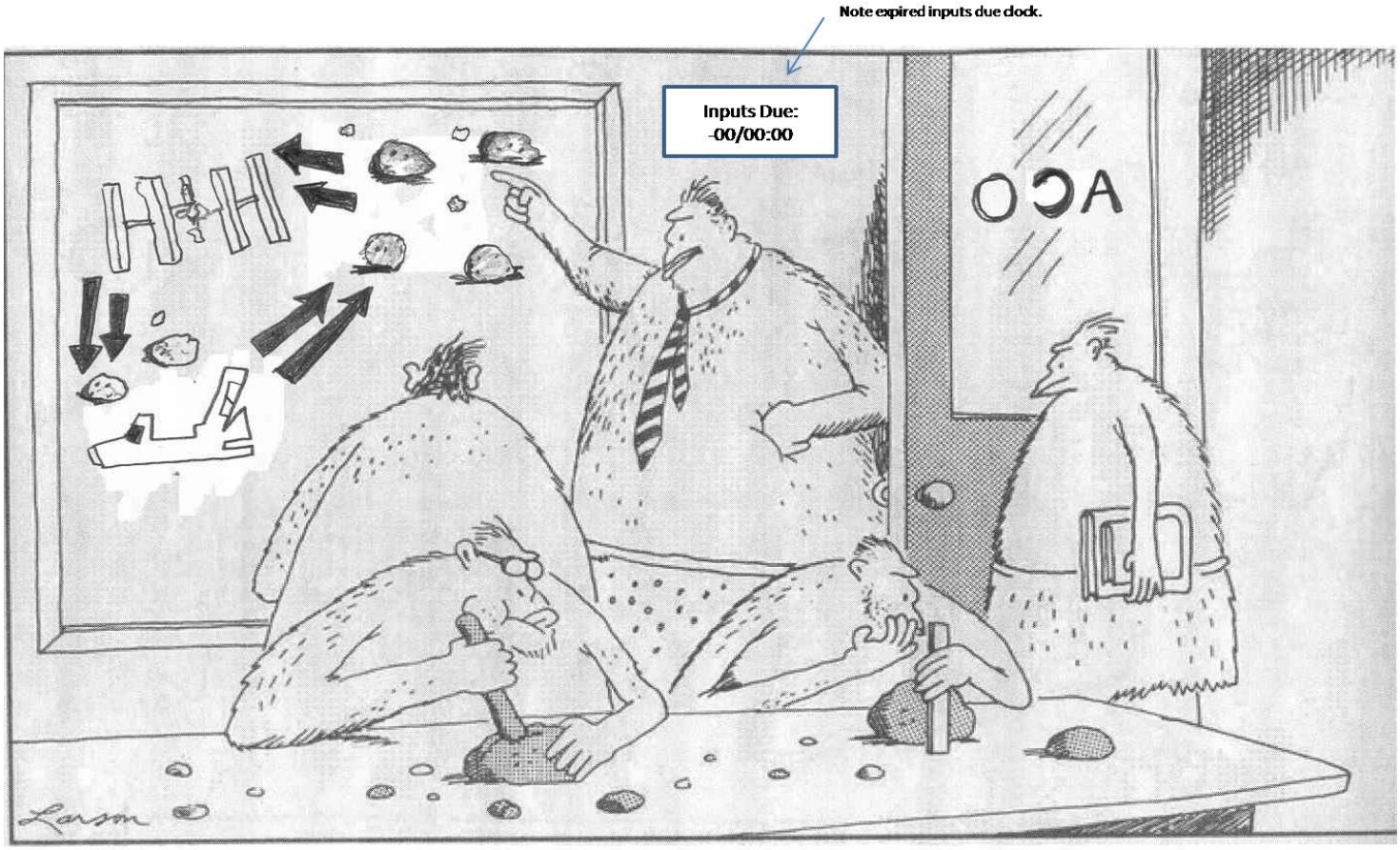
STS-131 / 19A

FD 06 Execute Package

MSG	Page(s)	Title
031B	1 - 15	FD06 Flight Plan Revision
032A	16 - 17	FD06 Mission Summary
033	18 - 21	FD06 Transfer Message
034	22	FD05 MMT Summary
035A	23	FD 6 EVA Procedure Deltas
036	24	FD06 Crew Choice Downlink
037	---	FD06 PAO Event Summary for Naval Postgraduate School Educational Event
038	---	FD06 PAO Event Summary, Nebraska Public Radio, CBS Newspath, Radio, KETV-TV

Approved by FAO:
L. Rush

Last Updated: Apr 10 2010 1:08 AM GMT
JEDI *(**J**oint **E**xecute package **D**evelopment and **I**ntegration), v3.0*



ACO Transfer works diligently to complete their daily transfer products. It 's not really that easy.

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MSG INDEX

MSG NO.	TITLE
031	FD06 Flight Plan Revision
032	FD06 Mission Summary
033	FD06 Transfer Message (23-0217)
034	FD05 MMT Summary
035	FD 6 EVA Procedure Deltas
036	FD06 Crew Choice Downlink (23-0221)
037	FD06 PAO Event Summary for Naval Postgraduate School Educational Event (23-0219)
038	FD06 PAO Event Summary, Nebraska Public Radio, CBS Newspath, Radio, KETV-TV (23-0220)

1. Cryo Config

Post-Sleep Cryo Config

For today's post-sleep cryo config, O2 tanks 1 and 2, and H2 tanks 1 and 5 will be active.

R1 O2,H2 MANF VLV TK1 (two) - OP (tb-OP)
O2 TK2 HTRS A,B (two) – AUTO

A15 CRYO TK5 HTR O2 A – OFF

Pre-Sleep Cryo Config

√MCC for deltas prior to configuring for pre-sleep.

For tonight's cryo config, manifold 2 will be closed with O2 and H2 tanks 2 and 5 active.

A15 CYRO TK5 HTR O2 A - AUTO

R1 H2 TK2 HTRS A,B (two) - AUTO
O2,H2 TK1 HTRS A,B (four) - OFF
MANF VLV TK2 (two) - CL (tb-CL)

2. Comm Loop Overview: FLIGHT DAY 6

S/G 1 & A/G 1	S/G 2	A/G 2
Rack Transfers	EVA Tool/EMU activities	Transfer
	ISS Payloads	All other STS Comm
	Russian Ops	
	PAO Event	
	Educational Event	
	DPC	
	All other ISS Comm	

3. **PDRS Deltas** - Due to a late change in the robotics choreography, please note the following changes to your PDRS procedures:

   OBSS MNVR TO EVA 2 VIEWING (FS1-9), step 1 note
   - WAS: SSRMS is at the FD 6 Overnight Park position on MBS PDGF 1
   - IS: SSRMS is at the **JEM Clearance** position on **NODE 2 PDGF**

   OBSS MNVR TO MPLM VIEWING (FS 1-13), step 1 note
   - WAS: SSRMS is at the FD7 Overnight Park postion on MBS PDGF 1
   - IS: SSRMS is at the **Port Clear (ONP)** position on **NODE 2 PDGF**

4. **FE-2 PFC** - Stephanie - you are scheduled to set up a Private Family Conference in the shuttle for Tracy using privatized A/G and a shuttle PGSC at 5/04:15.

