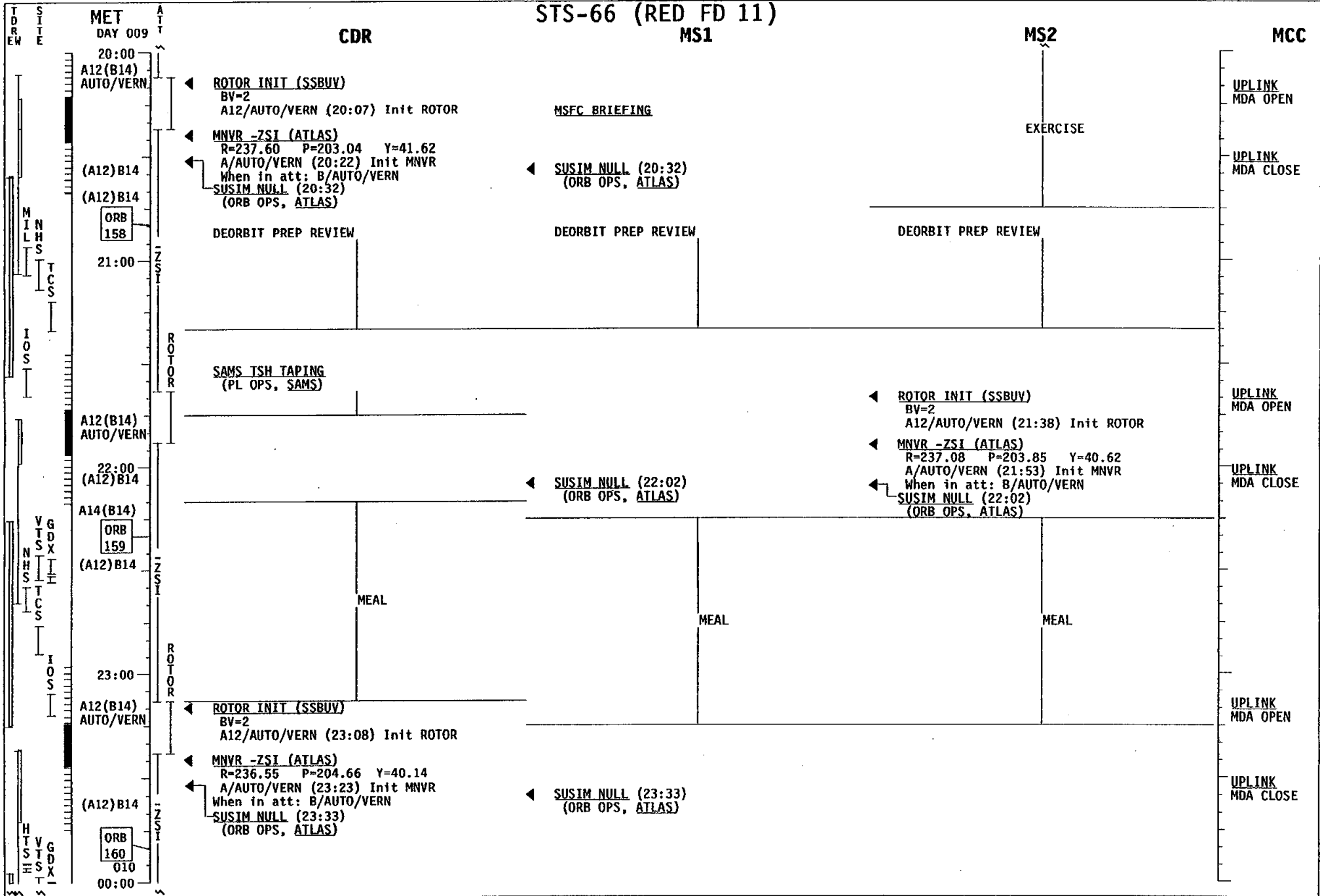


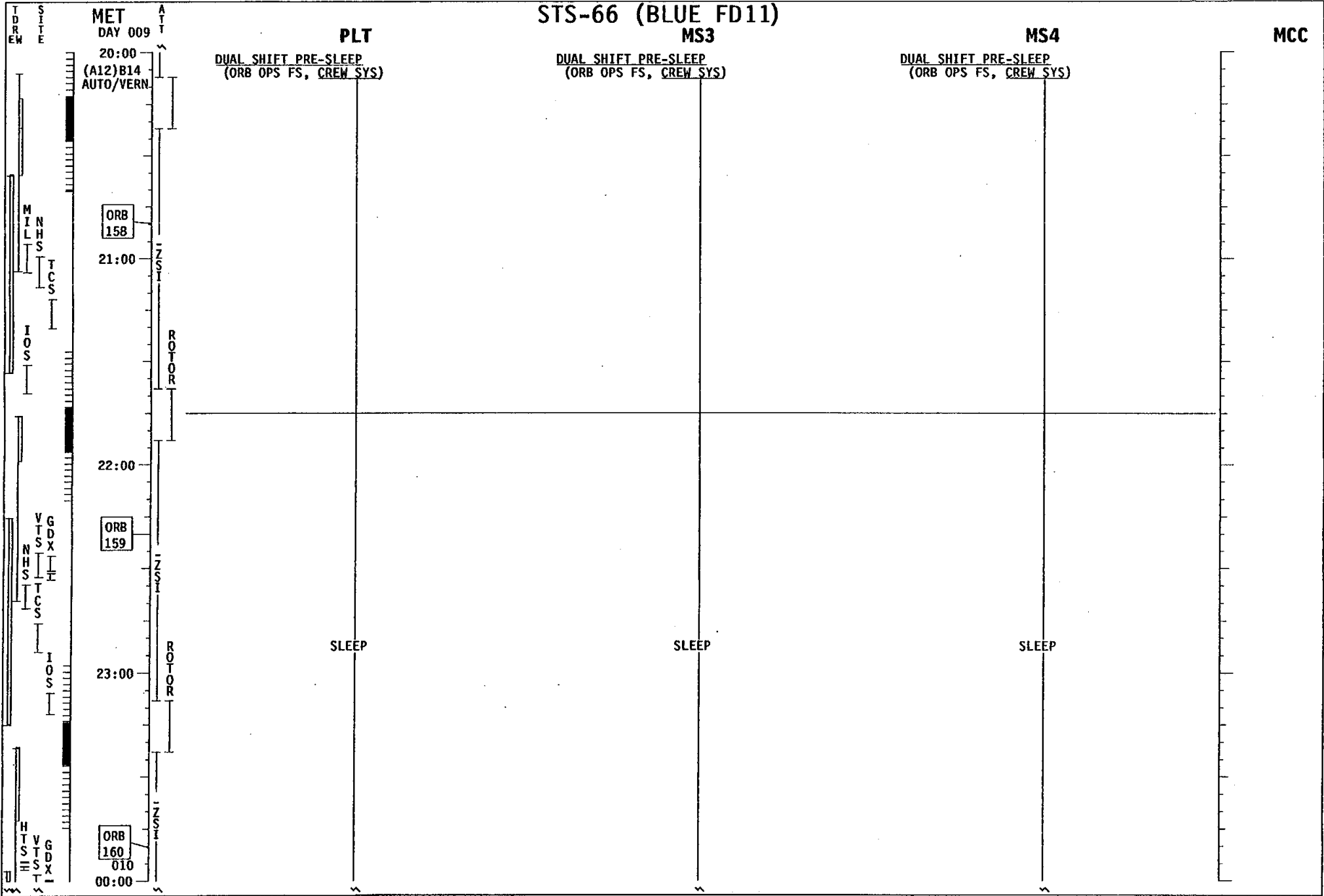


STS-66 (RED FD 11)

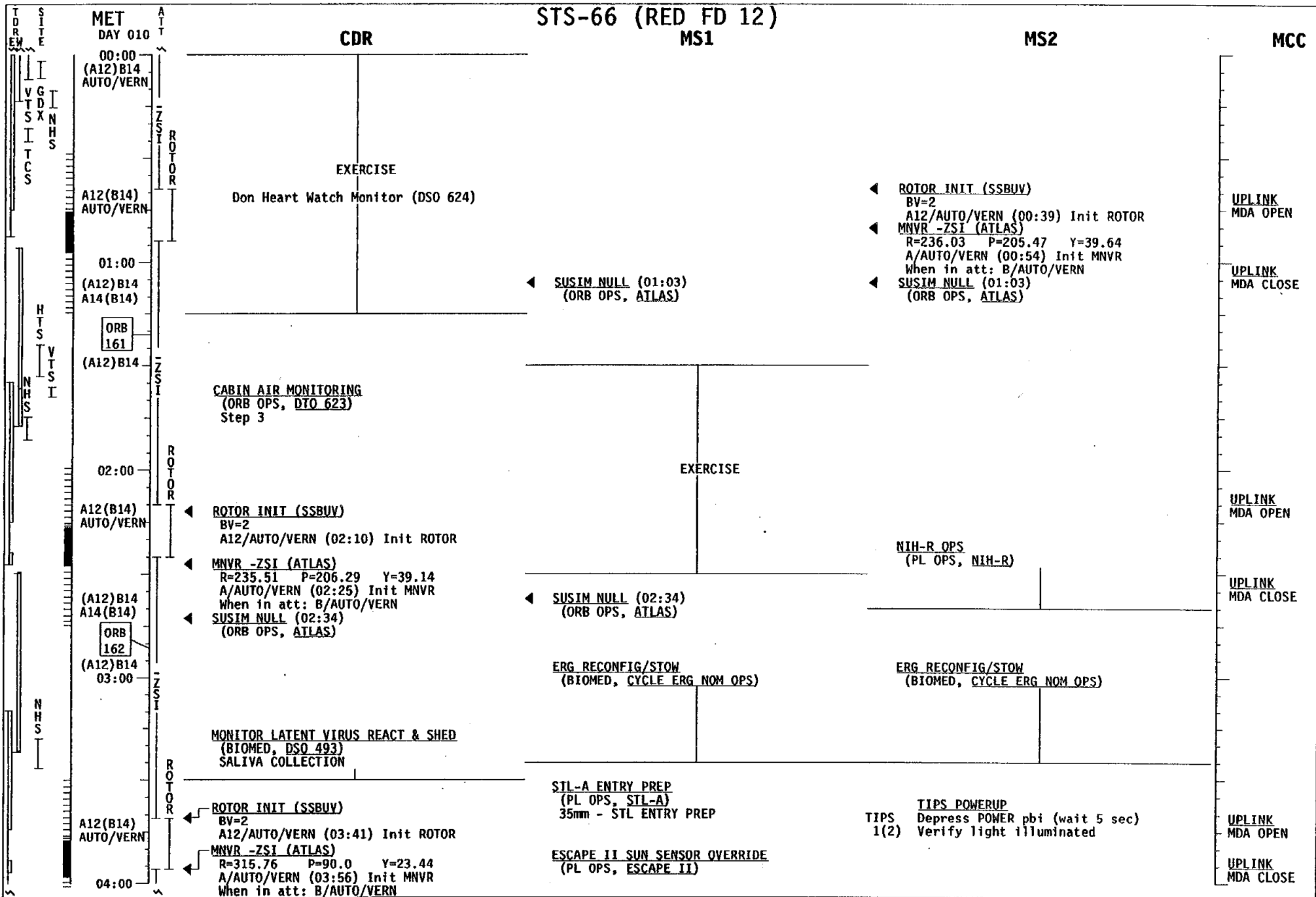




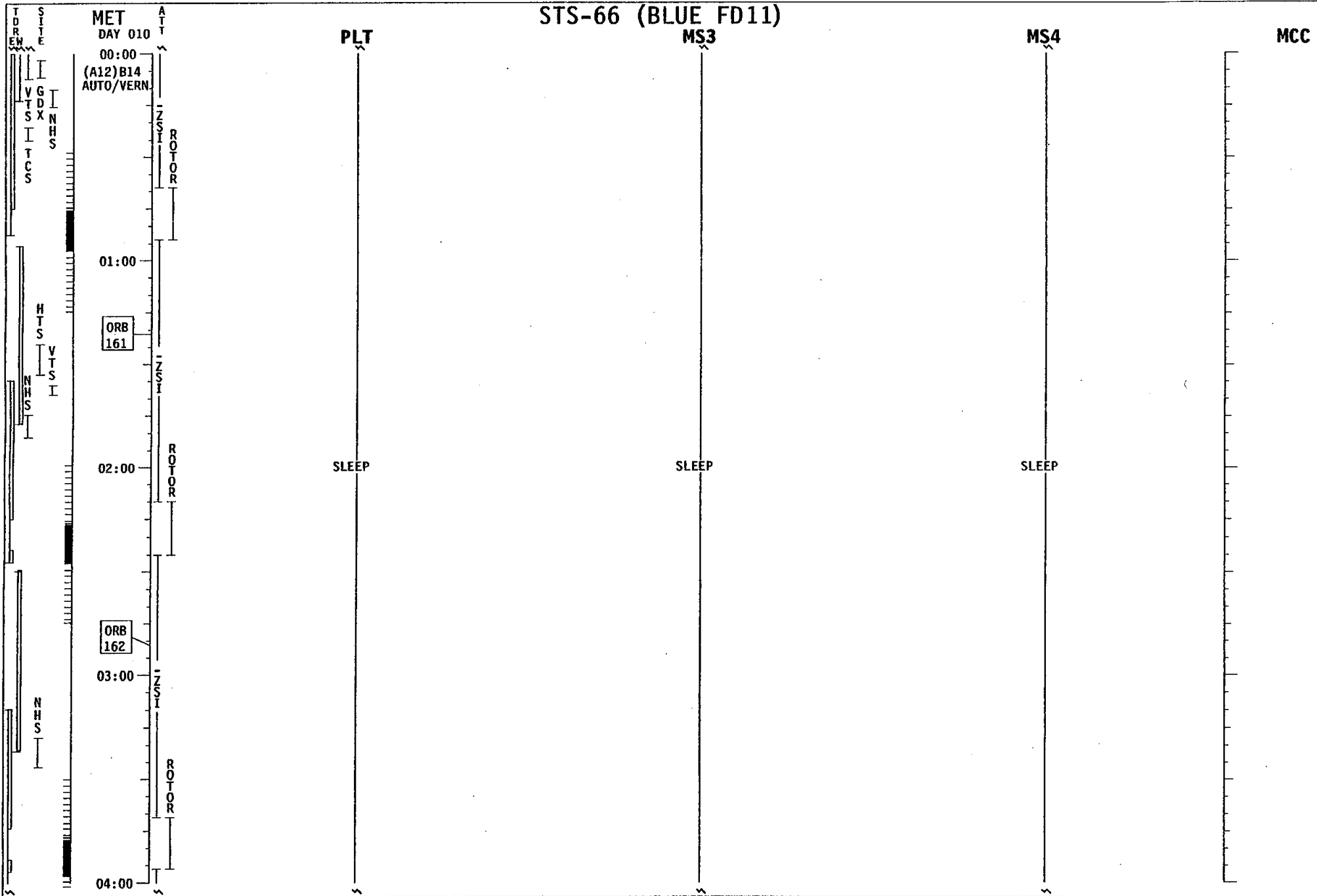




STS-66 (RED FD 12)



STS-66 (BLUE FD11)



MET
DAY 010

PLT

MS3

MS4

MCC

00:00
(A12) B14
AUTO/VERN.

01:00

ORB
161

02:00

SLEEP

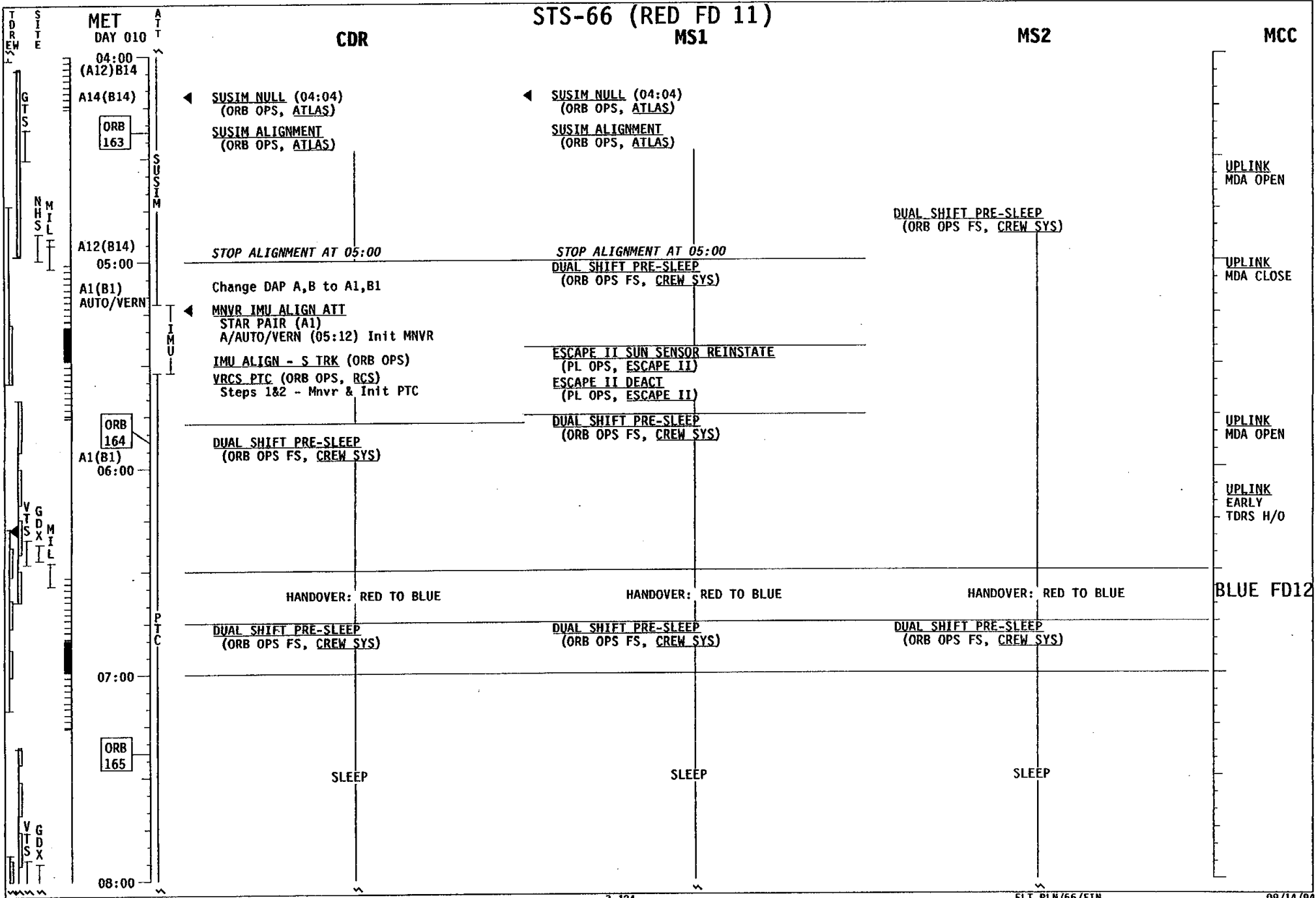
SLEEP

SLEEP

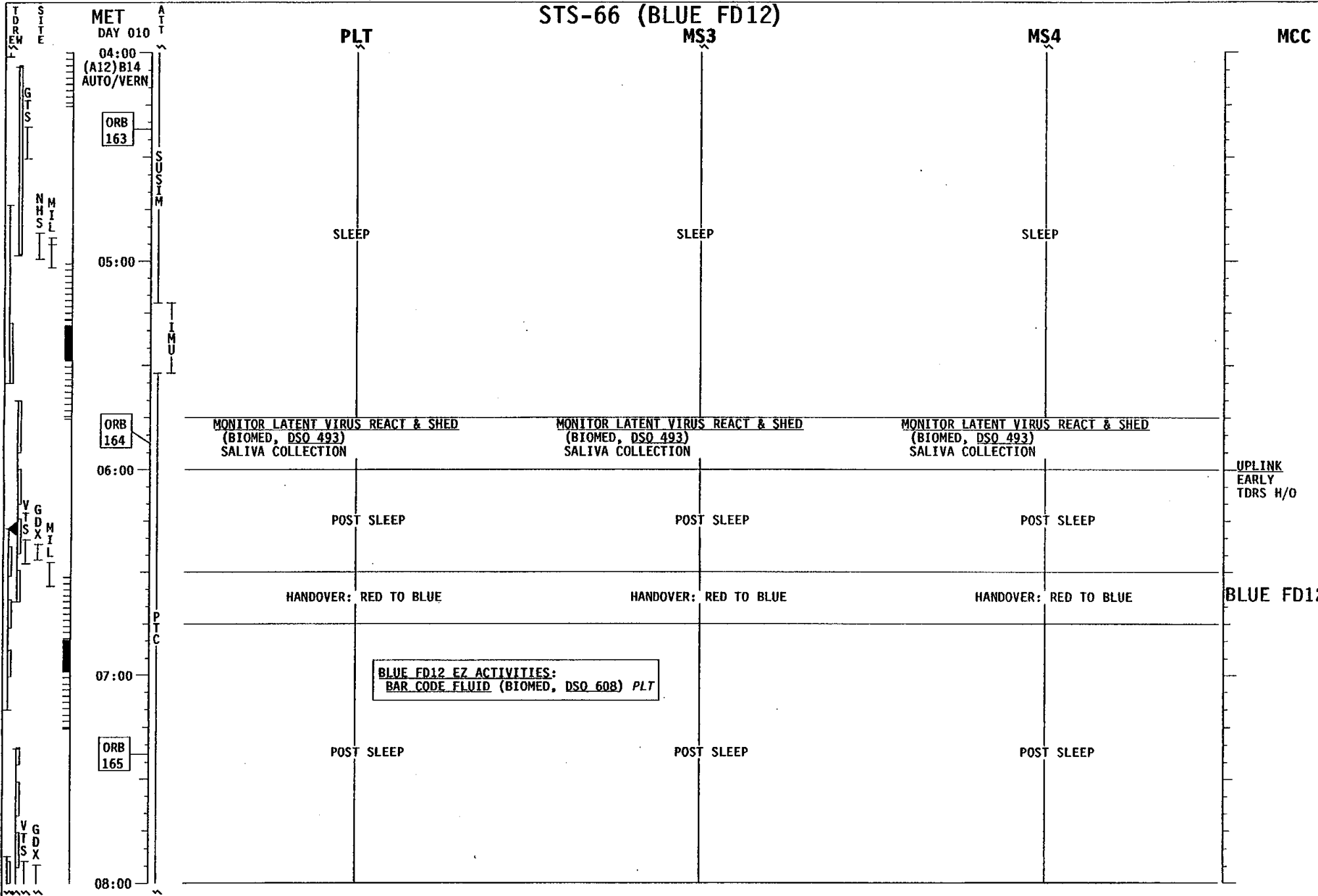
ORB
162

03:00

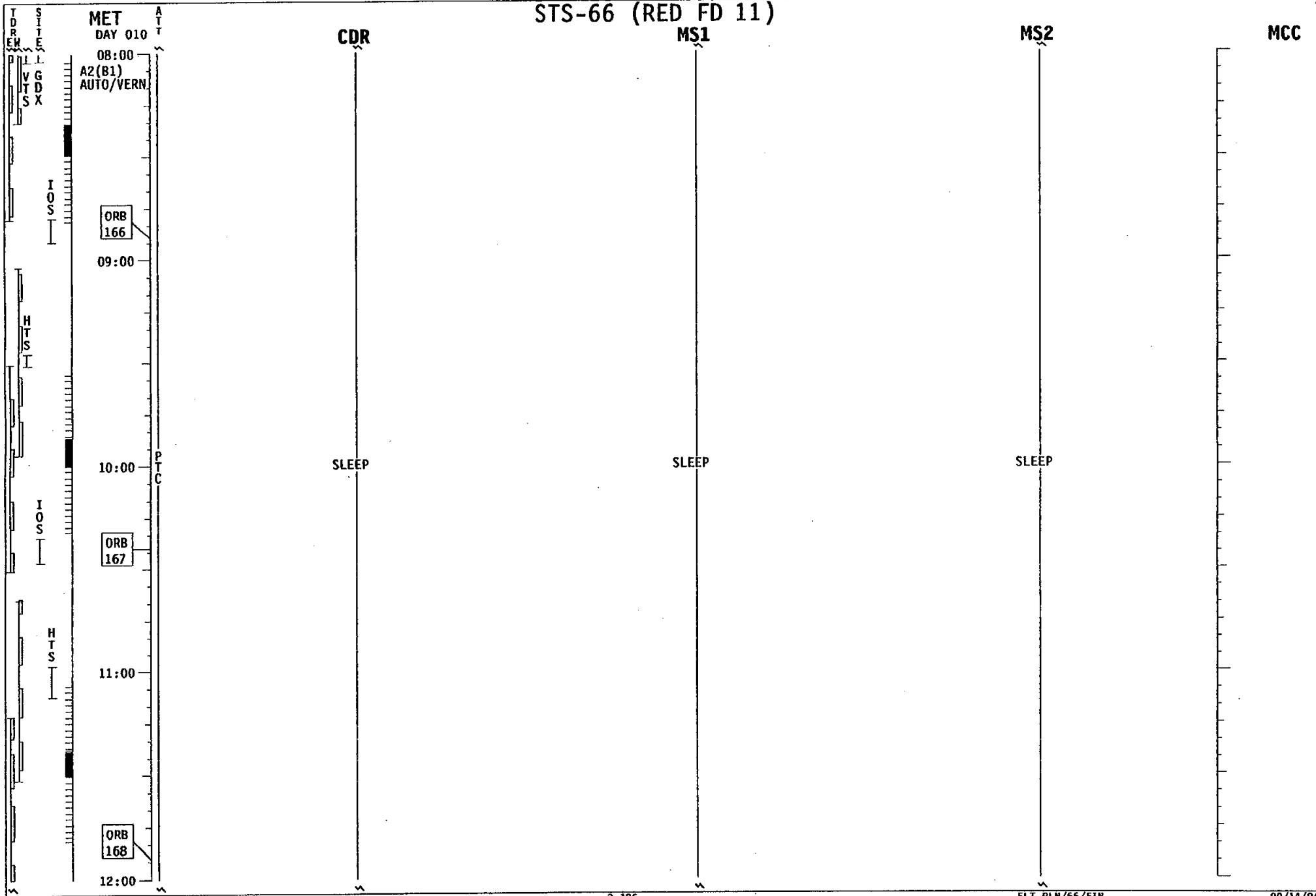
04:00

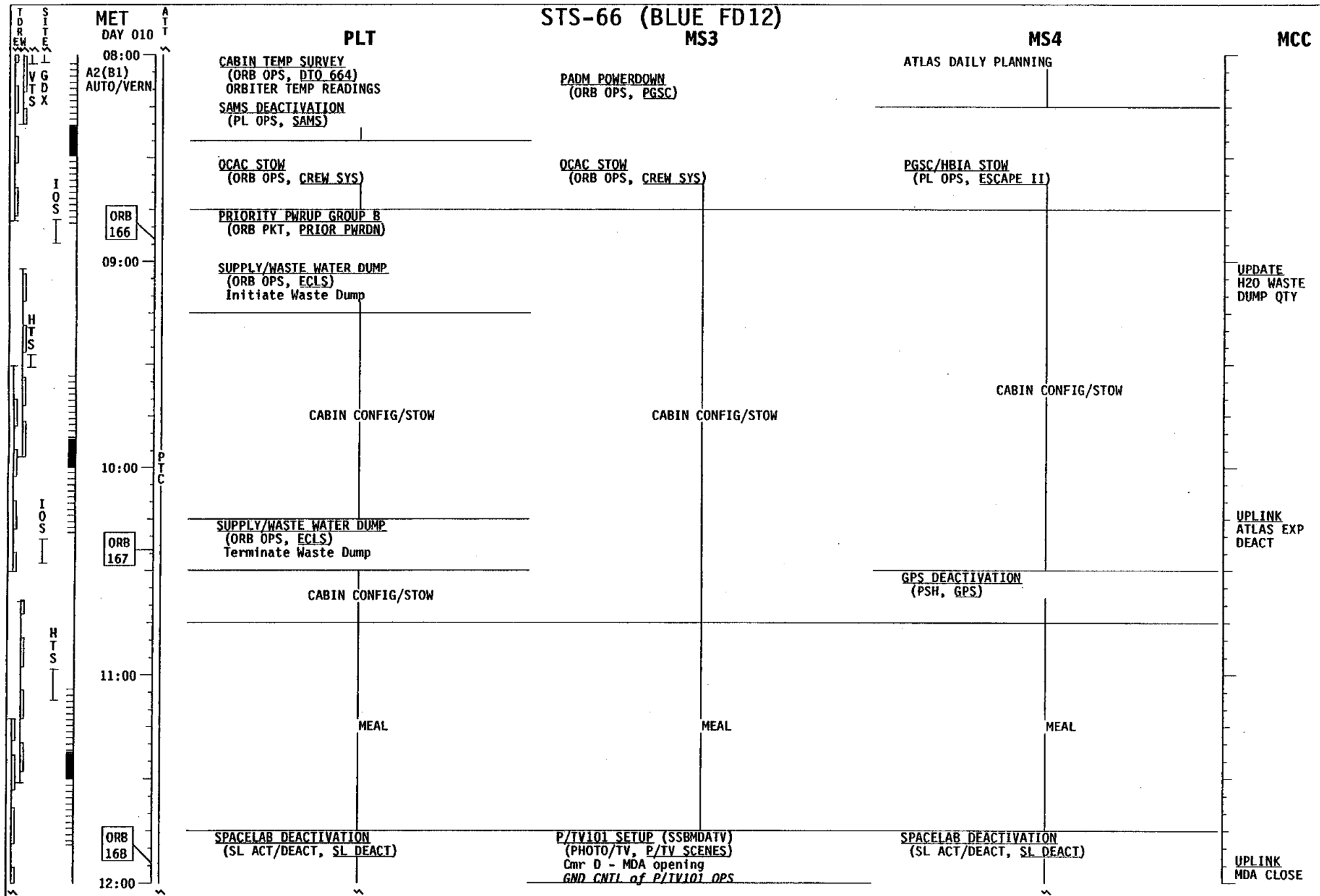


STS-66 (BLUE FD12)

