STS-130 / 20A

FD 14 Execute Package

MSG	Page(s)	Title
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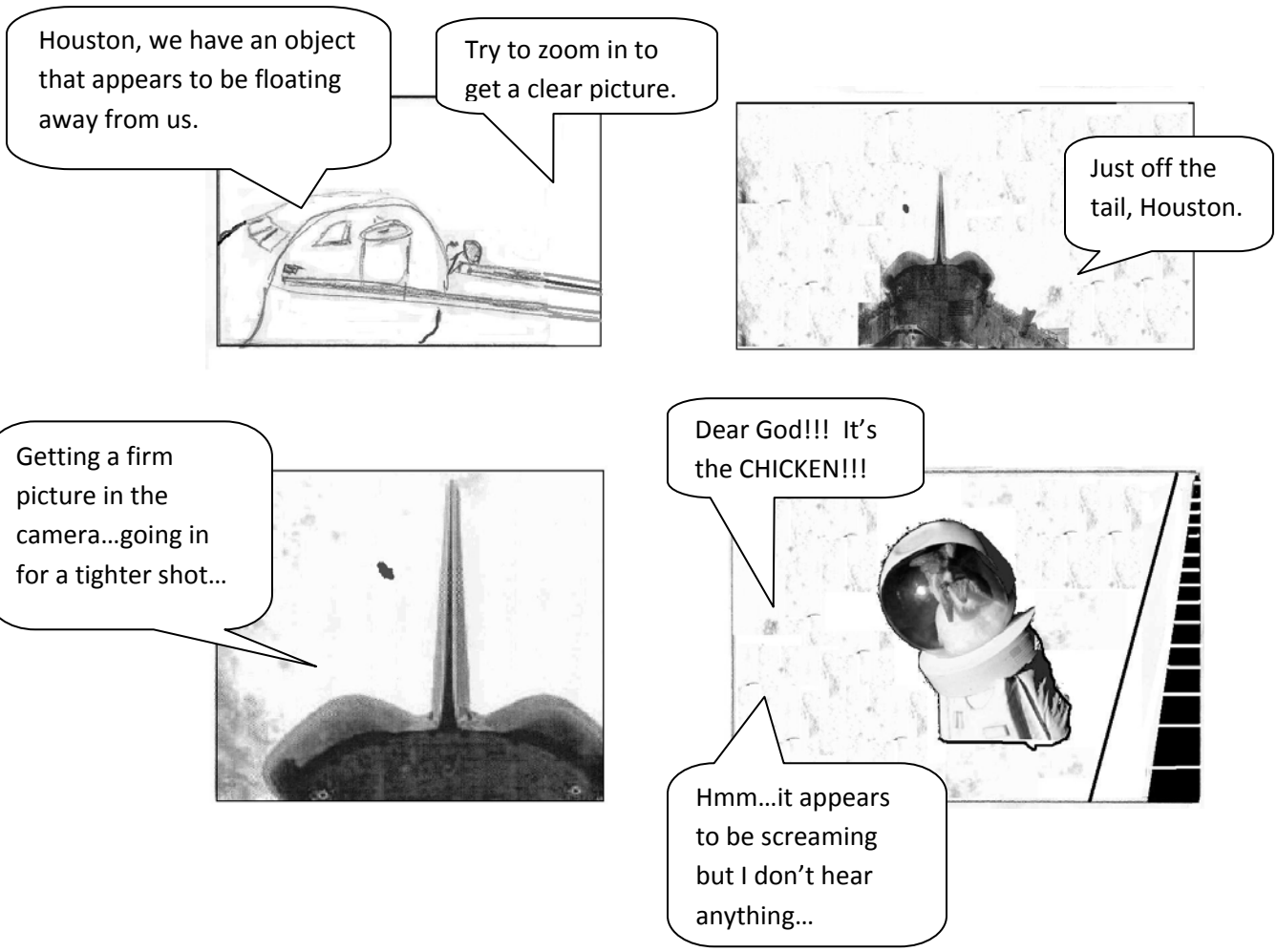
184C	15 - 16	FD14 Mission Summary
185	---	FD14 PAO Event Summary - CNN, CNN Espanol and Univision
187A	17 - 30	Sunday Funnies
188	31 - 32	Entry Fluid Loading
189	33 - 36	MAUI Procedure

Approved by FAO:
R. Smith

Last Updated: Feb 20 2010 7:34 PM GMT
JEDI *(**J**oint **E**xecute package **D**evelopment and **I**ntegration), v3.0*



MSG INDEX

MSG NO.	TITLE
MSG-183	FD14 Flight Plan Revision
MSG-184	FD14 Mission Summary
MSG-185	FD14 PAO Event Summary - CNN, CNN Espanol and Univision
MSG-187	Sunday Funnies
MSG-188	Entry Fluid Loading
MSG-189	MAUI Procedure

1. Post-Sleep Cryo Config

For today's Post-Sleep cryo config, O2 and H2 Tanks 1 and 4 will be active. Additionally, we are expecting to deplete several tanks today and you can expect realtime calls to reconfigure tank heaters following these depletions.

R1 O2,H2 MANF VLV TK1 (two) - OP (tb-OP)

A11 CRYO TK4 HTRS H2 A,B (two) - AUTO

A15 CRYO TK5 HTRS H2 A,B (two) - OFF

Pre-Sleep Cryo Config

√MCC for deltas prior to configuring for Pre-Sleep.

For tonight's Pre-Sleep cryo config, Manifold 2 will be closed with O2 and H2 Tanks 2 and 3 active.

A15 CRYO TK5 HTR H2 A - OFF

R1 H2 TK3 HTRS A,B (two) - AUTO
TK2 HTRS A,B (two) - AUTO
TK1 HTRS A,B (two) - OFF
O2 TK2 HTR A - AUTO
TK1 HTR A - OFF
O2,H2 MANF VLV TK2 (two) - CL (tb-CL)

2. Image Downlink

Due to the large amount of images that remain to be downlinked, any further image cards and the four currently in the PGSCs should be stowed in the Return to Houston bag for faster processing. There will be no need to insert new cards into the PGSCs. We believe you may have removed a card to make room for the high priority images. That card should also be stowed in the Return to Houston bag along with the others.

3. Last Outlook Mail Sync
   Prior to Ku Stow this afternoon, we will downlink your Outlook Personal Folders so that you may have them when you return to Houston. Please move any messages that you would like to keep from your INBOX, SENT ITEMS and UPLINKED BY CAPCOM folders to your Personal Folder before MET 12/22:00. We will also perform one final mail sync at that time to deliver any last-minute messages you have to send. We will not lock you out of your e-mail during this time so that you can still read your e-mail, but anything you change or write will be lost.

4. Transfer Question:
   Q: Yesterday you were asked to move the bag-of-station-bolts (transfer item #904) from the FDF Locker (MF43E) to an empty food locker. Can you tell us what locker they were moved to?

5. REPLACE PAGES 2-50 THROUGH 2-51 and 3-150 THROUGH 3-159.

02/20/10 13:07:44 **REPLANNED**

FD14

GMT 02/20/10 (051) 22 23 02/21 01 02 03 04 05 06 07 08 09

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

STS 130	CDR ZAMKA	POST SLEEP; BLEED; EXERCISE; FCS C/O; RCS HOT FIRE; FDC CONF FUT MVR; CABIN STOW; D/O PREP BRIEF; PAO; FES-I; MEAL; MLA L-1 COMM CHK; MNVR^ PILOT OPS; WSS L-1 COMM CHK; -ZLV -XVV; IMU; CABIN STOW; DFR L-1 COMM CHK; FES-T; OA^ OA BURN; ENTRY#; MADS*; POD@; MAUI^ MAUI BURN; PRE SLEEP
	PLT VIRTS	POST SLEEP; W/B^; MCIU@; RMS PWRDN; POST SLEEP; FCS C/O; RCS HOT FIRE; CABIN STOW; COMM 2; D/O PREP BRIEF; PAO; MEAL; SSV DEACT; PILOT OPS; EXERCISE; CABIN STOW; OA BURN; MAUI BURN; -ZLV -XVV
	MS1 HIRE	POST SLEEP; FILTER CLEANING; FCS C/O P/TV; CABIN STOW; EXERCISE; PAO SETUP - DIGITAL; D/O PREP BRIEF; PAO; ENTRY VIDEO SETUP; MEAL; CABIN STOW; PRE SLEEP
	MS2 ROBINSON	POST SLEEP; RMS PWRDN; FCMS OPS; FCS C/O; RCS HOT FIRE; CABIN STOW; D/O PREP BRIEF; PAO; MEAL; WLES DEACT; PILOT OPS; CABIN STOW; EXERCISE; CABIN STOW; PRE SLEEP; KU STOW
	MS3 PATRICK	POST SLEEP; FRED STOW; EXERCISE; CABIN STOW; D/O PREP BRIEF; PAO; MEAL; CABIN STOW; ERG STOW; CABIN STOW; PRE SLEEP
	MS4 BEHNKEN	POST SLEEP; MDDK CK; EXERCISE; CABIN STOW; D/O PREP BRIEF; PAO; MEAL; CABIN STOW; ERG STOW; CABIN STOW; MDDK CK; PRE SLEEP

