STS-119 / 15A

FD 13 Entry Execute Package

MSG	Page(s)	Title
139D	1 - 15	FD14 Through EOM+3 Timeline **(pdf)**
141	16	Deorbit Prep Deltas **(pdf)**
142	17 - 18	Entry Checklist Deltas **(pdf)**
143A	19 - 20	Entry Summary **(pdf)**
144	21 - 22	Blank Entry Summary **(pdf)**
145	23	Entry FIW Summary **(pdf)**

Approved by FAO: *Terry Clancy*

Last Updated: Mar 27 2009 2:19PM GMT
JEDI *(**J**oint **E**xecute package **D**evelopment and **I**ntegration), v2.04.0003*

03/27/09 09:00:02 **REPLANNED**

GMT 03/27/09 (086) 03/28 01 02 03 04 05 06 07 08 09 10 11

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

STS-119

FD14

CDR ARCHAMBAULT	PRE SLEEP		SLEEP	POST SLEEP	PMC A/G, PST SLP, GRP B
PLT ANTONELLI	PRE SLEEP		SLEEP	LOG, POST SLEEP	GRP B
MS1 ACABA	PRE SLEEP		SLEEP	POST SLEEP	
MS2 SWANSON	PRE SLEEP	DRY SLV	SLEEP	POST SLEEP	
MS3 ARNOLD	PRE SLEEP	DRY SLV	SLEEP	POST SLEEP	
MS4 PHILLIPS	PRE SLEEP	DRY SLV	SLEEP	LOG, POST SLEEP	
FE-2 DN MAGNUS	PRE SLEEP	DRY SLV	SLEEP	POST SLEEP	

DAY/NIGHT

ORBIT: 190 191 192 193 194 195 196 197 198

TDRS: W E Z

ORB ATT: -ZLV -XVV

GND: DFR; DFR, MLA; WSS, DFR, MLA; WSS, DFR; DFR

NOTES

03/27/09 09:00:02 **REPLANNED**

GMT 03/28/09 (087) 12 13 14 15 16 17 18 19 20 21 22 23

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

STS-119 2

FD14

CDR ARCHAMBAULT	GRPB	IMU ALIGN & VERIF	-XSI	DEORBIT PREP																			DEORBIT PREP BACKOUT	WATCH	MNVDR	HUD CAL	MNVR	-ZLV	PRE SLEEP	PMC A/G	♣
PLT ANTONELLI	GRPB	POST SLEEP	MADSC*	SEATCH	DEORBIT PREP																		DEORBIT PREP BACKOUT	WATCH	MACIUH*	PRE SLEEP					
MS1 ACABA	POST SLEEP	GSC*	DEORBIT PREP																				DEORBIT PREP BACKOUT	WATCH	MUS	PRE SLEEP					
MS2 SWANSON	POST SLEEP	TEPC	PWRDN	DEORBIT PREP																			DEORBIT PREP BACKOUT	WATCH	GIRA INSTALL	PRE SLEEP					
MS3 ARNOLD	POST	SLEEP	MDK@	GIRA	STOW	OCAC	STOW	DEORBIT PREP															DEORBIT PREP BACKOUT	WATCH	OCAC	SETUP	PRE SLEEP				
MS4 PHILLIPS	POST	SLEEP	STOW#	WATCH	PGSC STOW PART II	DEORBIT PREP																	DEORBIT PREP BACKOUT	WADCH#	MADCH#	UNSTW^	MUS	PRE SLEEP			
FE-2 DN MAGNUS	POST SLEEP	WATCH	DEORBIT PREP																				DEORBIT PREP BACKOUT	WATCH	PRE SLEEP						

D/O TIG*

LANDING*

ORBIT	TIG
KSC 201	012/16:50
KSC 202	012/18:25

DAY/NIGHT

ORBIT 198 199 200 201 202 203 204 205 206

TDRS W E Z

ORB ATT IMU -XSI COMM ENTRY -ZLV -XVV HUD -ZLV -XVV

GND MLA WSS DFR WSS DFR DFR

NOTES

*STRAIN GAGE ENABLE
*Activation
@STATUS CK
#SALIVA KIT

*D/O TIG (12/16:50)

*KSC LANDING (12/17:55)