5. Replace pages 2-18, 2-20, 2-22 and 3-56 through 3-65.

REPLANNED

FD05 | **FD06**

GMT 04/09/10 (099)
β = −13
MET Day 004

06 17 18 19 20 21 22 23 04/10 01 02 03 04
07 08 09 10 11 12 13 14 15 16 17 18

STS-131

CDR POINDEXTER	PMCA/G PRE SLEEP	SLEEP			POST SLEEP
PLT DUTTON	PRE SLEEP	SLEEP			POST SLEEP MCIU
MS1 MASTRACCHIO	PRE SLEEP	SLEEP		ASPRN	POST SLEEP
MS2 METCALF-LINDENBURGER	PRE SLEEP	SLEEP			POST SLEEP
MS3 WILSON	PRE SLEEP	SLEEP		LOG	POST SLEEP
MS4 YAMAZAKI	PRE SLEEP	SLEEP		LOG	POST SLEEP UPDAT XFER
MS5 ANDERSON	PRE SLEEP	SLEEP		ASPRN LPOG	PST SLP

TDRS W E Z

DAY/NIGHT

ORBIT 68 69 70 71 72 73 74 75

ORB ATT BIAS -XLV -ZVV

TDRS AVAIL

NOTES

FD06 **REPLANNED**

GMT 04/10/10 (100)
β=-11
MET Day 004

18 05 06 07 08 09 10 11 12 13 14 15 16
19 20 21 22 23 005/00 01 02 03 04 05 06

STS-131

CDR POINDEXTER	MO1OW; N2-I; CWC S/U & FILL #1; IMU; CWC; TERM; N2-T; CWC; XFER; EXERCISE ARED; OMS*; MEAL; ISP; INST; MPLM XFER; ISP; INST; MPLM XFER; ISP; INST; MPLM XFER; ILON; EVA 2 PROC RVW; PRE SLP; PAO EDU; EVENT; PRE SLEEP; PMCA/G
PLT DUTTON	SRMS MNVR EVA2; MPLM XFER; EXERCISE ARED; MPLM XFER; MEAL; FLTR INSP; MPLM XFER; WCS; EVA 2 PROC RVW; PRE SLP; PAO EDU; EVENT; PRE SLEEP
MS1 MASTRACCHIO	LIOH&; BIAS; INST; BSA-T; BSA INIT; TOOL CONFIG; E_LK PREP; MEAL; PAO; EVENT; EXERCISE; EVA 2 PROC RVW; PRE SLEEP; MASK P/B
MS2 METCALF-LINDENBURGER	SRMS MNVR EVA2; EXERCISE; MPLM XFER; TOOL CONFIG; MEAL; MPLM XFER; EVA 2 PROC RVW; PRE SLP; PAO EDU; EVENT; PRE SLEEP
MS3 WILSON	MDK; MPLM XFER; ULTRBAY; SWP; MPLM XFER; MEAL; MPLM XFER; PAO; EVENT; EXERCISE; MPLM PIVOT INST; AEM#; XFER; TAGUP; EVA 2 PROC RVW; MDK; FE2 PFC S/U; PRE SLEEP
MS4 YAMAZAKI	XFER; UPDAT; WORF PREP; WORF XFER; ER7 XFER; MEAL; ISP INSTALL; ISP INSTALL; ISP INSTALL; XFER; TAGUP; XFER BRIEF; EXERCISE; PRE SLEEP
MS5 ANDERSON	PSTSLP; MPLM XFER; LIOH&; BIAS; INST; TOOL CONFIG; E_LK PREP; MEAL; PAO; EVENT; MPLM XFER; EXERCISE; EVA 2 PROC RVW; PRE SLEEP; MASK P/B