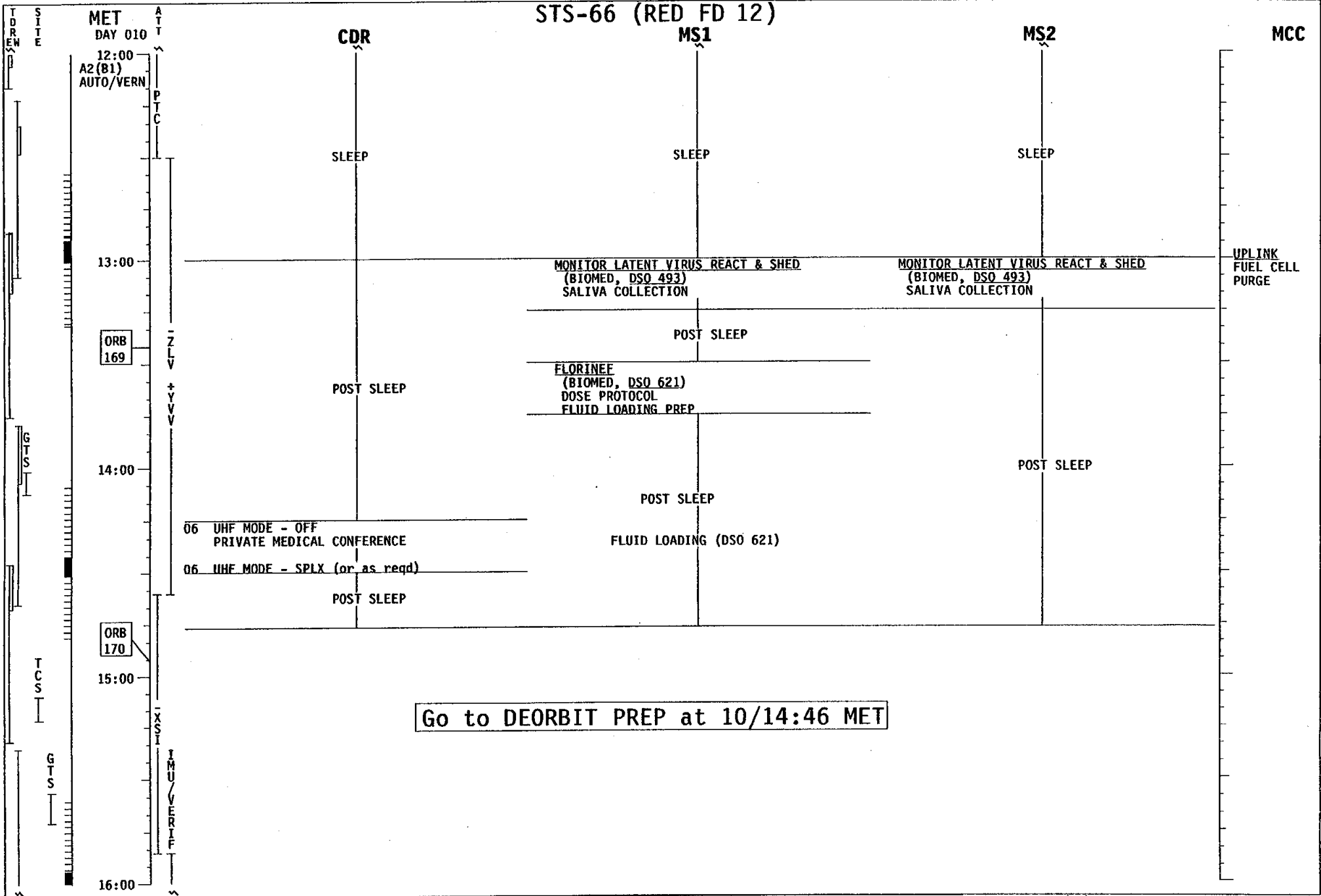


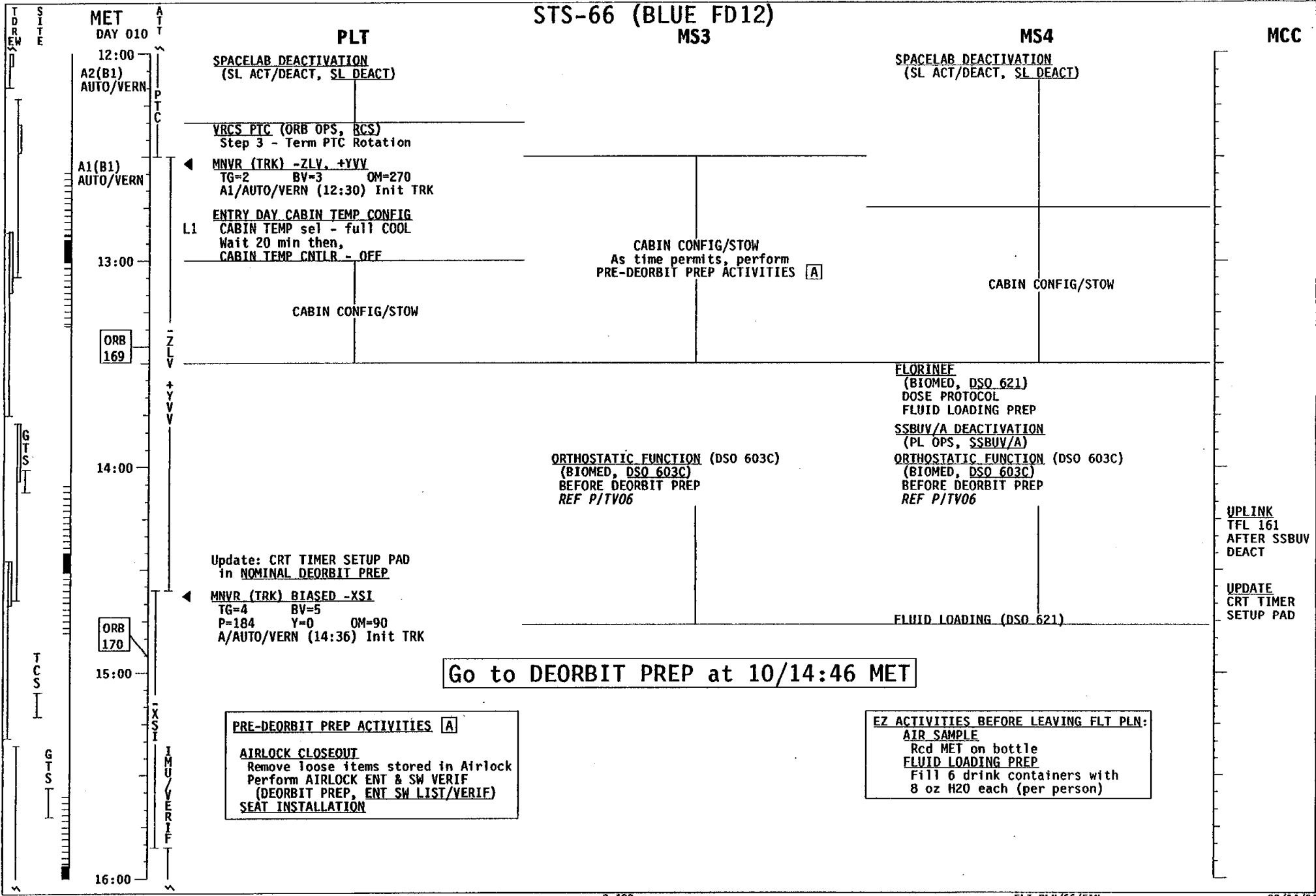
STS-66 (RED FD 11)





STS-66 (RED FD 12)





STS-66 (BLUE FD12)
MS3

MET
DAY 010

PLT

MS4

MCC

12:00
A2(B1)
AUTO/VERN
PTC
A1(B1)
AUTO/VERN
13:00
ORB 169
14:00
ORB 170
15:00
16:00
ZLV
+YVV
XSV
IMU/VERIF
TDR
SITE
GTS
TCS
GTS

SPACELAB DEACTIVATION
(SL ACT/DEACT, SL DEACT)

SPACELAB DEACTIVATION
(SL ACT/DEACT, SL DEACT)

VRCS PTC (ORB OPS, RCS)
Step 3 - Term PTC Rotation

◀ **MNVR (TRK) -ZLV, +YVV**
TG=2 BV=3 OM=270
A1/AUTO/VERN (12:30) Init TRK

ENTRY DAY CABIN TEMP CONFIG
L1 CABIN TEMP sel - full COOL
Wait 20 min then,
CABIN TEMP CNTRLR - OFF

CABIN CONFIG/STOW
As time permits, perform
PRE-DEORBIT PREP ACTIVITIES [A]

CABIN CONFIG/STOW

CABIN CONFIG/STOW

FLORINEF
(BIOMED, DSO 621)
DOSE PROTOCOL
FLUID LOADING PREP

ORTHOSTATIC FUNCTION (DSO 603C)
(BIOMED, DSO 603C)
BEFORE DEORBIT PREP
REF P/TV06

SSBUV/A DEACTIVATION
(PL OPS, SSBUV/A)
ORTHOSTATIC FUNCTION (DSO 603C)
(BIOMED, DSO 603C)
BEFORE DEORBIT PREP
REF P/TV06

Update: CRT TIMER SETUP PAD
in **NOMINAL DEORBIT PREP**

◀ **MNVR (TRK) BIASED -XSI**
TG=4 BV=5
P=184 Y=0 OM=90
A/AUTO/VERN (14:36) Init TRK

FLUID LOADING (DSO 621)

UPLINK
TFL 161
AFTER SSBUV
DEACT

UPDATE
CRT TIMER
SETUP PAD

Go to DEORBIT PREP at 10/14:46 MET

PRE-DEORBIT PREP ACTIVITIES [A]
AIRLOCK CLOSEOUT
Remove loose items stored in Airlock
Perform AIRLOCK ENT & SW VERIF
(DEORBIT PREP, ENT SW LIST/VERIF)
SEAT INSTALLATION

EZ ACTIVITIES BEFORE LEAVING FLT PLN:
AIR SAMPLE
Rcd MET on bottle
FLUID LOADING PREP
Fill 6 drink containers with
8 oz H2O each (per person)

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CONTINGENCY TIMELINES

CRISTA-SPAS EARLY DEPLOY 4A-1
NOTCH FILTER (DTO 834) 4B-1

CONTINGENCY
TIMELINES

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CRISTA-SPAS EARLY DEPLOY

The intent of this timeline is to provide an early deploy window for the CRISTA-SPAS in order to support a CRISTA Helium leak contingency which may shorten the overall CRISTA-SPAS mission. The timeline reflects an 11-day mission.

The CRISTA-SPAS Early Deploy timeline assumes a deploy time of 0/10:30 MET.

The timeline can support a deploy window of 1 hour.

The crew transitions to the Early Deploy timeline at 0/06:25 MET.

The CRISTA-SPAS post release communication requirement (4 hr, 20 min) is accommodated in the timeline. One additional free flight communication period (approximately 50 minutes) will be scheduled prior to the first set of Atlas solar periods. Atlas VTR operations will have to be rescheduled/added.

The Atlas solar periods can start at the nominal time if the deploy occurs near 0/10:30 MET.

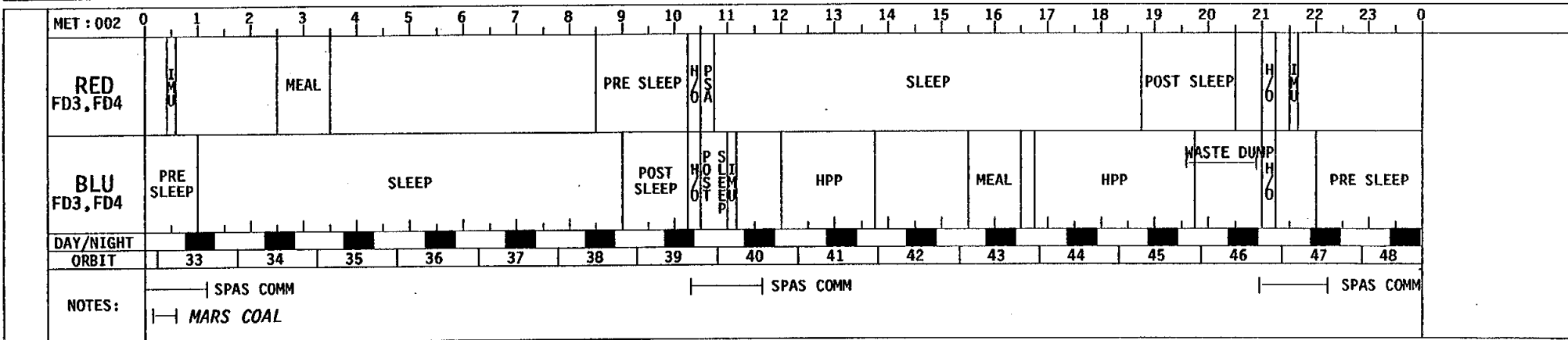
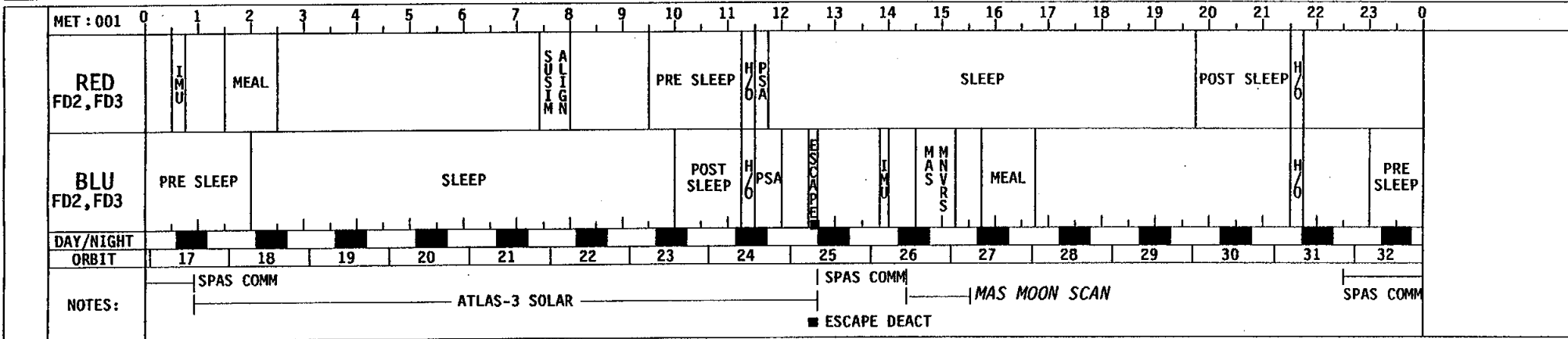
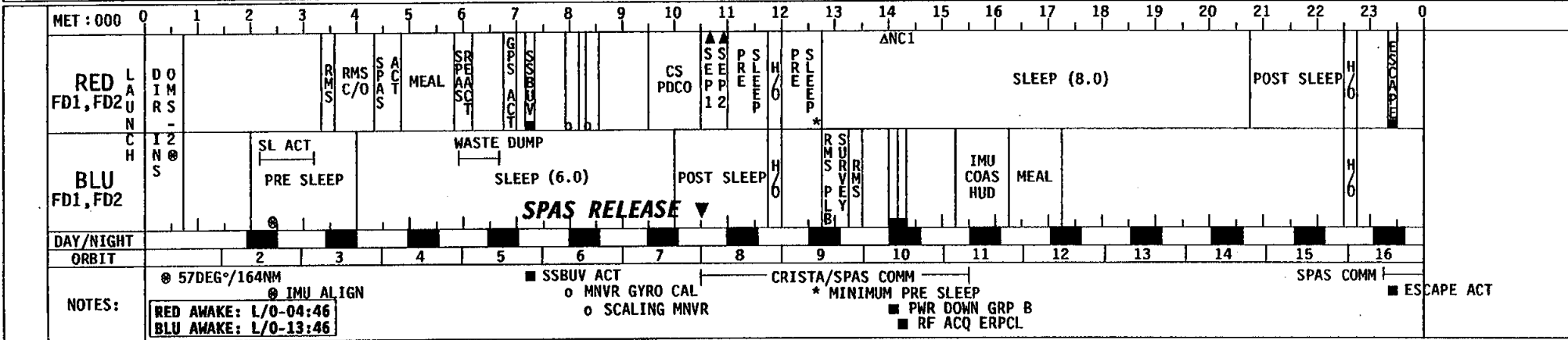
The crew transitions back to the nominal timeline at 0/22:30 MET (H/O from Blue to Red). The crew will execute from the Red FD2 Flight Plan Revision.

The following activities need to be replanned in the Red FD2 Flight Plan Revision:

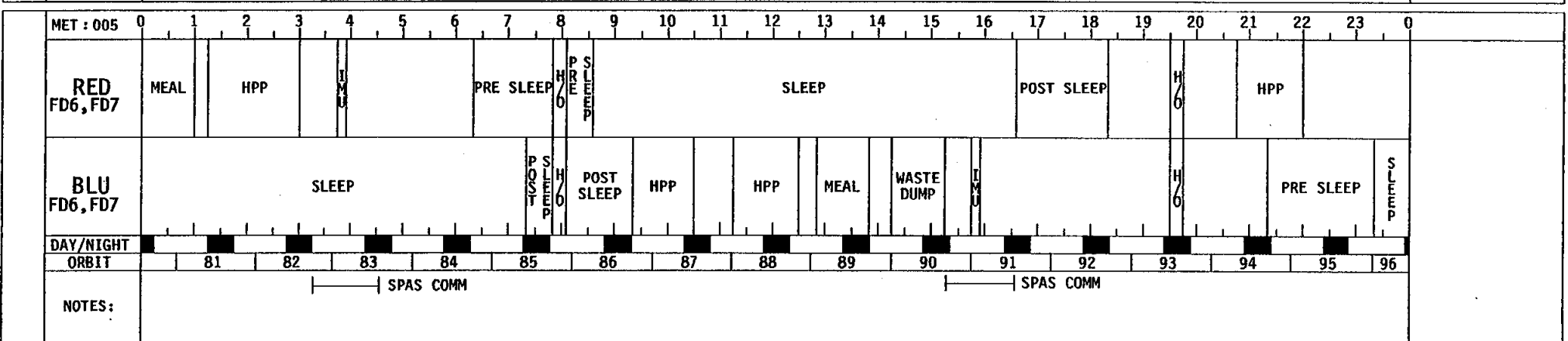
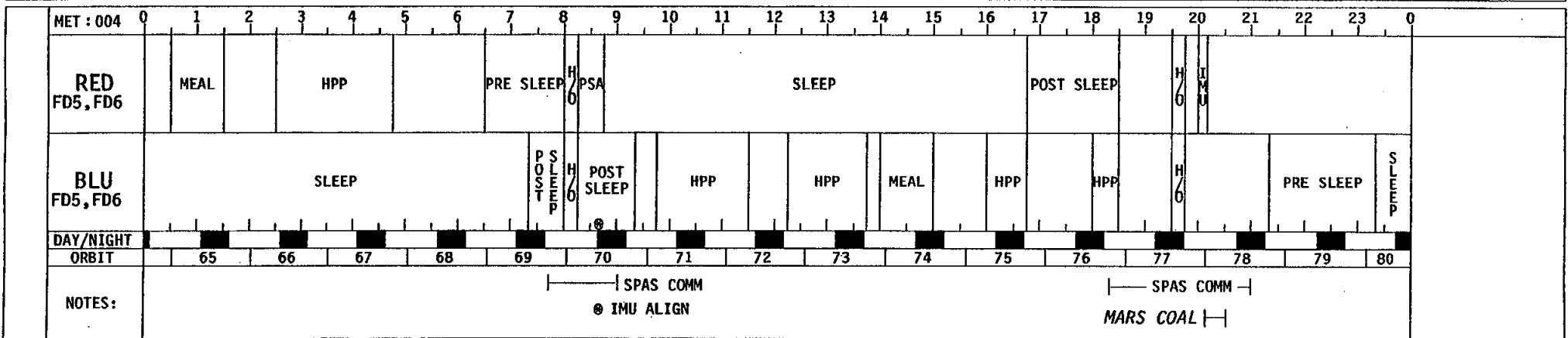
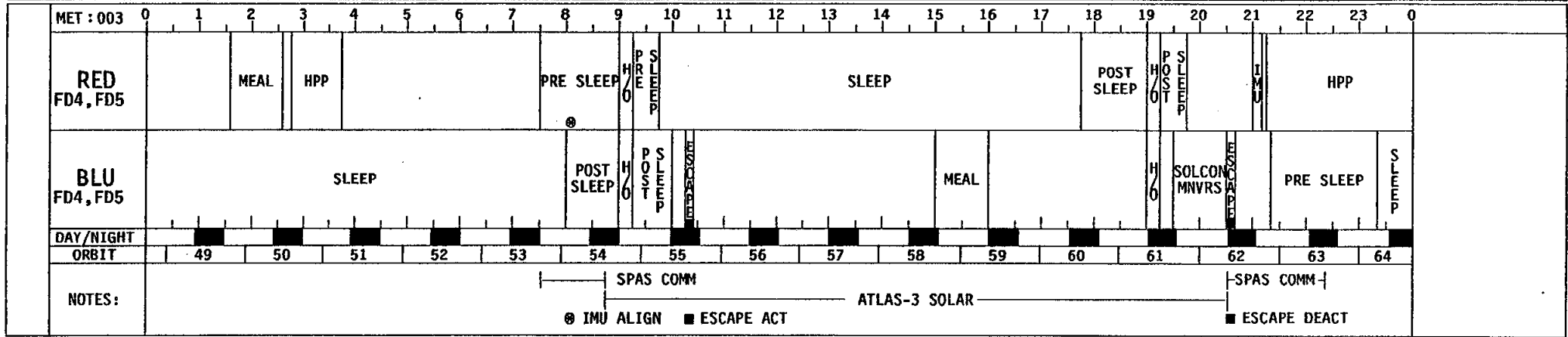
- P/TV02 SETUP & ACT (PCG-TES)
- PCG-TES ACTIVATION
- STES USER EVENT
- IMU ALIGNMENT (PRIOR TO FIRST SET OF SOLARS)
- ATLAS DAILY PLANNING
- TIPS POWERDOWN
- PGSC/HBIA SETUP
- ESCAPE ACTIVATION & P/TV06
- SAMS MNVR SEQUENCE

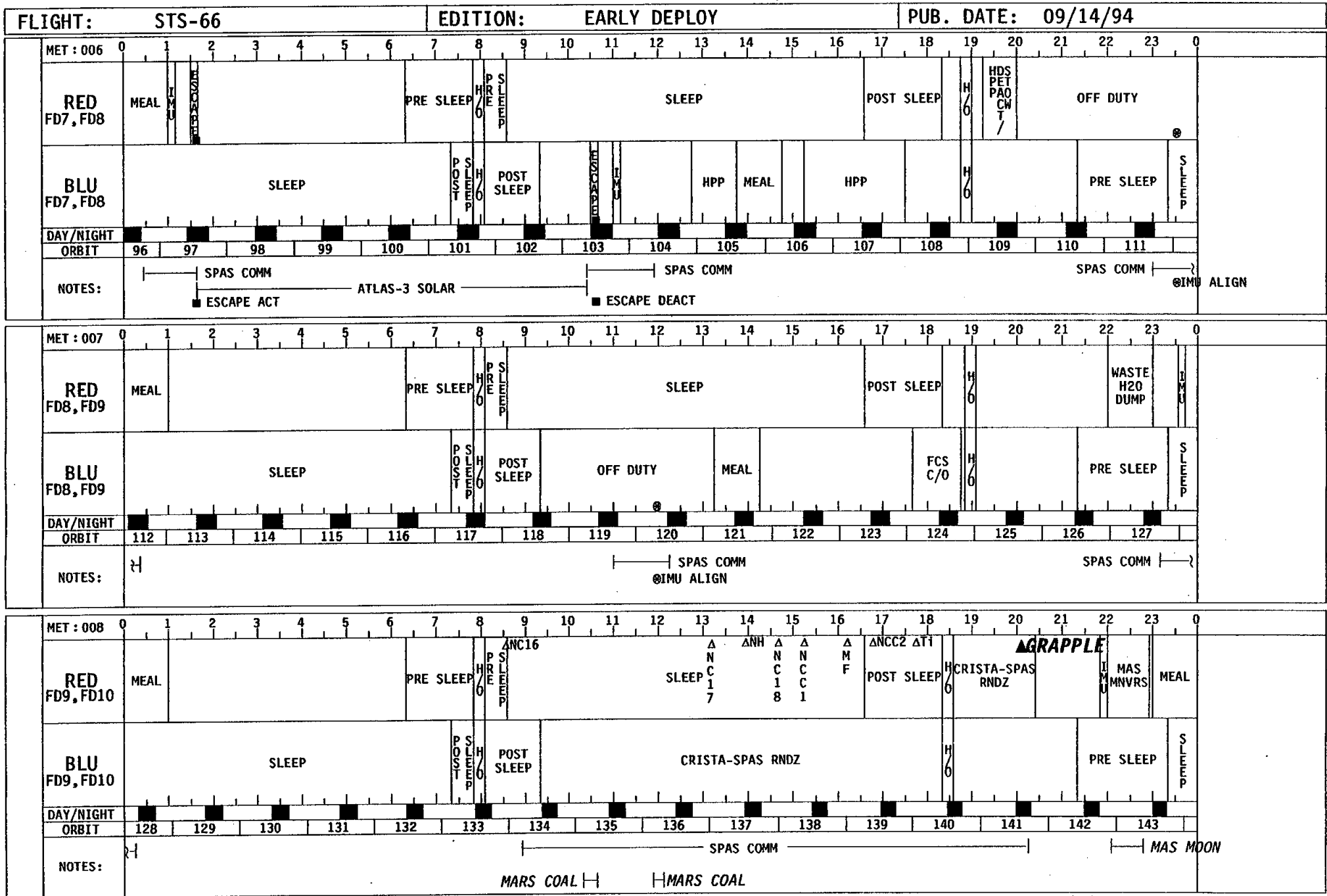
The CRISTA-SPAS grapple time is scheduled per the nominal timeline on Orbit 141, 8/20:09 MET.

Landing is at KSC, Orbit 174, landing MET 10/21:20; this landing is one rev later than the nominal landing time: MET 10/19:46. The one rev late landing opportunity is required to support a 1 hour deploy window. The landing time also provides the required sleep shifting for the crew. There are two EDW backup opportunities.