*FILTER CHECK
^SALIVA KIT
#STATUS CHECK

♣PRE SLEEP

FLT PLN/119/FLIGHT

03/27/09 09:00:02 **REPLANNED**

GMT 03/28/09 (087) 03/29 01 02 03 04 05 06 07 08 09 10 11

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

STS-119	FD14			EOM+1		
CDR ARCHAMBAULT	PRE SLEEP	SLEEP		POST SLEEP	PMC A/G	POST SLEEP
PLT ANTONELLI	PRE SLEEP	SLEEP	LOG	POST SLEEP		
MS1 ACABA	PRE SLEEP	SLEEP		POST SLEEP		
MS2 SWANSON	PRE SLEEP	SLEEP	DSLV	POST SLEEP		
MS3 ARNOLD	PRE SLEEP	SLEEP	DSLV	POST SLEEP		
MS4 PHILLIPS	PRE SLEEP	SLEEP	LOG DSLV	POST SLEEP		
FE-2 DN MAGNUS	PRE SLEEP	SLEEP	DSLV	POST SLEEP		

DAY/NIGHT

ORBIT 206 207 208 209 210 211 212 213

TDRS W E Z

ORB ATT -ZLV -XVV

GND -DFR -DFR -MLA -WSS -DFR -MLA -WSS -DFR -DFR

NOTES 2-47 FLT PLN/119/FLIGHT

03/27/09 09:00:02 **REPLANNED**

GMT 03/29/09 (088)

MET **EOM+1** Day 013

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

STS-119

FD15 CDR ARCHAMBAULT	POST SLEEP	WATCH	GRPB	PWRUP	IMU ALIGN & VERIF	-XSI	DEORBIT PREP							MNVR +YVV^ DEORBIT PREP BACKOUT		WATCH	MACTU*			MNVR	-ZLV	PMC A/G	PRE SLEEP
PLT ANTONELLI	POST SLEEP	WATCH	GRPB	PWRUP			DEORBIT PREP							DEORBIT PREP BACKOUT		WASTE	INITE	WATCH		WASTE	TERM		PRE SLEEP
MS1 ACABA	POST SLEEP	WATCH					DEORBIT PREP							DEORBIT PREP BACKOUT		WATCH					MUS		PRE SLEEP
MS2 SWANSON	POST SLEEP	WATCH					DEORBIT PREP							DEORBIT PREP BACKOUT		WATCH	GIRA INSTALL						PRE SLEEP
MS3 ARNOLD	POST SLEEP	WATCH	GIRA	STOW	OCAC	STOW	DEORBIT PREP							DEORBIT PREP BACKOUT		WATCH	OCAC	SETUP					PRE SLEEP
MS4 PHILLIPS	POST SLEEP	WATCH#	MADK#	STOW%			DEORBIT PREP							DEORBIT PREP BACKOUT		WATCH	UNSTW^	MDK#			MUS		PRE SLEEP
FE-2 DN MAGNUS	POST SLEEP	WATCH					DEORBIT PREP							DEORBIT PREP BACKOUT		WATCH							PRE SLEEP

D/O TIG*

LANDING*

ORBIT	TIG
KSC 217	013/17:13
KSC 218	013/18:50

DAY/NIGHT

ORBIT: 214 215 216 217 218 219 220 221

TDRS W E Z

ORB ATT: -XSI COMM ENTRY -ZLV +YVV -ZLV -XVV

GND: MLA; WSS DFR MLA; WSS DFR; DFR

NOTES: %SALIVA KIT; *D/O TIG (13/17:13); *FILTER CHECK; FLT PLN/119/FLIGHT; #STATUS CHECK; ^SALIVA KIT; *KSC LANDING (13/18:19)

03/27/09 09:00:02 **REPLANNED**

GMT 03/29/09 (088) 03/30 01 02 03 04 05 06 07 08 09 10 11

MET Day 014 014/00 01 02 03 04 05 06 07 08 09 10 11 12

STS-119	FD15			EOM+2						
CDR ARCHAMBAULT	PRE SLEEP	SLEEP		POST SLEEP	PMC A/G	POST SLEEP	WATCH	GRPB	PWRUP	IMU ALIGN & VERIF
PLT ANTONELLI	PRE SLEEP	SLEEP	LOG	POST SLEEP			GRPB	PWRUP	WATCH	
MS1 ACABA	PRE SLEEP	SLEEP		POST SLEEP						
MS2 SWANSON	PRE SLEEP	SLEEP	DSLV	POST SLEEP						
MS3 ARNOLD	PRE SLEEP	SLEEP	DSLV	POST SLEEP				WATCH	GIRA	STOW	OCAC*
MS4 PHILLIPS	PRE SLEEP	SLEEP	LOG DSLV	POST SLEEP				WATCH	MADCK#	STOW%
FE-2 DN MAGNUS	PRE SLEEP	SLEEP	DSLV	POST SLEEP						