TDRS W E Z

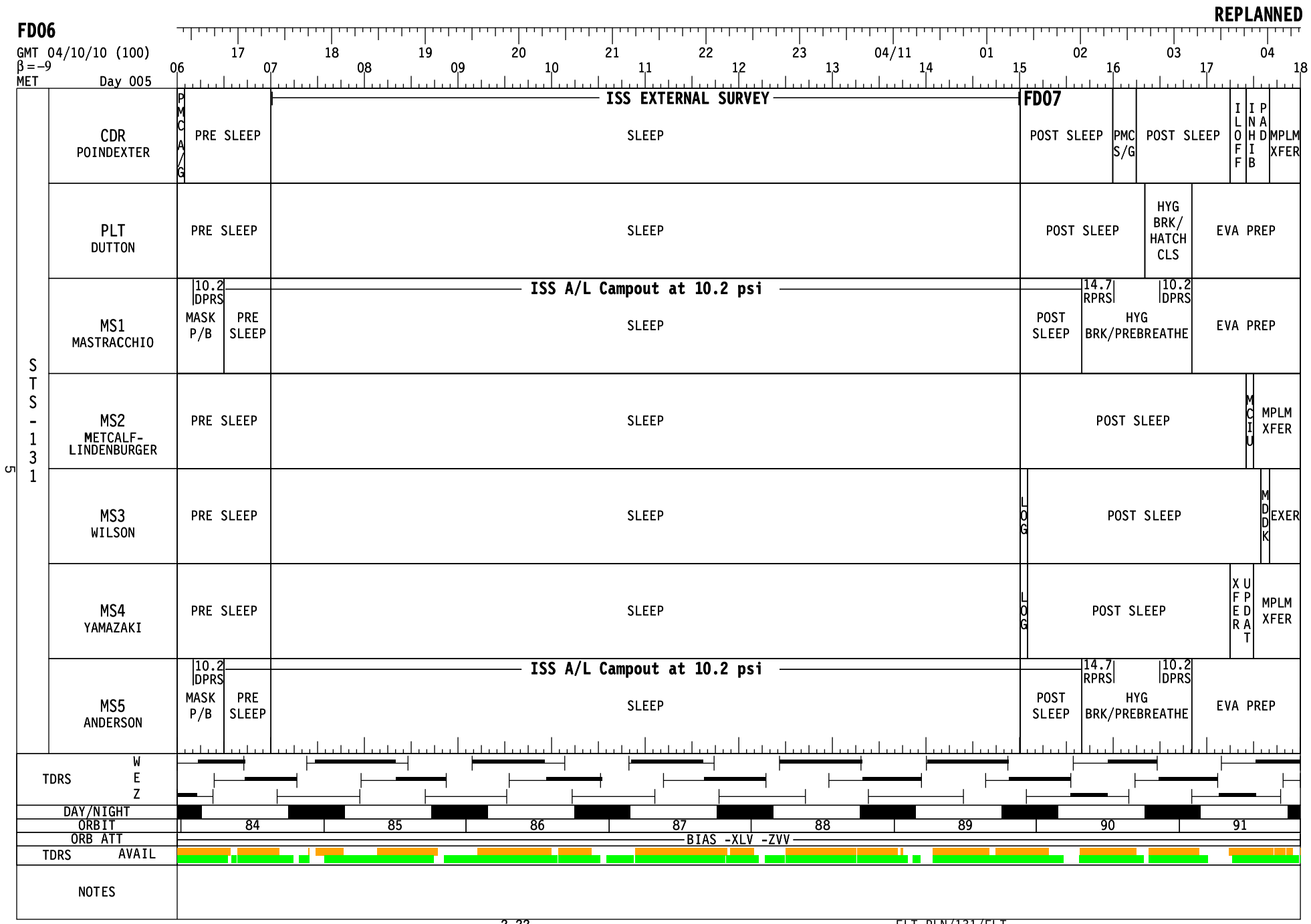
DAY/NIGHT

ORBIT 76 77 78 79 80 81 82 83

ORB ATT BIAS -XLV -ZVV

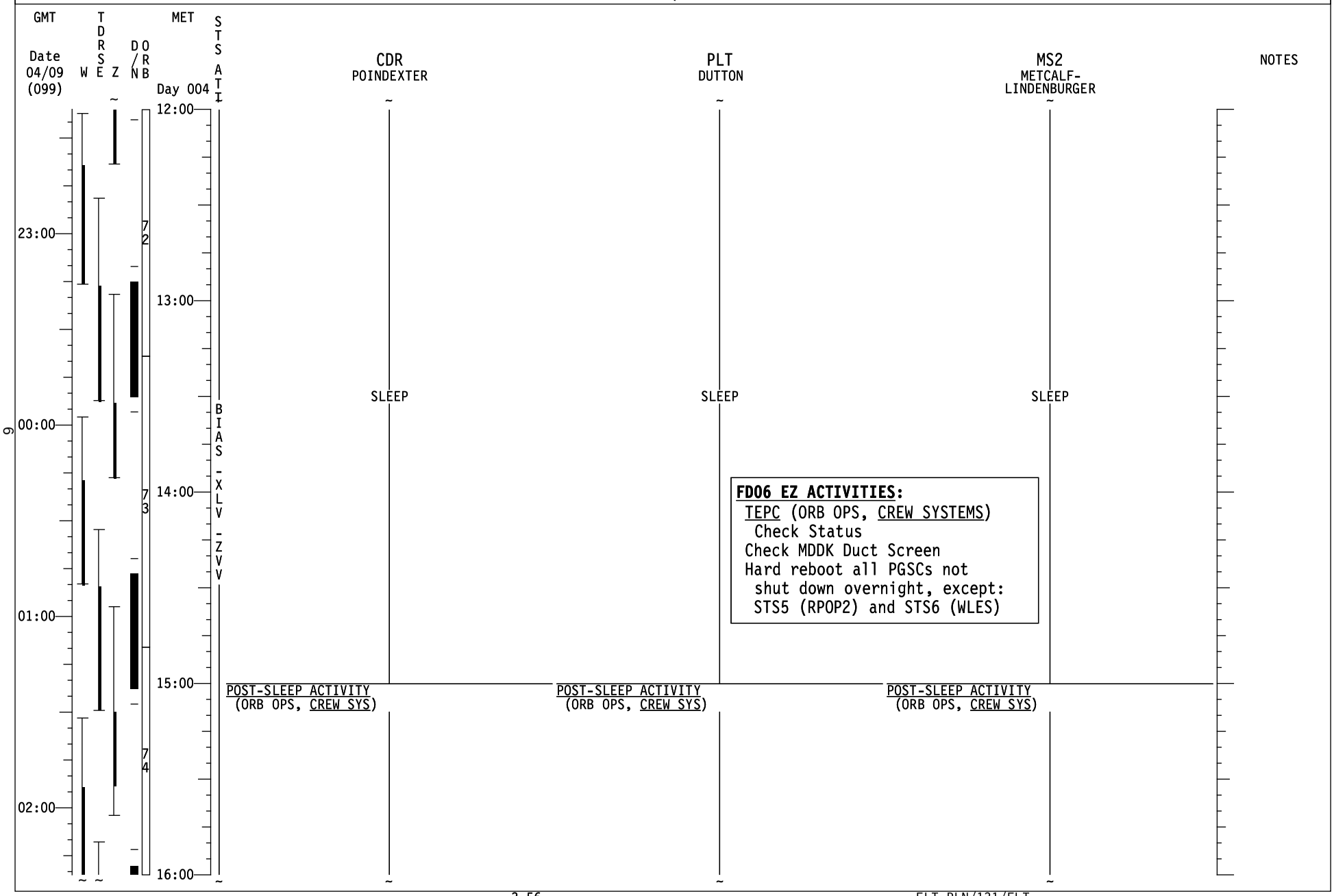
TDRS AVAIL

NOTES *B POD HTR RCFG #STATUS CHECK


REPLANNED
FD06
GMT 04/10/10 (100)
β=-9
MET Day 005
17 18 19 20 21 22 23 04/11 01 02 03 04
06 07 08 09 10 11 12 13 14 15 16 17 18
STS-131
CDR POINDEXTER
PMC A/G
PRE SLEEP
ISS EXTERNAL SURVEY
SLEEP
FD07
POST SLEEP
PMC S/G
POST SLEEP
ILOFF
INHIB
PAD
MPLM XFER
PLT DUTTON
PRE SLEEP
SLEEP
POST SLEEP
HYG BRK/ HATCH CLS
EVA PREP
MS1 MASTRACCHIO
10.2 DPRS
MASK P/B
PRE SLEEP
ISS A/L Campout at 10.2 psi
SLEEP
POST SLEEP
14.7 RPRS
10.2 DPRS
HYG BRK/PREBREATHE
EVA PREP
MS2 METCALF-LINDENBURGER
PRE SLEEP
SLEEP
POST SLEEP
MCIU
MPLM XFER
MS3 WILSON
PRE SLEEP
SLEEP
LOG
POST SLEEP
MDDK
EXER
MS4 YAMAZAKI
PRE SLEEP
SLEEP
LOG
POST SLEEP
XFER
UPDAT
MPLM XFER
MS5 ANDERSON
10.2 DPRS
MASK P/B
PRE SLEEP
ISS A/L Campout at 10.2 psi
SLEEP
POST SLEEP
14.7 RPRS
10.2 DPRS
HYG BRK/PREBREATHE
EVA PREP
TDRS
W
E
Z
DAY/NIGHT
ORBIT
84 85 86 87 88 89 90 91
ORB ATT
BIAS -XLV -ZVV
TDRS AVAIL
NOTES