STS	DAY/NIGHT	
	ORBIT	198 199 200 201 202 203 204 205 206
	TDRS W E Z	
	GND	-MLA -MLA -DFR -WSS -DFR -WSS -DFR
	ATTITUDE	-ZLV -XVV +ZLV -ZLV -XVV OA MAUI
	NOTES	^HTR ACT @FILTER CK #COOLING CNFG *POWER ON @POD HTR RCNFG

3

FD14 02/20/10 13:07:44 **REPLANNED**

GMT 02/21/10 (052)

MET Day 013

013/00 01 02 03 04 05 06 07 08 09 10 11 12 10 11 12 13 14 15 16 17 18 19 20 21

STS-130	CDR ZAMKA	PRE SLEEP; PMC A/G; PRE SLEEP; SLEEP; LOG; POST SLEEP; PMC A/G; POST SLEEP
	PLT VIRTS	PRE SLEEP; SLEEP; LOG; POST SLEEP
	MS1 HIRE	PRE SLEEP; SLEEP; POST SLEEP
	MS2 ROBINSON	PGSC STOW PART I; PRE SLEEP; SLEEP; POST SLEEP
	MS3 PATRICK	PRE SLEEP; SLEEP; LOG; POST SLEEP
	MS4 BEHNKEN	PRE SLEEP; SLEEP; POST SLEEP
STS	DAY/NIGHT	
	ORBIT	206 207 208 209 210 211 212 213 214
	TDRS W E Z	
	ORB ATT	-ZLV -XVV
	NOTES	

4

STS-130 FD14

GMT Date 02/20 (051) | W | T D R S E | Z | D/N | O R B | MET Day 012 | STS ATT

CDR ZAMKA | PLT VIRTS | MS1 HIRE | Notes

18:00 | 19:00 | 20:00 | 21:00

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

195 | 196 | 197 | 198

-ZLV -XVV

SLEEP (CDR ZAMKA)

SLEEP (PLT VIRTS)

SLEEP (MS1 HIRE)

FD14 EZ ACTIVITIES:
√OCAC FILTER
TEPC (STATUS CHECK)
(ORB OPS, CREW SYS)
HARD REBOOT ALL PGSCs EXCEPT:
STS-6(WLES),STS-5(RPOP2),&
OCA ROUTER.
FLUID LOADING PREP
Fill Drink Containers per
MSG 188.

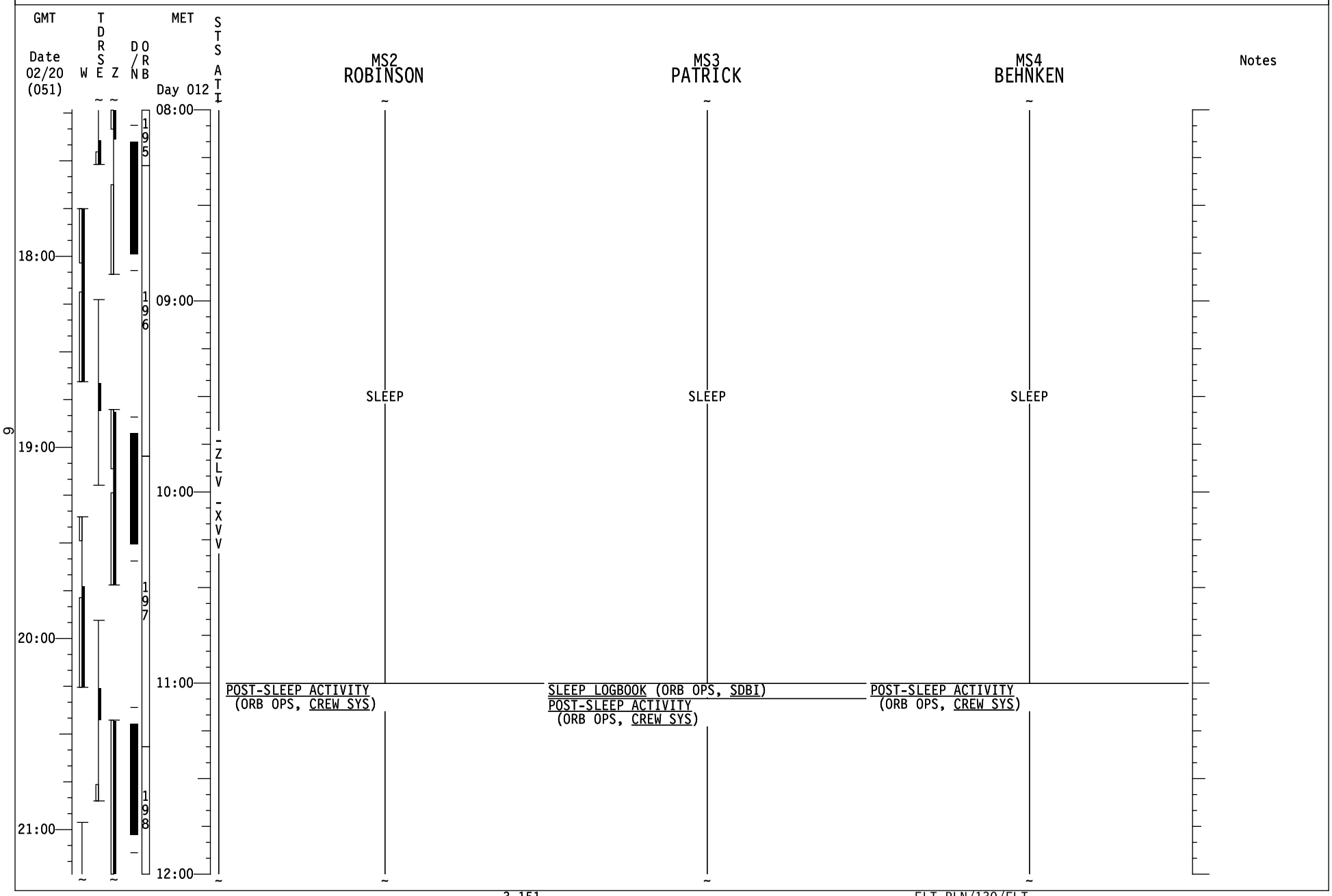
FD14 CABIN STOW ACTIVITIES:
Remove loose items stored in A/L
Perform SEAT INSTALLATION
Perform FLIGHTS WITH RETENTION NET
(REF DATA, ENTRY STOW)