DAY/NIGHT

ORBIT 222 223 224 225 226 227 228 229

TDRS W E Z

ORB ATT -ZLV -XVV IMU

GND —DFR —DFR —MLA —WSS —DFR ·MLA —WSS —DFR -DFR

NOTES 2-49 FLT PLN/119/FLIGHT

*STOW
%SALIVA KIT
#STATUS CHECK

03/27/09 09:00:02 **REPLANNED**

GMT 03/30/09 (089) 12 13 14 15 16 17 18 19 20 21 22 23

MET **EOM+2** Day 014 12 13 14 15 16 17 18 19 20 21 22 23 015/00

STS-119 6

FD16

CDR ARCHAMBAULT	XSI	DEORBIT PREP																					
PLT ANTONELLI		DEORBIT PREP																					
MS1 ACABA	WATCH	DEORBIT PREP																					
MS2 SWANSON	WATCH	DEORBIT PREP																					
MS3 ARNOLD	OCAC*	DEORBIT PREP																					
MS4 PHILLIPS		DEORBIT PREP																					
FE-2 DN MAGNUS	WATCH	DEORBIT PREP																					

D/O TIG*

LANDING*

CDR ARCHAMBAULT	DEORBIT PREP BACKOUT																						
PLT ANTONELLI	DEORBIT PREP BACKOUT																						
MS1 ACABA	DEORBIT PREP BACKOUT																						
MS2 SWANSON	DEORBIT PREP BACKOUT																						
MS3 ARNOLD	DEORBIT PREP BACKOUT																						
MS4 PHILLIPS	DEORBIT PREP BACKOUT																						
FE-2 DN MAGNUS	DEORBIT PREP BACKOUT																						

CDR ARCHAMBAULT	WATCH		PRE SLEEP	PMC A/G	PRE SLEEP																		
PLT ANTONELLI	WATCH	FILTER CLEANING	PRE SLEEP																				
MS1 ACABA	WATCH		PRE SLEEP																				
MS2 SWANSON	WATCH	GIRA INSTALL	PRE SLEEP																				
MS3 ARNOLD	WATCH	OCAC	SETUP	PRE SLEEP																			
MS4 PHILLIPS	WATCH	UNSTW^	MDK#	PRE SLEEP																			
FE-2 DN MAGNUS	WATCH		PRE SLEEP																				

DAY/NIGHT																							
ORBIT	229	230	231	232	233	234	235	236	237														
TDRS W																							
TDRS E																							
TDRS Z																							
ORB ATT	-XSI	COMM	ENTRY	-ZLV -XVV																			
GND	MLA	WSS DFR	WSS DFR	DFR																			

ORBIT	TIG																						
KSC 232	014/16:02																						
KSC 233	014/17:37																						
EDW 234	014/19:08																						

NOTES

*STOW

***D/O TIG (14/16:02)**

^SALIVA KIT

#STATUS CHECK

***KSC LANDING (14/17:07)**

03/27/09 09:00:02 **REPLANNED**

GMT 03/30/09 (089) 03/31 01 02 03 04 05 06 07 08 09 10 11

MET Day 015 015/00 01 02 03 04 05 06 07 08 09 10 11 12

STS-119	FD16			EOM+3		
CDR ARCHAMBAULT	PRE SLEEP	SLEEP		POST SLEEP	PMC A/G	POST SLEEP
PLT ANTONELLI	PRE SLEEP	SLEEP	LOG	PST SLP		
MS1 ACABA	PRE SLEEP	SLEEP		POST SLEEP		
MS2 SWANSON	PRE SLEEP	SLEEP	DSLV	PST SLP		
MS3 ARNOLD	PRE SLEEP	SLEEP	DSLV	PST SLP		
MS4 PHILLIPS	PRE SLEEP	SLEEP	LOG DSLV	PST SLP		
FE-2 DN MAGNUS	PRE SLEEP	SLEEP	DSLV	PST SLP		