STS-131/19A FD06

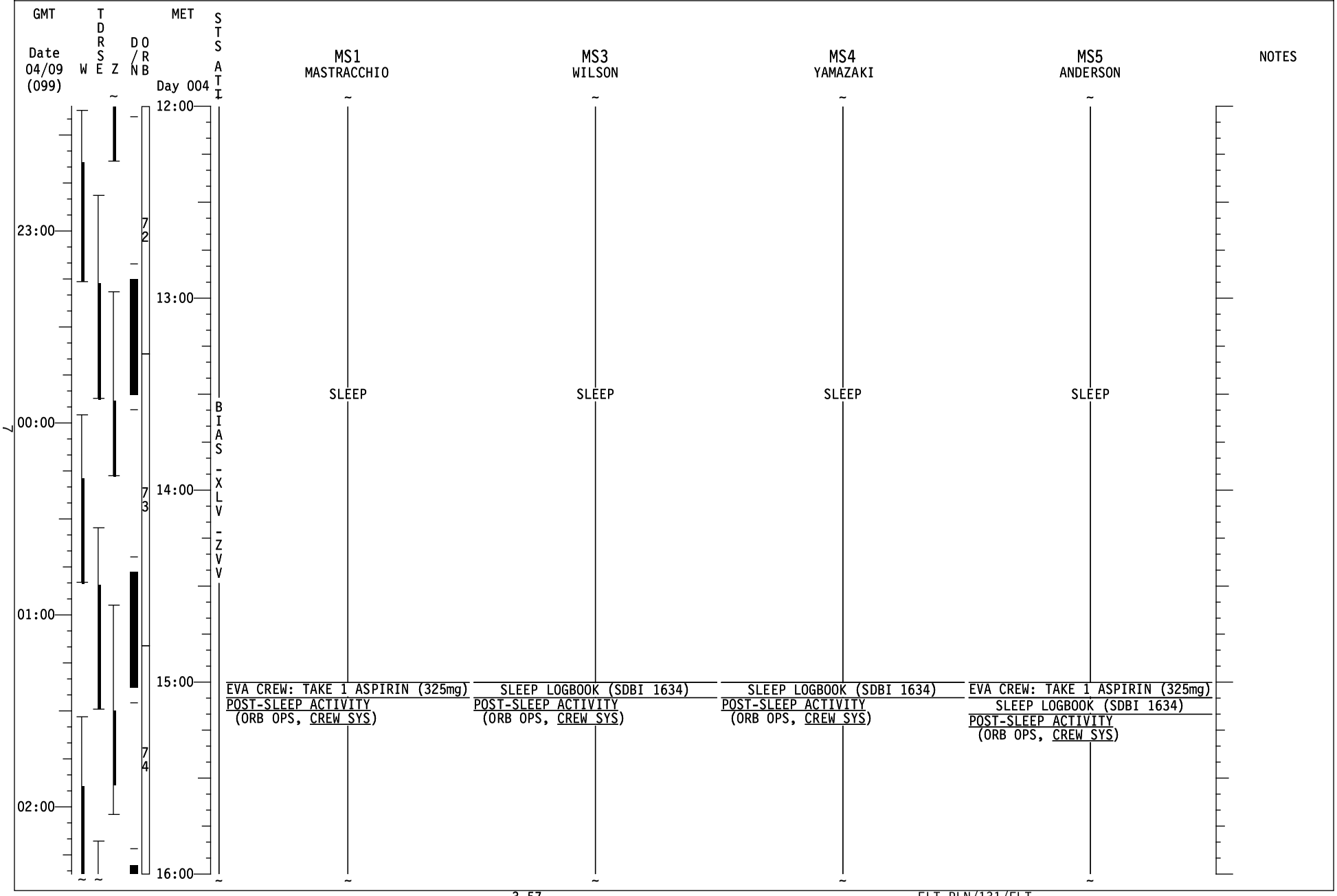
REPLANNED



FD06 EZ ACTIVITIES:
TEPC (ORB OPS, CREW SYSTEMS)
Check Status
Check MDDK Duct Screen
Hard reboot all PGSCs not shut down overnight, except: STS5 (RPOP2) and STS6 (WLES)

STS-131/19A FD06

REPLANNED



STS-131/19A FD06

REPLANNED

GMT Date 04/10 (100) | W | TDRSE | Z | D/N | ORB | MET Day 004 | STS ATT | CDR POINDEXTER | PLT DUTTON | MS2 METCALF-LINDENBURGER | NOTES

03:00 | 04:00 | 05:00 | 06:00

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

74 | 75 | 76 | 77

BIAS-XLV-ZVV

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

MO10W H2O TK N2 REG INLET SYS 2 vlv - OP
N2 REPRESS INIT [A]

SHUTTLE/ISS H2O CONTAINER FILL (HC)
(ORB OPS, ECLS)
Perform EQUIP PREP,
WATER TRANSFER HOSE PURGE, and
CWC FILL #1
Ref. MSG 012

IMU STAR OF OPPTY ALIGN (ORB OPS, GNC)

SHUTTLE/ISS H2O CONTAINER FILL (HC)
(ORB OPS, ECLS)
Perform FILL TERMINATION

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

L17 Check MCIU filter screen
OBSS MNVR TO EVA 2 VIEWING POSITION
(PDRS, OBSS NOMINAL)
Ref. MSG 031 item 3

[A] N2 REPRESS USING P/L N2 VLVS
(ORB OPS, ECLS) Steps 1,3-7
MCC will TMBU S/W FDA

TRANSFER OPS
Ref. MPLM Transfer Lists
and MSG 033

EXERCISE
ARED AVAILABLE

MS2
POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

OBSS MNVR TO EVA 2 VIEWING POSITION
(PDRS, OBSS NOMINAL)
Ref. MSG 031 item 3

EXERCISE

TRANSFER OPS
Ref. MPLM Transfer Lists
and MSG 033

8

STS-131/19A FD06

REPLANNED

GMT Date 04/10 (100) | W | TDRSE | Z | D/N | ORB | MET Day 004 | STS ATI

MS1 MASTRACCHIO	MS3 WILSON	MS4 YAMAZAKI	MS5 ANDERSON	NOTES
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
	MERLIN STATUS CK (Cue Card) GLACIER STATUS CK (Cue Card) STL STATUS CK (Cue Card)	DAILY TRANSFER LIST UPDATE Ref. Transfer List & MSG 033		
	TRANSFER OPS Ref. MPLM Transfer Lists and MSG 033 Remove any other external devices from the KFX machine then: A31p DEVICE CHANGEOUT (ORB OPS, PGSC) Steps 1-4, 9-11	2.110 WORF TRANSFER MPLM TO ISS (ASSY OPS, TRANSFER) Steps 1.1-1.18 Ref. MPLM Return Transfer List: Item 785		
	TRANSFER OPS Ref. MPLM Transfer Lists and MSG 033	2.110 WORF TRANSFER MPLM TO ISS (ASSY OPS, TRANSFER) Steps 2-end Ref. MPLM Resupply Transfer List: Items 127, 172, & 173	TRANSFER OPS Ref. MPLM Transfer Lists and MSG 033	
B Ref. CONSUMABLES TRACKING CC Ref. BATTERY RECHARGE CUE CARD Record LiOH s/n on Cue Card; Report to MCC				
EVA SYSTEMS: 1.515 EMU METOX/LIOH/BATTERY REPLACEMENT B			EVA SYSTEMS: 1.515 EMU METOX/LIOH/BATTERY REPLACEMENT B	