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

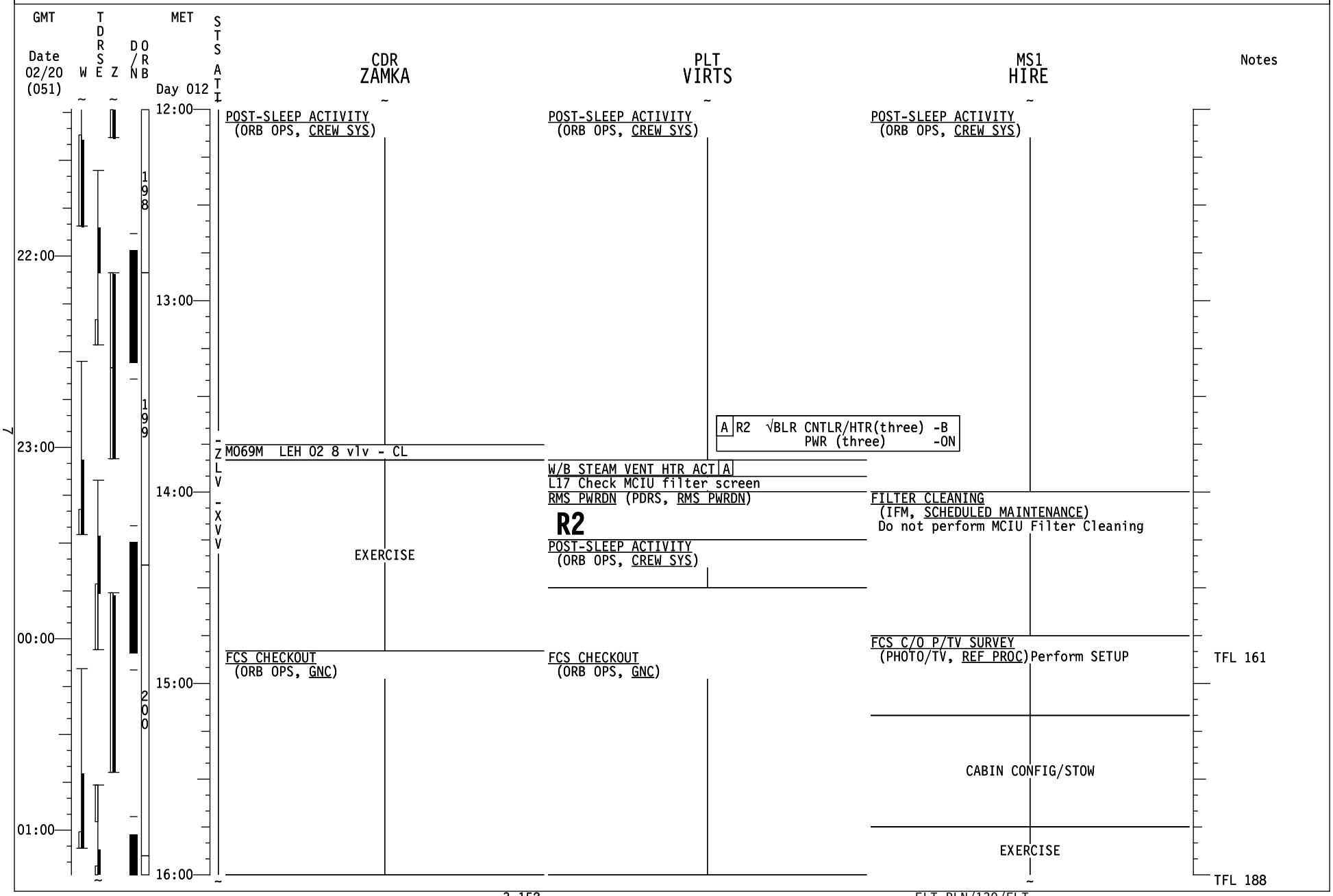
SLEEP LOGBOOK (ORB OPS, SDBI)
POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

STS-130 FD14


GMT
Date 02/20 (051)
W
T D R S E
Z
D / N
O R B
MET
Day 012
S T S A T I
MS2 ROBINSON
MS3 PATRICK
MS4 BEHNKEN
Notes
08:00
09:00
10:00
11:00
12:00
18:00
19:00
20:00
21:00
195
196
197
198
-ZLV
-XVV
SLEEP
SLEEP
SLEEP
POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
SLEEP LOGBOOK (ORB OPS, SDBI)
POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)
POST-SLEEP ACTIVITY
(ORB OPS, CREW SYS)

STS-130 FD14


GMT
Date 02/20 (051)
W
TDRSE
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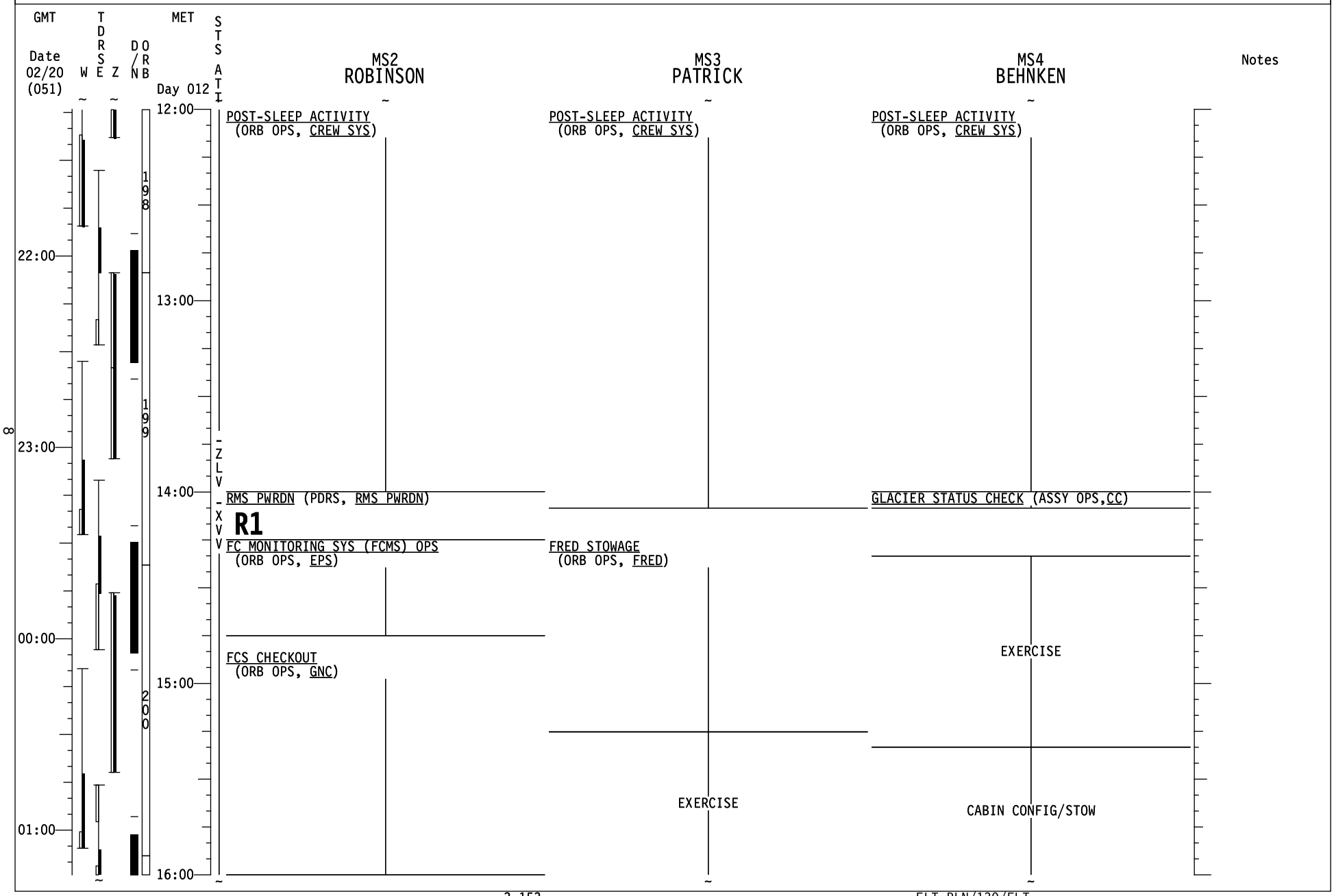
D/N
ORB
MET
Day 012
STS ATI
CDR ZAMKA
PLT VIRTS
MS1 HIRE
Notes
12:00
13:00
14:00
15:00
16:00
22:00
23:00
00:00
01:00
198
199
200
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
A R2 √BLR CNTLR/HTR(three) -B
PWR (three) -ON
-ZLV -XVV
M069M LEH 02 8 vlv - CL
W/B STEAM VENT HTR ACT A
L17 Check MCIU filter screen
RMS PWRDN (PDRS, RMS PWRDN)
R2
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
FILTER CLEANING (IFM, SCHEDULED MAINTENANCE)
Do not perform MCIU Filter Cleaning
EXERCISE
FCS CHECKOUT (ORB OPS, GNC)
FCS CHECKOUT (ORB OPS, GNC)
FCS C/O P/TV SURVEY (PHOTO/TV, REF PROC) Perform SETUP
TFL 161
CABIN CONFIG/STOW
EXERCISE
TFL 188

STS-130 FD14


GMT
Date 02/20 (051)
W
TDRSE
Z
D/N
ORB
MET
Day 012
STS ATT
MS2 ROBINSON
MS3 PATRICK
MS4 BEHNKEN
Notes
12:00
13:00
14:00
15:00
16:00
22:00
23:00
00:00
01:00
198
199
200
-ZLV
-XVV
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
RMS PWRDN (PDRS, RMS PWRDN)
R1
FC MONITORING SYS (FCMS) OPS (ORB OPS, EPS)
FCS CHECKOUT (ORB OPS, GNC)
FRED STOWAGE (ORB OPS, FRED)
EXERCISE
GLACIER STATUS CHECK (ASSY OPS,CC)
EXERCISE
CABIN CONFIG/STOW