DAY/NIGHT

ORBIT 237 238 239 240 241 242 243 244 245

TDRS W E Z

ORB ATT -ZLV -XVV

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

NOTES 2-51 FLT PLN/119/FLIGHT

03/27/09 09:00:02 **REPLANNED**

GMT 03/31/09 (090) 12 13 14 15 16 17 18 19 20 21 22 23

MET **EOM+3** Day 015 12 13 14 15 16 17 18 19 20 21 22 23 016/00

FD17

STS-119									
CDR ARCHAMBAULT		WATCH	GRPB	PWRUP	IMU ALIGN & VERIF	-XSI	DEORBIT PREP		
PLT ANTONELLI	PST SLP		GRPB	PWRUP		WATCH	DEORBIT PREP		
MS1 ACABA						WATCH	DEORBIT PREP		
MS2 SWANSON	PST SLP					WATCH	DEORBIT PREP		
MS3 ARNOLD	PST SLP				GIRA STOW OCAC STOW	WATCH	DEORBIT PREP		
MS4 PHILLIPS	PST SLP	MDDK#	STOW%			WATCH	DEORBIT PREP		
FE-2 DN MAGNUS	PST SLP					WATCH	DEORBIT PREP		

D/O TIG*

LANDING*

ORBIT	TIG
KSC 248	015/16:25
NOR 249	015/17:57
KSC 249	015/18:01
EDW 250	015/19:30
NOR 250	015/19:32
EDW 251	015/21:06

DAY/NIGHT

ORBIT 245 246 247 248 249 250 251 252 253

TDRS W E Z

ORB ATT -ZLV -XVV -XSI COMM ENTRY

GND MLA WSS DFR MLA WSS DFR DFR DFR

NOTES #STATUS CHECK %SALIVA KIT

*D/O TIG (15/19:30)

FLT PLN/119/FLIGHT

*EDW LANDING (15/20:37)

STS-119 FD (14)

GMT Date 03/28 (087) | W | TDRSE | Z | D/N | DORB | ORB | MET Day 012 | STS ATT

CDR ARCHAMBAULT | PLT ANTONELLI | MS1 ACABA | NOTES

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

14 15 16 1 | 195 196 197 198

SLEEP | SLEEP | SLEEP

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

FLIGHT SLEEP LOG (ORB OPS, SDBI) A

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

A Remove SLEEP book from Logbook
Stow SLEEP in MA9L for return
Stow Logbook with ODF

-ZLV -XVV

FD14 EZ ACTIVITIES:
√OCAC FILTER
TEPC (STATUS CHECK)
(ORB OPS, CREW SYS)

B Step 12 (Recover IMU 3), 10, 9
7, 6(Dual G2), 5, 2
After IMU/IMU align;
Unmask IMU 3 BITE: SPEC 21, ITEM 26 EXEC