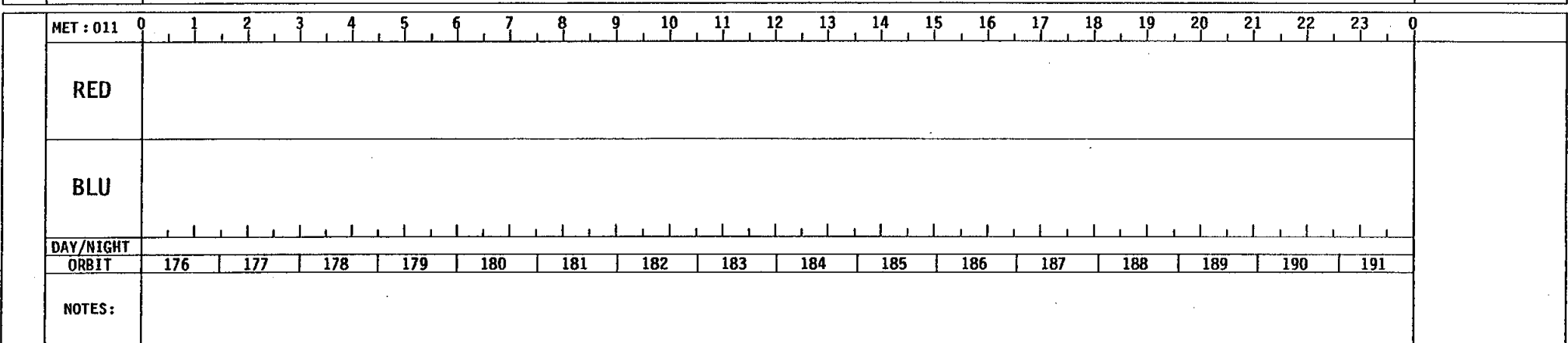
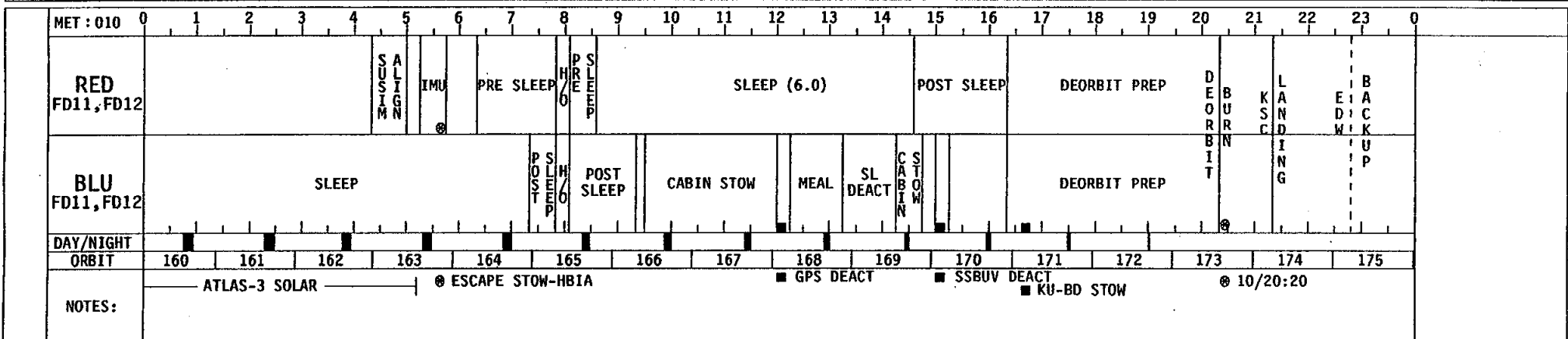
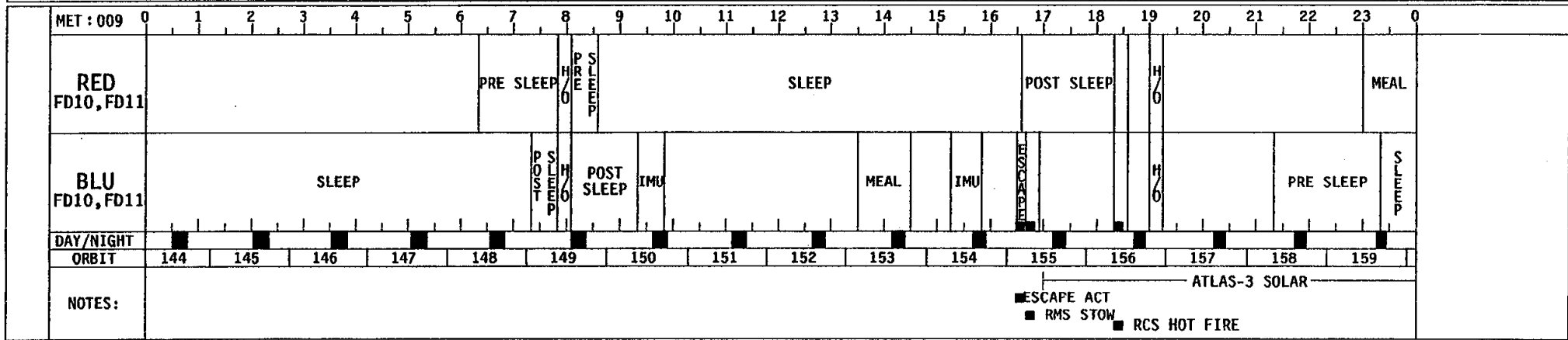


FLIGHT: STS-66 EDITION: EARLY DEPLOY PUB. DATE: 09/14/94





FLIGHT: STS-66 EDITION: EARLY DEPLOY PUB. DATE: 09/14/94



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GMT (D:H:M)		MET (D:H:M)		CDT (D:H:M)		FD/ DOY	BETA	MOON	HOUSTON DATE	FLIGHT	EDITION	PUB. DATE					
300:16:46 / 301:04:46		000:00:00 / 000:12:00		300:11:46 / 300:23:46		01/300 CDT	-27.4		OCTOBER 27, 1994	STS-66	EARLY DEPLOY	09/14/94					
CDT	:300	0	12	13	14	15	16	17	18	19	20	21	22	23	24		
FD	:001																
MET	:000																
RED		CDR															
		MS1	DIRECT LAUNCH														
		MS2	OMS-2														
		PLT															
BLUE		MS3															
		MS4															
		DAY/NIGHT ORBIT															
EARTH TRACE																	
TDRS																	
ATT		ASC - ZLV +YVV - BIAS -YLV -XVV - ZLV +YVV - ZLV -XVV - ZLV -XVV - DEPLOY - TGT TRK															
NOTES:		<p> ◎ ADV LOWER BODY RESTR TEST ▲ APU HTR DEACT ◎ -ZLV, -XVV ◎ DTO 700-7 PGSC CNCT ◎ H/O RED TO BLUE ◎ CABIN AIR MONITOR ▲ APU HTR RECONFIG ◎ REAL TIME NAV ◎ -ZLV, +YVV ◎ SPLY DUMP TERM ◎ SCALING MNVR ■ DTR RESET/SPEE DF ◎ -ZLV, -XVV ○ LAMP TEST </p> <p> TRANSITION TO EARLY DEPLOY TIMELINE AT 0/06:25 MET </p>															

GMT (D:H:M)	MET (D:H:M)	CDT (D:H:M)	FD/ DOY	BETA	MOON	HOUSTON DATE	FLIGHT	EDITION	PUB. DATE
301:04:46/ 301:16:46	000:12:00/ 001:00:00	300:23:46/ 301:11:46	82/300 CDT	-29.7		OCTOBER 27, 1994	STS-66	EARLY DEPLOY	09/14/94

CDT :300	0	CDT:301	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	MET:001
BLU FD :002	12		13		14		15		16		17		18		19		20		21	RED FD02	22		23				
MET :000																											

RED	CDR	PRE SLEEP	SLEEP										POST SLEEP	H/O
	MS1	PRE SLEEP	SLEEP										POST SLEEP	H/O
	MS2	PRE SLEEP	SLEEP										POST SLEEP	H/O

BLUE	PLT	PRE SLEEP	VTR PLBK	NCL MULT AXIS RCS BURN	PG WRP	SAMS ACT	IMU MNR	MEAL	ERG SETUP	EXERCISE	FILTER CLEANING	H/O	
	MS3	PSETUP	RMS PLB SURVEY	RMS PARK	DTO 668 STOW	REFERR	DTO 700-7 STOW	MEAL	PSS/ET TTE VUS OP 3	P/TV03 OPS STES	EXERCISE	H/O	MIR OPP
	MS4	ADPSA TALUC LINST ALGI SY M	P/TV06 OPS	PSS/EA TTM VUS OP 4	P/TV04 OPS SAMS		MEAL	ERG SETUP	STES VDA ACT	EXERCISE	H/O		

DAY/NIGHT	9	10	11	12	13	14	15	16
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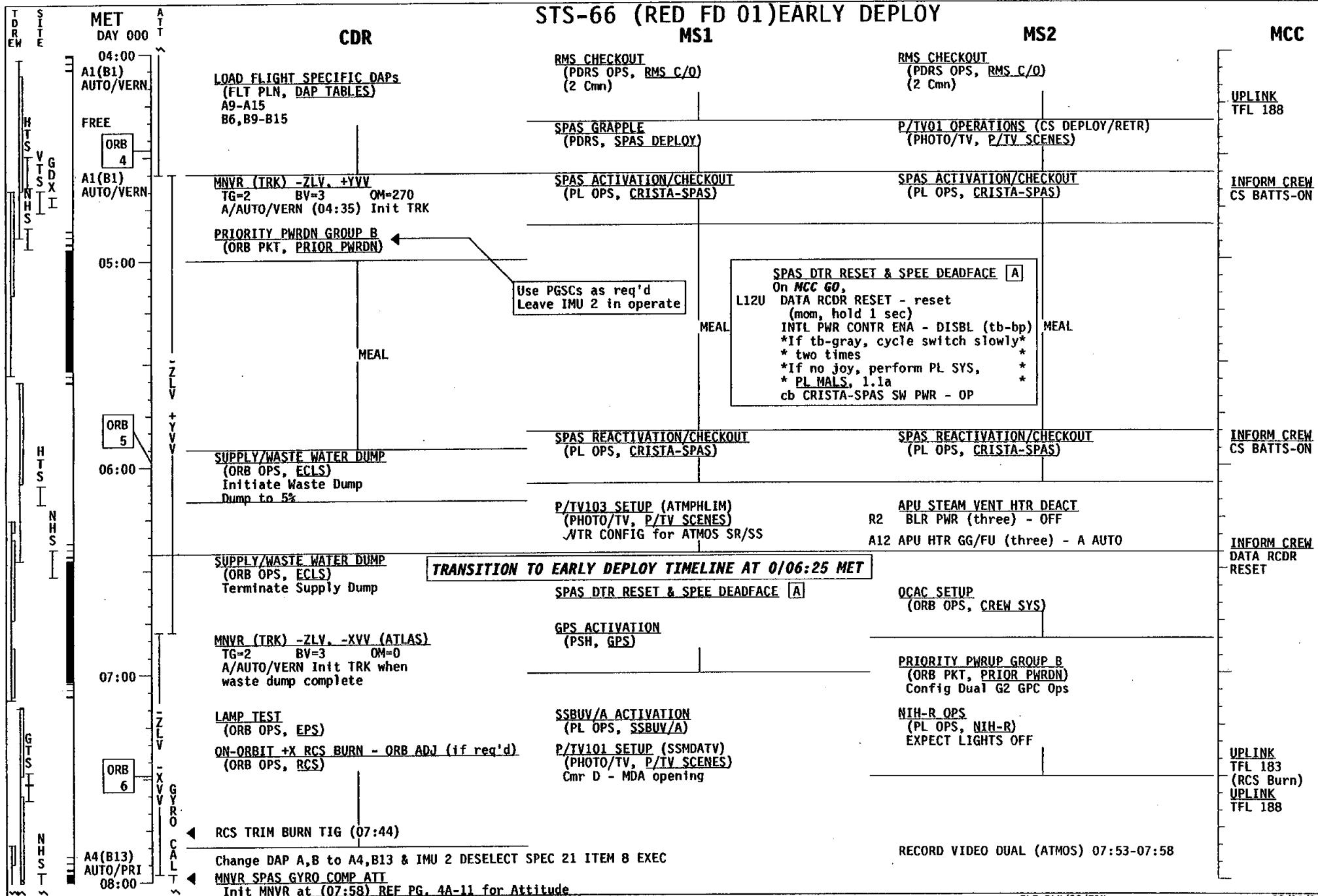


TDRS	E	W	TGT TRK	IMU/COAS	-ZLV -XV	ISPAS COMM
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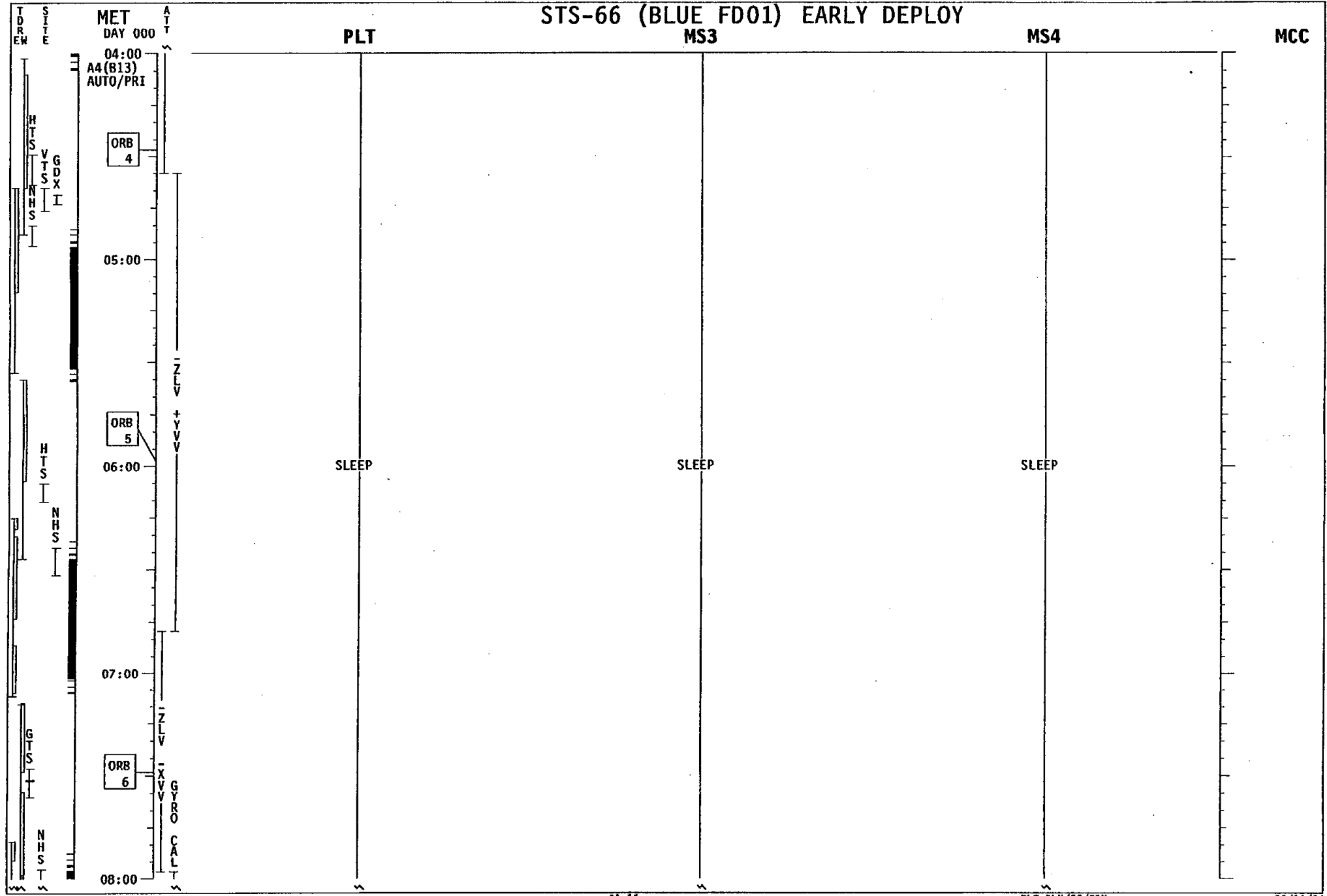
NOTES:

- ▶ DISABLE RNDZ NAV
- ◉ REAL TIME NAV
- ◉ -ZLV, -XV
- ▽ MCIU FLTR CHECK
- ▶ BLEED ORF CNFG
- ◉ CABIN TEMP SURVEY
- ◉ H/O BLUE TO RED
- TRANSITION TO RED FD2
- FLIGHT PLAN REVISION

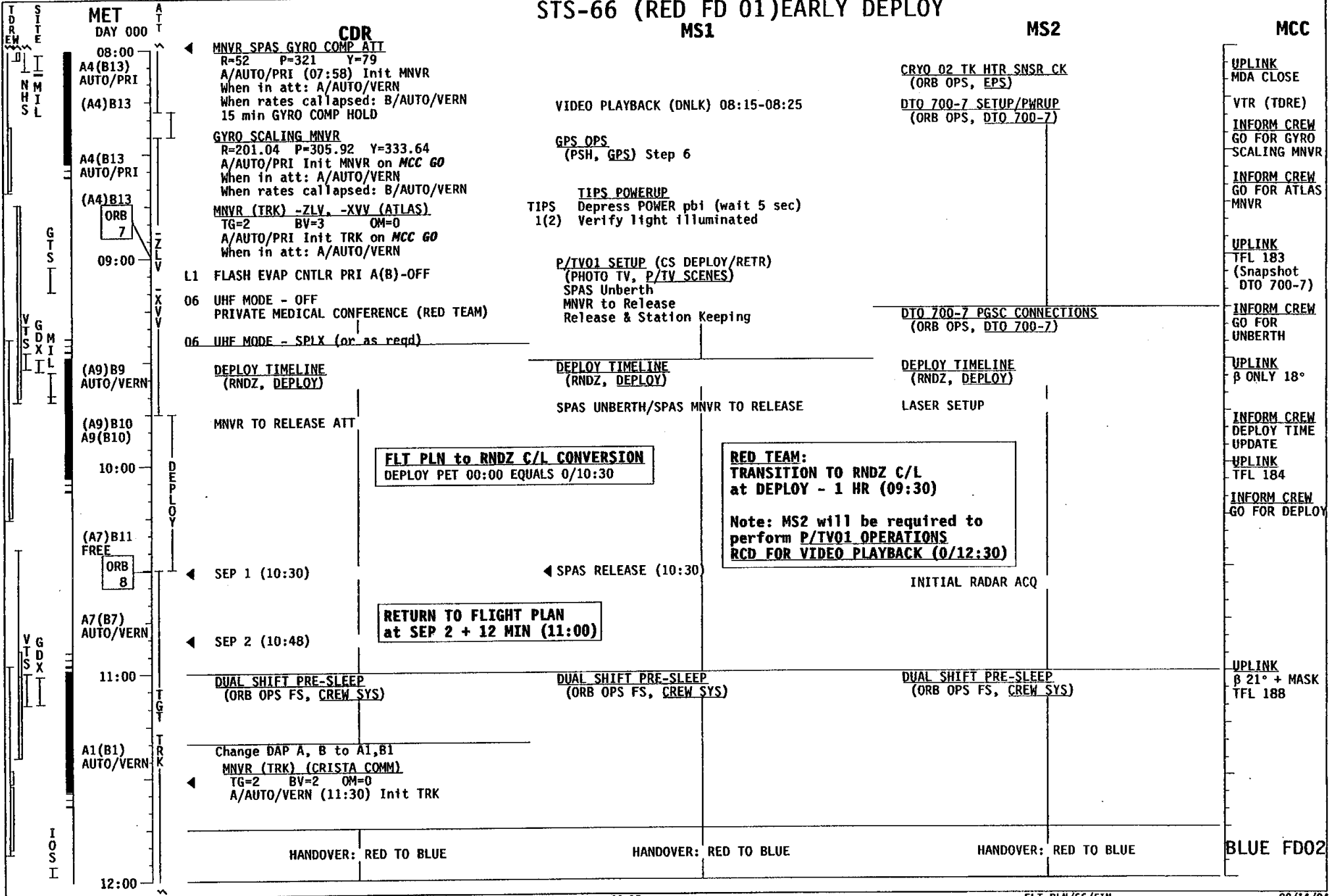
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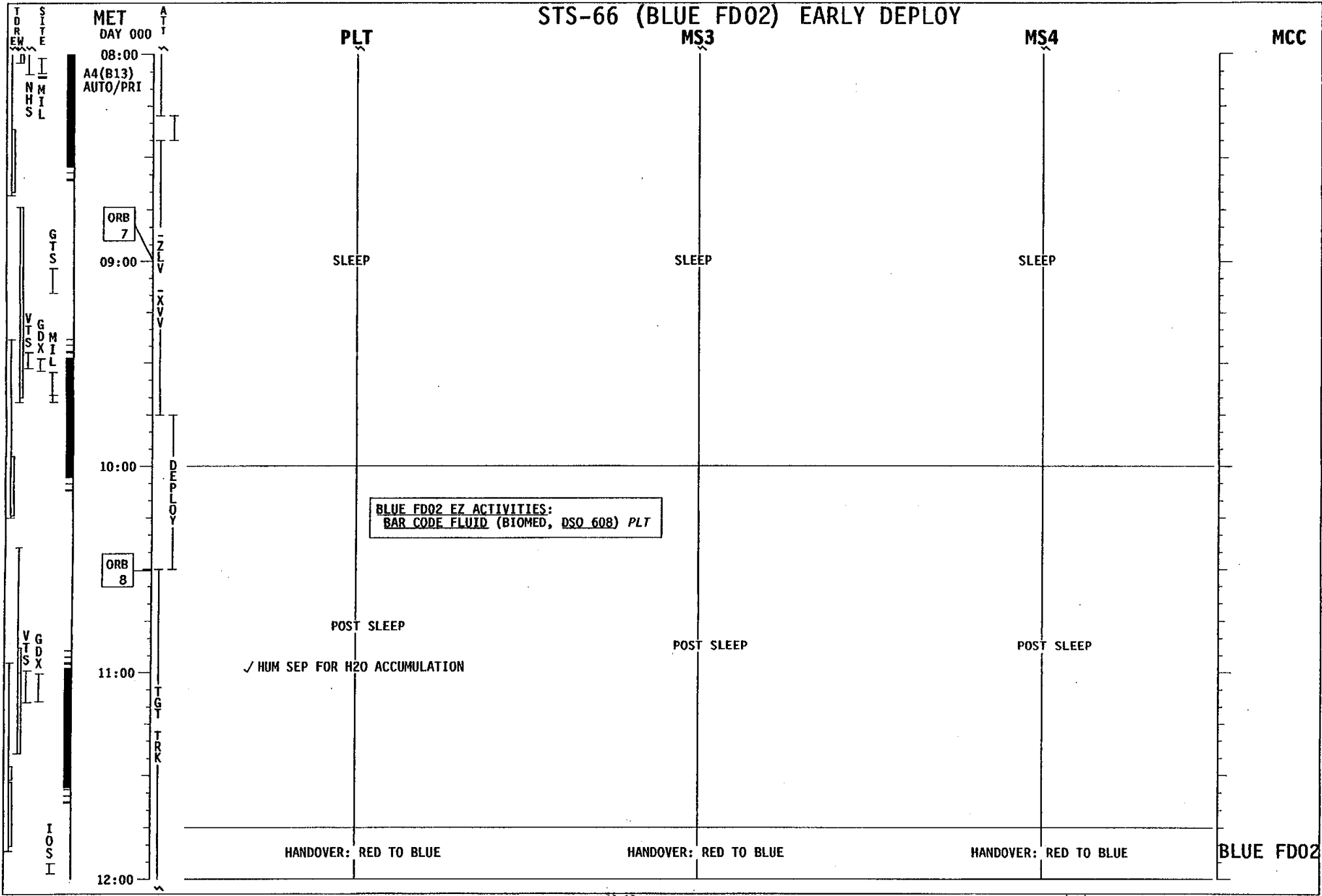
STS-66 (BLUE FD01) EARLY DEPLOY



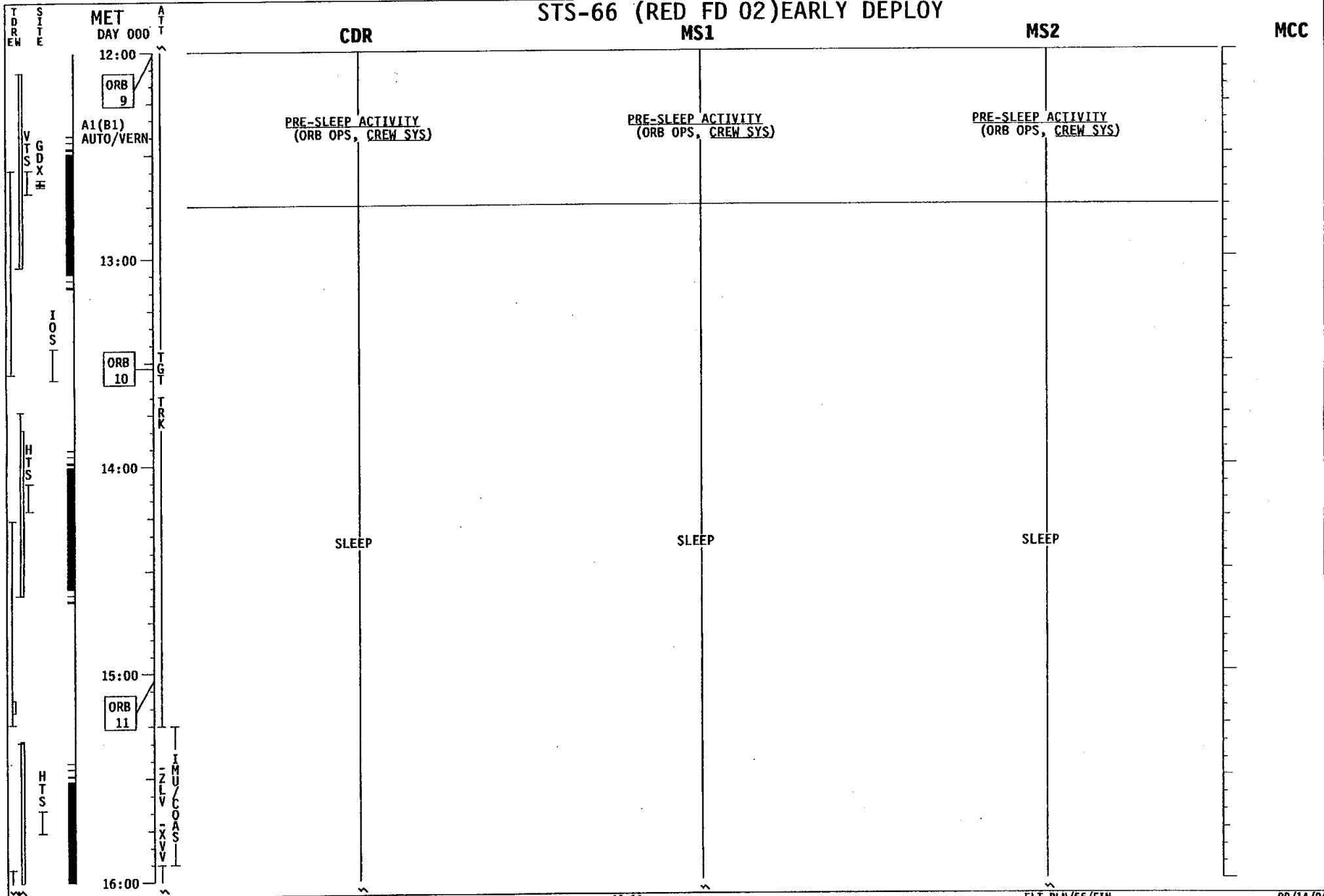
STS-66 (RED FD 01) EARLY DEPLOY



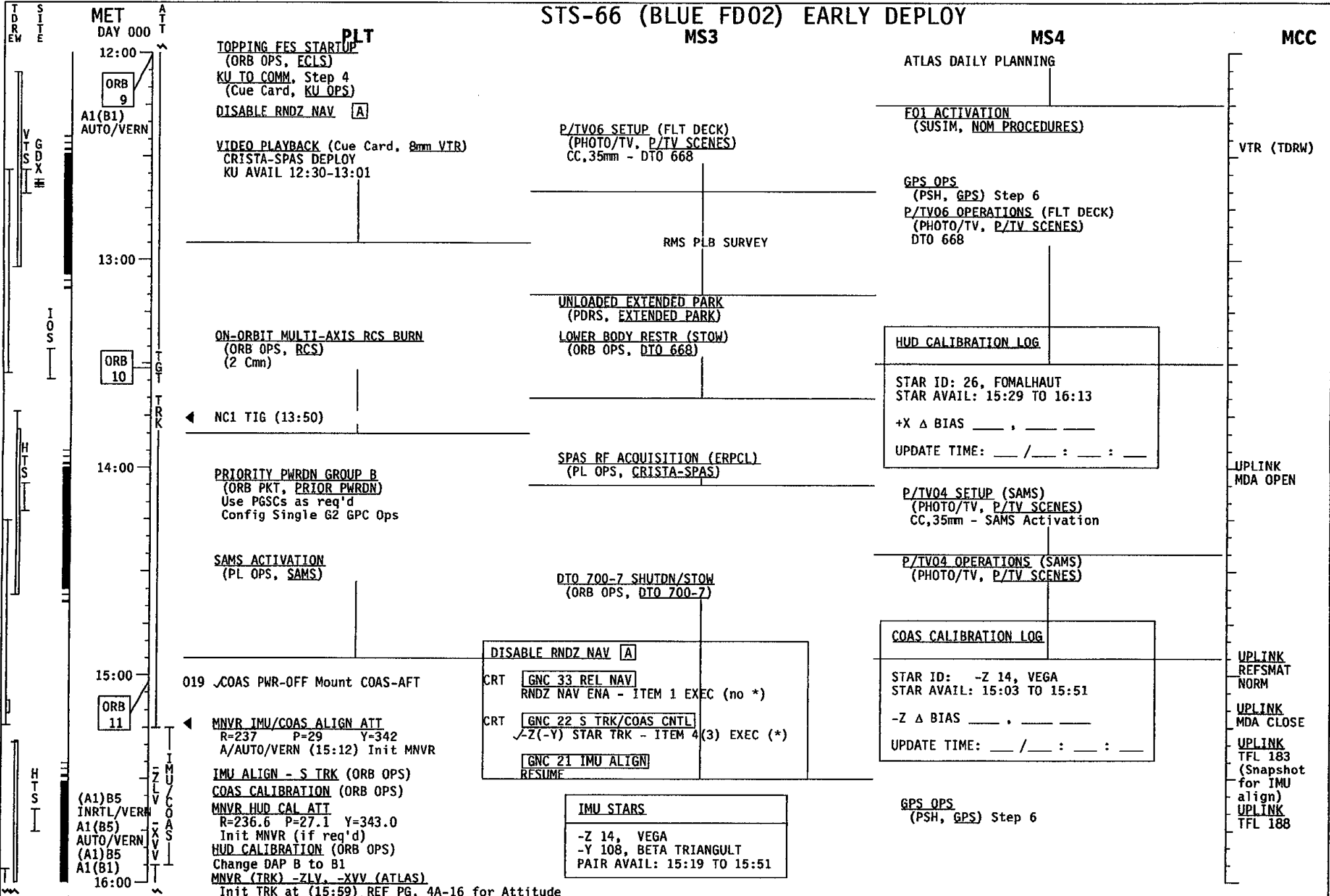
STS-66 (BLUE FD02) EARLY DEPLOY



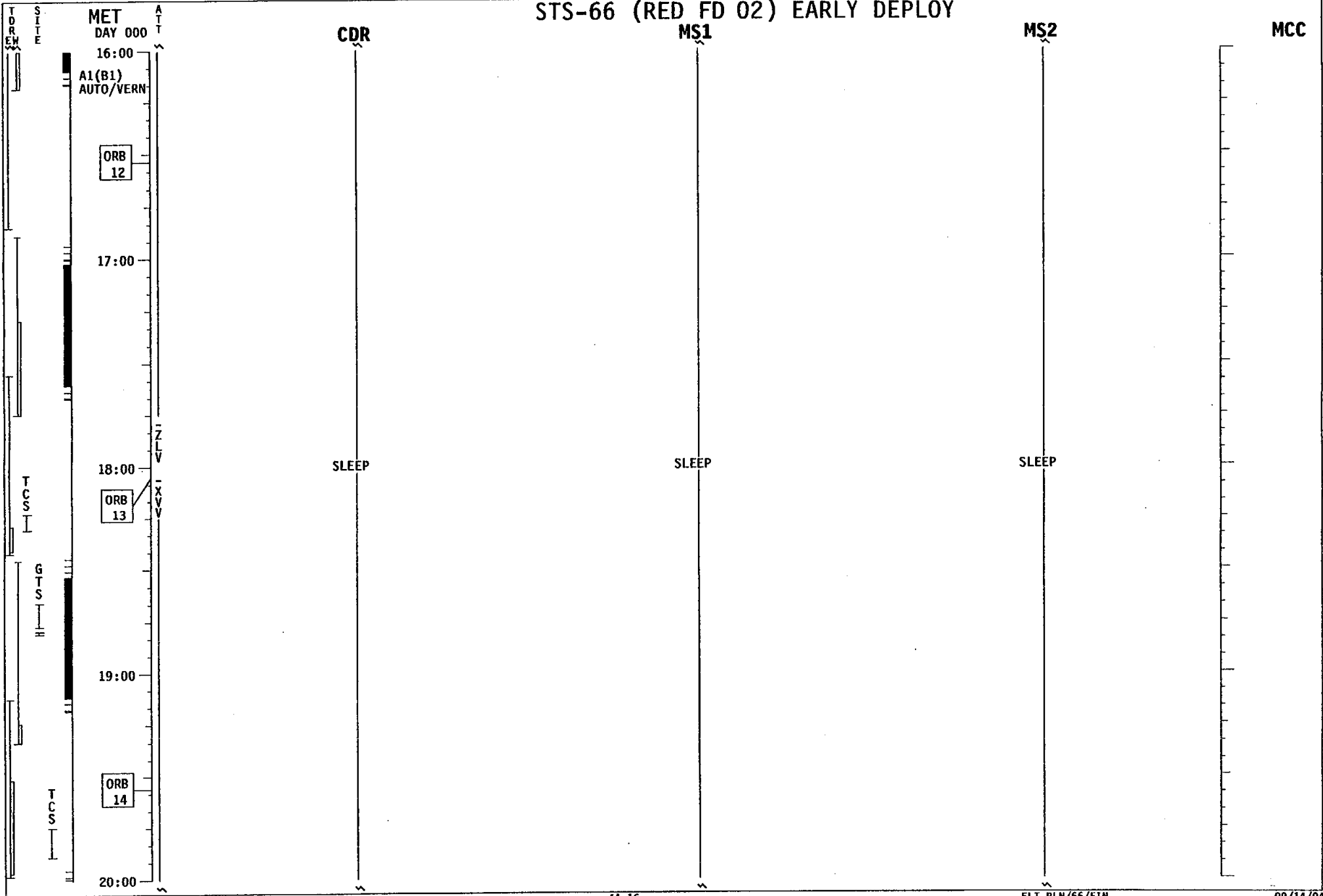
STS-66 (RED FD 02) EARLY DEPLOY



STS-66 (BLUE FD02) EARLY DEPLOY



STS-66 (RED FD 02) EARLY DEPLOY



STS-66 (BLUE FD02) EARLY DEPLOY

PLT

MS3

MS4

MCC

MET
DAY 000

◀ **MNVR (TRK) -ZLV, -XVV (ATLAS)**
 TG=2 BV=3 OM=0
 A/AUTO/VERN (15:59) Init TRK

UPLINK
MDA OPEN

16:00
A1(B1)
AUTO/VERN

ORB 12

17:00

18:00
ORB 13

19:00

20:00
ORB 14

MEAL

MEAL

MEAL

STL-A INITIALIZATION
(PL OPS, SIL-A)
Take 3 35mm photos

L17 Check MCIU filter screen

GPS OPS
(PSH, GPS) Step 6

ERGOMETER SETUP
(BIOMED, CYCLE ERG NOM OPS)