Time scale: 03:00, 04:00, 05:00, 06:00; MET Day 004: 16:00, 17:00, 18:00, 19:00, 20:00

STS ATI: BIAS - XLV - ZVV

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STS-131/19A FD06

REPLANNED

GMT Date 04/10 (100) | W | TDRSE | Z | D/N | ORB | MET Day 004 | STS ATI | CDR POINDEXTER | PLT DUTTON | MS2 METCALF-LINDENBURGER | NOTES

20:00

N2 REPRESS TERM (On MCC GO) C

CWC TRANSFER
Transfer CWC to ISS

EXERCISE
ARED AVAILABLE

C N2 REPRESS USING P/L N2 VLVS
(ORB OPS, ECLS)
on MCC go, perform steps 8-13
MCC will TMBU S/W FDA

07:00

EXERCISE
ARED AVAILABLE

TRANSFER OPS
Ref. MPLM Transfer Lists
and MSG 033

21:00

TRANSFER OPS
Ref. MPLM Transfer Lists
and MSG 033

08:00

BIAS-XLV-ZVV

RCS/OMS POD HTR RECONFIG D

D A14 RCS/OMS HTR L POD - A OFF
- B AUTO

EVA 2 TOOL CONFIG
(EVA, TIMELINES)
Ref. CONSUMABLES TRACKING
CUE CARD
Ref. MSG 035

22:00

MEAL

MEAL

09:00

S&M: 1.247 INTEGRATED STOWAGE
PLATFORM (ISP) INSTALL
Steps 1 (if required), 2-3.5.
Ref. MPLM Return Transfer List Items:
758,759,760,763,&764

MEAL

23:00

TRANSFER OPS
Ref. MPLM Transfer Lists
and MSG 033

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

TRANSFER OPS
Ref. MPLM Transfer Lists
and MSG 033

10:00

S&M: 1.247 INTEGRATED STOWAGE
PLATFORM (ISP) INSTALL
Steps 1 (if required), 2-3.5.
Ref. MPLM Return Transfer List Items:
758,759,760,763,&764

00:00

10

STS-131/19A FD06

REPLANNED

GMT Date 04/10 (100) | W | TDRSE | Z | D/N | ORB | MET Day 004 | STS ATT

MS1 MASTRACCHIO	MS3 WILSON	MS4 YAMAZAKI	MS5 ANDERSON	NOTES
EVA SYSTEMS: 1.515 EMU METOX/LIOH/BATTERY REPLACEMENT B EVA SYS: 1.605 BSA BATTERY RECHARGE TERM Ref. CONSUMABLES TRACKING CUE CARD EVA SYS: 1.605 BSA BATTERY RECHARGE INITIATE Ref. CONSUMABLES TRACKING CUE CARD Ref. BATTERY RECHARGE CUE CARD EVA 2 TOOL CONFIG (EVA, TIMELINES) Ref. CONSUMABLES TRACKING CUE CARD Ref. MSG 035 Ref. MPLM Resupply Transfer List: Item 214 B Ref. CONSUMABLES TRACKING CC Ref. BATTERY RECHARGE CUE CARD Record LiOH s/n on Cue Card; Report to MCC EVA SYSTEMS: 1.305 EQUIPMENT LOCK PREP Omit DRINK BAG FILL Ref. MSG 035 for CCA MEAL PUBLIC AFFAIRS EVENT ISS KU AVAIL (09:51-10:30) Ref. MSG 038	TRANSFER OPS Ref. MPLM Transfer Lists and MSG 033 MEAL TRANSFER OPS Ref. MPLM Transfer Lists and MSG 033 PUBLIC AFFAIRS EVENT ISS KU AVAIL (09:51-10:30) Ref. MSG 038	2.110 WORF TRANSFER MPLM TO ISS (ASSY OPS, TRANSFER) Steps 2-end Ref. MPLM Resupply Transfer List: Items 127, 172, & 173 2.104 RACK TRANSFER FROM MPLM TO ISS (ER7, CQ2, MARES) (ASSY OPS, TRANSFER) Perform for EXPRESS-7 Ref. MPLM Resupply Transfer List: Items 116 & 176 MEAL UNSTOW ISP from NOD3F5 TRANSFER ISP to MPL1S3 then: S&M: 1.247 INTEGRATED STOWAGE PLATFORM (ISP) INSTALL Steps 1.2-end Ref. MPLM Return Transfer List: Items 758,759,760,763,&764 UNSTOW ISP from NOD3F5 TRANSFER ISP to MPL1S3 then: S&M: 1.247 INTEGRATED STOWAGE PLATFORM (ISP) INSTALL Steps 1.2-end Ref. MPLM Return Transfer List: Items 758,759,760,763,&764	EVA SYSTEMS: 1.515 EMU METOX/LIOH/BATTERY REPLACEMENT B EVA 2 TOOL CONFIG (EVA, TIMELINES) Ref. CONSUMABLES TRACKING CUE CARD Ref. MSG 035 Ref. MPLM Resupply Transfer List: Item 214 EVA SYSTEMS: 1.305 EQUIPMENT LOCK PREP Omit DRINK BAG FILL Ref. MSG 035 for CCA MEAL PUBLIC AFFAIRS EVENT ISS KU AVAIL (09:51-10:30) Ref. MSG 038 TRANSFER OPS Ref. MPLM Transfer Lists and MSG 033	

Time scale: 07:00, 08:00, 09:00, 10:00; 20:00, 21:00, 22:00, 23:00, 00:00

BIAS - XLV - ZVV

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STS-131/19A FD06

REPLANNED

GMT Date 04/10 (100) | W | TDRSE | Z | D/N | ORB | MET Day 005 | STS ATT | CDR POINDEXTER | PLT DUTTON | MS2 METCALF-LINDENBURGER | NOTES