06 √UHF MODE - OFF
PRIVATE MEDICAL CONFERENCE

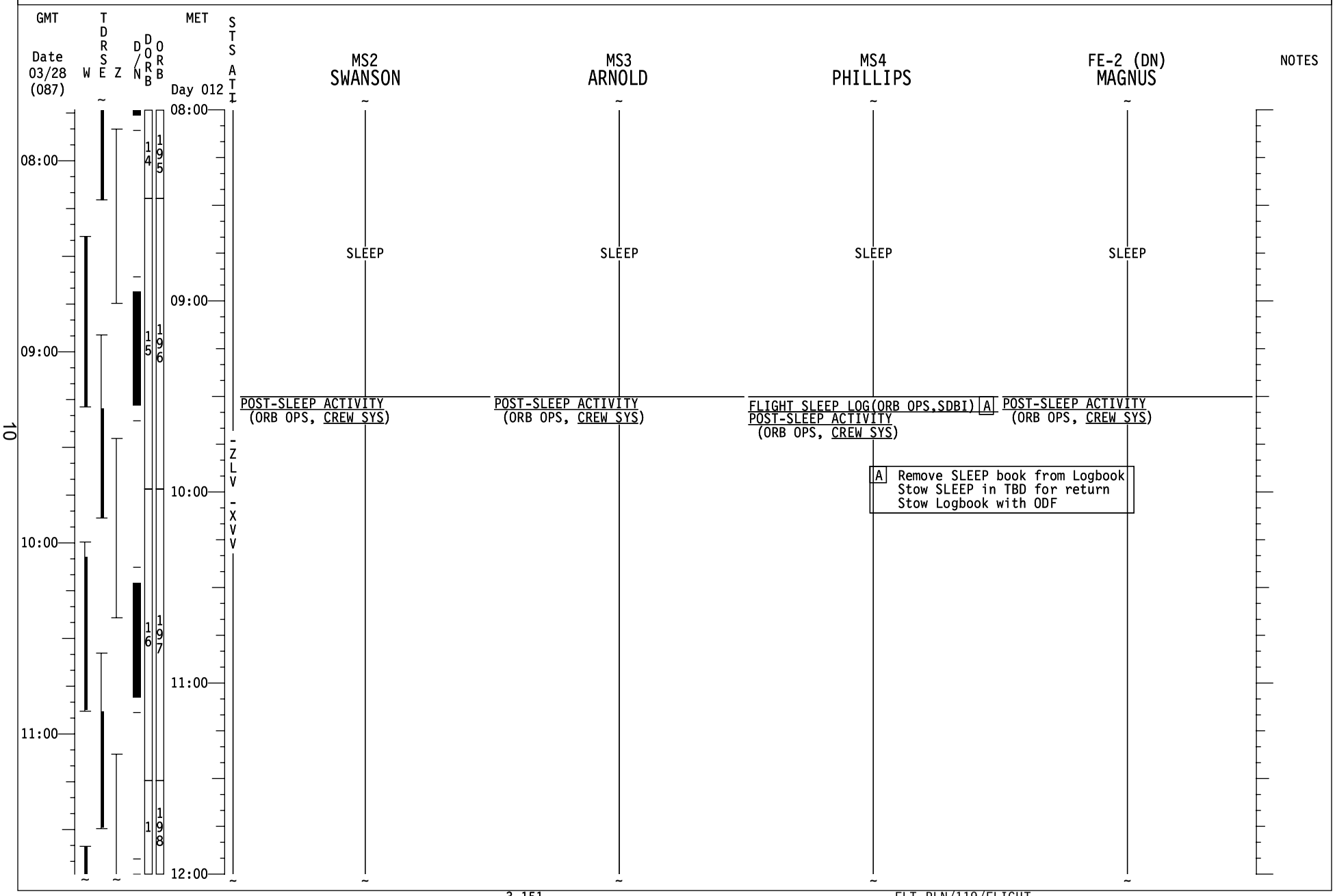
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)

PRIORITY PWRUP GRP B B (ORB PKT, PRIOR PWRDN)

PRIORITY PWRUP GRP B B (ORB PKT, PRIOR PWRDN)

6

STS-119 FD (14)


GMT
Date 03/28 (087)
W
TDRS E
Z
D/N
DORB
ORB
MET
Day 012
STS ATT
MS2 SWANSON
MS3 ARNOLD
MS4 PHILLIPS
FE-2 (DN) MAGNUS
NOTES
08:00
09:00
10:00
11:00
12:00
14
15
16
1
195
196
197
198
-ZLV-XVV
SLEEP
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)
FLIGHT SLEEP LOG(ORB OPS,SDBI) A
A Remove SLEEP book from Logbook
Stow SLEEP in TBD for return
Stow Logbook with ODF

STS-119 FD (14)

GMT Date 03/28 (087) | W | TDRS E | Z | D/N | DORB 1 2 3 | ORB 198 199 200 | MET Day 012 | STS ATT IMU -XSI COMM

CDR ARCHAMBAULT	PLT ANTONELLI	MS1 ACABA	NOTES
PRIORITY PWRUP GRP B [B] (ORB PKT, PRIOR PWRDN)	PRIORITY PWRUP GRP B [B] (ORB PKT, PRIOR PWRDN)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
MNVR IMU STAR ALIGN ATT [C] (pg 3-156) A1/AUTO/VERN, (12:11), Init MNVR	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)		
IMU ALIGN - S TRK (ORB OPS, GNC)		GSC ACTIVATION [E]	
MNVR IMU VERIF ATT [D] (pg 3-156) A1/AUTO/VERN, Init MNVR		[E] Unstow From Location MF28H "BOB Locker",Take sample on middeck or flight deck, and restow in Location MF28H "BOB Locker"	
IMU ALIGN - S TRK (ORB OPS, GNC)			
MNVR (TRK) -XSI TG=4 BV=5 P=184 Y=0 OM=90 A1/AUTO/VERN, (12:42), Init TRK	A6L MADS STRAIN GAGE - PCM ENA		
	DOFFING ACTIWATCH (ORB OPS, SDBI)		
	SEAT POWER CONFIG [F]		
[B] Step 12 (Recover IMU 3), 10, 9 7, 6(Dual G2), 5, 2 After IMU/IMU align; Unmask IMU 3 BITE: SPEC 21, ITEM 26 EXEC			
[F] SEATS CDR SEAT PWR BUS SEL - AC2(up) PLT SEAT PWR BUS SEL - AC3(dn)			
DEORBIT PREP	DEORBIT PREP	DEORBIT PREP	