STS-130 FD14

GMT Date 02/21 (052) | W E Z | DOR/NB | MET Day 012 | STS ATT

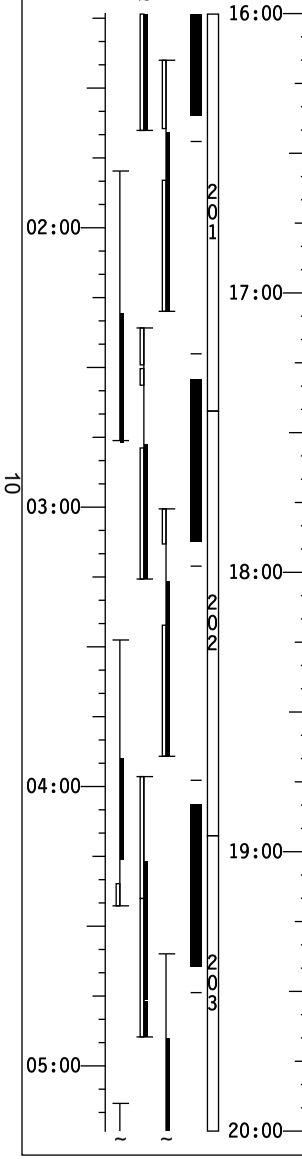
MET	CDR ZAMKA	PLT VIRTS	MS1 HIRE	Notes
16:00	RCS HOT FIRE TEST (ORB OPS, RCS) In Step 6, DAP:A1/AUTO/VERN	RCS HOT FIRE TEST (ORB OPS, RCS) In Step 6, DAP:A1/AUTO/VERN		
	FLIGHT DIRECTOR CONFERENCE		EXERCISE	
	FUTURE LOADED MNVR (+ZLV -XVV) TGT=2 BV=5 P=270 Y=0 OM=180 A1/AUTO/VERN (20:15) Init TRK	CABIN CONFIG/STOW		
02:00	CABIN CONFIG/STOW		HD G1 DNLK (PHOTO/TV, REF PROC)	
17:00		COMM STRING 1 C/O (PART B) (ORB OPS, COMM/INST)		
	DEORBIT PREP BRIEFING	DEORBIT PREP BRIEFING	DEORBIT PREP BRIEFING	
03:00	PUBLIC AFFAIRS EVENT KU TDRE: 17:34 -18:01 Ref. MSG 185	PUBLIC AFFAIRS EVENT KU TDRE: 17:34 -18:01 Ref. MSG 185	PUBLIC AFFAIRS EVENT KU TDRE: 17:34 -18:01 Ref. MSG 185	
18:00	SUPPLY H2O DUMP USING FES (ORB OPS, ECLS) Step 1, using FES Pri A		ENTRY VIDEO SETUP (PHOTO/TV, REF PROC)	
	MEAL	MEAL		
04:00			MEAL	
19:00	LANDING-1 COMM C/O (ORB OPS, COMM/INST) MLA AOS: 19:02-19:11	SSV DEACTIVATION SSV SSV Pwr - OFF L11 DC Pwr1 - OFF Remove SSV DC Pwr Cable from DC1 port and SSV to PDIP/CIP cable from WVS port.		TFL 161
	PILOT WITH RHC (ORB OPS, PGSC)	PILOT WITH RHC (ORB OPS, PGSC)		
05:00			CABIN CONFIG/STOW	
20:00				

STS ATT: -ZLV -XVV

DOR/NB: 201, 202, 203

STS-130 FD14

GMT Date 02/21 (052) | W | TDRSE | Z | D/N | ORB | MET Day 012 | STS ATI | MS2 ROBINSON | MS3 PATRICK | MS4 BEHNKEN | Notes



MET	STS ATI	MS2 ROBINSON	MS3 PATRICK	MS4 BEHNKEN
16:00		RCS HOT FIRE TEST (ORB OPS, RCS) In Step 6, DAP:A1/AUTO/VERN	EXERCISE	
		CABIN CONFIG/STOW	CABIN CONFIG/STOW	CABIN CONFIG/STOW
17:00		DEORBIT PREP BRIEFING	DEORBIT PREP BRIEFING	DEORBIT PREP BRIEFING
	-ZLV	PUBLIC AFFAIRS EVENT KU TDRE: 17:34 -18:01 Ref. MSG 185	PUBLIC AFFAIRS EVENT KU TDRE: 17:34 -18:01 Ref. MSG 185	PUBLIC AFFAIRS EVENT KU TDRE: 17:34 -18:01 Ref. MSG 185
18:00	-XVV	MEAL	MEAL	MEAL
19:00		WLES DEACTIVATION AND TEARDOWN (ORB OPS, WLE SENSORS)		
		PILOT WITH RHC (ORB OPS, PGSC)	CABIN CONFIG/STOW	CABIN CONFIG/STOW
20:00				

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STS-130 FD14

GMT Date 02/21 (052) | W | TDRS E | Z | DON/ORB | MET Day 012 | STS ATT

MET	CDR ZAMKA	PLT VIRTS	MS1 HIRE	Notes
20:00	PILOT WITH RHC (ORB OPS, PGSC)	PILOT WITH RHC (ORB OPS, PGSC)		
	< MNVR +ZLV -XVV			
	LANDING-1 COMM C/O (ORB OPS, COMM/INST) WSS AOS: 20:34-20:43			
06:00	MNVR (TRK) -ZLV -XVV TGT=2 BV=3 OM=0 A1/AUTO/VERN, Init TRK	EXERCISE		
21:00	IMU STAR OF OPPTY ALIGN (ORB OPS, GNC)			
	CABIN CONFIG/STOW		CABIN CONFIG/STOW	
07:00		CABIN CONFIG/STOW		
22:00	LANDING-1 COMM C/O (ORB OPS, COMM/INST) DFR AOS: 22:07-22:17			
	SUPPLY H2O DUMP USING FES (ORB OPS, ECLS) On MCC GO: Step 2, FES not reqd			
	ON-ORBIT OMS BURN (ORB OPS, OMS)	ON-ORBIT OMS BURN (ORB OPS, OMS)		UPDATE ORBITAL MNVR PAD
08:00	B R12 √VPU PWR - OFF(LED-off) Minimize use of P/TV equipment Dim cabin lighting to 25%			
	< OA TIG (22:51)			
23:00	ENTRY COOLING CONFIG B	C A14 RCS/OMS HTR L POD - B OFF - A AUTO R POD - B OFF - A AUTO	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
	A6L MADS STRAIN GAGE - ON			
	RCS/OMS POD HTR RECONFIG C			
	MAUI - PRCS Ref. MSG 189	MAUI - PRCS Ref. MSG 189		
	< MAUI TIG (23:39)			
09:00	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	MNVR (TRK) -ZLV -XVV TGT=2 BV=3 OM=0 A1/AUTO/VERN, Init TRK		
00:00				

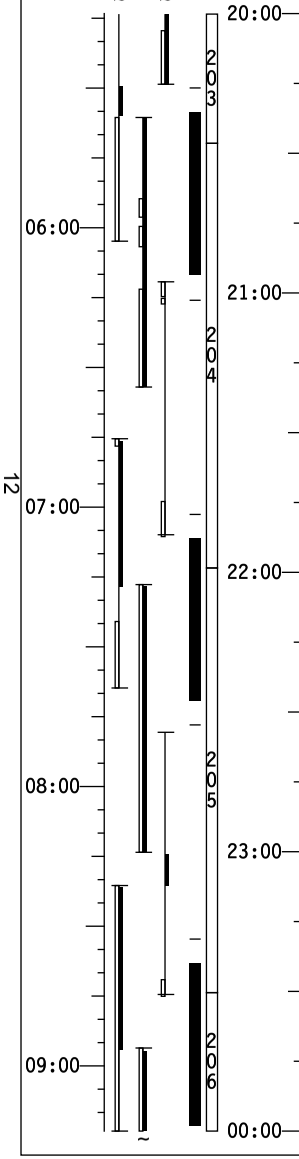
STS ATT: +ZLV, -ZLV -XVV, OA, MAUI

203 204 205 206

11

STS-130 FD14

GMT Date 02/21 (052) | W | TDRSE | Z | D/N | ORB | MET Day 012 | STS ATI



MET	STS ATI	MS2 ROBINSON	MS3 PATRICK	MS4 BEHNKEN	Notes
20:00		PILOT WITH RHC (ORB OPS, PGSC)			
	+ZLV	CABIN CONFIG/STOW			
21:00			CABIN CONFIG/STOW	CABIN CONFIG/STOW	
	-ZLV -XVV	EXERCISE			
22:00			CYCLE ERGOMETER OPS (ORB OPS, CREW SYS) Perform RECONFIG/STOW	CYCLE ERGOMETER OPS (ORB OPS, CREW SYS) Perform RECONFIG/STOW	
		CABIN CONFIG/STOW	CABIN CONFIG/STOW	CABIN CONFIG/STOW	
23:00	OA	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	GLACIER STATUS CHECK (ASSY OPS,CC) PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
	MAUI				
00:00		KU-BD ANT STOW(ORB OPS, COMM/INST) Deactivate CCTV			

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STS-130 FD14

GMT Date 02/21 (052) | W E Z | DRS / NB | MET Day 013 | STS ATI

CDR ZAMKA | PLT VIRTS | MS1 HIRE | Notes

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

PRIVATE MEDICAL CONFERENCE
L9 PAYLOAD STATION A/G (two) - OFF
Perform via A/G2

PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)

PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)
√ILLUMINATORS OFF - ALL

PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS)

206 207 208

-ZLV -XVV

10:00 11:00 12:00 13:00

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

SLEEP | SLEEP | SLEEP

STS-130 FD14

GMT Date 02/21 (052) | W | T D R S E | Z | D/N | O R B | MET Day 013 | STS ATI

MS2 ROBINSON | MS3 PATRICK | MS4 BEHNKEN | Notes

00:00 — PGSC NETWORK (B.TEARDOWN)
COLOR PRINTER STOW (ORB OPS, PGSC)
Stow color printer and all STS PGSCs

PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS) — MS2

PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS) — MS3

PRE-SLEEP ACTIVITY (ORB OPS, CREW SYS) — MS4

10:00 — 11:00 — 12:00 — 13:00

01:00 — 02:00 — 03:00 — 04:00

206 — 207 — 208

-ZLV -XVV

SLEEP — MS2

SLEEP — MS3

SLEEP — MS4

Good Morning Endeavour!!!!