P/TV03 SETUP (PCG-STES)
(PHOTO/TV, P/TV SCENES)

ERGOMETER SETUP
(BIOMED, CYCLE ERG NOM OPS)

019 .COAS PWR - OFF Stow COAS

P/TV03 OPERATIONS (PCG-STES)
(PHOTO/TV, P/TV SCENES)
RCD FOR VIDEO PLAYBACK (1/07:45)

VDA ACTIVATION
(PL OPS, PCG-STES)

EXERCISE

Don Heart Watch Monitor (DSO 608)

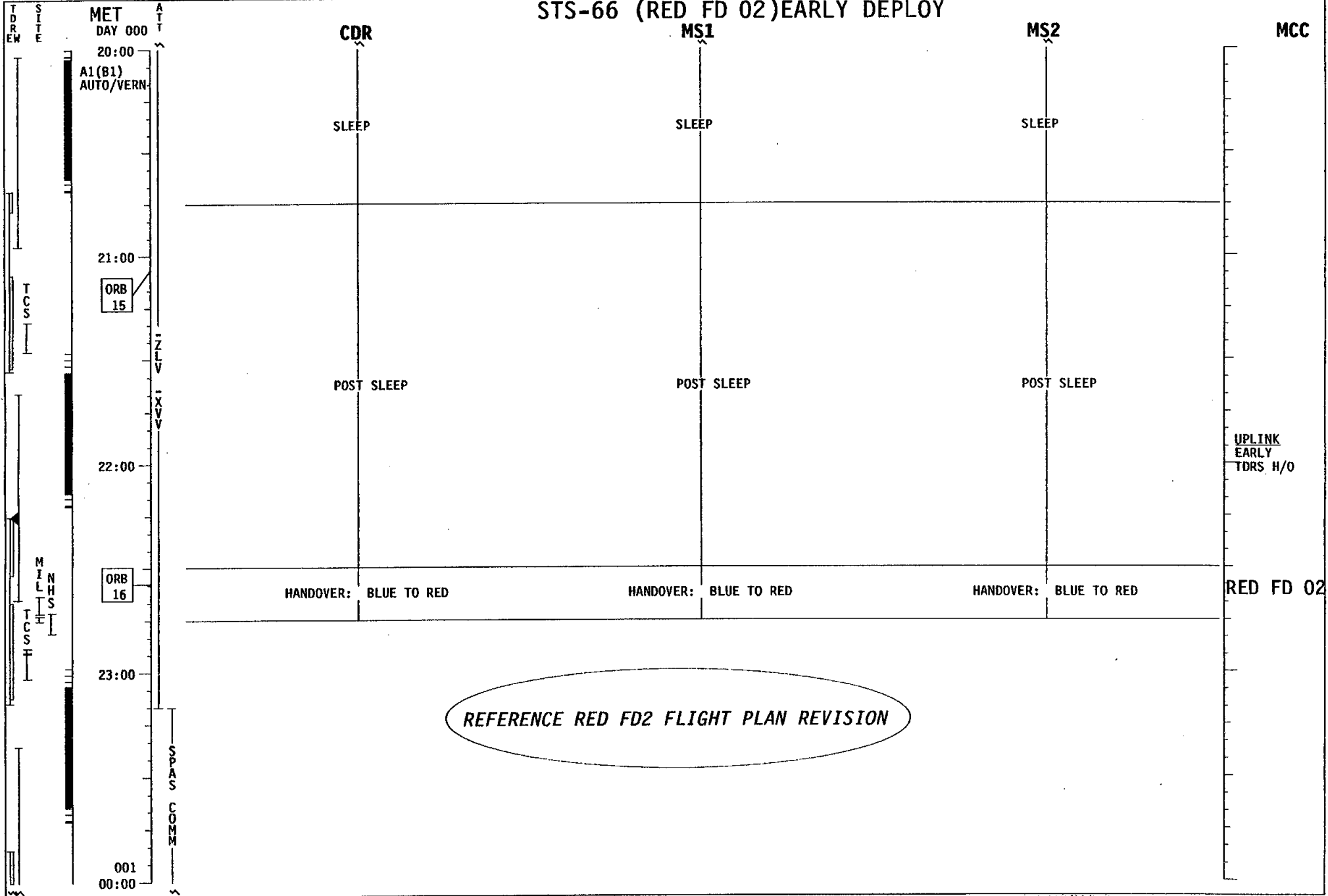
TDR EW SITE

TCS

GTS

TCS

STS-66 (RED FD 02) EARLY DEPLOY



TDRW
 SITE
 MET DAY 000
 20:00
 A7 (B7)
 AUTO/VERN
 TCS
 ZLV
 XVV
 MILHS
 TCSH
 SPAS
 COMM
 001
 00:00

STS-66 (BLUE FD02) EARLY DEPLOY

PLT

MS3

MS4

MCC

P/TV03 OPERATIONS (PCG-STES)
 (PHOTO/TV, P/TV SCENES)
 RCD FOR VIDEO PLAYBACK (1/07:45)

VDA ACTIVATION
 (PL OPS, PCG-STES)

TIPS POWERUP
 Depress POWER pbl (wait 5 sec)
 1(2) Verify light illuminated

FILTER CLEANING
 (IFM, SCHEDULED MAINTENANCE)

EXERCISE

21:00

ORB 15

BLEED ORIFICE CONFIG
 If O2 Bleed Orifice Assembly
 not installed
 M069M LEH O2 8 vlv - cl
 Insert O2 Bleed Orifice
 Assembly into LEH O2 8 QD
 LEH O2 8 vlv - op
 C7 LEH O2 SPLY 1,2 vlv - op

RECORD VIDEO DUAL (ATMOS) 21:29-21:34

PADM SETUP
 (ORB OPS, PGSC)
 USE RPOP PGSC

EXERCISE

Don Heart Watch Monitor (DSO 608)

22:00

SIL-A TEMPERATURES
 (PL OPS, SIL-A)

CABIN TEMP SURVEY
 (ORB OPS, DTO 664)
 PAYLOAD TEMP READINGS

ORB 16

HANDOVER: BLUE TO RED

HANDOVER: BLUE TO RED

HANDOVER: BLUE TO RED

RED FD 02

23:00

MIR AUDIO EVENT
 LIVE AUDIO REQ'D: 23:20-23:50

REFERENCE RED FD2 FLIGHT PLAN REVISION

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NOTCH FILTER (DTO 834)

The intent of this timeline is to schedule the entire Notch Filter (DTO 834) (2:00 hr) post SPAS grapple. The following is a list of assumptions used to create this timeline:

SPAS GRAPPLE occurs at MET 08/20:09. The crew will enter the Notch Filter detailed timeline at 08/20:15. The duration of each step of the Notch Filter procedure is assumed to be as follows:

Step #	Duration (hr:min)
1	00:05
2	00:30
3	00:30
4	00:25
5	00:25
6	00:05

The PAO EVENT scheduled at MET 08/22:08 is fixed and cannot be moved. Further, the orbiter must be in a good communication attitude prior to the start of the PAO EVENT.

The MAS MOON SCAN can be moved two revs later to approximately MET 09/01:11.

SPAS DEACTIVATION occurs prior to berth (after DTO completion).

SPAS BERTH will occur as soon as possible after the Notch Filter (DTO 834) activities are performed.

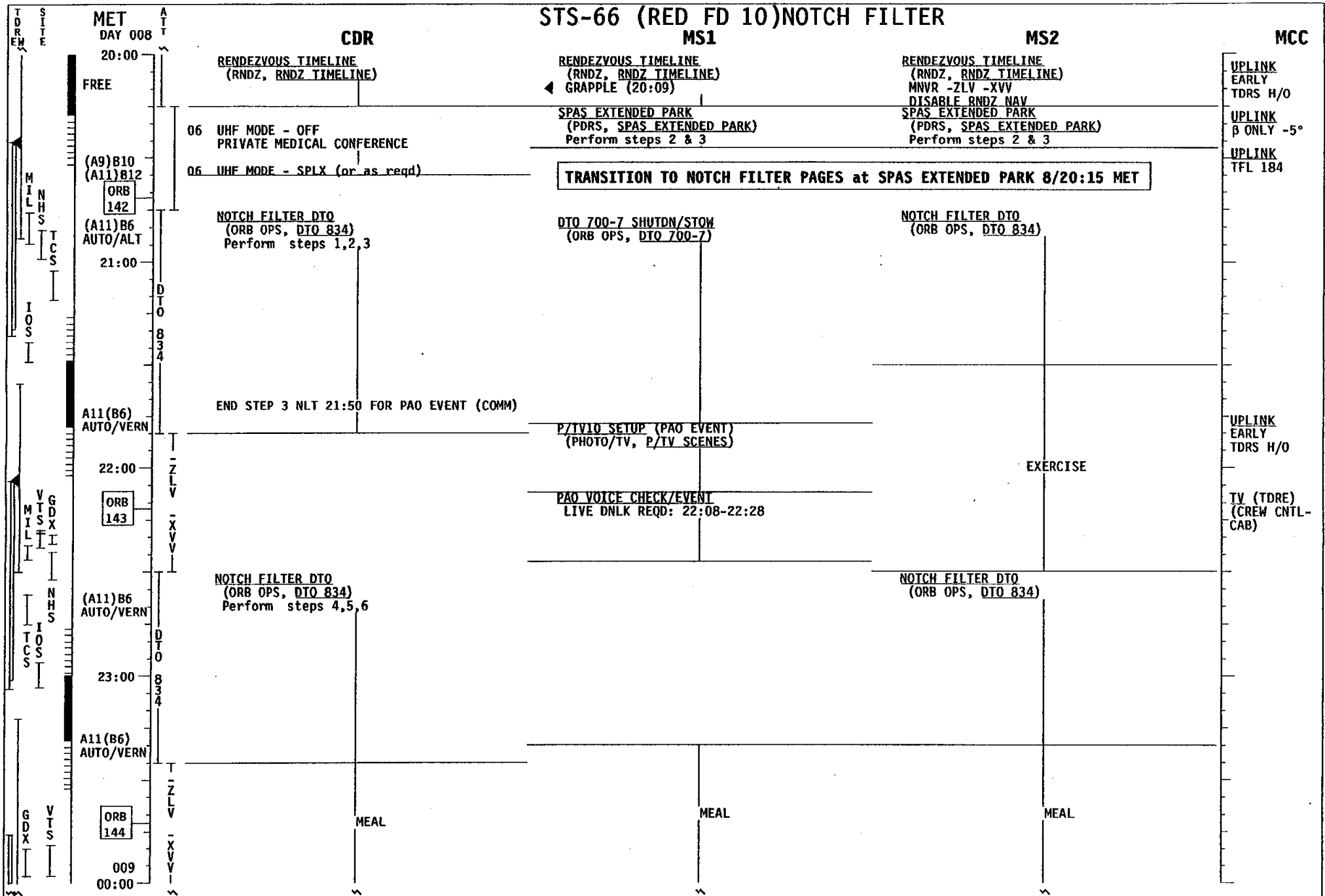
An IMU alignment can be performed during the MAS Moon Scan sequence.

The crew transitions back to the nominal timeline at 09/05:15 MET.

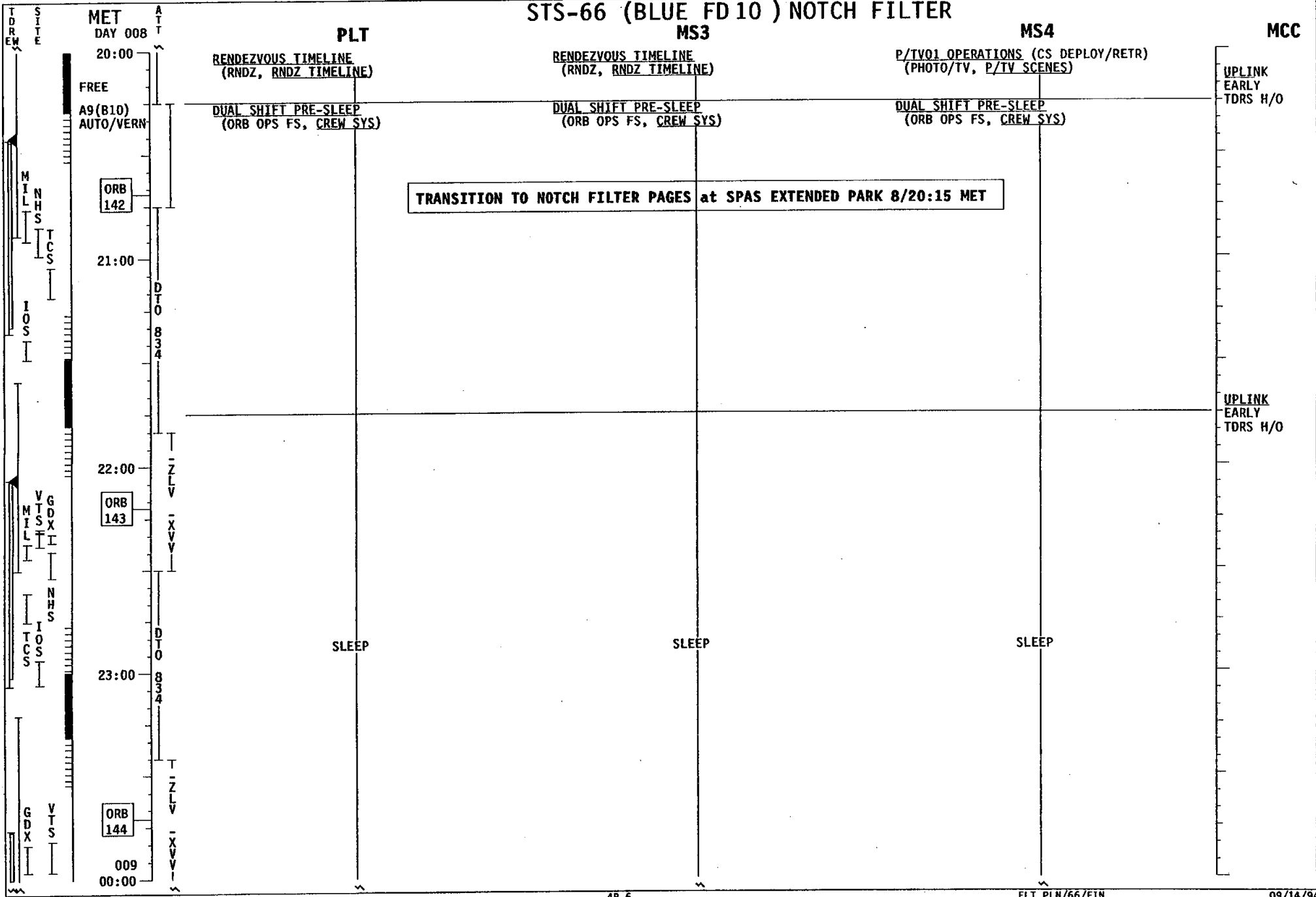
GMT (D:H:M)		MET (D:H:M)		CST (D:H:M)		FD/ DOY	BETA	MOON	HOUSTON DATE	FLIGHT	EDITION	PUB. DATE				
309:04:46/ 309:16:46		008:12:00/ 009:00:00		308:22:46/ 309:10:46		B10/308 CST	-66.0	●	NOVEMBER 4, 1994	STS-66	NOTCH FILTER	09/14/94				
CST	:308	23	0	CST:309	1	2	3	4	5	6	7	8	9	10	0	MET:009
BLU FD	:010	12	13	14	15	16	17	18	19	20	21	22	23			
MET	:008															
RED	CDR	SLEEP		DSO 493	POST SLEEP		H/O	SPAS RETRIEVE			CRONF MED	DTO 834 Steps 1,2,3		DTO 834 Steps 4,5,6		MEAL
	MS1	SLEEP		DSO 493	POST SLEEP		H/O	SPAS RETRIEVE			SPARSK EXT	DTO 700-7 STOW		PSETUP P/TV01	PAVENT	MEAL
	MS2	SLEEP		DSO 493	POST SLEEP		H/O	DSTOP 668	TPWPRSDN	SPAS RETRIEVE			SPARSK EXT	DTO 834	EXERCISE	DTO 834
BLUE	PLT	NC17▲ NHA NC18▲ NCC▲		MF▲ NCC▲		T1▲			ACRAPPLE			SPAS RETRIEVE		PRE SLEEP	SLEEP	
	MS3	SPAS RETRIEVE		MEAL	SPAS RETRIEVE			H/O	SPAS RETRIEVE			PRE SLEEP		SLEEP		
	MS4	VTR OPS	PSETUP P/TV01	MEAL	TPWPRSF	H/O			SRETREVE	PSETUP P/TV01	P/TV01 OPS CS			PRE SLEEP		SLEEP
DAY/NIGHT	136		137		138		139		140		141		142		143	
EARTH TRACE																
TDRS																
ATT	NC17		SPAS RNDZ NC18		SPAS RNDZ		IMF	SPAS RNDZ		IT1	SPAS RNDZ -ZLV -XVV		DTO 834 -ZLV -XVV		DTO 834 -ZLV -XVV	
NOTES:	ⓂMICR CAPT DEVICE				ⓂMONITOR LATENT VIRUS REACT				ⓂH/O BLUE TO RED				ⓂREAL TIME NAV			
					▲ MCIU FLTR CHECK											
					ⓂADV LOWER BODY RESTR TEST											
	<p style="text-align: right;">TRANSITION TO NOTCH FILTER TIMELINE AT 8/20:15</p>															

GMT (D:H:M)		MET (D:H:M)		CST (D:H:M)		FD/ DOY	BETA	MOON	HOUSTON DATE	FLIGHT	EDITION	PUB. DATE									
309:16:46 / 310:04:46		009:00:00 / 009:12:00		309:10:46 / 309:22:46		R10/309 CST	-67.8	●	NOVEMBER 5, 1994	STS-66	NOTCH FILTER	09/14/94									
CST	:309	0	11	12	13	14	15	16	17	18	19	20	21	22	12						
RED FD	:010								BLU	FD11	7										
MET	:009																				
RED	CDR	MEAL		MNVTOR AUTOR MNVTR -ZLVR MNVTR		DTO 683		FILTER CLEANING		PRE SLEEP	H/O	PRE SLEEP		SLEEP							
	MS1	MEAL	DEBACT SPEARTH	RMS PARK		DTO 683	ADP TAL LNG SY		P/TV100 OPS MAS		PRE SLEEP	H/O	PRE SLEEP		SLEEP						
	MS2	MEAL	PO/TS VOIS	RMS PARK	DTO 668 STOM	PS ADT MUP	PG WRP DB OWN	VIEW -C COS	TP IN PR SU P	NO YH -R		PRE SLEEP	H/O	PRE SLEEP		SLEEP					
BLUE	PLT					SLEEP				DSO 493	DSO 612	H/O	POST SLEEP	EXERCISE		VTR OPS	VTR OPS	SAMS CK			
	MS3					SLEEP				DSO 493	POST SLEEP	H/O	POST SLEEP		DTO 668	TP ZW PR SDN	VTR OPS	VTR OPS	PSM /A TUH VR SI 93		
	MS4					SLEEP				DSO 493	POST SLEEP	H/O	POST SLEEP		VTR OPS	SADP LTAL ELIN EALG PSY	VIEW -C COS	UE SV E RNT	P SET T V O P 6	P/TV06 OPS	PSS /EA TTM VUS OP 4
DAY/NIGHT	DAY		NIGHT		DAY		NIGHT		DAY		NIGHT		DAY		NIGHT		DAY				
ORBIT	144		145		146		147		148		149		150		151						
EARTH TRACE																					
TDRS	E W																				
ATT	-ZLV -XVV		-MAS MOON		-ZLV +XVV				IIMU				-ZLV +XVV								
NOTES:	ADV LOWER BODY RESTR TEST				CABIN TEMP SURVEY				MONITOR LATENT VIRUS REACT				-ZLV, +XVV				SAMS DISK				
	INTERLIMB EXERCISE SESSION								ENERGY UTILIZATION				CABIN TEMP SURVEY				P/TV93 OPS MAHRSI				
	-ZLV, +XVV								H/O RED TO BLUE												
	CABIN AIR MONITOR								TRANSITION BACK TO NOMINAL												
									TIMELINE AT 9/05:15 MET												

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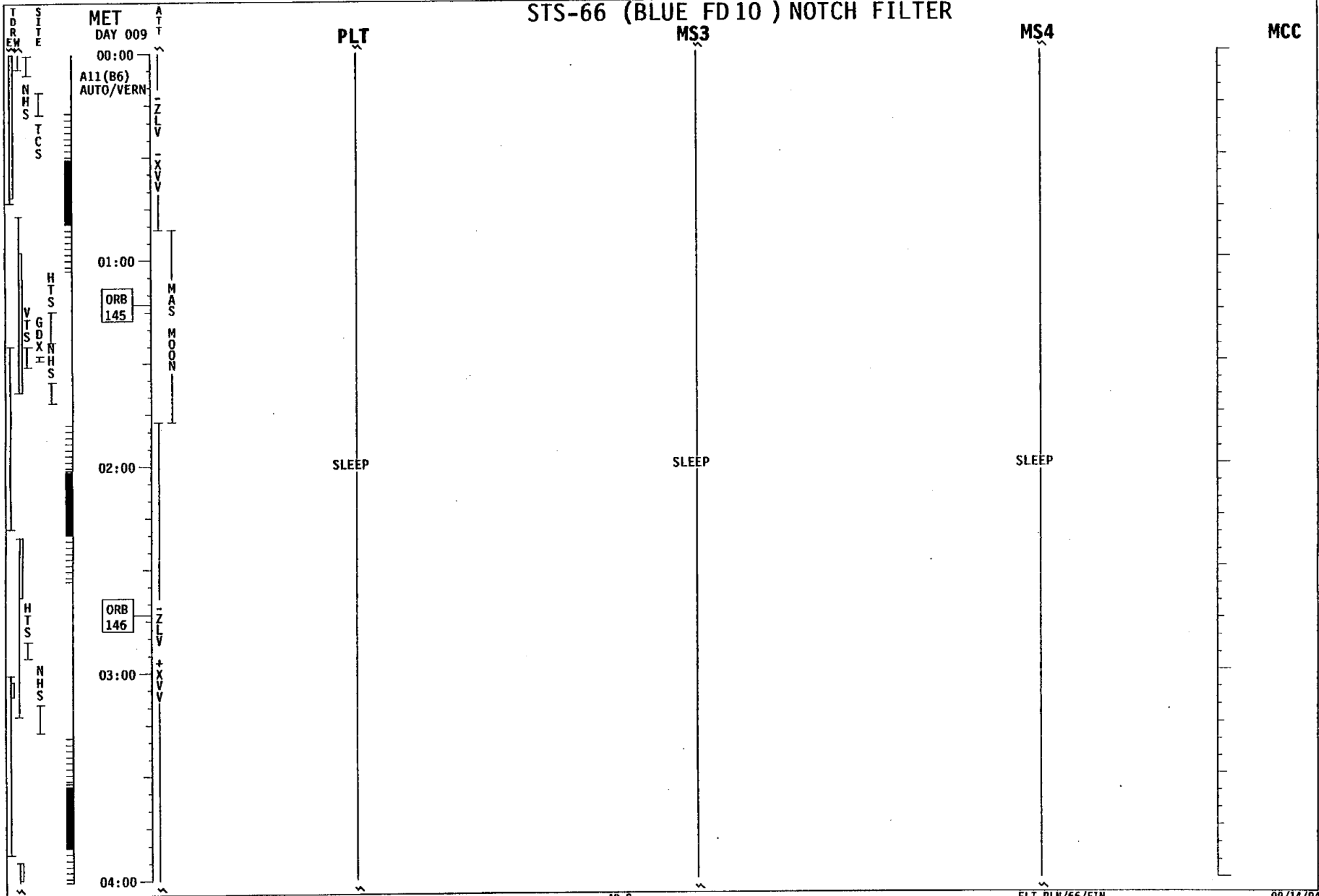
STS-66 (BLUE FD 10) NOTCH FILTER



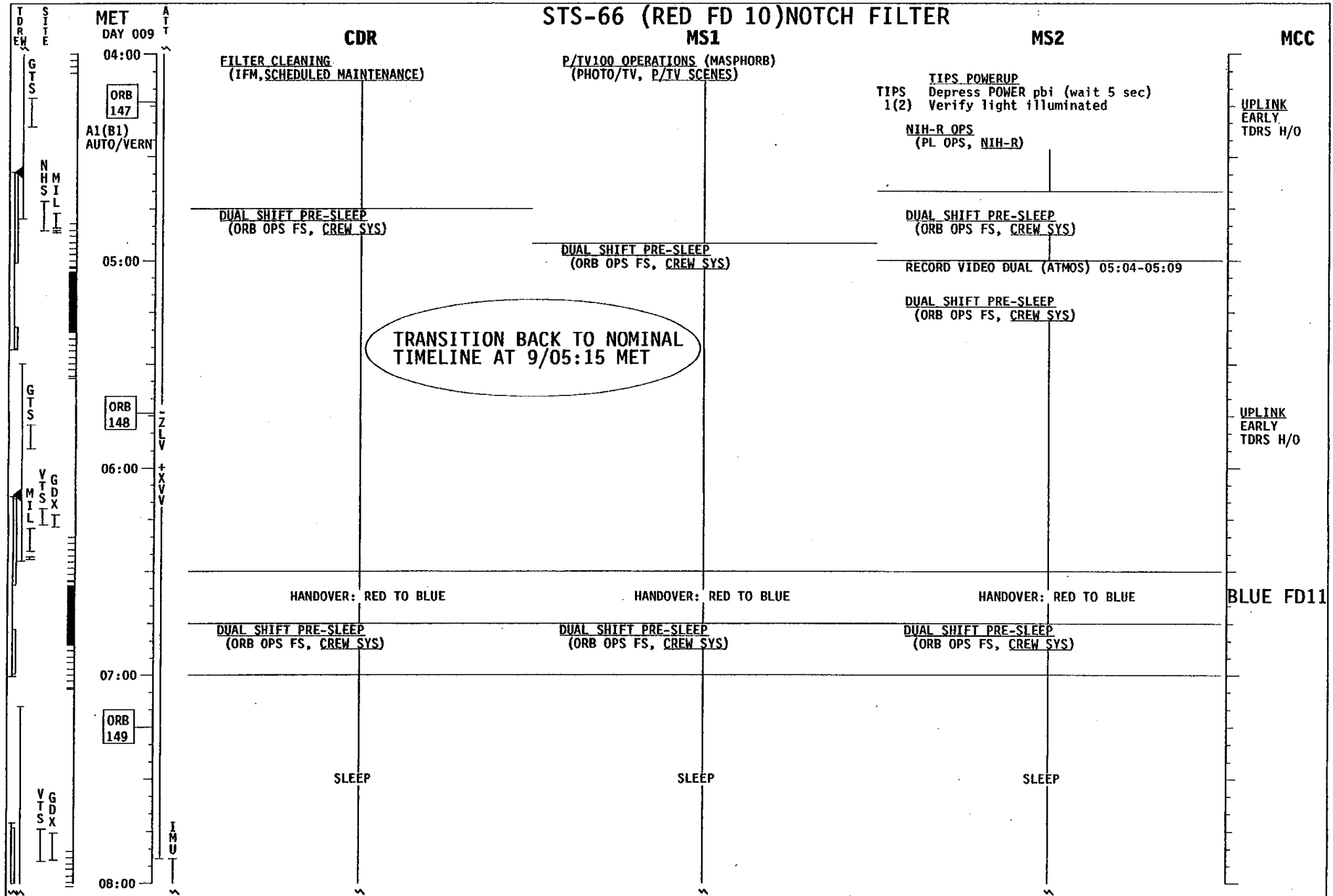
STS-66 (RED FD 10) NOTCH FILTER

TIME	CDR	MS1	MS2	MCC
00:00	MEAL	MEAL	MEAL	INFORM CREW GO FOR SPAS DEACT
(A9)B10		SPAS DEACTIVATION (PL OPS, CRISTA-SPAS)	P/TV01 SETUP (CS DEPLOY/RETR) (PHOTO TV, P/TV SCENES) SPAS Berth	UPLINK TFL 192
(A9)B9		SPAS BERTH (PDRS, SPAS RETRIEVE)	P/TV01 OPERATIONS (CS DEPLOY/RETR) (PHOTO/TV, P/TV SCENES) SPAS Berth KU AVAILABLE TDRS EAST 00:30-00:41 TDRS WEST 00:58-01:38	TV (TDRE/W) (CREW CNTL- CAB)
FREE				UPLINK β 21° + MASK
A13(B1) AUTO/VERN	Change DAP A,B to A13,B1 MNVR MAS MOON R=25.6 P=37.1 Y=323.1 B/AUTO/VERN (00:54) Init MNVR	UNLOADED EXTENDED PARK (PDRS, EXTENDED PARK)	UNLOADED EXTENDED PARK (PDRS, EXTENDED PARK)	
01:00			LOWER BODY RESTR (STOW) (ORB OPS, DTO 668)	
ORB 145 A13(B1) AUTO/VERN	MNVR MAS MOON R=24.14 P=34.55 Y=327.63 A/AUTO/VERN (01:12) Init MNVR			
	MNVR MAS MOON R=25.6 P=37.1 Y=323.1 A/AUTO/VERN (01:30) Init MNVR		PADM SETUP (ORB OPS, PGSC) USE RPOP PGSC	PADM UPLINK SPOC UPDATES FAMILY MAIL PADM DNLINK FAMILY MAIL
A1(B1) AUTO/VERN	Change DAP A to A1 MNVR (TRK) -ZLV, +XVV (ATLAS) TG=2 BV=3 OM=180 A/AUTO/VERN (01:47) Init TRK	INTERLIMB EXERCISE SESSION (BIOMED, DTO 683)		
02:00	CABIN AIR MONITORING (ORB OPS, DTO 623) Step 2		TOPPING FES STARTUP (ORB OPS, ECLS)	
		ATLAS DAILY PLANNING	PRIORITY PWRDN GROUP B (ORB PKT, PRIOR PWRDN) Use PGSCs as req'd Leave IMU2 in operate Config Single G2 GPC Ops	
ORB 146			TES-COS VIEWING (PL OPS, PCG-TES)	
03:00	INTERLIMB EXERCISE SESSION (BIOMED, DTO 683)			
		STL-A TEMPERATURES (PL OPS, STL-A)		
		P/TV100 SETUP (MASPHORB) (PHOTO/TV, P/TV SCENES) 70mm - Document one orbit		
	CABIN TEMP SURVEY (ORB OPS, DTO 664) ORBITER TEMP READINGS			
04:00		P/TV100 OPERATIONS (MASPHORB) (PHOTO/TV, P/TV SCENES)		