00:00 – 01:00 – 02:00 – 03:00 – 04:00

11:00 – 12:00 – 13:00 – 14:00

80 – 81 – 82

BIAS-XLV-ZVV

CDR

TRANSFER OPS
Ref. MPLM Transfer Lists
and MSG 033

S&M: 1.247 INTEGRATED STOWAGE PLATFORM (ISP) INSTALL
Steps 1 (if required), 2-3.5
Ref. MPLM Return Transfer List Items:
758,759,760,763,&764

TRANSFER OPS
Ref. MPLM Transfer Lists
and MSG 033

ILLUMINATOR OPS (Cue Card, TV)
ILLUMINATOR ON - A,D

EVA 2 BRIEFING CARD
(EVA, TIMELINES)
EVA 2 Procedure Review,
Ref. MSG 013
Ref. MSG 035

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

PLT

TRANSFER OPS
Ref. MPLM Transfer Lists
and MSG 033

E WCS Filter Check
WCS CRADLE - AUTO INIBIT
Inspect hose block filter,
change if req'd
WCS CRADLE - AUTO

WCS FILTER CHECK E

EVA 2 BRIEFING CARD
(EVA, TIMELINES)
EVA 2 Procedure Review,
Ref. MSG 013
Ref. MSG 035

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

MS2

TRANSFER OPS
Ref. MPLM Transfer Lists
and MSG 033

EVA 2 BRIEFING CARD
(EVA, TIMELINES)
EVA 2 Procedure Review,
Ref. MSG 013
Ref. MSG 035

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

12

3-62

FLT PLN/131/FLT

STS-131/19A FD06

REPLANNED

GMT Date 04/10 (100) | W | TDRSE | Z | D/N | ORB | MET Day 005 | STS ATT

00:00 – 01:00 – 02:00 – 03:00 – 04:00

11:00 – 12:00 – 13:00 – 14:00

80 – 81 – 82

BIAS - XLV - ZVV

MS1 MASTRACCHIO

EXERCISE

EVA 2 BRIEFING CARD
(EVA, TIMELINES)
EVA 2 Procedure Review
Ref. MSG 013
Ref. MSG 035

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

MS3 WILSON

EXERCISE

S&M: 1.261 RSP/RSR ROTATE DOWN
Steps 1-3 for Pivot Pins on MPL1F4, A4, and F2 RSPs.
Steps 4-end to rotate an RSP down, as required.
Ref. S&M: 1.262 RSP/RSR ROTATE UP as required.
Ref. MPLM Return Transfer List: Items 102 & 213

AEM UNIT#1 CK (Cue Card)
AEM UNIT#2 CK (Cue Card)

TRANSFER TAGUP
Coordinate with transfer counterparts

EVA 2 BRIEFING CARD
(EVA, TIMELINES)
EVA 2 Procedure Review
Ref. MSG 013
Ref. MSG 035

MERLIN STATUS CK (Cue Card)
GLACIER STATUS CK (Cue Card)
STL STATUS CK (Cue Card)

MS4 YAMAZAKI

UNSTOW ISP from NOD3F5
TRANSFER ISP to MPL1S3 then:
S&M: 1.247 INTEGRATED STOWAGE PLATFORM (ISP) INSTALL
Steps 1.2-end
Ref. MPLM Return Transfer List: Items 758,759,760,763,&764
INTEGRATED STOWAGE PLATFORM (ISP) REMOVAL
(MPLM RESUPPLY TRANSFER, PROCEDURES)
TRANSFER ISP to MPL1P3 then:
1.247 INTEGRATED STOWAGE PLATFORM (ISP) INSTALL
Steps 1.2-end
Ref. MPLM Return Transfer List: Items 758,759,760,763,&764

TRANSFER TAGUP
Coordinate with transfer counterparts

TRANSFER BRIEF
Call down status to MCC
Ratty Comm (02:55-02:58)
and (03:28-03:38)

EXERCISE

MS5 ANDERSON

TRANSFER OPS
Ref. MPLM Transfer Lists and MSG 033

EXERCISE

EVA 2 BRIEFING CARD
(EVA, TIMELINES)
EVA 2 Procedure Review
Ref. MSG 013
Ref. MSG 035

PRE-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

NOTES

STS-131/19A FD06

REPLANNED

GMT Date 04/10 (100) | W | TDRSE | Z | D/N | ORB | MET Day 005 | STS ATT

CDR POINDEXTER	PLT DUTTON	MS2 METCALF-LINDENBURGER	NOTES
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
PUBLIC AFFAIRS EVENT ISS KU AVAIL (14:35-15:19) Ref. MSG 037	PUBLIC AFFAIRS EVENT ISS KU AVAIL (14:35-15:19) Ref. MSG 037	PUBLIC AFFAIRS EVENT ISS KU AVAIL (14:35-15:19) Ref. MSG 037	
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS) Air Quality Report	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
L9 PAYLOAD STATION A/G (two) - OFF PRIVATE MEDICAL CONFERENCE VIA A/G 2			
PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)			SSRMS WALKOFF TO MBS PDGF 1
SLEEP	SLEEP	SLEEP	

Time scale: 15:00, 16:00, 17:00, 18:00; 04:00, 05:00, 06:00, 07:00, 08:00

Orbits: 82, 83, 84, 85

BIAS-XLV-ZVV

CREW WAKEUP AT 05/15:00

14

STS-131/19A FD06

REPLANNED

GMT Date 04/10 (100) | W | TDRSE | Z | D/N | ORB | MET Day 005 | STS ATT

MS1 MASTRACCHIO | MS3 WILSON | MS4 YAMAZAKI | MS5 ANDERSON | NOTES

L9 PAYLOAD STATION AUDIO A/G (two) - OFF

NETMEETING VIDEO CONFERENCING (ORB OPS, PGSC)

Private Family Conference Setup F

PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)

EXERCISE

PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)

F Omit Steps 1.2 and 3. Use A/G 2 for audio Inform MCC which PGSC will be used.

EVA SYSTEMS: 1.206 10.2 PSIA CAMPOUT MASK PREBREATHE Ref. Consumables Tracking Cue Card

PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)

CREW WAKEUP AT 05/15:00

SLEEP

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

15:00 16:00 17:00 18:00

82 83 84 85

BIAS - XLV - ZVV

15

Discovery,
Congratulations on a superb EVA1. We are all glad you do not have to do Focused Inspection today. The MMT decided to extend the mission by a day, making it 14+0. The MMT also cleared the TPS for entry. Enjoy your transfer activities today!