STS-119 FD (14)

GMT Date 03/28 (087) | W | TDRSE | Z | D/N | DORB | ORB | MET Day 012 | STS ATT

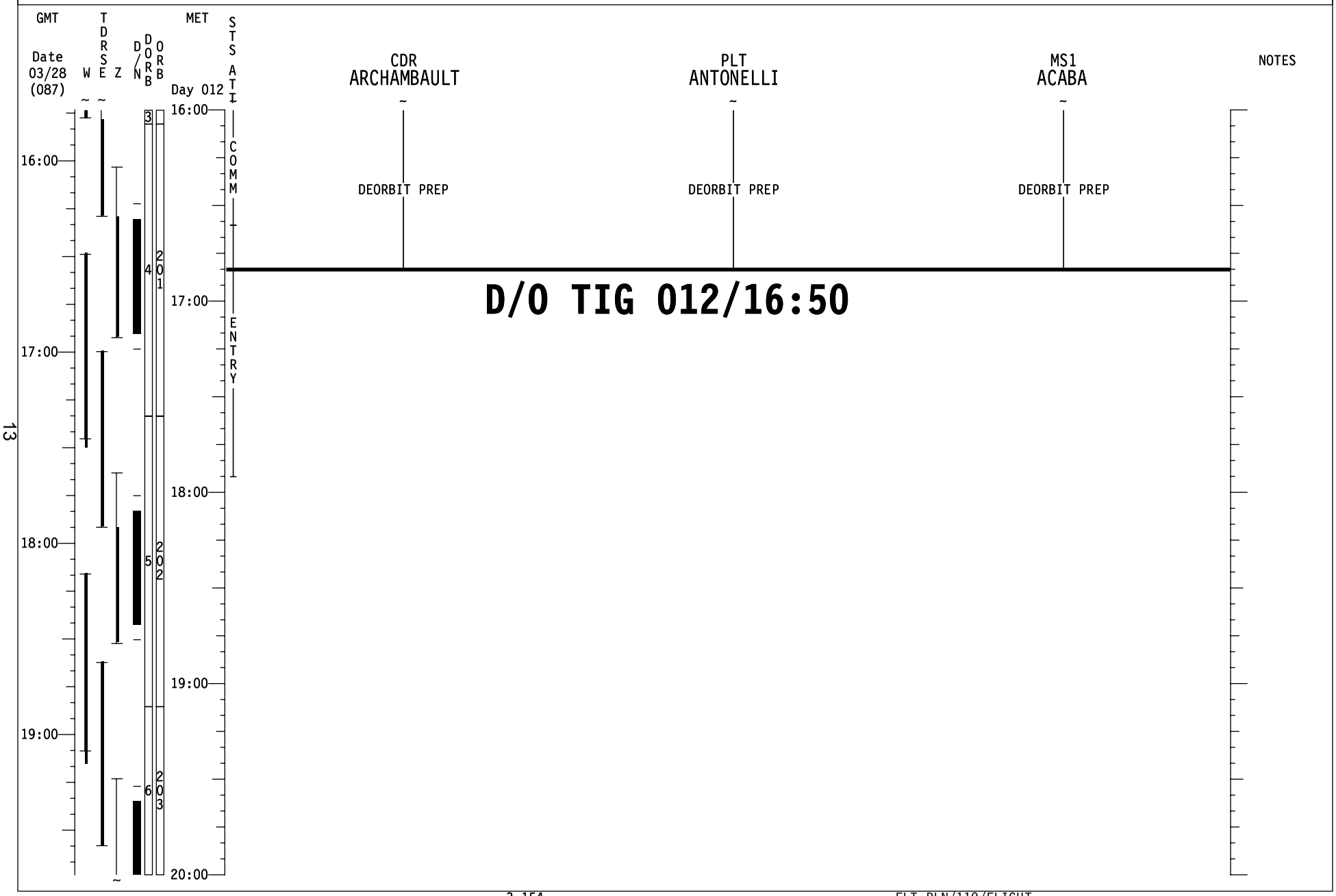
MS2 SWANSON	MS3 ARNOLD	MS4 PHILLIPS	FE-2 (DN) MAGNUS	NOTES
POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	POST-SLEEP ACTIVITY (ORB OPS, CREW SYS)	
	MDDK ST CK(ASSY OPS,PYLDS)Step 1	SALIVA STOW (ORB OPS, SDBI)		
	GIRA STOWAGE (ORB OPS, ECLS)	DOFFING ACTIWATCH (ORB OPS, SDBI)		
TISSUE EQUIV PROPORTIONAL COUNTER (TEPC) (ORB OPS, CREW SYS) Powerdown	OCAC STOWAGE (ORB OPS, CREW SYS)	PGSC DEACT COLOR PRINTER STOW (ORB OPS, PGSC) Stow remaining PGSCs and color printer	DOFFING ACTIWATCH (ORB OPS, SDBI)	
DEORBIT PREP	DEORBIT PREP	DEORBIT PREP	DEORBIT PREP	