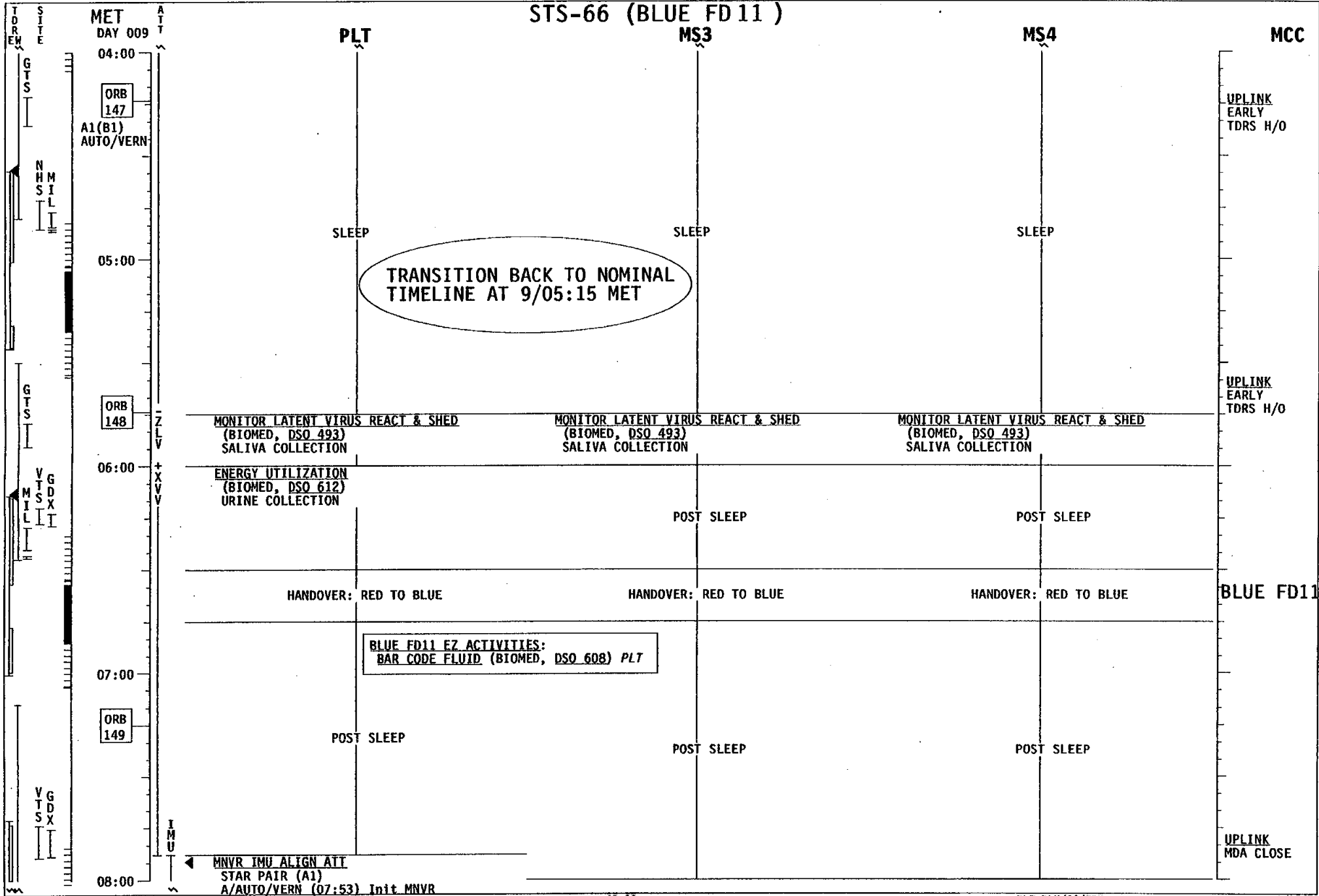
STS-66 (BLUE FD 10) NOTCH FILTER



STS-66 (RED FD 10) NOTCH FILTER



STS-66 (BLUE FD11)



STS-66 DAP TABLES

**DAP
TABLES**

**DAP
TABLES**

STS-66 DAP A - GENERIC

	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	0.2000
ATT DB	11 (51)	5.00	1.00	1.00	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)	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
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)	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.05
ALT									
RATE DB	18 (58)	0.200	0.200	0.200	0.200	0.070	0.070	0.200	0.200
JET OPT	19 (59)	ALL	ALL	ALL	ALL	ALL	TAIL	ALL	ALL
# JETS	20 (60)	2	2	2	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	0.2000	0.2000	0.2000	0.2000
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	0.010
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 ATLAS	PTC	GG	PRE/POST DEPLOY	LOSS OF VERN (NOSE & TAIL)	LOSS OF VERN (TAIL ONLY)	RNDZ	PROX OPS

5-2

FLT PLN/66/FIN

STS-66 DAP A - FLIGHT SPECIFIC

	ITEM #	A9	A10	A11	A12	A13	A14	A15
PRI								
ROT RATE	10 (50)	0.1000	0.1000	0.1000	0.2140	0.0500	0.0500	0.0500
ATT DB	11 (51)	3.00	5.00	5.00	3.00	0.30	0.30	0.30
RATE DB	12 (52)	0.20	0.20	0.20	0.20	0.20	0.20	0.20
ROT PLS	13 (53)	0.04	0.04	0.04	0.10	0.10	0.04	0.10
COMP	14 (54)	.000	.000	.000	.000	.000	.000	.000
P OPTION	15 (55)	TAIL	TAIL	TAIL	ALL	ALL	ALL	ALL
Y OPTION	16 (56)	TAIL	TAIL	TAIL	ALL	ALL	ALL	ALL
TRAN PLS	17 (57)	0.10	0.10	0.10	0.10	0.10	0.10	0.10
ALT								
RATE DB	18 (58)	0.100	0.100	0.100	0.070	0.070	0.070	0.070
JET OPT	19 (59)	TAIL	TAIL	TAIL	TAIL	TAIL	TAIL	TAIL
# JETS	20 (60)	2	2	2	1	1	1	1
ON TIME	21 (61)	0.08	0.08	0.08	0.08	0.08	0.08	0.08
DELAY	22 (62)	8.10	9.00	8.10	0.00	0.00	0.00	0.00
VERN	2							
ROT RATE	3 (63)	0.2000	0.2000	0.2000	0.2140	0.0050	0.0080	0.0300
ATT DB	24 (64)	2.000	2.000	1.000	2.000	0.100	0.033	0.100
RATE DB	25 (65)	.040	.040	.020	.020	.010	.010	.010
ROT PLS	26 (66)	0.010	0.010	0.010	0.010	0.010	0.002	0.010
COMP	27 (67)	.000	.000	.000	.000	.000	.000	.000
CNTL ACC	28 (68)	2	2	3	0	0	0	0
PURPOSE		NOM REL SJ REL NOM CPT	SNGL JNT CAPTURE	UNLOADED EXTEND PARK	SSBUV ROTORS	MAS MOON SCAN	SUSIM	SOLCON

Note: **BOLD/ITALICS** = not l-Loaded

STS-66 DAP B - GENERIC

	ITEM #	B1	B2	B3	B4	B5	B7	B8
PRI								
ROT RATE	30 (50)	0.5000	0.2000	0.2000	0.2000	0.2000	0.5000	0.2000
ATT DB	31 (51)	3.00	3.00	3.00	0.30	3.00	2.00	2.00
RATE DB	32 (52)	0.20	0.20	0.20	0.20	0.20	0.20	0.20
ROT PLS	33 (53)	0.04	0.04	0.04	0.04	0.04	0.04	0.04
COMP	34 (54)	.000	.000	.000	.000	.000	.000	.000
P OPTION	35 (55)	ALL	TAIL	ALL	TAIL	TAIL	ALL	ALL
Y OPTION	36 (56)	ALL	TAIL	ALL	TAIL	TAIL	ALL	ALL
TRAN PLS	37 (57)	0.01	0.02	0.02	0.02	0.02	0.05	0.01
ALT								
RATE DB	38 (58)	0.200	0.070	0.070	0.200	0.200	0.200	0.200
JET OPT	39 (59)	ALL	TAIL	ALL	ALL	ALL	ALL	ALL
# JETS	40 (60)	2	1	1	2	2	2	2
ON TIME	41 (61)	0.08	0.08	0.08	0.08	0.08	0.08	0.08
DELAY	42 (62)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VERN								
ROT RATE	43 (63)	0.2000	0.2000	0.2000	0.0080	0.0160	0.2000	0.2000
ATT DB	44 (64)	1.000	1.000	1.000	0.100	0.033	1.000	1.000
RATE DB	45 (65)	.020	.020	.020	.010	.020	.020	.020
ROT PLS	46 (66)	0.002	0.002	0.002	0.002	0.002	0.002	0.002
COMP	47 (67)	.000	.000	.000	.000	.000	.000	.000
CNTL ACC	48 (68)	0	0	0	0	0	0	0
PURPOSE		NOM OMS & RCS BURNS	LOSS OF VERN (TAIL ONLY)	LOSS OF VERN (NOSE & TAIL)	SSUS DEPLOY	COAS CAL	RNDZ	PROX OPS

5-4

FLT PLN/66/FIN

STS-66 DAP B - FLIGHT SPECIFIC

	ITEM #	B6	B9	B10	B11	B12	B13	B14	B15
PRI									
ROT RATE	30 (50)	0.1000	0.1000	0.1000	0.0500	0.1000	0.2000	0.0500	0.0500
ATT DB	31 (51)	3.00	5.00	5.00	1.00	5.00	1.00	1.00	0.30
RATE DB	32 (52)	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
ROT PLS	33 (53)	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
COMP	34 (54)	.000	.000	.000	.000	.000	.000	.000	.000
P OPTION	35 (55)	ALL	TAIL	TAIL	TAIL	TAIL	ALL	ALL	ALL
Y OPTION	36 (56)	ALL	TAIL	TAIL	TAIL	TAIL	ALL	ALL	ALL
TRAN PLS	37 (57)	0.02	0.10	0.10	0.10	0.10	0.02	0.02	0.02
ALT									
RATE DB	38 (58)	0.100	0.100	0.100	0.100	0.100	0.070	0.070	0.070
JET OPT	39 (59)	TAIL	TAIL	TAIL	TAIL	TAIL	TAIL	TAIL	TAIL
# JETS	40 (60)	2	2	2	2	2	1	1	1
ON TIME	41 (61)	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
DELAY	42 (62)	8.10	8.10	8.10	8.10	8.10	0.00	0.00	0.00
VERN									
ROT RATE	43 (63)	0.1000	0.2000	0.2000	0.0200	0.2000	0.0500	0.0160	0.0100
ATT DB	44 (64)	2.000	3.000	3.000	0.500	3.000	0.100	0.100	0.100
RATE DB	45 (65)	.020	.200	.200	.010	.200	.010	.020	.010
ROT PLS	46 (66)	0.082	0.010	0.010	0.010	0.010	0.002	0.002	0.002
COMP	47 (67)	.000	.000	.000	.000	.000	.000	.000	.000
CNTL ACC	48 (68)	4	1	2	2	3	0	0	0
PURPOSE		NOTCH FILTER DTO	BERTH UNBERTH MNVR T/F LOW HOVER	MNVR T/F NOM/SJ CAPT & NOM/SJ RELEASE	PRE-REL DEAD BAND COLLAPSE	MNVR T/F EXTENDED PARK	GYRO CAL	ATLAS ZSI	SOLCON

Note: **BOLD/ITALICS** = not I-Loaded

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ATTITUDE TIMELINE

Attitude Timeline

MET/GMT	MNVR OPTION	DAP	E/S	REF ATT/REMARKS	EVENT	
1 000/01:12:00 MET 300/17:58:00 GMT	TGT=2 BV=3 P= 90.00 Y= 0.00 OM=270.00	A1 AUTO PRI	RATE 0.2000 DB AT 5.00 DB RT 0.20	EARTH R 0 P 90	LVLH R= 0.00 P=180.00 Y= 90.00	-ZLV +YVV POST INSERTION SOPA
2 000/02:30:00 MET 38:15 300/19:16:00 GMT 24:15	TGT=2 BV=5 P= 90.00 Y=290.00 OM=345.00	A1 AUTO VERN	RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 290 P 90	LVLH R= 70.00 P=180.00 Y= 15.00	BIAS -YLV -XVV ATLAS
3 000/04:35:00 MET 43:15 300/21:21:00 GMT 29:15	TGT=2 BV=3 P= 90.00 Y= 0.00 OM=270.00	A1 AUTO VERN	RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 360 P 90	LVLH R= 0.00 P=180.00 Y= 90.00	-ZLV +YVV H2O DUMP
4 000/06:48:00 MET 55:30 300/23:34:00 GMT 41:30 SR 0/7:01	TGT=2 BV=3 P= 90.00 Y= 0.00 OM= 0.00	A1 AUTO VERN	RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 0 P 90	LVLH R= 0.00 P=180.00 Y= 0.00	-ZLV -XVV ATLAS
5 000/07:30:00 MET 301/00:16:00 GMT	TGT=2 BV=3 P= 90.00 Y= 0.00 OM= 0.00	A1 AUTO VERN	RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 360 P 90	LVLH R= 0.00 P=180.00 Y= 0.00	-ZLV -XVV RCS TRIM BURN TIG: 0/7:44
6 000/13:40:00 MET 50:20 301/06:26:00 GMT 36:20	INRTL R=237.00 MNVR P= 29.00 Y=342.00	A1 AUTO VERN	RATE 0.2000 DB AT 1.000 DB RT 0.020	SUN R 74 P 115		IMU ALIGN -Z COAS CAL -Z: 14 -Y: 108
7 000/14:29:00 MET 34:02 301/07:15:00 GMT 20:02 SR 0/14:35	TGT=2 BV=3 P= 90.00 Y= 0.00 OM= 0.00	A1 AUTO VERN	RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 0 P 90	LVLH R= 0.00 P=180.00 Y= 0.00	-ZLV -XVV ATLAS
8 000/17:02:00 MET 03:53 301/09:48:00 GMT 49:53	INRTL R= 52.00 MNVR P=321.00 Y= 79.00	A4 AUTO PRI	RATE 1.0000 DB AT 3.00 DB RT 0.20	SUN R 65 P 131		GYRO CAL DRIFT COMPENSATION AND SAMS
9 000/17:25:00 MET 27:35 301/10:11:00 GMT 13:35	INRTL R=201.04 MNVR P=305.92 Y=333.64	A4 AUTO PRI	RATE 1.0000 DB AT 3.00 DB RT 0.20	SUN R 33 P 112		155 SCALNG MNVR EIGEN AXIS: P= -45 Y= -35.26
10 000/17:35:00 MET 40 301/10:21:00 GMT 40 SR 0/17:36	TGT=2 BV=3 P= 90.00 Y= 0.00 OM= 0.00	A4 AUTO PRI	RATE 1.0000 DB AT 3.00 DB RT 0.20	EARTH R 0 P 90	LVLH R= 0.00 P=180.00 Y= 0.00	-ZLV -XVV
11 000/19:11:00 MET 22:43 301/11:57:00 GMT 12:08:43 NET SR+4(19:07)	TGT=2 BV=5 P=169.86 Y= 53.57 OM=171.81	A1 AUTO VERN	RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 83 P 126	LVLH R=180.00 P= 84.00 Y=306.00	CRISTA DEPLOY AT 0/19:50 C STKR OOP N
12 000/20:00:00 MET 03:21 301/12:46:00 GMT 49:21	TGT=2 BV=5 P=262.00 Y= 0.00 OM=180.00	B7 AUTO PRI	RATE 0.5000 DB AT 2.00 DB RT 0.20	EARTH R 180 P 98	LVLH R=180.00 P=172.00 Y= 0.00	SEP 2: 20:07:30

*** ALL ATTITUDES IN MEAN OF 1950 ***
*** PYR EULER SEQUENCE ***

Attitude Timeline

MET/GMT	MNVR OPTION	DAP	E/S	REF ATT/REMARKS	EVENT
13 000/20:08:00 MET 23:00 301/12:54:00 GMT 13:09:00	TGT=1 BV=3 P= 90.00 Y= 0.00 OM= 0.00	A7 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020		RNDZ NAV must be enabled	TGT TRACK
14 000/20:50:00 MET 42 301/13:36:00 GMT 42	TGT=2 BV=2 P=180.00 Y= 0.00 OM= 0.00	A1 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 127 P 180	LVLH R= 0.00 P= 90.00 Y= 0.00	CRSTA-SPAS COMM NC 1 MULTI-AXIS TIG:0/23:11
15 001/00:59:00 MET 01:03:52 301/17:45:00 GMT 49:52 SR 1/01:09	INRTL R=324.90 MNVR P= 90.00 Y= 23.44	B1 AUTO PRI RATE 0.5000 DB AT 3.00 DB RT 0.20	SUN R 1 P 90		-ZSI
16 001/02:07:00 MET 301/18:53:00 GMT SS 1/02:05	INRTL R=324.90 ROTR BV=2 P=180.00 Y= 0.00	A12 AUTO VERN RATE 0.2140 DB AT 2.000 DB RT 0.020		INRTL R=324.90 P= 90.00 Y= 23.44	SSBUV ROTOR
17 001/02:25:00 MET 35:03 301/19:11:00 GMT 21:03 MID 1/02:22	INRTL R=324.83 MNVR P= 90.00 Y= 23.44	A12 AUTO VERN RATE 0.2140 DB AT 2.000 DB RT 0.020	SUN R 1 P 90		-ZSI
18 001/03:37:00 MET 301/20:23:00 GMT SS 1/03:36	INRTL R=324.83 ROTR BV=2 P=180.00 Y= 0.00	A12 AUTO VERN RATE 0.2140 DB AT 2.000 DB RT 0.020		INRTL R=324.83 P= 90.00 Y= 23.44	SSBUV ROTOR
19 001/03:55:00 MET 04:05:03 301/20:41:00 GMT 51:03 MID 1/03:53	INRTL R=324.77 MNVR P= 90.00 Y= 23.44	A12 AUTO VERN RATE 0.2140 DB AT 2.000 DB RT 0.020	SUN R 1 P 90		-ZSI
20 001/05:08:00 MET 301/21:54:00 GMT SS 1/05:06	INRTL R=324.77 ROTR BV=2 P=180.00 Y= 0.00	A12 AUTO VERN RATE 0.2140 DB AT 2.000 DB RT 0.020		INRTL R=324.77 P= 90.00 Y= 23.44	SSBUV ROTOR
21 001/05:25:00 MET 36:03 301/22:11:00 GMT 22:03 MID 1/05:23	INRTL R=324.71 MNVR P= 90.00 Y= 23.44	A12 AUTO VERN RATE 0.2140 DB AT 2.000 DB RT 0.020	SUN R 1 P 90		-ZSI
22 001/06:38:00 MET 301/23:24:00 GMT SS 1/06:37	INRTL R=324.71 ROTR BV=2 P=180.00 Y= 0.00	A12 AUTO VERN RATE 0.2140 DB AT 2.000 DB RT 0.020		INRTL R=324.71 P= 90.00 Y= 23.44	SSBUV ROTOR
23 001/06:55:00 MET 07:06:03 301/23:41:00 GMT 52:03 MID 1/06:54	INRTL R=324.65 MNVR P= 90.00 Y= 23.44	A12 AUTO VERN RATE 0.2140 DB AT 2.000 DB RT 0.020	SUN R 1 P 90		-ZSI SUSIM ALIGNMENT 5TH SUN 1ST SOLAR
24 001/08:09:00 MET 302/00:55:00 GMT SS 1/08:07	INRTL R=324.65 ROTR BV=2 P=180.00 Y= 0.00	A12 AUTO VERN RATE 0.2140 DB AT 2.000 DB RT 0.020		INRTL R=324.65 P= 90.00 Y= 23.44	SSBUV ROTOR

*** ALL ATTITUDES IN MEAN OF 1950 ***
*** PYR EULER SEQUENCE ***

Attitude Timeline

MET/GMT	MNVR OPTION	DAP	E/S	REF ATT/REMARKS	EVENT
25 001/08:25:00 MET 37:03 302/01:11:00 GMT 23:03 MID 1/08:24	INRTL R=324.59 MNVR P= 90.00 Y= 23.44	A12 AUTO VERN RATE 0.2140 DB AT 2.000 DB RT 0.020	SUN R 1 P 90		-ZSI
26 001/09:40:00 MET 302/02:26:00 GMT SS 1/09:38	INRTL BV=2 ROTR P=180.00 Y= 0.00	A12 AUTO VERN RATE 0.2140 DB AT 2.000 DB RT 0.020		INRTL R=324.59 P= 90.00 Y= 23.44	SSBUV ROTOR
27 001/10:00:00 MET 08:03 302/02:46:00 GMT 54:03 MID 1/09:55	INRTL R=324.52 MNVR P= 90.00 Y= 23.44	A12 AUTO VERN RATE 0.2140 DB AT 2.000 DB RT 0.020	SUN R 1 P 90		-ZSI
28 001/11:10:00 MET 302/03:56:00 GMT SS 1/11:09	INRTL BV=2 ROTR P=180.00 Y= 0.00	A12 AUTO VERN RATE 0.2140 DB AT 2.000 DB RT 0.020		INRTL R=324.52 P= 90.00 Y= 23.44	SSBUV ROTOR
29 001/11:30:00 MET 38:03 302/04:16:00 GMT 24:03 MID 1/11:26	INRTL R=324.46 MNVR P= 90.00 Y= 23.44	A12 AUTO VERN RATE 0.2140 DB AT 2.000 DB RT 0.020	SUN R 1 P 90		-ZSI
30 001/12:41:00 MET 54:23 302/05:27:00 GMT 40:23	TGT=2 BV=2 P=180.00 Y= 0.00 OM= 0.00	A1 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 354 P 180	LVLH R= 0.00 P= 90.00 Y= 0.00	CRSTA-SPAS COMM SOPA
31 001/14:29:00 MET 39:33 302/07:15:00 GMT 25:33	INRTL R=108.62 MNVR P=104.76 Y=357.12	A1 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020	SUN R 217 P 63		MAS MOON SETUP
32 001/14:43:00 MET 59:40 302/07:29:00 GMT 45:40	INRTL R=108.31 MNVR P=100.01 Y=355.53	A13 AUTO VERN RATE 0.0050 DB AT 0.100 DB RT 0.010	SUN R 219 P 66		MAS MOON SCAN
33 001/15:01:00 MET 17:40 302/07:47:00 GMT 08:03:40	INRTL R=108.62 MNVR P=104.76 Y=357.12	A13 AUTO VERN RATE 0.0050 DB AT 0.100 DB RT 0.010	SUN R 217 P 63		MAS MOON SCAN
34 001/15:18:00 MET 23:41 302/08:04:00 GMT 09:41	TGT=2 BV=3 P= 90.00 Y= 0.00 OM= 0.00	A1 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 360 P 90	LVLH R= 0.00 P=180.00 Y= 0.00	-ZLV -XVV
35 001/17:03:00 MET 18:00 302/09:49:00 GMT 10:04:00	INRTL R=328.00 MNVR P=168.00 Y= 9.00	A1 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020	SUN R 297 P 41		NC 2 +X TIG: 1/17:18 LVLH 180/0/0
36 001/17:18:00 MET 32:59 302/10:04:00 GMT 18:59	TGT=2 BV=3 P= 90.00 Y= 0.00 OM= 0.00	A1 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 360 P 90	LVLH R= 0.00 P=180.00 Y= 0.00	-ZLV -XVV

*** ALL ATTITUDES IN MEAN OF 1950 ***
*** PYR EULER SEQUENCE ***

Attitude Timeline

MET/GMT	MNVR OPTION	DAP	E/S	REF ATT/REMARKS	EVENT
37 001/21:35:00 MET 302/14:21:00 GMT	TGT=2 BV=3 P= 90.00 Y= 0.00 OM= 0.00	A1 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 360 P 90	LVLH R= 0.00 P=180.00 Y= 0.00	NC 3 MULTI-AXIS TIG: 1/21:50
38 001/22:23:00 MET 26:00 302/15:09:00 GMT 12:00	TGT=2 BV=2 P=180.00 Y= 0.00 OM= 0.00	B1 AUTO PRI RATE 0.5000 DB AT 3.00 DB RT 0.20	EARTH R 13 P 180	LVLH R= 0.00 P= 90.00 Y= 0.00	CRSTA-SPAS COMM COAL #1 SOPA
39 002/01:15:30 MET 18:30 302/18:01:30 GMT 04:30	TGT=2 BV=3 P= 90.00 Y= 0.00 OM= 0.00	B1 AUTO PRI RATE 0.5000 DB AT 3.00 DB RT 0.20	EARTH R 0 P 90	LVLH R= 0.00 P=180.00 Y= 0.00	-ZLV -XVV
40 002/10:26:00 MET 33:30 303/03:12:00 GMT 19:30	TGT=2 BV=2 P=180.00 Y= 0.00 OM= 0.00	A1 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 300 P 180	LVLH R= 0.00 P= 90.00 Y= 0.00	CRSTA-SPAS COMM SOPA
41 002/11:44:00 MET 51:30 303/04:30:00 GMT 37:30	TGT=2 BV=3 P= 90.00 Y= 0.00 OM= 0.00	A1 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 0 P 90	LVLH R= 0.00 P=180.00 Y= 0.00	-ZLV -XVV
42 002/14:12:00 MET 26:58 303/06:58:00 GMT 07:12:58	INRTL R=329.00 MNVR P=169.00 Y= 12.00	A1 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020	SUN R 295 P 45		NC 4 +X TIG: 2/14:27 LVLH 180/0/0
43 002/14:27:00 MET 41:59 303/07:13:00 GMT 27:59	TGT=2 BV=3 P= 90.00 Y= 0.00 OM= 0.00	A1 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 0 P 90	LVLH R= 0.00 P=180.00 Y= 0.00	-ZLV -XVV
44 002/19:16:00 MET 23:30 303/12:02:00 GMT 09:30	TGT=2 BV=3 P= 90.00 Y= 0.00 OM=270.00	A1 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 0 P 90	LVLH R= 0.00 P=180.00 Y= 90.00	H2O DUMP SOPA
45 002/20:45:00 MET 55:00 303/13:31:00 GMT 41:00	TGT=2 BV=2 P=180.00 Y= 0.00 OM= 0.00	A1 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 35 P 180	LVLH R= 0.00 P= 90.00 Y= 0.00	CRSTA-SPAS COMM SOPA
46 002/22:18:00 MET 25:30 303/15:04:00 GMT 11:30	TGT=2 BV=3 P= 90.00 Y= 0.00 OM= 0.00	A1 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 0 P 90	LVLH R= 0.00 P=180.00 Y= 0.00	-ZLV -XVV
47 003/00:46:00 MET 303/17:32:00 GMT	TGT=2 BV=3 P= 90.00 Y= 0.00 OM= 0.00	A1 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 360 P 90	LVLH R= 0.00 P=180.00 Y= 0.00	NC 5 MULTI-AXIS TIG: 3/01:01
48 003/06:49:00 MET 303/23:35:00 GMT	TGT=2 BV=3 P= 90.00 Y= 0.00 OM= 0.00	A1 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 360 P 90	LVLH R= 0.00 P=180.00 Y= 0.00	NC 6 MULTI-AXIS TIG: 3/07:04