YOUR CURRENT ORBIT IS: 191 X 182 NM

NOTAMS (ADDED MRN, DELETED HNL)

EDW -	EDT 22R/04L IN USE. EDW 22/04 CLOSED FOR CONSTRUCTION.
EDW -	LAKEBED RWYS RED.
NOR -	LAKEBED RWYS GREEN.
FOK -	RWY 06/24 CLOSED.
DOV -	RWY 32 REIL OTS.
FMH -	RWY 23 ALS OTS.
YYT -	TACAN UYT23 AZIMUTH OTS.
JTY -	RWY 18 ALS OTS.
MYR -	RWY 18/36 CLOSED FROM 0340 - 0930 GMT.
KKI -	TACAN RIY92 OTS.
MRN -	RWY 02/20 CLOSED FROM 1430 - 1830 GMT.
IKF -	NOT USABLE. NO AGREEMENT.
BEN -	NOT RECOMMENDED/NOT SUPPORTED.

<u>NEXT 2 PLS OPPORTUNITIES:</u>

EDT22R	ORB 79 – 4/23:16	SCT250		7	230/08P13
NOR23	ORB 94 – 5/22:06	SCT120	BKN250	7	160/04P06

<u>OMS TANK FAIL CAPABILITY:</u>

L OMS FAILS: NO
R OMS FAILS: NO

<u>LEAKING OMS PRPLT BURN:</u>

L OMS LEAK: ALWAYS BURN RETROGRADE
R OMS LEAK: ALWAYS BURN RETROGRADE

<u>OMS QUANTITIES(%)</u>

L OMS	OX = 34.08	R OMS	OX = 35.28
	FU = 33.60		FU = 35.21

DELTA V AVAILABLE:

OMS	372 FPS
ARCS (TOTAL ABOVE QTY1)	31 FPS
TOTAL IN THE AFT	403 FPS
ARCS (TOTAL ABOVE QTY2)	64 FPS
FRCS (ABOVE QTY 1)	30 FPS
AFT QTY 1	81 %
AFT QTY 2	43 %

THERE ARE NO FAILURE/IMPACT/WORK AROUNDS FOR TODAY.

END OF PAGE 2 OF 2, MSG 032A

Good Morning Naoko and Steph,

Great day yesterday! I think you'll really appreciate having transferred the second ZSR yesterday, which should give you a bit more flexibility when stowing resupply items today.

With focused inspection not required, we've added several more hours of MPLM transfer to today's schedule. In addition you'll complete the rack transfers today by moving WORF and ER7 to ISS and installing the ISPs in the MPLM for return.

The Transfer List Excel file, FD06_Transfer_List_STS131.xls, locations are:

- Shuttle: **C:\OCA-up\transfer** (KFX machine)
- Station: **K:\OCA-up\transfer**

<u>Transfer Notes</u>

- **MPLM Rack Rotations:** Steph, for today's MPLM Pivot Pin install, remember to reference the MPLM Resupply Transfer Book, PROCEDURES tab, 1.261 RSP/RSR ROTATE DOWN. In addition, you'll need MPLM Resupply Item 102 from NOD2O2 and the pivot pin launched in your MPLM Kit.

- **WORF Rack Prep:** Naoko, we have added the remainder of the WORF Rack Prep to this morning's timeline. In addition, the following are a couple tools that can be substituted for the missing 3/16" Hex Head, 3/8" Drive:
    - **3/8" to 1/4" Adapter with 3/16" Hex Head, 1/4" Drive** - located in the ISS Tool Box, Drawer 2 at NOD1D4_G2.
    - **6" Long, 3/16" Ball Tip Hex Head, 3/8" Drive** - located in the Tool Page (b/c PERS3302M) at NOD2S1.

- **MPLM Return Layouts:** As promised, we have uplinked your MPLM Rack, M-bag, and Foam Return layouts today. Considering this is a rather large uplink, we have provided you with additional time for your Transfer Update this morning.

- **WHC Trash Bagging:** You'll notice in today's transfer list updates that we have included extra instructions on MPLM Return items 629, 630, 632, and 633. A few of these WHC trash items have been identified as Tox Level 2. Therefore, you will need to double-bag items 629, 632, and 633. For item 630, we unfortunately need you to retrieve a couple items from inside the 3.0 CTB, double-bag them, and restow them in the 3.0 CTB.

- **MPLM GLA Scavenge:** We have been informed that you will only need to remove and transfer the Lamp Housing Assemblies (LHAs) from the MPLM instead of the entire General Luminaire Assemblies (GLAs). The Baseplate Ballast Assemblies (BBAs) will be needed for the launch-on-need MPLM configuration; therefore, they will need to return in the MPLM. Your transfer list has been updated to reflect this, and the FD7, FD9, and FD10 scavenge activities will be updated as well.

<u>FD06 Choreography</u> (in timeline order)

- **Item 717:** Transfer Silver Biocide Syringe Kit (s/n 1006) to middeck prior to first silver CWC fill.
- **Item 766:** Transfer LAB Window Flexhose Cover and temp stow in MPLM following LAB Window Cover Removal activity.
- **Item 431.2:** Stow LADA Root Module Return Kits in Bag 431 following the БИО-5-DEINSTL activity.
- **Item 785:** Stow WORF Launch Bolts ziplock in MPLM following WORF Rack Prep.
- **Item 171:** Remove handrail (qty 1) from WORF rack-front prior to transferring rack.
- **Item 127:** Retrieve WORF Closeout Seals and Lower Restraints prior to WORF XFER activity.
- **Items 172 and 173:** Transfer WORF rack and Knee Braces from MPL1P2 to LAB1D3.
- **Items 786 and 787:** Stow RSR/ZSR launch brackets and pip pins in ziplock with other RSR/ZSR hardware for return.
- **Items 174 and 175:** Remove handrails (qty 2) from EXPRESS Rack 7 rack-front prior to transferring rack.
- **Items 116 and 176:** Transfer EXPRESS Rack 7 from MPL1P3 to LAB1P2.
- **Item 425.1:** Stow Post-flight Analysis Packets (qty 2) in bag 425 following WPA Wastewater Offload activity.
- **Item 763:** Remove MPL1P3 knee braces (qty 2) and stow in MPL1A4_A1 for return prior to ISP install at P3.
- **Items 758, 759, 760, 763, and 764:** Transfer ISP racks (qty 3) from NOD3F5 to MPL1S2, P3, and P2.
- **Items 102 and 213:** Install pivot pins on MPL1F2, F4, and A4 RSPs to allow RSP rotations.
- **Item 214:** Transfer Radiator Stowage Beams (Inboard and Outboard) from MPL1S1_D2 for EVA 2 prep.