Time scale: 12:00, 13:00, 14:00, 15:00, 16:00

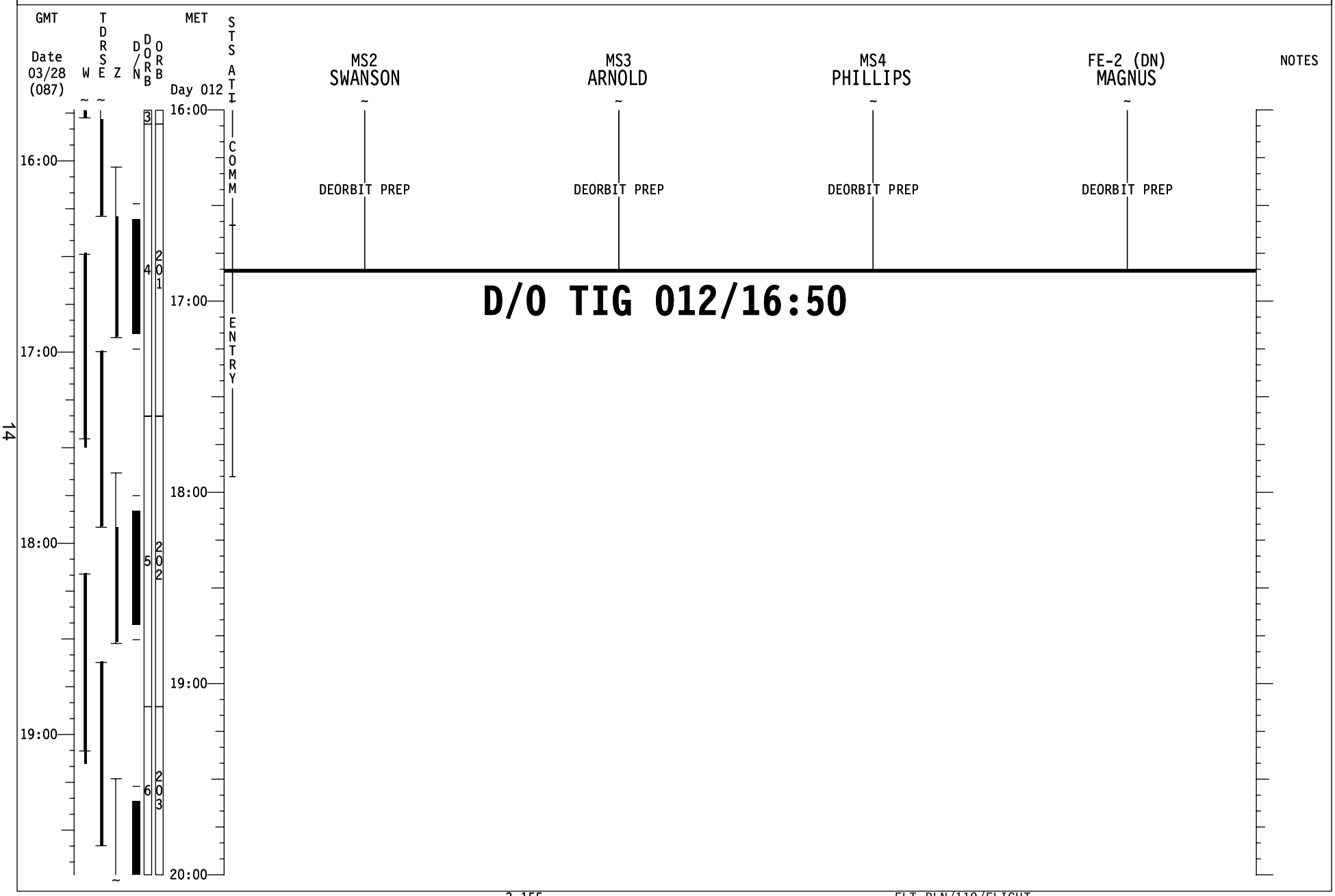
STS ATT: IMU, -XSI, COMM

Orbits: 1 198, 2 199, 3 200

STS-119 FD (14)


GMT
Date 03/28 (087)
W
TDRSE
Z
D/N
DORB
ORB
MET
Day 012
STS ATT
COMM
ENTRY
16:00
17:00
18:00
19:00
20:00
3
4
5
6
201
202
203
CDR
ARCHAMBAULT
PLT
ANTONELLI
MS1
ACABA
DEORBIT PREP
DEORBIT PREP
DEORBIT PREP
NOTES
D/O TIG 012/16:50

STS-119 FD (14)


GMT
Date 03/28 (087)
W
TDRSE
Z
D/N
DORB
ORB
MET
Day 012
STS ATT
COMM
ENTRY
MS2 SWANSON
MS3 ARNOLD
MS4 PHILLIPS
FE-2 (DN) MAGNUS
NOTES
DEORBIT PREP
DEORBIT PREP
DEORBIT PREP
DEORBIT PREP
D/O TIG 012/16:50
16:00
17:00
18:00
19:00
20:00
3
4
5
6
201
202
203

C IMU STAR ALIGN PAD

ID: -Y: 95, BETA GRUIS
MET (12/12:23 TO 12/13:12)

-Z: 75, ZETA OPHIUCHI
MET (12/12:05 TO 12/12:54)

ANG DIFF: 83.2

DUAL S TRKR ALIGNMENT		2nd ATTITUDE (SINGLE S TRKR) -Z: 95 -Y: 75	
R 286	R	199	7
P 123	P	128	137
Y 18	Y	32	12

REQD ID:

-Y: _____, -Z: _____, ANG ERR____,____ ____

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

EXECUTION TIME: ____/___:___:___MET

D IMU VERIFICATION STAR ALIGN PAD

ID: -Y: 57, ACAMAR
MET (12/12:28 TO 12/13:19)