Thank you so much for such a super successful and superbly satisfying space flight! Thanks for giving station a window to the world!!! Now's the time to prepare Endeavour to "bring home the gold"!

Have a great entry prep day!!!!

YOUR CURRENT ORBIT IS: 189 X 180 NM

NOTAMS – TWO CHANGES (DELETED FOK AND KBO)

EDW -	TEMP RWY IN USE. PERM RWY CLOSED FOR CONSTRUCTION.
EDW -	LAKEBED RWYS RED.
NOR -	LAKEBED RWYS GREEN.
DOV-	RWY 32 RWY END LIGHTS OUT OF SERVICE.
ZZA -	ARRESTING NET INSTALLED 40M FROM END OF RWY 30L.
ESN -	RWY 03R/21L CLOSED. RWY 03L/21R USABLE.
GUA -	RWY 06L/24R RWY END LIGHTS OUT OF SERVICE.
PTN -	CLOSED FOR RUNWAY CONSTRUCTION.
IKF -	NOT USABLE. NO AGREEMENT.
BEN -	NOT RECOMMENDED/NOT SUPPORTED.

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

NOR17	ORB 203 – 12/19:48	SCT060	BKN250		7	220/10P16 KT
NOR17	ORB 218 – 13/18:31	SCT150	BKN250		7	200/10P16 KT

<u>EOM PRIME KSC OPPORTUNITY:</u>

KSC15	ORB 217 – 13/16:59	BKN060	BKN120	BKN250	7	160/10P14 KT
		CHC SHRA WI 30 NM				

<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

The propellant information below is for post orbit adjust burn:

OMS QUANTITIES(%)

L OMS OX = 27.7 R OMS OX = 28.9
FU = 27.4 FU = 28.7

Subtract interconnect counter for current OMS quantities.

DELTA V AVAILABLE:

OMS	293 FPS
ARCS (TOTAL ABOVE QTY1)	27 FPS
TOTAL IN THE AFT	320 FPS
ARCS (TOTAL ABOVE QTY2)	62 FPS
FRCS (ABOVE QTY 1)	0 FPS
AFT QTY 1	66 %
AFT QTY 2	28 %

SYSTEM	FAILURE	IMPACT	WORK AROUND
EPS	FC2 Cell Performance Monitor failed several self-tests on Substack 3 (SS3). Spec 69 indication displayed OSH (500mV) until the next self-test.	FC2 Cell Performance Monitor is currently performing nominally. Subsequent failures will reduce insight into the health of FC2.	Bus tied B-C and daily FCMS data takes being performed for additional FC2 health insight. FC2 SS3 FDA has also been inhibited.

END OF PAGE 2 OF 2, MSG 184C

FD02:

C H I C K E N

In space, no one can hear your chicken scream.

FD03:

Fried Chicken - ISS Style

1) Get Frozen chicken from Glacier.
US SODF: Assy Ops: Payloads: Ascent Chicken Transfer from Glacier to CIR [Combustion integration rack]

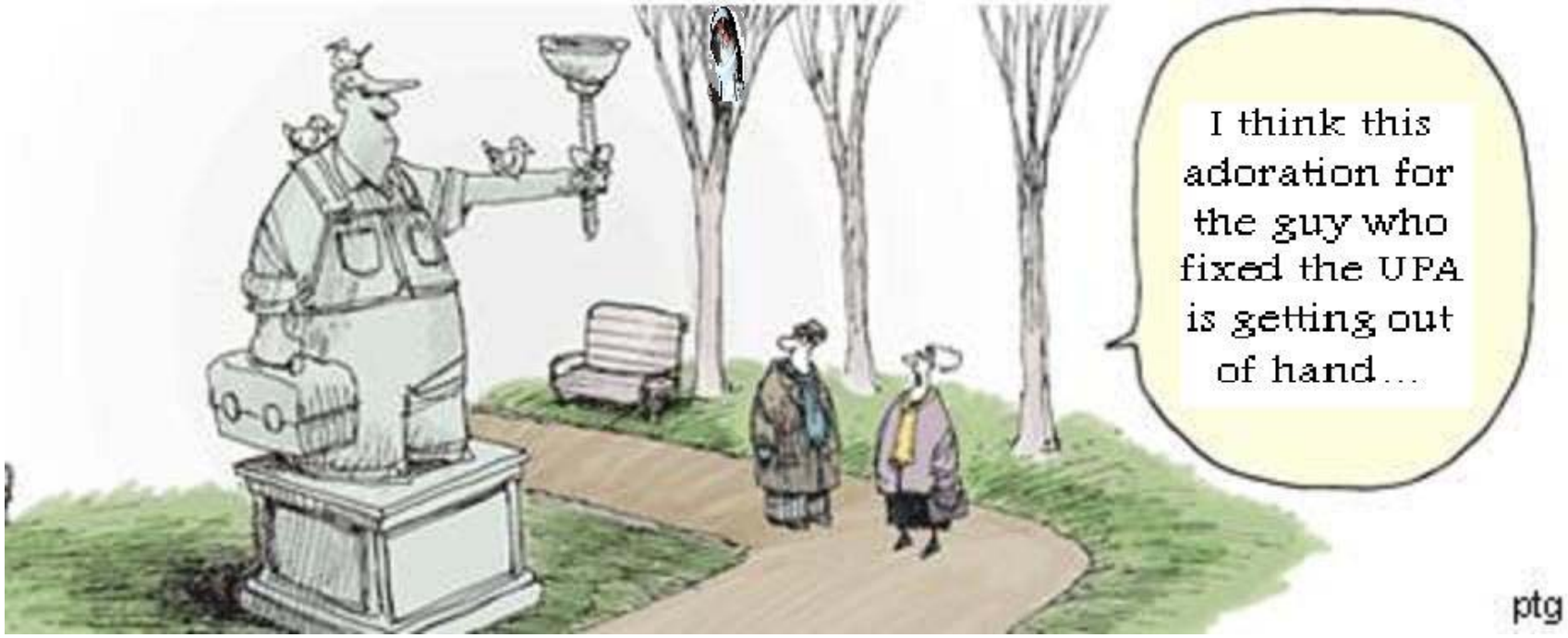
WARNING
Protective gloves must be worn when handling frozen Chicken samples or manipulating inner doors, cold trays or samples in Glacier to prevent injury to exposed skin.

2) Lightly cover in butter, salt and spices.
3) Transfer Chicken to CIR (LABS3).
4) Sear each side for 2 min in the CIR.
5) Transfer Chicken to new Food warmer (Transfer item #20.1).
6) Keep warm for 4 hours until ready to serve.

FD04:

"What's this guy have against us Chickens? Doesn't he know
we're the famous Denny's Superbowl XLIV commercial actors?"

FD05:


I think this adoration for the guy who fixed the UPA is getting out of hand...
ptg

FD06:

Ballad of the MUX
(to the tune of the Chicken Dance)

Yeah, we're tryn' ta fix the MUX.
Flight is chewing hockey pux,
But I'll betcha 50 bux
The MUX just SUX.