<u>FD06 Transfer Get-aheads</u>

☑	Get-ahead Activity	Nominally scheduled
	Scavenge MPL1PA3 LHA in preparation for transferring TeSS to MPL1A3 (call MCC-H first to have RPC opened).	FD07
	Transfer TeSS to MPL1A3.	FD07

Please incorporate uplink pages as follows (we've listed the updates in the order they printed out for you):

In the Middeck Transfer List **RETURN** tab
Replace the following pages:
Return 2
Return 3
Return 8

In the MPLM Resupply Transfer List **MPLM GLA** tab
Replace the following page:
Resupply 13

In the MPLM Resupply Transfer List **A3 RSP** tab
Replace the following page:
Resupply 17

In the MPLM Resupply Transfer List **A4 RSP** tab
Replace the following pages:
Resupply 18
Resupply 19

In the MPLM Resupply Transfer List **F1 RSP** tab
Replace the following page:
Resupply 20

In the MPLM Resupply Transfer List **F2 RSP** tab
Replace the following page:
Resupply 21

In the MPLM Resupply Transfer List **F3 RSP** tab
Replace the following page:
Resupply 22

In the MPLM Resupply Transfer List **S2 RSR** tab
Replace the following page:
Resupply 35

In the MPLM Resupply Transfer List **S4 RSR** tab
Replace the following pages:
Resupply 39
Resupply 40

In the MPLM Resupply Transfer List **ENDCONE** tab
Replace the following pages:
Resupply 41
Resupply 43

In the MPLM Return Transfer List **LAYOUTS** tab
Add the following pages:
L-2 thru L-48

In the MPLM Return Transfer List **RETURN** tab
Replace the following pages:
Return 17
Return 18
Return 21
Return 22
Return 28

<u>FD07 Choreography</u> (in timeline order)

- **Item 162:** Transfer Glacier from MPL1F3_H1 and install at LAB1O1_G1 per GLACIER XFER activity.
- **Items 761 and 762:** Transfer LAB1O1_G1 and J1 lockers to MPL1F1_H1 & A3_K1 following GLACIER XFER activity.
- **Items 132 and 146:** Transfer HRF 8PU Stowage Drawers from MPL1A4_A1 and MPL1F2_A1 to COL1A4_D1 and COL1A4_G1 respectively per HRF2 Rack Reconfig.
- **Item 103:** Scavenge MPL1PA3 LHA prior to stowing TeSS pieces for return - call MCC to open RPC.
- **Items 652 and 654:** Transfer TeSS per TeSS Transfer from ISS to MPLM.
- Deploy fences on F1 and F3 RSPs.
- Return M-bags temp-stowed in A1 inter-rack bungee jail to F1and F3 RSP locations.

Have a nice day and let us know if you have any questions!

- The STS-131 Transfer Team

The MMT met to review the DAT summary, mission progress, and late inspection plans. The MMT concurred with the DAT recommendation to consider the TPS cleared for entry. Discovery continues to perform well, and in order to accommodate the docked late inspection, the MMT concurred with the recommendation to extend the mission by one day. In addition, the team was very happy with the success of yesterday's EVA.

Damage Assessment Team: The DAT has completed their thorough analysis of the remaining TPS areas of interest. The damage to the Left OMS pod tile is shallow and very minor. It will not be an issue for entry. A debris transport analysis was performed on the FRCS gap filler. If the gap filler liberates between M6 and M2.5, there is a small chance it could contact windows #1 or #2 at a very low angle of incidence. Given the low mass and low angle of incidence, there is very little chance such contact would damage the thermal pane. Finally, the effects of the missing tile on the Rudder/Speedbrake were analyzed. As expected, the highest heating loads and temperatures are during ascent. The predicted temperatures during entry are only negligibly higher than ambient and will not be an issue during entry.

Docked Late Inspection: It was decided to extend the docked phase of the mission by one day in order to accommodate the addition of the docked late inspection. Flight Day 11 will be very similar to the pre-flight plan, Flight Day 12 will be the new docked late inspection day, and Flight Day 13 will be undock day. The docked late inspection procedures are those that were prepared for STS-134/ULF5. Those procedures were verified by the team and have been executed several times on the ground by previously flown crew members. The procedures are in good shape, and the plan is to uplink them as soon as FD09 with the intention of providing plenty of time for review and any comments. There are a few instances of tight clearances, but the viewing angles and assets for all of these cases will provide you with all the insight needed to assure safe operations. You will get all of the details in separate direction from the team, but in order to expedite the downlink process, the team will have several imagery collection updates to improve the ISS downlink efficiency.

As part of the late inspection and undocking plan, the team assessed the remainder of the free flight portion of the mission being executed without the Ku antenna. The ground is making an extra effort to maximize uplink of procedures and information prior to undock. Additionally it was determined that in the very unlikely event that the late inspection uncovers MMOD damage which requires a repair, the repair could be successfully executed and verified without the orbiter Ku antenna capability.

ULF4 Get Aheads

The ULF-4 EVA team has come up with a few get-aheads they would like you to consider performing on Z1, including relocating the end of a cable bundle, connecting 2 electrical connectors and verifying the status of the SGANT attachment bolts. We are gathering the details in a briefing package and will uplink them when we have the full story. If, after reviewing that briefing package, you believe the tasks are feasible, we will add them to EVA 3 in place of other get aheads.

Rick's Comm Cap

Due to the moisture build up in Rick's comm cap, we would like to use the backup. This is in Rick's ECOK, labeled MT 2, s/n 1198.

Battery Charging CC Delta

We have found a typo on the Battery Recharge Cue Card. In the lower left corner of Post EVA 1 and Post EVA 2, the battery charger indicated as BC2 CH3 should actually be BC3 CH3.

EVA Checklist Pen and Inks

1. Update both FS CC 10-16 & Battery Recharge Cue Card as follows:
   Was: BC2 CH3
   Is: BC3 CH3

2. Due to the tasks accomplished on EVA1, please update the EVA2 Detailed Procedures as follows:
   FS7-63 EV1 Column
   Delete Steps 6 and 7

3. To protect for the EVA tool relocate get-ahead task on EVA2 or EVA3, please keep the crewlock bag configured from EVA 1 and perform the following pen & inks:

FS 7-60 (EVA 2 Tool Config) and FS 7-95 (EVA 3 Tool Config):

- Add C/L bag with Lg/sm RET with the following tools for Tool Relocate:
  - Hammer
  - Vise Grips
  - Probe (Verify no sheath)
  - Pin Straightener

FS 7-61 (EVA 2 Tool Config) and FS 7-96 (EVA 3 Tool Config):

- Delete the following tools from the Staging Bag (moved to C/L bag for Tool Relocate):
  - Hammer
  - Vise Grips
  - Probe
  - Pin Straightener

END OF PAGE 1 OF 1, 23-0215A (MSG 035A)

MSG 036 (23-0221) - FD06 CREW CHOICE DOWNLINK

TDRS	AOS	LOS	Delta (min)	Notes
W-TDW	05/04:35	05/04:58	23	
E-TDE	05/05:03	05/05:18	15	
W-TDW	05/05:49	05/06:33	44	

Note: Please notify MCC-H 10 minutes prior to the event to allow for ground network configuration.