*** ALL ATTITUDES IN MEAN OF 1950 ***
*** PYR EULER SEQUENCE ***

Attitude Timeline

MET/GMT	MNVR OPTION	DAP	E/S	REF ATT/REMARKS	EVENT
49 003/07:34:00 MET 41:30 304/00:20:00 GMT 27:30	TGT=2 BV=2 P=180.00 Y= 0.00 OM= 0.00	A1 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 8 P 180	LVLH R= 0.00 P= 90.00 Y= 0.00	CRSTA-SPAS COMM SOPA
50 003/08:43:00 MET 54:44 304/01:29:00 GMT 40:44 SR 3/09:00	INRTL R=322.57 MNVR P= 90.00 Y= 23.44	A1 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020	SUN R 1 P 90		-ZSI
51 003/10:00:00 MET 304/02:46:00 GMT SS 3/09:58	INRTL BV=2 ROTR P=180.00 Y= 0.00	A12 AUTO VERN RATE 0.2310 DB AT 2.000 DB RT 0.020		INRTL R=322.57 P= 90.00 Y= 23.44	SSBUV ROTOR
52 003/10:20:00 MET 25:59 304/03:06:00 GMT 11:59 MID 3/10:14	INRTL R=322.51 MNVR P= 90.00 Y= 23.44	A12 AUTO VERN RATE 0.2310 DB AT 2.000 DB RT 0.020	SUN R 1 P 90		-ZSI
53 003/11:31:00 MET 304/04:17:00 GMT SS 3/11:28	INRTL BV=2 ROTR P=180.00 Y= 0.00	A12 AUTO VERN RATE 0.2310 DB AT 2.000 DB RT 0.020		INRTL R=322.51 P= 90.00 Y= 23.44	SSBUV ROTOR
54 003/11:50:00 MET 56:59 304/04:36:00 GMT 42:59 MID 3/11:45	INRTL R=322.45 MNVR P= 90.00 Y= 23.44	A12 AUTO VERN RATE 0.2310 DB AT 2.000 DB RT 0.020	SUN R 1 P 90		-ZSI
55 003/13:01:00 MET 304/05:47:00 GMT SS 3/13:00	INRTL BV=2 ROTR P=180.00 Y= 0.00	A12 AUTO VERN RATE 0.2310 DB AT 2.000 DB RT 0.020		INRTL R=322.45 P= 90.00 Y= 23.44	SSBUV ROTOR
56 003/13:20:00 MET 26:59 304/06:06:00 GMT 12:59 MID 3/13:16	INRTL R=322.38 MNVR P= 90.00 Y= 23.44	A12 AUTO VERN RATE 0.2310 DB AT 2.000 DB RT 0.020	SUN R 1 P 90		-ZSI
57 003/14:32:00 MET 304/07:18:00 GMT SS 3/14:30	INRTL BV=2 ROTR P=180.00 Y= 0.00	A12 AUTO VERN RATE 0.2310 DB AT 2.000 DB RT 0.020		INRTL R=322.38 P= 90.00 Y= 23.44	SSBUV ROTOR
58 003/14:50:00 MET 57:59 304/07:36:00 GMT 43:59 MID 3/14:46	INRTL R=322.32 MNVR P= 90.00 Y= 23.44	A12 AUTO VERN RATE 0.2310 DB AT 2.000 DB RT 0.020	SUN R 1 P 90		-ZSI
59 003/16:02:00 MET 304/08:48:00 GMT SS 3/16:00	INRTL BV=2 ROTR P=180.00 Y= 0.00	A12 AUTO VERN RATE 0.2310 DB AT 2.000 DB RT 0.020		INRTL R=322.32 P= 90.00 Y= 23.44	SSBUV ROTOR
60 003/16:20:00 MET 27:59 304/09:06:00 GMT 13:59 MID 3/16:17	INRTL R=322.26 MNVR P= 90.00 Y= 23.44	A12 AUTO VERN RATE 0.2310 DB AT 2.000 DB RT 0.020	SUN R 1 P 90		-ZSI

*** ALL ATTITUDES IN MEAN OF 1950 ***
*** PYR EULER SEQUENCE ***

Attitude Timeline

MET/GMT	MNVR OPTION	DAP	E/S	REF ATT/REMARKS	EVENT	
61 003/17:33:00 MET 304/10:19:00 GMT SS 3/17:31	INRTL BV=2 ROTR P=180.00 Y= 0.00	A12 AUTO DB AT 2.000 VERN DB RT 0.020	RATE 0.2310 DB AT 2.000 DB RT 0.020		INRTL R=322.26 P= 90.00 Y= 23.44	SSBUV ROTOR
62 003/17:50:00 MET 58:59 304/10:36:00 GMT 44:59 MID 3/17:47	INRTL R=322.20 MNVR P= 90.00 Y= 23.44	A12 AUTO DB AT 2.000 VERN DB RT 0.020	RATE 0.2310 DB AT 2.000 DB RT 0.020	SUN R 1 P 90		-ZSI
63 003/19:04:00 MET 304/11:50:00 GMT SS 3/19:02	INRTL BV=2 ROTR P=180.00 Y= 0.00	A12 AUTO DB AT 2.000 VERN DB RT 0.020	RATE 0.2310 DB AT 2.000 DB RT 0.020		INRTL R=322.20 P= 90.00 Y= 23.44	SSBUV ROTOR
64 003/19:20:00 MET 29:59 304/12:06:00 GMT 15:59 MID 3/19:18	TGT=5 RA= 214.893 BV=5 DEC= -13.934S P= 90.00 Y= 0.63 OM=194.16	A12 AUTO DB AT 2.000 VERN DB RT 0.020	RATE 0.2310 DB AT 2.000 DB RT 0.020	SUN R 1 P 90	INRTL R=322.14 P= 89.97 Y= 23.41	-ZS1 SOLCON MOTU 8TH SUN 2ND SOLAR
65 003/20:34:00 MET 46:54 304/13:20:00 GMT 32:54 SS 3/20:32	TGT=2 BV=2 P=180.00 Y= 0.00 OM= 0.00	A1 AUTO DB AT 1.000 VERN DB RT 0.020	RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 27 P 180	LVLH R= 0.00 P= 90.00 Y= 0.00	CRSTA-SPAS COMM SOPA
66 003/22:27:00 MET 34:30 304/15:13:00 GMT 20:30	TGT=2 BV=3 P= 90.00 Y= 0.00 OM= 0.00	A1 AUTO DB AT 1.000 VERN DB RT 0.020	RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 0 P 90	LVLH R= 0.00 P=180.00 Y= 0.00	-ZLV -XVV
67 004/00:56:00 MET 304/17:42:00 GMT	TGT=2 BV=3 P= 90.00 Y= 0.00 OM= 0.00	A1 AUTO DB AT 1.000 VERN DB RT 0.020	RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 0 P 90	LVLH R= 0.00 P=180.00 Y= 0.00	NC 7 MULTI-AXIS TIG: 4/01:11
68 004/07:43:00 MET 50:30 305/00:29:00 GMT 36:30	TGT=2 BV=2 P=180.00 Y= 0.00 OM= 0.00	A1 AUTO DB AT 1.000 VERN DB RT 0.020	RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 346 P 180	LVLH R= 0.00 P= 90.00 Y= 0.00	CRSTA-SPAS COMM SOPA
69 004/09:01:00 MET 08:30 305/01:47:00 GMT 54:30	TGT=2 BV=3 P= 90.00 Y= 0.00 OM= 0.00	A1 AUTO DB AT 1.000 VERN DB RT 0.020	RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 0 P 90	LVLH R= 0.00 P=180.00 Y= 0.00	-ZLV -XVV
70 004/11:31:00 MET 305/04:17:00 GMT	TGT=2 BV=3 P= 90.00 Y= 0.00 OM= 0.00	A1 AUTO DB AT 1.000 VERN DB RT 0.020	RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 0 P 90	LVLH R= 0.00 P=180.00 Y= 0.00	NC 8 MULTI-AXIS TIG: 4/11:46
71 004/17:33:00 MET 305/10:19:00 GMT	TGT=2 BV=3 P= 90.00 Y= 0.00 OM= 0.00	A1 AUTO DB AT 1.000 VERN DB RT 0.020	RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 360 P 90	LVLH R= 0.00 P=180.00 Y= 0.00	NC 9 MULTI-AXIS TIG: 4/17:48
72 004/18:20:00 MET 28:12 305/11:06:00 GMT 14:12	TGT=2 BV=5 P=180.00 Y= 45.00 OM= 0.00	A1 AUTO DB AT 1.000 VERN DB RT 0.020	RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 90 P 135	LVLH R= 0.00 P= 90.00 Y= 45.00	CRSTA-SPAS COMM COAL #2 SOPA

*** ALL ATTITUDES IN MEAN OF 1950 ***
*** PYR EULER SEQUENCE ***

Attitude Timeline

MET/GMT	MNVR OPTION	DAP	E/S	REF ATT/REMARKS	EVENT
73 004/21:10:00 MET 14:57 305/13:56:00 GMT 14:00:57	TGT=2 BV=3 P= 90.00 Y= 0.00 OM=180.00	B1 AUTO PRI RATE 0.5000 DB AT 3.00 DB RT 0.20	EARTH R 360 P 90	LVLH R=180.00 P= 0.00 Y= 0.00	-ZLV +XVV
74 005/03:20:00 MET 30:00 305/20:06:00 GMT 16:00	TGT=2 BV=5 P=180.00 Y= 90.00 OM= 90.00	A1 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 90 P 90	LVLH R= 0.00 P= 90.00 Y= 90.00	CRSTA-SPAS COMM SOPA
75 005/04:35:00 MET 45:00 305/21:21:00 GMT 31:00	TGT=2 BV=3 P= 90.00 Y= 0.00 OM=180.00	A1 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 360 P 90	LVLH R=180.00 P= 0.00 Y= 0.00	-ZLV +XVV
76 005/08:40:00 MET 306/01:26:00 GMT	TGT=2 BV=3 P= 90.00 Y= 0.00 OM=180.00	A1 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 0 P 90	LVLH R=180.00 P= 0.00 Y= 0.00	NC 10 MULTI TIG: 5/08:55
77 005/14:01:00 MET 08:30 306/06:47:00 GMT 54:30	TGT=2 BV=3 P= 90.00 Y= 0.00 OM=270.00	A1 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 0 P 90	LVLH R= 0.00 P=180.00 Y= 90.00	H2O DUMP SOPA
78 005/15:24:00 MET 34:00 306/08:10:00 GMT 20:00	TGT=2 BV=2 P=180.00 Y= 0.00 OM= 0.00	A1 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 11 P 180	LVLH R= 0.00 P= 90.00 Y= 0.00	CRSTA-SPAS COMM SOPA
79 005/16:34:00 MET 49:00 306/09:20:00 GMT 35:00	TGT=2 BV=3 P= 90.00 Y= 0.00 OM=180.00	A1 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 0 P 90	LVLH R=180.00 P= 0.00 Y= 0.00	-ZLV +XVV
80 005/19:15:00 MET 306/12:01:00 GMT	TGT=2 BV=3 P= 90.00 Y= 0.00 OM=180.00	A1 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 0 P 90	LVLH R=180.00 P= 0.00 Y= 0.00	NC 11 MULTI TIG: 5/19:30
81 005/23:47:00 MET 306/16:33:00 GMT	TGT=2 BV=3 P= 90.00 Y= 0.00 OM=180.00	A1 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 0 P 90	LVLH R=180.00 P= 0.00 Y= 0.00	NC 12 MULTI TIG:6/00:02
82 006/00:27:00 MET 42:00 306/17:13:00 GMT 28:00	TGT=2 BV=2 P=180.00 Y= 0.00 OM= 0.00	A1 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 24 P 180	LVLH R= 0.00 P= 90.00 Y= 0.00	CRSTA-SPAS COMM SOPA
83 006/01:38:00 MET 48:50 306/18:24:00 GMT 34:50 SR 6/01:54	INRTL R=319.87 MNVR P= 90.00 Y= 23.44	A1 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020	SUN R 1 P 90		-ZSI
84 006/02:58:00 MET 306/19:44:00 GMT SS 6/02:56	INRTL BV=2 ROTR P=180.00 Y= 0.00	A12 AUTO VERN RATE 0.2860 DB AT 2.000 DB RT 0.020		INRTL R=319.87 P= 90.00 Y= 23.44	SSBUV ROTOR

*** ALL ATTITUDES IN MEAN OF 1950 ***
*** PYR EULER SEQUENCE ***

Attitude Timeline

MET/GMT	MNVR OPTION	DAP	E/S	REF ATT/REMARKS	EVENT	
85 006/03:15:00 MET 18:59 306/20:01:00 GMT 04:59 MID 6/03:10	INRTL R=319.81 MNVR P= 90.00 Y= 23.44	A12 AUTO DB AT 2.000 VERN DB RT 0.020	RATE 0.2860 DB AT 2.000 RT 0.020	SUN R 1 P 90		-ZSI
86 006/04:29:00 MET 306/21:15:00 GMT SS 6/04:26	INRTL BV=2 ROTR P=180.00 Y= 0.00	A12 AUTO DB AT 2.000 VERN DB RT 0.020	RATE 0.2860 DB AT 2.000 RT 0.020		INRTL R=319.81 P= 90.00 Y= 23.44	SSBUV ROTOR
87 006/04:45:00 MET 49:59 306/21:31:00 GMT 35:59 MID 6/04:41	INRTL R=319.74 MNVR P= 90.00 Y= 23.44	A12 AUTO DB AT 2.000 VERN DB RT 0.020	RATE 0.2860 DB AT 2.000 RT 0.020	SUN R 1 P 90		-ZSI
88 006/05:59:00 MET 306/22:45:00 GMT SS 6/05:57	INRTL BV=2 ROTR P=180.00 Y= 0.00	A12 AUTO DB AT 2.000 VERN DB RT 0.020	RATE 0.2860 DB AT 2.000 RT 0.020		INRTL R=319.74 P= 90.00 Y= 23.44	SSBUV ROTOR
89 006/06:15:00 MET 19:59 306/23:01:00 GMT 05:59 MID 6/06:11	INRTL R=319.68 MNVR P= 90.00 Y= 23.44	A12 AUTO DB AT 2.000 VERN DB RT 0.020	RATE 0.2860 DB AT 2.000 RT 0.020	SUN R 1 P 90		-ZSI
90 006/07:30:00 MET 307/00:16:00 GMT SS 6/07:28	INRTL BV=2 ROTR P=180.00 Y= 0.00	A12 AUTO DB AT 2.000 VERN DB RT 0.020	RATE 0.2860 DB AT 2.000 RT 0.020		INRTL R=319.68 P= 90.00 Y= 23.44	SSBUV ROTOR
91 006/07:45:00 MET 50:59 307/00:31:00 GMT 36:59 MID 6/07:42	INRTL R=319.62 MNVR P= 90.00 Y= 23.44	A12 AUTO DB AT 2.000 VERN DB RT 0.020	RATE 0.2860 DB AT 2.000 RT 0.020	SUN R 1 P 90		-ZSI
92 006/09:01:00 MET 307/01:47:00 GMT SS 6/08:59	INRTL BV=2 ROTR P=180.00 Y= 0.00	A12 AUTO DB AT 2.000 VERN DB RT 0.020	RATE 0.2860 DB AT 2.000 RT 0.020		INRTL R=319.62 P= 90.00 Y= 23.44	SSBUV ROTOR
93 006/09:15:00 MET 21:59 307/02:01:00 GMT 07:59 MID 6/09:13	INRTL R=319.56 MNVR P= 90.00 Y= 23.44	A12 AUTO DB AT 2.000 VERN DB RT 0.020	RATE 0.2860 DB AT 2.000 RT 0.020	SUN R 1 P 90		-ZSI
94 006/10:31:00 MET 42:56 307/03:17:00 GMT 28:56	TGT=2 BV=2 P=180.00 Y= 0.00 OM= 0.00	A1 AUTO DB AT 1.000 VERN DB RT 0.020	RATE 0.2000 DB AT 1.000 RT 0.020	EARTH R 292 P 180	LVLH R= 0.00 P= 90.00 Y= 0.00	CRSTA-SPAS COMM SOPA
95 006/12:12:00 MET 27:00 307/04:58:00 GMT 05:13:00 SR 6/12:28	TGT=2 BV=3 P= 90.00 Y= 0.00 OM=180.00	A1 AUTO DB AT 1.000 VERN DB RT 0.020	RATE 0.2000 DB AT 1.000 RT 0.020	EARTH R 0 P 90	LVLH R=180.00 P= 0.00 Y= 0.00	-ZLV +XVV
96 006/14:53:00 MET 307/07:39:00 GMT	TGT=2 BV=3 P= 90.00 Y= 0.00 OM=180.00	A1 AUTO DB AT 1.000 VERN DB RT 0.020	RATE 0.2000 DB AT 1.000 RT 0.020	EARTH R 0 P 90	LVLH R=180.00 P= 0.00 Y= 0.00	NC 13 MULTI TIG: 6/15:08

*** ALL ATTITUDES IN MEAN OF 1950 ***
*** PYR EULER SEQUENCE ***

Attitude Timeline

MET/GMT	MNVR OPTION		DAP	E/S	REF ATT/REMARKS	EVENT
97 006/23:06:00 MET 21:00 307/15:52:00 GMT 16:07:00	TGT=2 BV=2 P=180.00 Y= 0.00 OM= 0.00	A1 AUTO VERN	RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 23 P 180	LVLH R= 0.00 P= 90.00 Y= 0.00	CRSTA-SPAS COMM SOPA
98 007/00:16:00 MET 31:00 307/17:02:00 GMT 17:00 SR 7/00:32	TGT=2 BV=3 P= 90.00 Y= 0.00 OM=180.00	A1 AUTO VERN	RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 360 P 90	LVLH R=180.00 P= 0.00 Y= 0.00	-ZLV +XVV
99 007/11:10:00 MET 25:00 308/03:56:00 GMT 04:11:00 SR 7/11:06	TGT=2 BV=2 P=180.00 Y= 0.00 OM= 0.00	A1 AUTO VERN	RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 21 P 180	LVLH R= 0.00 P= 90.00 Y= 0.00	CRSTA-SPAS COMM SOPA
100 007/12:21:00 MET 36:00 308/05:07:00 GMT 22:00	TGT=2 BV=3 P= 90.00 Y= 0.00 OM=180.00	A1 AUTO VERN	RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 360 P 90	LVLH R=180.00 P= 0.00 Y= 0.00	-ZLV +XVV
101 007/13:34:00 MET 308/06:20:00 GMT	TGT=2 BV=3 P= 90.00 Y= 0.00 OM=180.00	A1 AUTO VERN	RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 0 P 90	LVLH R=180.00 P= 0.00 Y= 0.00	NC 14 MULTI TIG: 7/13:49
102 007/21:51:00 MET 58:30 308/14:37:00 GMT 44:30	TGT=2 BV=3 P= 90.00 Y= 0.00 OM=270.00	A1 AUTO VERN	RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 0 P 90	LVLH R= 0.00 P=180.00 Y= 90.00	-ZLV +YVV H2O DUMP
103 007/23:14:00 MET 24:00 308/16:00:00 GMT 10:00	TGT=2 BV=2 P=180.00 Y= 0.00 OM= 0.00	A1 AUTO VERN	RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 288 P 180	LVLH R= 0.00 P= 90.00 Y= 0.00	CRSTA-SPAS COMM SOPA
104 008/00:25:00 MET 40:00 308/17:11:00 GMT 26:00 SR	TGT=2 BV=3 P= 90.00 Y= 0.00 OM=180.00	A1 AUTO VERN	RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 360 P 90	LVLH R=180.00 P= 0.00 Y= 0.00	-ZLV +XVV
105 008/01:30:00 MET 308/18:16:00 GMT	TGT=2 BV=3 P= 90.00 Y= 0.00 OM=180.00	A1 AUTO VERN	RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 360 P 90	LVLH R=180.00 P= 0.00 Y= 0.00	NC 15 MULTI TIG: 8/01:55
106 008/08:17:00 MET 309/01:03:00 GMT	TGT=2 BV=3 P= 90.00 Y= 0.00 OM=180.00	A1 AUTO VERN	RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 360 P 90	LVLH R=180.00 P= 0.00 Y= 0.00	NC 16 MULTI TIG: 8/08:32
107 008/08:55:00 MET 09:10:00 309/01:41:00 GMT 56:00	TGT=1 BV=3 P= 90.00 Y= 0.00 OM= 0.00	A7 AUTO VERN	RATE 0.2000 DB AT 1.000 DB RT 0.020		RNDZ NAV must be enabled	TGT TRACK CRSTA-SPAS COMM COAL #3
108 008/12:56:00 MET 13:08:00 309/05:42:00 GMT 54:00	INRTL R=143.00 MNVR P=251.00 Y=333.00	A7 AUTO VERN	RATE 0.2000 DB AT 1.000 DB RT 0.020	SUN R 72 P 74		NC 17 TIG: 8/13:11 LVLH 0/8/0

*** ALL ATTITUDES IN MEAN OF 1950 ***
*** PYR EULER SEQUENCE ***

Attitude Timeline

MET/GMT	MNVR OPTION	DAP	E/S	REF ATT/REMARKS	EVENT
109 008/13:15:00 MET 20:52 309/06:01:00 GMT 06:52	TGT=1 BV=3 P= 90.00 Y= 0.00 OM= 0.00	A7 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020		RNDZ NAV must be enabled	TGT TRACK
110 008/13:40:00 MET 45:54 309/06:26:00 GMT 31:54	TGT=2 BV=5 P= 84.00 Y= 0.00 OM= 0.00	A7 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 360 P 84	LVLH R= 0.00 P=186.00 Y= 0.00	NH MULTI TIG: 8/13:56
111 008/13:57:00 MET 21 309/06:43:00 GMT 21	TGT=1 BV=3 P= 90.00 Y= 0.00 OM= 0.00	A7 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020		RNDZ NAV must be enabled	TGT TRACK
112 008/14:27:00 MET 39:20 309/07:13:00 GMT 25:20	INRTL R=126.00 MNVR P= 77.00 Y= 50.00	A7 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020	SUN R 203 P 114		NC 18 TIG: 8/14:41 LV 270/168/345
113 008/14:43:00 MET 49:13 309/07:29:00 GMT 35:13	TGT=1 BV=3 P= 90.00 Y= 0.00 OM= 90.00	A7 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020		RNDZ NAV must be enabled	TGT TRACK
114 008/15:57:00 MET 16:09:17 309/08:43:00 GMT 55:17	INRTL R=139.00 MNVR P=193.00 Y= 39.00	A7 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020	SUN R 106 P 83		MAHRSI FOOTBALL TIG: 8/16:12 LVLH 0/94/349
115 008/16:15:00 MET 28:56 309/09:01:00 GMT 14:56	TGT=1 BV=3 P= 90.00 Y= 0.00 OM= 90.00	A7 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020		RNDZ NAV must be enabled	TGT TRACK
116 008/17:28:00 MET 34:52 309/10:14:00 GMT 20:52	INRTL R=310.00 MNVR P=193.00 Y= 42.00	A7 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020	SUN R 295 P 85		TI: 8/17:43 LVLH 171/93/347
117 008/17:45:00 MET 59:02 309/10:31:00 GMT 45:02	TGT=1 BV=3 P= 90.00 Y= 0.00 OM= 0.00	A7 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020		RNDZ NAV must be enabled	TGT TRACK
118 008/18:54:00 MET 57 309/11:40:00 GMT 57	TGT=2 BV=5 P=270.00 Y= 0.00 OM= 0.00	A7 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 180 P 90	LVLH R= 0.00 P= 0.00 Y= 0.00	GRAPPLE 8/20:09
119 008/20:15:00 MET 30:00 309/13:01:00 GMT 16:00 SR 9/02:19	TGT=2 BV=3 P= 90.00 Y= 0.00 OM= 0.00	A9 AUTO VERN RATE 0.2000 DB AT 2.000 DB RT 0.040	EARTH R 0 P 90	LVLH R= 0.00 P=180.00 Y= 0.00	-ZLV -XVV
120 008/21:43:00 MET 53:15 309/14:29:00 GMT 39:15	INRTL R=185.00 MNVR P=205.00 Y=346.00	A1 AUTO VERN RATE 0.2000 DB AT 1.000 DB RT 0.020	SUN R 35 P 46		IMU ALIGN B1

*** ALL ATTITUDES IN MEAN OF 1950 ***
 *** PYR EULER SEQUENCE ***

Attitude Timeline

MET/GMT	MNVR OPTION	DAP	E/S	REF ATT/REMARKS	EVENT
121 008/22:01:00 MET 15:05 309/14:47:00 GMT 15:01:05	INRTL R= 10.88 MNVR P= 55.57 Y= 4.18	A1 AUTO DB AT 1.000 VERN DB RT 0.020	RATE 0.2000 SUN R 311 P 104		MAS MOON SCAN
122 008/22:19:00 MET 35:38 309/15:05:00 GMT 21:38	INRTL R= 10.99 MNVR P= 54.61 Y= 9.08	A13 AUTO DB AT 0.100 VERN DB RT 0.010	RATE 0.0050 SUN R 312 P 108		MAS SCAN
123 008/22:37:00 MET 53:38 309/15:23:00 GMT 39:38	INRTL R= 10.88 MNVR P= 55.57 Y= 4.18	A13 AUTO DB AT 0.100 VERN DB RT 0.010	RATE 0.0050 SUN R 311 P 104		MAS MOON SCAN
124 008/22:54:00 MET 57:00 309/15:40:00 GMT 43:00	TGT=2 BV=3 P= 90.00 Y= 0.00 OM=180.00	A1 AUTO DB AT 1.000 VERN DB RT 0.020	RATE 0.2000 EARTH R 360 P 90	LVLH R=180.00 P= 0.00 Y= 0.00	-ZLV +XVV
125 009/07:53:00 MET 08:05:42 310/00:39:00 GMT 51:42	INRTL R=229.00 MNVR P= 96.00 Y= 61.00	A1 AUTO DB AT 1.000 VERN DB RT 0.020	RATE 0.2000 SUN R 90 P 112		IMU ALIGN A1
126 009/08:11:00 MET 24:19 310/00:57:00 GMT 01:10:19	TGT=2 BV=3 P= 90.00 Y= 0.00 OM=180.00	A1 AUTO DB AT 1.000 VERN DB RT 0.020	RATE 0.2000 EARTH R 0 P 90	LVLH R=180.00 P= 0.00 Y= 0.00	-ZLV +XVV
127 009/15:39:00 MET 53:14 310/08:25:00 GMT 39:14	INRTL R=185.00 MNVR P=205.00 Y=346.00	A1 AUTO DB AT 1.000 VERN DB RT 0.020	RATE 0.2000 SUN R 36 P 47		IMU ALIGN B1
128 009/15:58:00 MET 16:09:30 310/08:44:00 GMT 55:30	TGT=2 BV=3 P= 90.00 Y= 0.00 OM=180.00	A1 AUTO DB AT 1.000 VERN DB RT 0.020	RATE 0.2000 EARTH R 0 P 90	LVLH R=180.00 P= 0.00 Y= 0.00	-ZLV +XVV
129 009/17:20:00 MET 24:37 310/10:06:00 GMT 10:37	INRTL R=238.66 MNVR P=201.45 Y= 41.96	A12 AUTO DB AT 2.000 VERN DB RT 0.020	RATE 0.2860 SUN R 0 P 89		-ZSI
130 009/18:36:00 MET 310/11:22:00 GMT	INRTL BV=2 ROTR P=180.00 Y= 0.00	A12 AUTO DB AT 2.000 VERN DB RT 0.020	RATE 0.2860 SUN R 0 P 89	INRTL R=238.66 P=201.45 Y= 41.96	SSBUV ROTOR
131 009/18:51:00 MET 56:59 310/11:37:00 GMT 42:59 ROTR + 15	INRTL R=238.13 MNVR P=202.23 Y= 41.53	A12 AUTO DB AT 2.000 VERN DB RT 0.020	RATE 0.2860 SUN R 0 P 89		-ZSI
132 009/20:07:00 MET 310/12:53:00 GMT	INRTL BV=2 ROTR P=180.00 Y= 0.00	A12 AUTO DB AT 2.000 VERN DB RT 0.020	RATE 0.2860 SUN R 0 P 89	INRTL R=238.13 P=202.23 Y= 41.53	SSBUV ROTOR