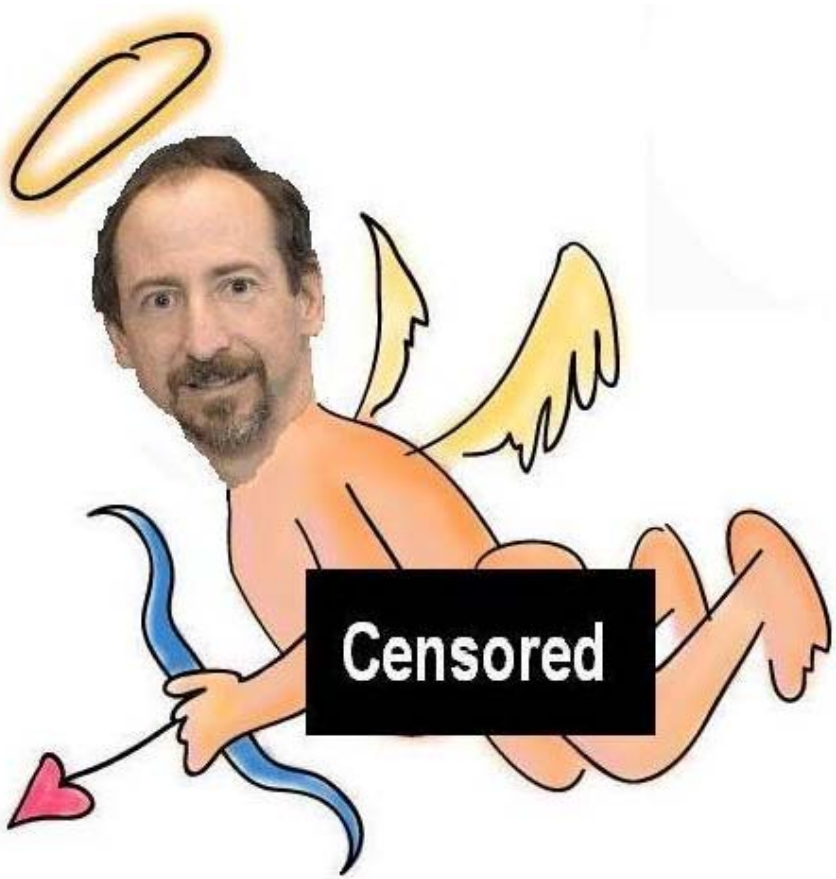
The procedure is in flux,
INCO's lining up his dux,
But I'll bet my finest tux,
The MUX just SUX.

Sure as any chicken clux,
We discovered that the crux
of the matter is the MUX
'Cause it just sux!

Yeah, this ditty really trux
Though the FAO upchux.
Shoulda spent a few more bux
On that darned MUX!

Shux!

FD07:



I am Richard LaBrode and I approved this comedy.

Happy Valentine's Day!!!

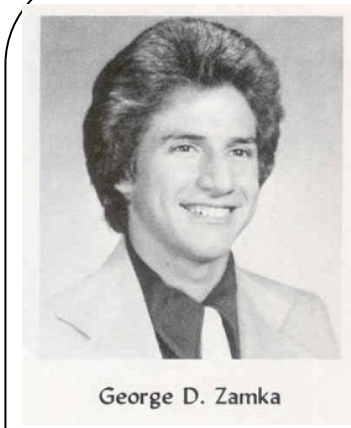
FD08:

What to watch out for on crew off-duty days with the new Cupola

FD09:

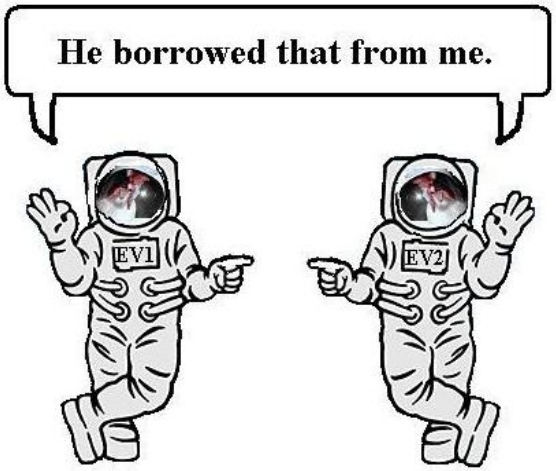
The 7 bad words according to George Carlin:	The 7 bad words according to Shannon Lucid:
1. CENSORED	1. Darn!
2. CENSORED	2. Rats!
3. CENSORED	3. Barnacles!
4. CENSORED	4. Shoot!
5. CENSORED	5. Crickey!
6. CENSORED	6. Shucks!
7. CENSORED	7. Whoopie

FD10:



After Saturday Night Fever

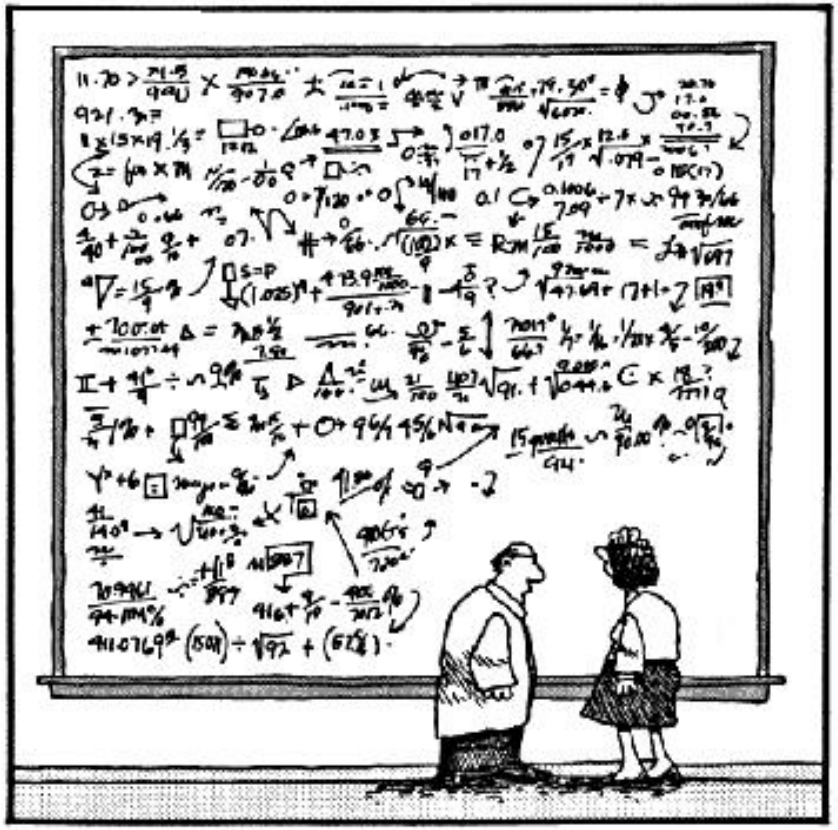
After the Corps



Record 3 EMU swaps for a single flight w/ 2 EV crewmen?

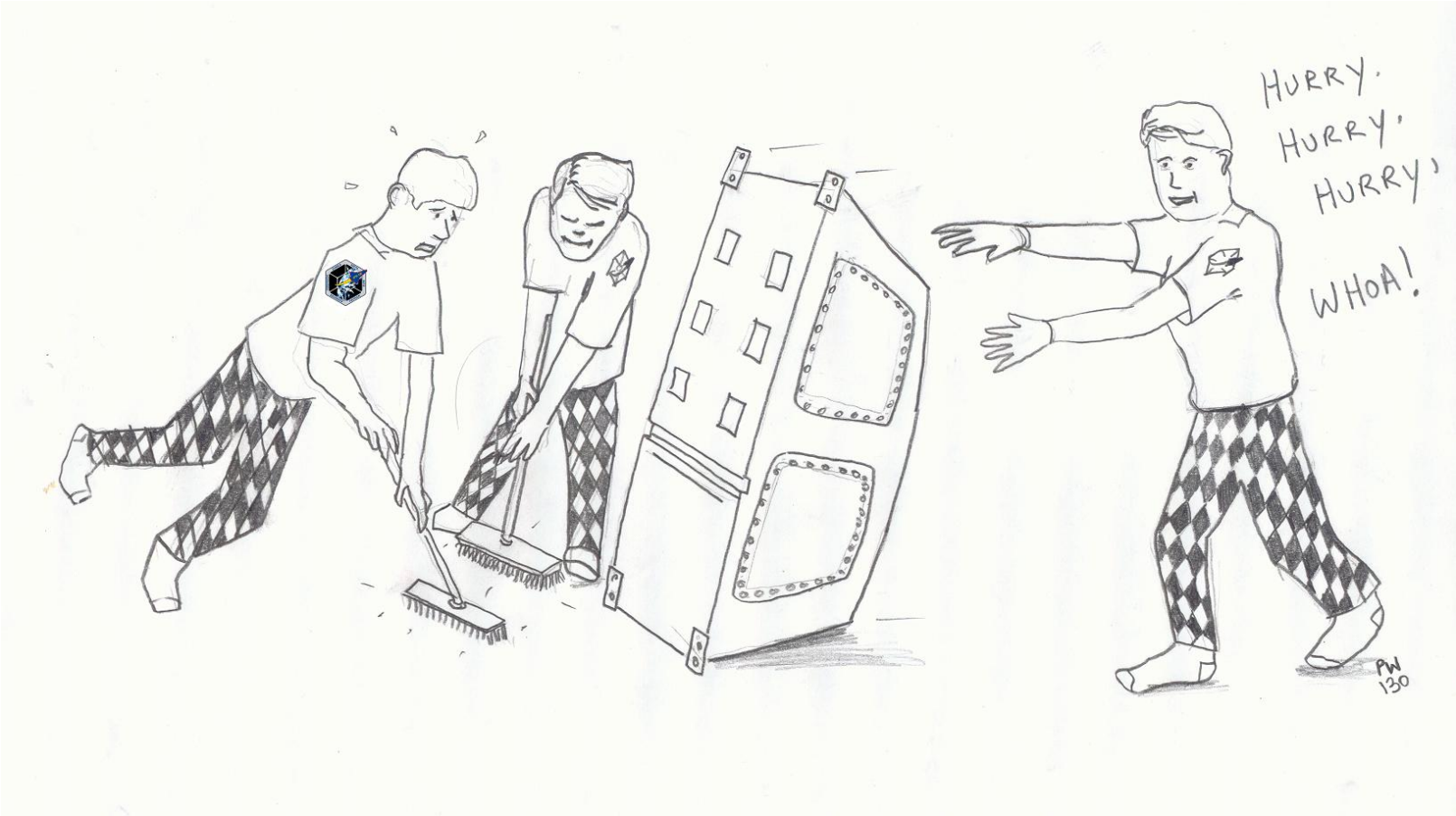
FD11:

After seeing so much of Mr. Alibaruho on NASA Select, Hollywood just had to have him in their next series:
Star Trek - Defiant Generation



So…have you figured out where to schedule the reboost?

FD12:

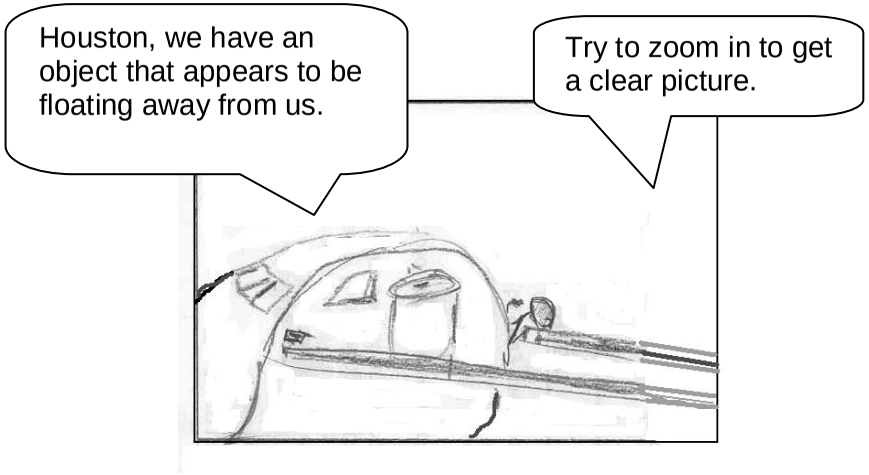


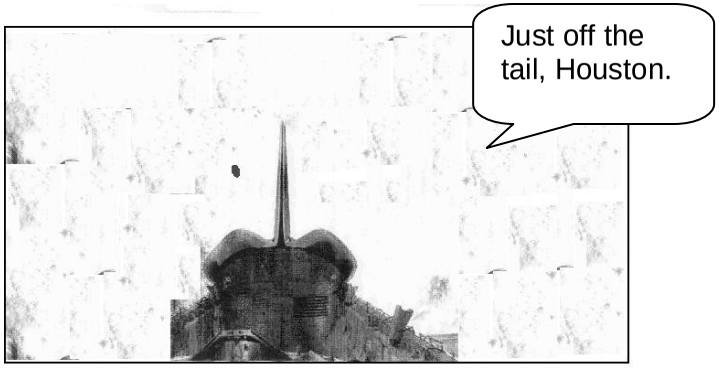
"Endeavour, Houston. We didn't say transfer by *curling*. Surgeon wanted to know if anyone was hampered by ***hurling***."

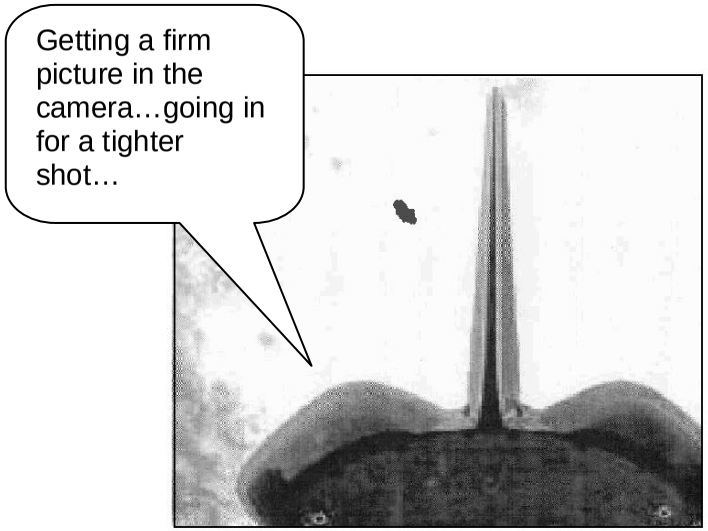
FD13:

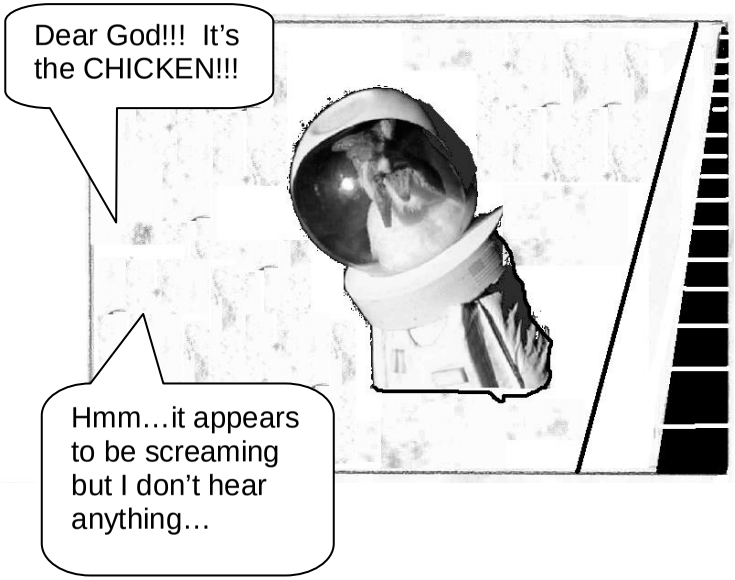
MATS HAND OVER : ORBIT 2 TO ORBIT 3
DUDE LOOK, IT HAS GOTTEN SO BAD THE PRESS IS ASKING THE CREW ABOUT CHICKENS! ENOUGH WITH THE CHICKENS ALREADY!
MATS
CHICKEN
THE CHICKEN COMEDY IS NOT FUNNY! IT'S DUMB!
IT DOESN'T MAKE SENSE
THE FRONT ROOM HATES IT. IT'S JUVENILE! AND I'LL TELL YOU WHAT I THINK... I THINK YOU CAN TAKE THAT CHICKEN AND...
CLUCK! BUK BUK BUK bukkaaa!
MATS
CHICKE
SURE.
EP FD11

FD14:


Houston, we have an object that appears to be floating away from us.
Try to zoom in to get a clear picture.


Just off the tail, Houston.


Getting a firm picture in the camera…going in for a tighter shot…


Dear God!!! It's the CHICKEN!!!
Hmm…it appears to be screaming but I don't hear anything…

Congratulations on your purchase of a new NODE! This User's Guide will help you through your basic installation and setup. Some assembly is required, and tools are not included (standard SSRMS, CBM, hex wrench, etc).

IN THE BOX:

- One (1) NODE (color may vary from picture on front of box)
- One (1) Cupola ©
- Assorted cables and jumpers (refurbished)

INSTALLATION

1. Remove NODE from packaging. Do not discard Shuttle! Original Shuttle must be used in the event of a return or exchange.
2. Using your CBCS (not included), align your NODE with a CBM of your choice. Choice is limited to N1P or N1N. N1N not available in some areas.
3. When you have at least two Ready-to-Latch (RTL) indications, attempt to maneuver your NODE to get the other two. Notice that when you get the other two, the first two will go away. Amazing! This is a feature of your new NODE, designed to make sure you really want to install it.
4. After you have all four RTLs, go Limp with relief.
5. Have a friend go outside to install jumpers and remove MLI. Refer to diagrams 3 through 14,473 (sold separately).
6. Wait for 20 hours.
7. Now let go.
8. Installation is complete! Open the CBM hatch and ingress. Make sure to install a fan to increase cooling. If temperature continues to increase, try to lower your body heat, or breathe less.