*** ALL ATTITUDES IN MEAN OF 1950 ***
*** PYR EULER SEQUENCE ***

Attitude Timeline

MET/GMT	MNVR OPTION	DAP	E/S	REF ATT/REMARKS	EVENT
133 009/20:22:00 MET 27:59 310/13:08:00 GMT 13:59	INRTL R=237.60 MNVR P=203.04 Y= 41.62	A1 AUTO DB AT 1.000 VERN DB RT 0.020	RATE 0.2860 SUN R 360 P 90		-ZSI
134 009/21:38:00 MET 310/14:24:00 GMT	INRTL BV=2 ROTR P=180.00 Y= 0.00	A12 AUTO DB AT 2.000 VERN DB RT 0.020	RATE 0.2860	INRTL R=237.60 P=203.04 Y= 41.62	SSBUV ROTOR
135 009/21:53:00 MET 58:59 310/14:39:00 GMT 44:59	INRTL R=237.08 MNVR P=203.85 Y= 40.62	A12 AUTO DB AT 2.000 VERN DB RT 0.020	RATE 0.2860 SUN R 360 P 89		-ZSI
136 009/23:08:00 MET 310/15:54:00 GMT	INRTL BV=2 ROTR P=180.00 Y= 0.00	A12 AUTO DB AT 2.000 VERN DB RT 0.020	RATE 0.2860	INRTL R=237.08 P=203.85 Y= 40.62	SSBUV ROTOR
137 009/23:23:00 MET 28:59 310/16:09:00 GMT 14:59	INRTL R=236.55 MNVR P=204.66 Y= 40.14	A12 AUTO DB AT 2.000 VERN DB RT 0.020	RATE 0.2860 SUN R 360 P 89		-ZSI
138 010/00:39:00 MET 310/17:25:00 GMT	INRTL BV=2 ROTR P=180.00 Y= 0.00	A12 AUTO DB AT 2.000 VERN DB RT 0.020	RATE 0.2860	INRTL R=236.55 P=204.66 Y= 40.14	SSBUV ROTOR
139 010/00:54:00 MET 59:42 310/17:40:00 GMT 45:42	INRTL R=236.03 MNVR P=205.47 Y= 39.64	A12 AUTO DB AT 2.000 VERN DB RT 0.020	RATE 0.3000 SUN R 360 P 89		-ZSI
140 010/02:10:00 MET 310/18:56:00 GMT	INRTL BV=2 ROTR P=180.00 Y= 0.00	A12 AUTO DB AT 2.000 VERN DB RT 0.020	RATE 0.3000	INRTL R=236.03 P=205.47 Y= 39.64	SSBUV ROTOR
141 010/02:25:00 MET 30:00 310/19:11:00 GMT 16:00	INRTL R=235.51 MNVR P=206.29 Y= 39.14	A12 AUTO DB AT 2.000 VERN DB RT 0.020	RATE 0.3000 SUN R 360 P 89		-ZSI
142 010/03:41:00 MET 310/20:27:00 GMT	INRTL BV=2 ROTR P=180.00 Y= 0.00	A12 AUTO DB AT 2.000 VERN DB RT 0.020	RATE 0.3000	INRTL R=235.51 P=206.29 Y= 39.14	SSBUV ROTOR
143 010/03:56:00 MET 04:02:47 310/20:42:00 GMT 48:47	INRTL R=315.76 MNVR P= 90.00 Y= 23.44	A12 AUTO DB AT 2.000 VERN DB RT 0.020	RATE 0.3000 SUN R 1 P 90		-ZSI SUSIM ALIGNMENT 8TH SUN 4TH SOLAR
144 010/05:12:00 MET 19:27 310/21:58:00 GMT 22:05:27	INRTL R=229.00 MNVR P= 96.00 Y= 61.00	A1 AUTO DB AT 1.000 VERN DB RT 0.020	RATE 0.2000 SUN R 89 P 113		IMU ALIGN A1

*** ALL ATTITUDES IN MEAN OF 1950 ***
*** PYR EULER SEQUENCE ***

Attitude Timeline

MET/GMT	MNVR OPTION	DAP	E/S	REF ATT/REMARKS	EVENT	
145 010/05:32:00 MET 41:50 310/22:18:00 GMT 27:50	TGT=4 RA= 221.192 BV=5 DEC= -15.940S P=270.00 Y= 0.00 OM=270.00	A1 AUTO VERN	RATE 0.2000 DB AT 1.000 DB RT 0.020	SUN R 180 P 90	INRTL R= 39.65 P=243.38 Y= 7.08	MNVR TO PTC
146 010/05:45:00 MET 310/22:31:00 GMT	INRTL BV=1 ROTR P= 0.00 Y= 0.00	A2 AUTO VERN	RATE 0.4000 DB AT 1.000 DB RT 0.020		INRTL R= 39.65 P=243.45 Y= 6.99	PTC
147 010/12:30:00 MET 41:23 311/05:16:00 GMT 27:23	TGT=2 BV=3 P= 90.00 Y= 0.00 OM=270.00	A1 AUTO VERN	RATE 0.2000 DB AT 1.000 DB RT 0.020	EARTH R 0 P 90	LVLH R= 0.00 P=180.00 Y= 90.00	-ZLV +YVV
148 010/14:36:00 MET 50:30 311/07:22:00 GMT 36:30	TGT=4 RA= 221.568 BV=5 DEC= -16.054S P=184.00 Y= 0.00 OM= 90.00	A1 AUTO VERN	RATE 0.2000 DB AT 1.000 DB RT 0.020	SUN R 180 P 176	INRTL R=172.95 P=344.12 Y= 39.24	-XSI
149 010/15:51:00 MET 16:04:18 311/08:37:00 GMT 50:18	INRTL R=268.00 MNVR P=104.00 Y= 67.00	A1 AUTO PRI	RATE 0.2000 DB AT 5.00 DB RT 0.20	SUN R 46 P 115		DEORBIT IMU
150 010/16:10:00 MET 17:15 311/08:56:00 GMT 09:03:15	INRTL R=152.00 MNVR P=224.00 Y= 16.00	A1 AUTO PRI	RATE 0.2000 DB AT 5.00 DB RT 0.20	SUN R 73 P 82		VERIF
151 010/16:21:00 MET 30:51 311/09:07:00 GMT 16:51	INRTL R= 1.00 MNVR P=334.00 Y= 40.00	A1 AUTO VERN	RATE 0.2000 DB AT 1.000 DB RT 0.020	SUN R 176 P 176		COMM
152 010/18:31:00 MET 45:29 311/11:17:00 GMT 31:29	INRTL R= 82.50 MNVR P=177.00 Y=310.50	A1 AUTO PRI	RATE 0.2000 DB AT 5.00 DB RT 0.20	SUN R 67 P 16		MNVR TO D/O BURN ATT TIG: 10/18:46
153 010/18:51:00 MET 52:59 311/11:37:00 GMT 38:59	INRTL R=135.00 MNVR P=247.00 Y=336.00	TRN AUTO PRI	RATE 0.5000 DB AT 3.50 DB RT 0.20	SUN R 82 P 74		EI-25 INRTL
154 010/19:11:00 MET 14:29 311/11:57:00 GMT 12:00:29	TGT=2 BV=5 P=230.00 Y= 0.00 OM= 0.00	TRN AUTO PRI	RATE 0.5000 DB AT 3.50 DB RT 0.20	EARTH R 180 P 130	LVLH R= 0.00 P= 40.00 Y= 0.00	EI-5 LVLH

*** ALL ATTITUDES IN MEAN OF 1950 ***
*** PYR EULER SEQUENCE ***

STS-66 DAP BOOK

<u>DAP</u>	<u>PURPOSE</u>	<u>DAP</u>	<u>PURPOSE</u>
A1	- NOMINAL ATLAS	B1	- NOMINAL OMS & RCS BURNS
A2	- PTC	B2	- LOSS OF VERN (TAIL ONLY)
A3	- GG	B3	- LOSS OF VERN (NOSE & TAIL)
A4	- PRE/POST DEPLOY	B4	- SSUS DEPLOY
A5	- LOSS OF VERN (NOSE AND TAIL)	B5	- COAS CAL
A6	- LOSS OF VERN (TAIL ONLY)	B6	- NOTCH FILTER DTO
A7	- RENDEZVOUS	B7	- RENDEZVOUS
A8	- PROX OPS	B8	- PROX OPS
A9	- NOMINAL RELEASE SINGLE JOINT RELEASE	B9	- BERTH UNBERTH MNVR TO/FROM LOW HOVER
A10	- NOMINAL CAPTURE SNGLE JOINT CAPTURE	B10	- MNVR TO/FROM NOMINAL/SINGLE JOINT CAPTURE & NOMINAL/SINGLE JOINT RELEASE
A11	- UNLOADED EXTENDED PARK	B11	- PRE-REL DEADBAND COLLAPSE
A12	- SSBV ROTORS	B12	- MNVR TO/FROM EXTENDED PARK
A13	- MAS MOON SCAN	B13	- GYRO CAL
A14	- SUSIM	B14	- ATLAS ZSI
A15	- SOLCON	B15	- SOLCON

CNT ACC = 0 UNLOADED
 1-5 SPAS ON RMS

FLT PLN-1a/66/O/B

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FLT PLN-1b/66/O/A

(reduced copy)

DAP A

DAP A1

PURPOSE:
NOMINAL
ATLAS

FLT PLN-2a/66/O/A

FLT PLN-2b/66/O/A

A1

A1

DAP A2

PURPOSE:
PTC

A1

DAP A 01	1	PRI
0.2000	10	ROT RATE
-5.00	11	ATT DB
0.20	12	RATE DB
0.10	13	ROT PLS
0.00	14	COMP
ALL	15	P OPTION
ALL	16	Y OPTION
0.10	17	TRAN PLS
		ALT
0.200	18	RATE DB
ALL	19	JET OPT
2	20	#JETS
0.08	21	ON TIME
0.000	22	DELAY
		VERN
0.2000	23	ROT RATE
-1.000	24	ATT DB
0.20	25	RATE DB
0.010	26	ROT PLS
0.00	27	COMP
0	28	CNTL ACC

FLT PLN-3a/66/O/A

FLT PLN-3b/66/O/A

A2

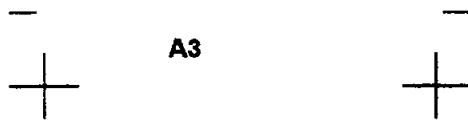
(reduced copy)



A2

DAP A 0 2	1	PRI
<u>0.4 0 0 0</u>	10	ROT RATE
<u>- 1.0 0</u>	11	ATT DB
<u>0.2 0</u>	12	RATE DB
<u>0.1 0</u>	13	ROT PLS
<u>0.0 0</u>	14	COMP
ALL	15	P OPTION
ALL	16	Y OPTION
<u>0.1 0</u>	17	TRAN PLS
		ALT
<u>0.2 0 0</u>	18	RATE DB
ALL	19	JET OPT
2	20	#JETS
<u>0.0 8</u>	21	ON TIME
<u>- 0.0 0</u>	22	DELAY
		VERN
<u>0.4 0 0 0</u>	23	ROT RATE
<u>- 1.0 0 0</u>	24	ATT DB
<u>0.2 0</u>	25	RATE DB
<u>0.0 1 0</u>	26	ROT PLS
<u>0.0 0</u>	27	COMP
0	28	CNTL ACC

FLT PLN-4a/66/O/A



A3



A3

DAP A 0 3	1	PRI
<u>0.2 0 0 0</u>	10	ROT RATE
<u>- 1.0 0</u>	11	ATT DB
<u>0.2 0</u>	12	RATE DB
<u>0.1 0</u>	13	ROT PLS
<u>0.0 0</u>	14	COMP
ALL	15	P OPTION
TAIL	16	Y OPTION
<u>0.1 0</u>	17	TRAN PLS
		ALT
<u>0.2 0 0</u>	18	RATE DB
ALL	19	JET OPT
2	20	#JETS
<u>0.0 8</u>	21	ON TIME
<u>- 0.0 0</u>	22	DELAY
		VERN
<u>0.0 0 8 0</u>	23	ROT RATE
<u>- 0.0 7 0</u>	24	ATT DB
<u>0.1 0</u>	25	RATE DB
<u>0.0 1 0</u>	26	ROT PLS
<u>0.0 0</u>	27	COMP
0	28	CNTL ACC

FLT PLN-5a/66/O/A



A4

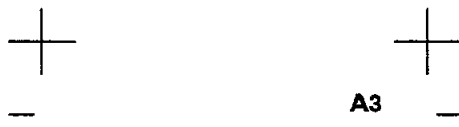
A2

DAP A3

PURPOSE:

GG

FLT PLN-4b/66/O/A



A3

DAP A4

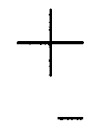
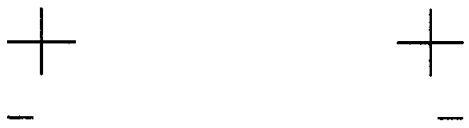
PURPOSE:

PRE/POST DEPLOY

FLT PLN-5b/66/O/A



(reduced copy)



A4

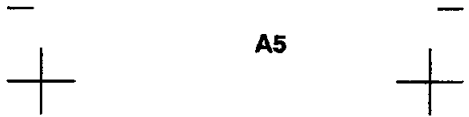
**A4
DAP A5**

DAP A 0 4	1	PRI
<u>0.5 0 0 0</u>	10	ROT RATE
<u>- 3.0 0</u>	11	ATT DB
<u>0.2 0</u>	12	RATE DB
<u>0.1 0</u>	13	ROT PLS
<u>.0 0 0</u>	14	COMP
ALL	15	P OPTION
ALL	16	Y OPTION
<u>0.1 0</u>	17	TRAN PLS
		ALT
<u>0.2 0 0</u>	18	RATE DB
ALL	19	JET OPT
2	20	#JETS
<u>0.0 8</u>	21	ON TIME
<u>- 0.0 0</u>	22	DELAY
		VERN
<u>0.2 0 0 0</u>	23	ROT RATE
<u>- 1.0 0 0</u>	24	ATT DB
<u>.0 2 0</u>	25	RATE DB
<u>0.0 1 0</u>	26	ROT PLS
<u>.0 0 0</u>	27	COMP
<u>0</u>	28	CNTL ACC

PURPOSE:
LOSS OF VERN
(NOSE & TAIL)

FLT PLN-6a/66/O/A

FLT PLN-6b/66/O/A



A5



A5

DAP A 0 5	1	PRI
<u>0.2 0 0 0</u>	10	ROT RATE
<u>- 5.0 0</u>	11	ATT DB
<u>0.2 0</u>	12	RATE DB
<u>0.1 0</u>	13	ROT PLS
<u>.0 0 0</u>	14	COMP
ALL	15	P OPTION
ALL	16	Y OPTION
<u>0.1 0</u>	17	TRAN PLS
		ALT
<u>0.0 7 0</u>	18	RATE DB
ALL	19	JET OPT
1	20	#JETS
<u>0.0 8</u>	21	ON TIME
<u>- 0.0 0</u>	22	DELAY
		VERN
<u>0.2 0 0 0</u>	23	ROT RATE
<u>- 1.0 0 0</u>	24	ATT DB
<u>.0 2 0</u>	25	RATE DB
<u>0.0 1 0</u>	26	ROT PLS
<u>.0 0 0</u>	27	COMP
<u>0</u>	28	CNTL ACC

**A5
DAP A6**

PURPOSE:
LOSS OF VERN
(TAIL ONLY)

FLT PLN-7a/66/O/A

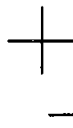
FLT PLN-7b/66/O/A



A6



(reduced copy)



A6

DAP A7

A6

DAP A 0 6	1	PRI
<u>0.2 0 0 0</u>	10	ROT RATE
- 5.0 0	11	ATT DB
<u>0.2 0</u>	12	RATE DB
<u>0.1 0</u>	13	ROT PLS
<u>0.0 0</u>	14	COMP
TAIL	15	P OPTION
TAIL	16	Y OPTION
<u>0.1 0</u>	17	TRAN PLS
		ALT
<u>0.0 7 0</u>	18	RATE DB
TAIL	19	JET OPT
1	20	#JETS
<u>0.0 8</u>	21	ON TIME
- 0.0 0	22	DELAY
		VERN
<u>0.2 0 0 0</u>	23	ROT RATE
- 1.0 0 0	24	ATT DB
<u>0.2 0</u>	25	RATE DB
<u>0.0 1 0</u>	26	ROT PLS
<u>0.0 0</u>	27	COMP
0	28	CNTL ACC

PURPOSE:
RENDEZVOUS

FLT PLN-8a/66/O/A

FLT PLN-8b/66/O/A



A7

A7

**A7
DAP A8**

DAP A 0 7	1	PRI
<u>0.2 0 0 0</u>	10	ROT RATE
- 2.0 0	11	ATT DB
<u>0.2 0</u>	12	RATE DB
<u>0.1 0</u>	13	ROT PLS
<u>0.0 0</u>	14	COMP
ALL	15	P OPTION
ALL	16	Y OPTION
<u>0.1 0</u>	17	TRAN PLS
		ALT
<u>0.2 0 0</u>	18	RATE DB
ALL	19	JET OPT
2	20	#JETS
<u>0.0 8</u>	21	ON TIME
- 0.0 0	22	DELAY
		VERN
<u>0.2 0 0 0</u>	23	ROT RATE
- 1.0 0 0	24	ATT DB
<u>0.2 0</u>	25	RATE DB
<u>0.0 1 0</u>	26	ROT PLS
<u>0.0 0</u>	27	COMP
0	28	CNTL ACC

PURPOSE:
PROX OPS

FLT PLN-9a/66/O/A

FLT PLN-9b/66/O/A



A8

(reduced copy)



A8

DAP A 0 8	1	PRI
0.2 0 0 0	10	ROT RATE
- 2.0 0	11	ATT DB
0.2 0	12	RATE DB
0.1 0	13	ROT PLS
0.0 0	14	COMP
ALL	15	P OPTION
ALL	16	Y OPTION
0.0 5	17	TRAN PLS
		ALT
0.2 0 0	18	RATE DB
ALL	19	JET OPT
2	20	#JETS
0.0 8	21	ON TIME
- 0.0 0	22	DELAY
		VERN
0.2 0 0 0	23	ROT RATE
- 1.0 0 0	24	ATT DB
0.2 0	25	RATE DB
0.0 1 0	26	ROT PLS
0.0 0	27	COMP
0	28	CNTL ACC

FLT PLN-10a/66/O/A

A8

DAP A9

PURPOSE:
 NOMINAL RELEASE
 SINGLE JOINT RELEASE
 NOMINAL CAPTURE

FLT PLN-10b/66/O/A



A9



A9

DAP A 0 9	1 /3	PRI
0.1 0 0 0	10/50	ROT RATE
- 3.0 0	11/51	ATT DB
0.2 0	12/52	RATE DB
0.0 4	13/53	ROT PLS
0.0 0	14/54	COMP
TAIL	15/55	P OPTION
TAIL	16/56	Y OPTION
0.1 0	17/57	TRAN PLS
		ALT
0.1 0 0	18/58	RATE DB
TAIL	19/59	JET OPT
2	20/60	#JETS
0.0 8	21/61	ON TIME
- 8.1 0	22/62	DELAY
		VERN
0.2 0 0 0	23/63	ROT RATE
- 2.0 0 0	24/64	ATT DB
0.4 0	25/65	RATE DB
0.0 1 0	26/66	ROT PLS
0.0 0	27/67	COMP
2	28/68	CNTL ACC

FLT PLN-11a/66/O/B

DAP A10

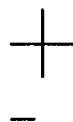
PURPOSE:
 SINGLE JOINT CAPTURE

FLT PLN-11b/66/O/A



A10

(reduced copy)



A10

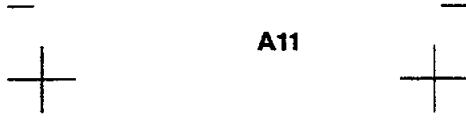
DAP A 1 0	1/3	PRI
<u>0.1 0 0 0</u>	10/50	ROT RATE
- 5.0 0	11/51	ATT DB
- 0.2 0	12/52	RATE DB
0.0 4	13/53	ROT PLS
0.0 0	14/54	COMP
TAIL	15/55	P OPTION
TAIL	16/56	Y OPTION
0.1 0	17/57	TRAN PLS
		ALT
0.1 0 0	18/58	RATE DB
TAIL	19/59	JET OPT
2	20/60	#JETS
0.0 8	21/61	ON TIME
- 9.0 0	22/62	DELAY
		VERN
0.2 0 0 0	23/63	ROT RATE
- 2.0 0 0	24/64	ATT DB
- 0.4 0	25/65	RATE DB
0.0 1 0	26/66	ROT PLS
0.0 0	27/67	COMP
2	28/68	CNTL ACC

FLT PLN-12a/66/O/B

**A10
DAP A11**

PURPOSE:
UNLOADED
EXTENDED PARK

FLT PLN-12b/66/O/A



A11



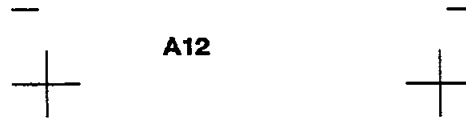
**A11
DAP A12**

PURPOSE:
SSBUV ROTORS

DAP A 1 1	1/3	PRI
<u>0.1 0 0 0</u>	10/50	ROT RATE
- 5.0 0	11/51	ATT DB
- 0.2 0	12/52	RATE DB
0.0 4	13/53	ROT PLS
0.0 0	14/54	COMP
TAIL	15/55	P OPTION
TAIL	16/56	Y OPTION
0.1 0	17/57	TRAN PLS
		ALT
0.1 0 0	18/58	RATE DB
TAIL	19/59	JET OPT
2	20/60	#JETS
0.0 8	21/61	ON TIME
- 8.1 0	22/62	DELAY
		VERN
0.2 0 0 0	23/63	ROT RATE
- 1.0 0 0	24/64	ATT DB
- 0.2 0	25/65	RATE DB
0.0 1 0	26/66	ROT PLS
0.0 0	27/67	COMP
3	28/68	CNTL ACC

FLT PLN-13a/66/O/B

FLT PLN-13b/66/O/A



A12



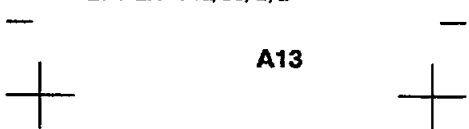
(reduced copy)



A12

DAP A 1 2	1/3	PRI
<u>0.2 1 4 0</u>	10/50	ROT RATE
<u>- 3.0 0</u>	11/51	ATT DB
<u>0.2 0</u>	12/52	RATE DB
<u>0.1 0</u>	13/53	ROT PLS
<u>0.0 0</u>	14/54	COMP
ALL	15/55	P OPTION
ALL	16/56	Y OPTION
<u>0.1 0</u>	17/57	TRAN PLS
		ALT
<u>0.0 7 0</u>	18/58	RATE DB
TAIL	19/59	JET OPT
<u>1</u>	20/60	#JETS
<u>0.0 8</u>	21/61	ON TIME
<u>- 0.0 0</u>	22/62	DELAY
		VERN
<u>0.2 1 4 0</u>	23/63	ROT RATE
<u>- 2.0 0 0</u>	24/64	ATT DB
<u>0.2 0</u>	25/65	RATE DB
<u>0.0 1 0</u>	26/66	ROT PLS
<u>0.0 0</u>	27/67	COMP
<u>0</u>	28/68	CNTL ACC

FLT PLN-14a/66/O/B



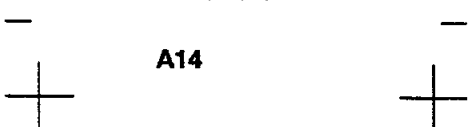
A13



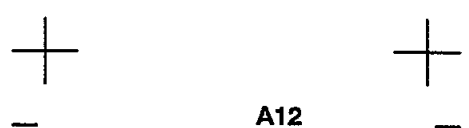
A13

DAP A 1 3	1/3	PRI
<u>0.0 5 0 0</u>	10/50	ROT RATE
<u>- 0.3 0</u>	11/51	ATT DB
<u>0.2 0</u>	12/52	RATE DB
<u>0.1 0</u>	13/53	ROT PLS
<u>0.0 0</u>	14/54	COMP
ALL	15/55	P OPTION
ALL	16/56	Y OPTION
<u>0.1 0</u>	17/57	TRAN PLS
		ALT
<u>0.0 7 0</u>	18/58	RATE DB
TAIL	19/59	JET OPT
<u>1</u>	20/60	#JETS
<u>0.0 8</u>	21/61	ON TIME
<u>- 0.0 0</u>	22/62	DELAY
		VERN
<u>0.0 0 5 0</u>	23/63	ROT RATE
<u>- 0.1 0 0</u>	24/64	ATT DB
<u>0.1 0</u>	25/65	RATE DB
<u>0.0 1 0</u>	26/66	ROT PLS
<u>0.0 0</u>	27/67	COMP
<u>0</u>	28/68	CNTL ACC

FLT PLN-15a/66/O/B

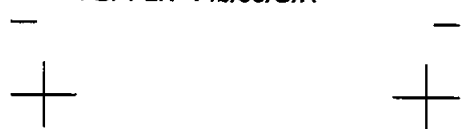


A14



**A12
DAP A13**

PURPOSE:
MAS MOON SCAN

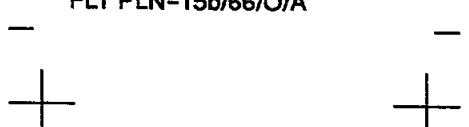


FLT PLN-14b/66/O/A



**A13
DAP A14**

PURPOSE:
SUSIM



FLT PLN-15b/66/O/A

(reduced copy)



A14

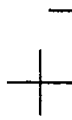
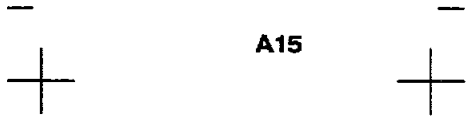
**A14
DAP A15**

DAP A 1 4	1/3	PRI
<u>0.0 5 0 0</u>	10/50	ROT RATE
<u>- 0.3 0</u>	11/51	ATT DB
<u>0.2 0</u>	12/52	RATE DB
<u>0.0 4</u>	13/53	ROT PLS
<u>0.0 0</u>	14/54	COMP
ALL	15/55	P OPTION
ALL	16/56	Y OPTION
<u>0.1 0</u>	17/57	TRAN PLS
		ALT
<u>0.0 7 0</u>	18/58	RATE DB
TAIL	19/59	JET OPT
1	20/60	#JETS
<u>0.0 8</u>	21/61	ON TIME
<u>- 0.0 0</u>	22/62	DELAY
		VERN
<u>0.0 0 8 0</u>	23/63	ROT RATE
<u>- 0.0 3 3</u>	24/64	ATT DB
<u>0.1 0</u>	25/65	RATE DB
<u>0.0 0 2</u>	26/66	ROT PLS
<u>0.0 0</u>	27/67	COMP
0	28/68	CNTL ACC

PURPOSE:
SOLCON

FLT PLN-16a/66/O/B

FLT PLN-16a/66/O/A



A15



A15

A15

DAP A 1 5	1/3	PRI
<u>0.0 5 0 0</u>	10/50	ROT RATE
<u>- 0.3 0</u>	11/51	ATT DB
<u>0.2 0</u>	12/52	RATE DB
<u>0.1 0</u>	13/53	ROT PLS
<u>0.0 0</u>	14/54	COMP
ALL	15/55	P OPTION
ALL	16/56	Y OPTION
<u>0.1 0</u>	17/57	TRAN PLS
		ALT
<u>0.0 7 0</u>	18/58	RATE DB
TAIL	19/59	JET OPT
1	20/60	#JETS
<u>0.0 8</u>	21/61	ON TIME
<u>- 0.0 0</u>	22/62	DELAY
		VERN
<u>0.0 3 0 0</u>	23/63	ROT RATE
<u>- 0.1 0 0</u>	24/64	ATT DB
<u>0.1 0</u>	25/65	RATE DB
<u>0.0 1 0</u>	26/66	ROT PLS
<u>0.0 0</u>	27/67	COMP
0	28/68	CNTL ACC

FLT PLN-17a/66/O/B

FLT PLN-17b/66/O/A



(reduced copy)



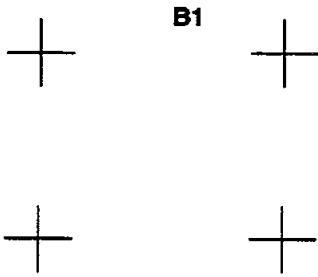
DAP B



DAP B1

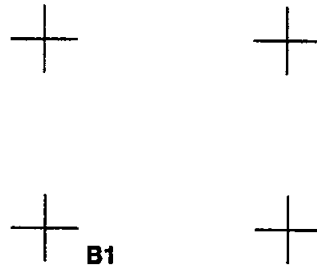
PURPOSE:
NOMINAL
OMS &
RCS BURNS

FLT PLN-18a/66/O/A



B1

FLT PLN-18b/66/O/A



B1

B1

2	DAP B 0 1
30	<u>0.5 0 0 0</u>
31	<u>- 3.0 0</u>
32	<u>0.2 0</u>
33	<u>0.0 4</u>
34	<u>- 0.0 0</u>
35	ALL
36	ALL
37	<u>0.0 1</u>
38	<u>0.2 0 0</u>
39	ALL
40	<u>2</u>
41	<u>0.0 8</u>
42	<u>- 0.0 0</u>
43	<u>0.2 0 0 0</u>
44	<u>- 1.0 0 0</u>
45	<u>0.2 0</u>
46	<u>0.0 0 2</u>
47	<u>- 0.0 0</u>
48	0

DAP B2

PURPOSE:
LOSS OF VERN
(TAIL ONLY)

FLT PLN-19a/66/O/B



B2

FLT PLN-19b/66/O/A



(reduced copy)



B2

2	DAP B 0 2
30	<u>0.2 0 0 0</u>
31	- <u>3.0 0</u>
32	<u>0.2 0</u>
33	<u>0.0 4</u>
34	<u>.0 0 0</u>
35	TAIL
36	TAIL
37	<u>0.0 2</u>
38	<u>0.0 7 0</u>
39	TAIL
40	1
41	<u>0.0 8</u>
42	- <u>0.0 0</u>
43	<u>0.2 0 0 0</u>
44	- <u>1.0 0 0</u>
45	<u>.0 2 0</u>
46	<u>0.0 0 2</u>
47	<u>.0 0 0</u>
48	<u>0</u>

FLT PLN-20a/66/O/B



B3



B3

2	DAP B 0 3
30	<u>0.2 0 0 0</u>
31	- <u>3.0 0</u>
32	<u>0.2 0</u>
33	<u>0.0 4</u>
34	<u>.0 0 0</u>
35	ALL
36	ALL
37	<u>0.0 2</u>
38	<u>0.0 7 0</u>
39	ALL
40	1
41	<u>0.0 8</u>
42	- <u>0.0 0</u>
43	<u>0.2 0 0 0</u>
44	- <u>1.0 0 0</u>
45	<u>.0 2 0</u>
46	<u>0.0 0 2</u>
47	<u>.0 0 0</u>
48	<u>0</u>

FLT PLN-21a/66/O/B



B4

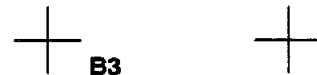


B2

DAP B3

PURPOSE:
LOSS OF VERN
(NOSE & TAIL)

FLT PLN-20b/66/O/A

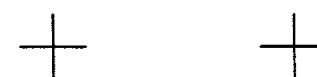


B3

DAP B4

PURPOSE:
SSUS DEPLOY

FLT PLN-21b/66/O/A



(reduced copy)



B4

2	DAP B 0 4
30	0.2 0 0 0
31	- 0.3 0
32	0.2 0
33	0.0 4
34	.0 0 0
35	TAIL
36	TAIL
37	0.0 2
38	0.2 0 0
39	ALL
40	2
41	0.0 8
42	- 0.0 0
43	0.0 0 8 0
44	- 0.1 0 0
45	.0 1 0
46	0.0 0 2
47	.0 0 0
48	0

FLT PLN-22a/66/O/B



B4

DAP B5

PURPOSE:
COAS CAL



B5



B5

2	DAP B 0 5
30	0.2 0 0 0
31	- 3.0 0
32	0.2 0
33	0.0 4
34	.0 0 0
35	TAIL
36	TAIL
37	0.0 2
38	0.2 0 0
39	ALL
40	2
41	0.0 8
42	- 0.0 0
43	0.0 1 6 0
44	- 0.0 3 3
45	.0 2 0
46	0.0 0 2
47	.0 0 0
48	0

FLT PLN-23a/66/O/A



FLT PLN-22b/66/O/A



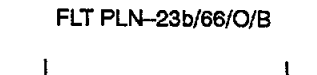
B5

DAP B6

PURPOSE:
NOTCH FILTER DTO



B6



FLT PLN-23b/66/O/B

(reduced copy)



B6

2/4	DAP B 0 6
30/50	0.1 0 0 0
31/51	- 3.0 0
32/52	0.2 0
33/53	0.0 4
34/54	.0 0 0
35/55	ALL
36/56	ALL
37/57	0.0 2
38/58	0.1 0 0
39/59	TAIL
40/60	2
41/61	0.0 8
42/62	- 8.1 0
43/63	0.1 0 0 0
44/64	- 2.0 0 0
45/65	.0 2 0
46/66	0.0 8 2
47/67	.0 0 0
48/68	4

FLT PLN-24a/66/O/B



B6

DAP B7

PURPOSE:
RENDEZVOUS

FLT PLN-24b/66/O/A



B7



B7

2	DAP B 0 7
30	0.5 0 0 0
31	- 2.0 0
32	0.2 0
33	0.0 4
34	.0 0 0
35	ALL
36	ALL
37	0.0 5
38	0.2 0 0
39	ALL
40	2
41	0.0 8
42	- 0.0 0
43	0.2 0 0 0
44	- 1.0 0 0
45	.0 2 0
46	0.0 0 2
47	.0 0 0
48	0

FLT PLN-25a/66/O/A



B7

DAP B8

PURPOSE:
PROX OPS

FLT PLN-25b/66/O/A



B8

(reduced copy)





B8

2	DAP B 0 8
30	<u>0.2 0 0 0</u>
31	- <u>2.0 0</u>
32	<u>0.2 0</u>
33	<u>0.0 4</u>
34	<u>.0 0 0</u>
35	ALL
36	ALL
37	<u>0.0 1</u>
38	<u>0.2 0 0</u>
39	ALL
40	2
41	<u>0.0 8</u>
42	- <u>0.0 0</u>
43	<u>0.2 0 0 0</u>
44	- <u>1.0 0 0</u>
45	- <u>0.2 0</u>
46	<u>0.0 0 2</u>
47	<u>.0 0 0</u>
48	0

FLT PLN-26a/66/O/A



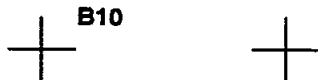
B9



B9

2/4	DAP B 0 9
30/50	<u>0.1 0 0 0</u>
31/51	- <u>5.0 0</u>
32/52	<u>0.2 0</u>
33/53	<u>0.0 4</u>
34/54	<u>.0 0 0</u>
35/55	TAIL
36/56	TAIL
37/57	<u>0.1 0</u>
38/58	<u>0.1 0 0</u>
39/59	TAIL
40/60	2
41/61	<u>0.0 8</u>
42/62	- <u>8.1 0</u>
43/63	<u>0.2 0 0 0</u>
44/64	- <u>3.0 0 0</u>
45/65	- <u>2.0 0</u>
46/66	<u>0.0 1 0</u>
47/67	<u>.0 0 0</u>
48/68	1

FLT PLN-27a/66/O/B



B10



B8

DAP B9

PURPOSE:

BERTH
UNBERTH
MNVR TO/FROM
LOW HOVER

FLT PLN-26b/66/O/A



B9

DAP B10

PURPOSE:

MNVR TO/FROM
NOMINAL/SINGLE
JOINT CAPTURE &
NOMINAL SINGLE
JOINT RELEASE

FLT PLN-27b/66/O/A



(reduced copy)



B10

2/4	DAP B 1 0
30/50	<u>0.1 0 0 0</u>
31/51	- <u>5.0 0</u>
32/52	<u>0.2 0</u>
33/53	<u>0.0 4</u>
34/54	<u>0 0 0</u>
35/55	TAIL
36/56	TAIL
37/57	<u>0.1 0</u>
38/58	<u>0.1 0 0</u>
39/59	TAIL
40/60	<u>2</u>
41/61	<u>0.0 8</u>
42/62	- <u>8.1 0</u>
43/63	<u>0.2 0 0 0</u>
44/64	- <u>3.0 0 0</u>
45/65	<u>2 0 0</u>
46/66	<u>0.0 1 0</u>
47/67	<u>0 0 0</u>
48/68	<u>2</u>

FLT PLN-28a/66/O/B



B10
DAP B11

PURPOSE:
PRE-RELEASE
DEADBAND
COLLAPSE

FLT PLN-28b/66/O/A



B11



B11

2/4	DAP B 1 1
30/50	<u>0.0 5 0 0</u>
31/51	- <u>1.0 0</u>
32/52	<u>0.2 0</u>
33/53	<u>0.0 4</u>
34/54	<u>0 0 0</u>
35/55	TAIL
36/56	TAIL
37/57	<u>0.1 0</u>
38/58	<u>0.1 0 0</u>
39/59	TAIL
40/60	<u>2</u>
41/61	<u>0.0 8</u>
42/62	- <u>8.1 0</u>
43/63	<u>0.0 2 0 0</u>
44/64	- <u>0.5 0</u>
45/65	<u>0 1 0</u>
46/66	<u>0.0 1 0</u>
47/67	<u>0 0 0</u>
48/68	<u>2</u>

FLT PLN-29a/66/O/B



B11

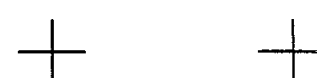
DAP B12

PURPOSE:
MNVR TO/FROM
EXTENDED PARK

FLT PLN-29b/66/O/A



B12



(reduced copy)



B12

2/4	DAP B 1 2
30/50	<u>0.1 0 0 0</u>
31/51	<u>- 5.0 0</u>
32/52	<u>0.2 0</u>
33/53	<u>0.0 4</u>
34/54	<u>0 0 0</u>
35/55	TAIL
36/56	TAIL
37/57	<u>0.1 0</u>
38/58	<u>0.1 0 0</u>
39/59	TAIL
40/60	2
41/61	<u>0.0 8</u>
42/62	<u>- 8.1 0</u>
43/63	<u>0.2 0 0 0</u>
44/64	<u>- 3.0 0 0</u>
45/65	<u>0.2 0 0</u>
46/66	<u>0.0 1 0</u>
47/67	<u>0.0 0 0</u>
48/68	3

FLT PLN-30a/66/O/B



B13



B13

2/4	DAP B 1 3
30/50	<u>0.2 0 0 0</u>
31/51	<u>- 1.0 0</u>
32/52	<u>0.2 0</u>
33/53	<u>0.0 4</u>
34/54	<u>0 0 0</u>
35/55	ALL
36/56	ALL
37/57	<u>0.0 2</u>
38/58	<u>0.0 7 0</u>
39/59	TAIL
40/60	1
41/61	<u>0.0 8</u>
42/62	<u>- 0.0 0</u>
43/63	<u>0.0 5 0 0</u>
44/64	<u>- 0.1 0 0</u>
45/65	<u>0 1 0</u>
46/66	<u>0.0 0 2</u>
47/67	<u>0.0 0 0</u>
48/68	0

FLT PLN-31a/66/O/B



B14



B12

DAP B13

PURPOSE:
GYRO CAL



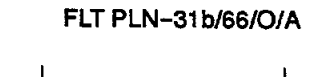
FLT PLN-30b/66/O/A



B13

DAP B14

PURPOSE:
ATLAS ZSI



FLT PLN-31b/66/O/A

(reduced copy)



B14

2/4	DAP B 1 4
30/50	<u>0.0 5 0 0</u>
31/51	- <u>1.0 0</u>
32/52	<u>0.2 0</u>
33/53	<u>0.0 4</u>
34/54	<u>.0 0 0</u>
35/55	ALL
36/56	ALL
37/57	<u>0.0 2</u>
38/58	<u>0.0 7 0</u>
39/59	TAIL
40/60	<u>1</u>
41/61	<u>0.0 8</u>
42/62	- <u>0.0 0</u>
43/63	<u>0.0 1 6 0</u>
44/64	- <u>0.1 0 0</u>
45/65	<u>.0 2 0</u>
46/66	<u>0.0 0 2</u>
47/67	<u>.0 0 0</u>
48/68	<u>0</u>

FLT PLN-32a/66/O/B



B15



B15

2/4	DAP B 1 5
30/50	<u>0.0 5 0 0</u>
31/51	- <u>0.3 0</u>
32/52	<u>0.2 0</u>
33/53	<u>0.0 4</u>
34/54	<u>.0 0 0</u>
35/55	ALL
36/56	ALL
37/57	<u>0.0 2</u>
38/58	<u>0.0 7 0</u>
39/59	TAIL
40/60	<u>1</u>
41/61	<u>0.0 8</u>
42/62	- <u>0.0 0</u>
43/63	<u>0.0 1 0 0</u>
44/64	- <u>0.1 0 0</u>
45/65	<u>.0 1 0</u>
46/66	<u>0.0 0 2</u>
47/67	<u>.0 0 0</u>
48/68	<u>0</u>

FLT PLN-33a/66/O/B



B14

DAP B15

PURPOSE:

SOLCON

FLT PLN-32b/66/O/A



B15

FLT PLN-33b/66/O/A



(reduced copy)

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

FLT PLN-34/66/O/A

FLT PLN-34/66/O/A is mounted on the back of the DAP Book

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**STS-66
FLIGHT PLAN NOTES**

**FLT PLN
NOTES**

FLIGHT PLAN NOTES
(CONSTRAINTS AND GUIDELINES)

A. FLIGHT DESCRIPTION

Orbiter: OV104/Atlantis
 Inclination: 57 deg
 Altitude: 163 x 165
 Duration: 11 + 2

B. MAJOR EVENTS

<u>EVENT</u>	<u>MET</u>	<u>DATE</u>	<u>CDT/CST</u>	<u>GMT</u>	<u>ΔV</u>	<u>ORBIT</u> (HP/HA)
Launch	00/00:00	10/27/94	11:46 CDT	300/16:46	--	--
OMS-2	00/00:39	10/27/94	12:25 CDT	300/17:25	262.0	163/165
CRISTA/SPAS RELEASE (SEP 1)	00:19:52	10/28/94	07:38 CDT	301/12:38	0.5	163/165
SEP 2	00/20:09	10/28/94	07:55 CDT	301/12:55	1.0	162/165
NC1	00:23:11	10/28/94	10:57 CDT	301/15:57	0.4	162/165
NC2	01/17:18	10/29/94	05:04 CDT	302/10:04	2.8	164/165
NC3	01/21:50	10/29/94	09:36 CDT	302/14:36	3.3	162/165
NC4	02/14:27	10/30/94	01:13 CST	303/07:13	1.2	162/165
NC5	03/01:01	10/30/94	11:47 CST	303/17:47	0.0	162/165
NC6	03/07:04	10/30/94	17:50 CST	303/23:50	0.2	163/165
NC7	04/01:11	10/31/94	11:57 CST	304/17:57	1.2	163/165
NC8	04/11:46	10/31/94	22:32 CST	305/04:32	0.0	163/165
NC9	04/17:48	11/01/94	04:34 CST	305/10:34	2.4	161/165
NC10	05/08:55	11/01/94	19:41 CST	306/01:41	0.0	161/165
NC11	05/19:30	11/02/94	06:16 CST	306/12:16	0.7	162/165
NC12	06/00:02	11/02/94	10:48 CST	306/16:48	0.0	162/165
NC13	06/15:08	11/03/94	01:54 CST	307/07:54	0.2	161/166
NC14	07/13:49	11/04/94	00:35 CST	308/06:35	0.2	161/165
NC15	08/01:55	11/04/94	12:41 CST	308/18:41	0.0	161/165
NC16	08/08:32	11/04/94	19:18 CST	309/01:18	0.0	162/165
NC17	08/13:11	11/05/94	23:57 CST	309/05:57	16.01	162/166
NH	08/13:56	11/05/94	00:42 CST	309/06:42	1.09	162/175
NC18	08/14:41	11/05/94	01:27 CST	309/07:27	23.03	162/175
NCC1	08/15:15	11/05/94	02:01 CST	309/08:01	0.0	160/161
MF	08/16:12	11/05/94	02:58 CST	309/08:58	10.3	160/161
NCC2	08/16:46	11/05/94	03:32 CST	309/09:32	0.0	161/165
TI	08/17:43	11/05/94	04:29 CST	309/10:29	8.9	161/165
CRISTA/SPAS GRAPPLE	08/20:09	11/05/94	06:55 CST	309/12:55	--	161/165
DEORBIT	10/18:46	11/07/94	05:32 CST	311/11:32	265.0	161/165
LANDING	10/19:46	11/07/94	06:32 CST	311/12:32	-	--

FLT PLN
NOTES

C. LANDING OPPORTUNITIES

		<u>Landing Orbit</u>	<u>No.</u>	<u>Site</u>	<u>Local Time</u>	<u>MET</u>
Nominal	Primary		173	KSC	07:32 EST	10/19:46
	1 Rev Late		174	KSC	09:06 EST	10/21:20
	Weather Alt		175	EDW	07:35 PST	10/22:49
1 Day Late	Primary		189	KSC	07:40 EST	11/19:54
	Weather Alt (1 Rev Late)		190	NOR	07:11 MST	11/21:25
	Weather Alt (2 Rev Late)		191	EDW	07:44 PST	11/22:58
2 Days Late	Primary		205	KSC	07:49 EST	12/20:03
	1 Rev Late		206	EDW	06:19 PST	12/21:33
	Weather Alt (2 Rev Late)		207	EDW	07:53 PST	12/23:07

D. CREW

CDR – Don McMonagle
 PLT – Curtis Brown
 MS1 – Ellen Ochoa
 MS2 – Joseph Tanner
 MS3 – Jean-Francois Clervoy
 MS4 – Scott Parazynski

1. RED team: CDR, MS1, MS2
 BLUE team: PLT, MS3, MS4

A dual shift duty cycle is planned. Each team works approximately 12 hours followed by 12 hours off duty. This allows continuous 24 hour/day payload operations.

2. The Payload Commander is MS1. The crewmembers responsible for performing an EVA, should one become necessary, are: MS4(EV1), MS2(EV2), MS3(IV).

E. COMMUNICATIONS

*TDRS Support: East (46° W), West (174° W)
 Contingency GSTDN: MIL, GDX, and, WLP
 Contingency RTS: DGS, GTS, HTS, IOS, NHS, OTS, and VTS

Lead time for site call-up: GSTDN – 2 hr, RTS – 4 hr

*The Flight Plan shows TDRS East coverage at 41° West, even though the real time support is TDRS East (46° W). MSFC requested that the JSC timeline stay in SYNC with the MSFC generated final FDF which was published using TDRS East (41° W).

The following table describes the Telemetry Format Loads (TFLs) for STS-66:

Data Source	TFLs			
	183/204	184/205	188/208	192/211
SL OD Replacement	X		X	X
SL Flex MDM Data		X	X	X
CRISTA-SPAS	X	X	X	
SSBUV	X	X	X	X
HDR GNC	X	X		X
HDR SM		X	X	X

1. SL OD Replacement data are those MSIDs routed from ATLAS ECOS and SCOS to the PCMMU and downlinked in the OI data stream.
2. SL Flex MDM data are those MSIDs routed from the Flex MDMs to the SM GPC and downlinked in the SM downlist.
3. CRISTA-SPAS data is a 16 kbps data stream from the PDI.
4. When HDR SM is not available (TFL 183/204), no SL Flex MDM data will be available.
5. The Flight Plan shows snapshots of data for IMU ALIGNS and RCS BURNS. The TFL snapshot for RCS BURNS will last from about 3-5 minutes prior to the burn until just after completion. The IMU ALIGN snapshots will occur when requested by GNC during the IMU alignment periods shown. TFL 183 will be used for approximately 3-5 minutes sometime during each alignment.
6. TFL 161, used for FCS checkout, does not support any payload data.

F. PAYLOADS

1. Atmospheric Laboratory for Applications and Science - 3 (ATLAS-3)

The ATLAS-3 payload is the third of a series of NASA shuttle-borne Spacelab (SL) missions designed to measure the variations in the solar output and its effects on the Earth's atmosphere over the course of an 11-year solar cycle. The payload consists of an Igloo Spacelab pallet system and includes six instruments (four solar and two atmospheric) which are controlled via ground commanding.

- a. Solar Physics

The Active Cavity Radiometer (ACR), Solar Constant (SOLCON), and Solar Spectrum (SOLSPEC) are solar physics instruments which measure the solar constant (the Sun's irradiance at one atmospheric unit or at the distance from the Earth to the Sun) at various wavelengths. The Solar Ultraviolet Spectral Irradiance Monitor (SUSIM) is a solar physics instrument which measures the solar spectrum from 180 to 3200 nanometers.

b. Atmospheric Physics

The Atmospheric Trace Molecule Spectroscopy (ATMOS) is an atmospheric instrument which measures trace gases in the atmosphere through the solar occultations. The Millimeter Wave Atmospheric Sounder (MAS) is an atmospheric instrument which measures temperature, pressure, and amounts of ozone, water vapor, and chlorine monoxide by viewing the atmospheric limb to the side of the orbiter.

2. Cryogenic Infrared Spectrometers and Telescopes for the Atmosphere--Shuttle Pallet Satellite (CRISTA/SPAS)

The CRISTA/SPAS payload is the second of a series of missions in the Astronomy Payload (ASTRO)--SPAS program, a cooperative venture between the German Space Agency, DARA, and the Office of Space Science and Applications (OSSA) at NASA Headquarters. CRISTA/SPAS is a Remote Manipulator System (RMS) deployed and retrieved free-flying payload which will acquire atmospheric physics data in low Earth orbit. The payload is comprised of the ASTRO--SPAS carrier and two science instruments. The primary experiment on CRISTA/SPAS is the CRISTA, which is a system of three telescopes and four spectrometers to measure infrared radiation emitted by the Earth's middle atmosphere.

A complementary instrument Middle Atmosphere High Resolution Spectrograph Investigation (MAHRSI) will also be carried on CRISTA/SPAS to measure ultraviolet radiation emitted and scattered by the Earth's atmosphere. The ASTRO--SPAS carrier is a truss structure that supports the payload subsystems and instruments. The carrier is capable of rotational attitude control using two redundant cold gas propulsion systems.

3. Shuttle Solar Backscatter Ultraviolet (SSBUV/A)

The SSBUV program is designed to provide more accurate and reliable readings of global ozone to aid in the calibration of backscatter ultraviolet (UV) instruments flown concurrently on free-flying satellites. The payload consists of an SSBUV spectrometer with five supporting optical sensors and command, data, and power systems mounted in two Get-Away-Special (GAS) canisters in bay 4 on the starboard side of the payload bay. The instrument views downward to measure ozone by comparing scattered UV sunlight with that coming directly from the Sun. The instrument also measures the solar spectrum in the UV range. Payload operations are controlled via ground commands.

4. Experiment of the Sun Complementing the Atlas Payload and Education-II (ESCAPE-II)

The ESCAPE-II experiment is contained in a standard Get-Away-Special (GAS) canister equipped with a commandable Standard Door Assembly (SDA). The PL is controlled by the Payload General Support Computer (PGSC) and Hitchhiker Bus Interface Adapter (HBIA). The PGSC/HBIA allows control of the payload by the crewmember from the Aft Flight Deck (AFD). ESCAPE-II is a project of the University of Colorado Space Grant consortium. The ESCAPE-II experiment consists of a 1/8-meter spectrometer to measure solar radiation between 110 and 200 nanometers, a soft X-ray photometer to measure full disk solar irradiance from 10-110 nanometers, and a Lyman alpha solar imaging telescope to take full disk solar images in Lyman alpha.

5. Protein Crystal Growth – Thermal Enclosure System (PCG–TES) (Block II)

The PCG–TES payload is designed to conduct experiments that will supply information on the scientific methods and dynamics of growing large high–quality protein crystals in microgravity. The TES is a refrigeration and incubation module for microgravity and biotechnology research. In the Block II configuration, the TES contents consist of a Crystal Observation System (COS).

6. Protein Crystal Growth – Single Locker Thermal Enclosure System (PCG–STES) (Block I)

The PCG–STES payload is designed to conduct experiments that will supply information on the scientific methods and dynamics of growing large high–quality protein crystals in microgravity. The PCG–STES payload consists of an STES, a refrigeration and incubation module for conducting microgravity and biotechnology research. The Block I configuration consists of a carrier containing three Vapor Diffusion Apparatus (VDA) trays.

7. Heat Pipe Performance Experiment – Reflight (HPP–RFL)

The HPP payload will study the behavior of heat pipes in microgravity. The HPP hardware consists of 10 heat pipes, a control/motor module, an SSP–provided PGSC, and supporting electronics. One crewmember will perform the HPP operations, experimentation involving static, rotating, and rewicking test in the middeck area. 22 hours of experimentation are planned. Daily PADM downlinks of test data will be provided for experimentation evaluation.

8. Physiological and Anatomical Experiment/National Institute of Health – Rodents (PARE/NIH–R)

The PARE/NIH–R is a series of experiments designed to determine whether exposure to microgravity results in physiological or anatomical changes in rodents. The rodents will be contained in two Animal Enclosure Modules (AEM) which are designed such that the flight crew will not come into direct contact with the animals.

9. Space Acceleration Measurement System (SAMS)

SAMS prime objective is to provide acceleration data to characterize the middeck and/or middeck mounted experiments. The acceleration environment is measured using three triaxial sensor heads and storing the data on optical data disks.

10. Space Tissue Loss/National Institute of Health – Cells (STL/NIH–C)

The objective of STL is to validate models of muscle, bone, and endothelial biochemical, and functional loss induced by microgravity stress. STL will evaluate cytoskeleton, metabolism, membrane integrity, and protease activity in target cells; in addition, STL will test tissue loss pharmaceuticals for efficacy.

G. ON-ORBIT DTOs

1. Cabin Air Monitoring (DTO 623)

This DTO will use the solid sorbent sampler to continuously sample the orbiter atmosphere throughout the flight.

2. Cabin Temperature Survey (DTO 664)

The purpose of this DTO is to compile a temperature profile of the crew cabin in a variety of orbiter attitudes and configurations, and to correlate the cabin temperature sensor reading with the cabin temperature profile during on-orbit operation. A crewmember will record temperatures at various test points twice daily using a digital thermometer.

3. Advanced Lower Body Restraint Test (DTO 668)

The purpose of DTO 668 is to evaluate the advanced lower body (legs and feet) restraint that provides variability in positioning an RMS operator. An adjustable lower body flexibility/rigidity and upper body movement/reach envelope will be tested. The restraint will be used at a work station requiring varying degrees of restraint/mobility/reach, such as the Aft Flight Deck (AFD) during Remote Manipulation System (RMS) operations.

4. Evaluation of Microbial Capture Device in Microgravity (DTO 677)

DTO 677 will demonstrate the zero-gravity operation of water sampling hardware proposed for the microbiological characterization of spacecraft potable water. Six microbial capture devices (MCDs) will be processed on Flight Day 8 thru Flight Day 11 using both shuttle drinking water and ground-supplied water.

5. On-Orbit Fit Check of the Recumbent Seat System on OV104 (DTO 680)

The primary objective of DTO 680 is to verify the ability to attach selected Recumbent Seating System (RSS) components to matching orbiter interfaces on OV104 when the crew compartment is subjected to on-orbit structural deformations that occur in flight. The ability to install the RSS on OV104 is critical to the first Mir Docking Mission.

6. Interlimb Resistance Device (ILRD) Evaluation (DTO 683)

DTO 683 will provide crewmembers a variable resistance exercise system, as opposed to aerobic training exercise (ergometer/treadmill). The low mass exercise harness with an inelastic cable and pulley system allows subjects to exercise one limb against the other. The ILRD is a free-floating exercise device. Its simple tethering system is expected to minimize vibration of sensitive experiments aboard the orbiter.

7. Laser Range and Range Rate Device (DTO 700-2)

The purpose of this Laser Range and Range Rate DTO is to demonstrate the capability to provide the orbiter flight crew with range rate data for rendezvous, proximity operations, and deploy operations. The DTO will assess the usefulness of the data to assist the pilot in achieving the desired trajectory conditions.

8. Payload Bay Rendezvous Laser Data Comparison (DTO 700-7)

This DTO will provide a more accurate assessment of the laser range and range rate device as a rendezvous and proximity guidance aid. The DTO will provide orbiter attitude information to the laser software in real time.

9. Notch Filter (DTO 834)

The objective of Notch Filters is to protect against potential DAP/structural bending interaction that can result in short period limit cycles. The Notch Filters are implemented in the OI-23 flight software. The test will excite the orbiter and RMS/CRISTA-SPAS payload structural system with open loop VRCS and PRCS pulses. Additionally, VRCS and PRCS automatic maneuvers both with and without the Notch Filters enabled will be performed.

10. Mir Approach Demonstration (Objective 1 thru 4) (DTO 835)

DTO 835 will demonstrate prox ops techniques designed to minimize plume effects. During rendezvous, the orbiter will approach the CRISTA-SPAS along the positive radius vector (+R -bar) rather than along the positive velocity vector (+V -bar).

11. Tools for Rendezvous and Docking (TRAD) (DTO 836)

The purpose of this DTO is to evaluate the performance of the TRAD system which integrates the Handheld Lidar (HHL) and the interface to the orbiter's GPC with the Rendezvous and Proximity Operations Program (RPOP) software. The RPOP software which is loaded on a PGSC utilizes GPC data via a connection to the Pulse Code Modulation Master Unit (PCMMU). The TRAD system provides displays of raw and processed trajectory information which will be used by the crew during rendezvous, proximity ops, and docking. Selected data files may be downlinked via the PADM.

H. ON-ORBIT DSOs

1. Inter Mars Tissue Equivalent Proportional Counter (ITEPC) (DSO 485)

DSO 485 consists of a spectrometer, radiation detector, and support electronics mounted in a GAS canister located in the payload bay. This experiment will demonstrate the ability of the hardware to withstand the radiation environment and to gather data on the radiation environment for future EVAs, as well as single event upset data.

2. Monitoring Latent Virus Reactivating and Shedding in Astronauts (DSO 493)

The object of DSO 493 is to determine the frequency of induced reactivation of herpes viruses, herpes virus shedding, and clinical disease after exposure to physical, physiological, and psychological stresses associated with space flight. Saliva will be collected once per flight day, immediately after sleep cycle.

3. Orthostatic Function During Entry, Landing, and Egress (DSO 603C)

The purpose of this DSO is to document the relationship between mission duration and changes in orthostatic function of crewmembers during the actual stresses of entry, landing, and egress from the seat and from the cabin. The crew will don and calibrate equipment prior to deorbit preparation. At LES donning, crewmembers will connect cables and power the equipment. This data will be used to guide the development of entry, landing, and egress countermeasures.

4. Effects of Space Flight on Aerobic and Anaerobic Metabolism During Exercise (DSO 608)

Changes in energy metabolism, shifts in fuel utilization, and decreases in muscle mass after extended duration space flight may limit a crewmember's ability to do physical work, both inflight and postflight. Participating crewmembers will keep a daily log of their fluid intake as well as don a heartwatch prior to exercise.

5. Energy Utilization (DSO 612)

Blood glucose and muscle glycogen are the body's primary energy sources, and decreases in their availability may affect a crewmember's physical capacity during entry, landing, and egress. Thus, DSO 612 will be used to develop, verify, and optimize appropriate countermeasures against muscle loss and low blood sugar. Participating crewmembers will collect urine and saliva samples on five consecutive days with a final urine sample on EOM-1. The crew will also maintain a log of all exercise, food, and fluid intake.

6. In-Flight Use of Florinef to Improve Orthostatic Intolerance Postflight (DSO 621)

The objective of this DSO is to evaluate the efficiency of Florinef on postflight orthostatic tolerance using heart rate, blood pressure, stroke volume, and other cardiovascular responses to orthostatic stress. Florinef, a plasma expander, has been effective in restoring or maintaining plasma volume and orthostatic tolerances during post-bedrest tests. Participating crewmembers will begin fluid loading one hour after the Florinef is taken on EOM.

7. Pre and Postflight Measurement of Cardiorespiratory Responses to Submaximal Exercise (DSO 624)

DSO 624 will evaluate the changes in aerobic capacity using submaximal exercise testing to correlate preflight and in-flight crew activities with postflight aerobic performance. This data will be used to assist the development of optimal exercise prescriptions as countermeasures to prevent decrements in the nominal cardiorespiratory response. Participating crewmembers will don heartwatches prior to exercise and will maintain daily exercise logs.

8. Documentary Television (DSO 901)

The purpose of DSO 901 is to provide live television or Video Tape Recorder (VTR) dumps of crew activities, orbiter operations, payload deployment/retrieval and operations, Earth views, rendezvous and proximity operations.

9. Documentary Motion Picture (DSO 902)

The purpose of DSO 902 is to provide documentary and public affair motion picture photography of the orbiter's basic capabilities and key flight objectives. Documentation shall include launch, crew activities, payload deployment/retrieval, landing, and unscheduled activities of special interest.

10. Documentary Still Photography (DSO 903)

The purpose of DSO 903 is to provide still photography of crew activities, orbiter operations, payload deployment/retrieval and operations, Earth views, and unscheduled items of interest.

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66 FLT PLN FSP FIN

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