CUPOLA © INSTALLATION (OPTIONAL)

Your Cupola © was provided by Room With A View Industries, and is one of a kind! Installing it can significantly improve your NODE experience.

1. Without actually touching the window part of the module made entirely out of windows, grab the window.
2. Coax or trick the CBM into letting go of it (some CBMs get lonely). If necessary, say you'll give it a PMA to replace the Cupola © when you're done.
3. Place it on the Nadir CBM. Follow steps 3 through 7 from the NODE installation procedure above.
4. Then, simply √TRRJ >2" by SSRMS LEE CLA w/Z=20.0 or OBSS ITVC B4 ETCS α→<30° else CAT-1 C&W pot., and install PMA @ N3P CBM. Easy!

OTHER NOTES

- For troubleshooting, call the following numbers:
    - For problems involving temperature control, call 1-800-SG1-HELP, extension THOR
    - For problems involving rack relocations, call 1-800-SG1-HELP, extension OSO1
- Do not throw rocks while in the Cupola ©.
- In fact, just don't throw rocks anywhere in the Station. Or the shuttle, for that matter. Why do you have rocks up there, anyway?
- When not in use, keep your Cupola © windows shut. This will keep you from being distracted while moving your Regen ECLSS equipment (also sold separately).

COMEDY

Fluid Loading:

Fluid loading water for one entry opportunity should be pulled during pre-sleep today. Fluid loading for a one orbit wave-off is not required to be pulled until wave-off is declared. Pulling water for fluid loading on EOM-1 will help maximize Supply Water quantities to support maximum Deorbit landing opportunities. Report to MCC when complete.

The following is the prescription for fluid loading on Entry day:

Initiate fluid loading at 1 hour before TIG. Consume 8 ounces of water or artificially sweetened (A/S) drink with two salt tablets, every 15 minutes. Fluid loading must be completed by Entry Interface (EI).

CREWMEMBER	FLUID	TOTAL # OF SALT TABLETS
CDR (Zamka)	16 oz Tropical Punch w/ A/S 8 oz Lemon Lime Ade 16 oz Orange Ade	4
PLT (Virts)	24 oz Water 16 oz Lemon-Lime Ade 8 oz Orange Ade	6
MS1 (Hire)	32 oz Orange Drink w/ A/S	8
MS2 (Robinson)	24 oz Lemon-Lime Ade 16 oz Orange Ade	0
MS3 (Patrick)	48 oz Grape Drink w/ A/S	12
MS4 (Behnken)	24 oz Water 24 oz Lemonade w/ A/S	12

Note: Pre-packaged volume may exceed prescribed quantity. Fluid loading bags may be filled the night before and consumed within 30 hours of filling. Fluid loading bags not consumed within this time should be discarded and new bags filled for use.

If there is a one orbit wave-off and fluid loading was completed on the previous de-orbit attempt, then the following prescription should be completed by EI:

CREWMEMBER	FLUID	TOTAL # OF SALT TABLETS
CDR (Zamka)	8 oz Tropical Punch w/ A/S 8 oz Lemon-Lime Ade 4 oz Orange Ade	2
PLT (Virts)	8 oz Water 8 oz Lemon-Lime Ade 8 oz Orange Ade	2
MS1 (Hire)	16 oz Orange Drink w/ A/S	4
MS2 (Robinson)	8 oz Lemon-Lime Ade 12 oz Orange Ade	0
MS3 (Patrick)	24 oz Grape Drink w/ A/S	6
MS4 (Behnken)	8 oz Water 16 oz Lemonade w/ A/S	6

If there is a greater than one orbit wave-off or a partial fluid load was performed on the previous de-orbit attempt then the entire protocol above should be repeated.

Anti-G Suit Operations:

Anti-G suits must be inflated to 0.5 psi (one click) at or near entry interface (EI) and to at least 1.0 psi (two clicks) at one G.

Dosimeter Reminder:

Ensure that all dosimeters are stowed in your ACES suits.

MAUI - PRCS

-15:00 or earlier 1. MANEUVER TO START ATTITUDE (BIASED +ZLV +YVV)

NOTE
External lights should remain OFF
from 15 minutes before, until
5 minutes after the MAUI burn.

A7U √PL BAY FLOOD (all) - OFF
√ILLUMINATORS (all) - OFF

GNC 20 DAP CONFIG
√DAP A1, B1 loaded

UNIV PTG
TGT ID – ITEM 8 +2 EXEC
BODY VECT – ITEM 14 +5 EXEC
P – ITEM 15 +2 7 0 EXEC
Y – ITEM 16 +3 5 0 EXEC
OM – ITEM 17 +2 7 0 EXEC

TRK – ITEM 19 EXEC (CUR - *****)

2. INITIATE TIMER
√MCC for start time

GNC 2 TIME
Set count down/count up timer per MCC
√MET – ITEM 2 EXEC (*)
CRT TIMER COUNT TO – ITEM 17 +_ _ +_ _ +_ _
EXEC

3. SETUP

O14:E, O15:E cb DDU L (two) – cl

O14:F, O15:F, O16:F Pri RJD LOGIC, DRIVER (sixteen) – ON

GNC 20 DAP CONFIG
DAP A PRI P OPTION – ITEM 15 EXEC (NOSE)
ROT PLS – ITEM 13 + 1.0 0 0 EXEC
TRAN PLS – ITEM 17 +0.8 1 EXEC

Cont next page

GNC 23 RCS

Deselect Jets:

Forward RCS page – ITEM 1 EXEC
JET DES F1D – ITEM 23 EXEC (*)
F2D – ITEM 27 EXEC (*)

C3 √DAP: A/AUTO/VERN
√DAP TRANS: PULSE/PULSE/PULSE
√DAP ROT: PULSE/PULSE/PULSE

4. VERIFY ATTITUDE

-05:00 Verify in attitude

NOTE

For the following PRCS firing sequence (step 5):

A. Expect total orbiter body rates (RSS) to exceed 1 deg/sec

B. Possible loss of comm due to orbiter body rates and attitude excursions

C. For any jet fail OFF, continue with firing sequence

D. Requirement is for a particular jet group, not a specific jet

E. The table in step 5 is also provided as a cue card

Cont next page

5. PRCS FIRING SEQUENCE

NOTE

Use the table below or the cue card

MAUI – PRCS FIRING SEQUENCE

Reminder: All inputs are momentary except RHC +pitch at 00:45

Timer	Jets Fired	CDR	PLT
-01:00		√Body rates: +0.047 ≤ roll ≤ +0.087 -0.020 ≤ pitch ≤ +0.020 -0.020 ≤ yaw ≤ +0.020 DAP: FREE DAP: A/PRI	Configure initial setup GNC 23 RCS √Forward RCS page – ITEM 1 EXEC (*) NOTE Queue the following ITEM entry on the scratch pad. Do not perform the EXEC until specified at 35 sec JET DES F3D – ITEM 25
-00:30		FLT CNTLR PWR – ON	
00:00	RXA, LXA	THC +X (in) (3 sec firing)	
00:15	FXL, LXL	THC +Y (right) (3 sec firing)	
00:30	FXR, RXR	THC -Y (left) (3 sec firing)	
00:35			When jets stop firing: GNC 23 RCS EXEC [JET DES F3D – ITEM 25 (*)]
00:45	F4D	RHC +pitch Past soft stop, hold 3 sec	
00:48		RHC release	
		FLT CNTLR PWR – OFF	Return to MAUI - PRCS, Step 6

Cont next page

6. CLEANUP

F6 √FLT CNTRL PWR – OFF

GNC 23 RCS

√Forward RCS page – ITEM 1 EXEC
Reselect Jets:
JET DES F1D – ITEM 23 EXEC (no *)
F3D – ITEM 25 EXEC (no *)
F2D – ITEM 27 EXEC (no *)

GNC 20 DAP CONFIG

DAP A1 – ITEM 1 + 1 EXEC

7. SNAP LVLH ATTITUDE AND NULL RATES

When time ≥ +02:00:
√DAP: A/PRI
DAP: LVLH

When rates stable:
DAP: VERN

Return to FLT PLN attitude

8. RECONFIGURE TO GROUP B POWERDOWN

O14:E, O15:E cb DDU L (two) – op

O14:F, O15:F, O16:F Pri RJD LOGIC,DRIVER (sixteen) – OFF
RJDA 1A L2/R2 MANF DRIVER – ON