-Z: 60, ENIF
MET (12/12:31 TO 12/13:20)

ANG DIFF: 87.8

DUAL S TRKR ALIGNMENT		2nd ATTITUDE (SINGLE S TRKR) -Z:57 -Y: 60	
R 221	R	143	309
P 100	P	117	102
Y 328	Y	331	313

REQD ID:

-Y: _____, -Z: _____, ANG ERR____,____ ____

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

If any ΔX, ΔY, OR ΔZ > 0.1 Check MCC

EXECUTION TIME: ____/___:___:___MET

15

NOMINAL DEORBIT PREP CHECKLIST DELTAS

PAGE	TIG	CHANGE
1-32	-00:32	In WCS DEACT, Block 27, after: Foot/toe restraints - up, latched add: **MO13Q AC UTIL PWR AC3 - OFF** **L4:B cb UTIL PWR A15/MO13Q AC3 - op** stow PHOTO/TV Floodlight in COAS Locker (MF71O)

DEORBIT PREP BACKOUT DELTAS

PAGE	ET	CHANGE
2-18	1:40	ON-ORBIT PCS 2(1) CONFIG, Block 19 Work the parenthesis actions to configure to PCS 1

ENTRY SWITCH LIST VERIFICATION DELTAS

PAGE	PANEL	NOMENCLATURE	NEW ENTRY SWITCH POSITION
3-12	MO13Q	AC UTIL PWR AC3	OFF– may remain ON until WCS Deactivation complete and PHOTO/TV Floodlight stowed in COAS Locker (MF71O).
3-13	L4:B	cb UTIL PWR A15/MO13Q AC3	open – may remain closed until WCS Deactivation complete and PHOTO/TV Floodlight stowed in COAS Locker (MF71O).

END OF PAGE 1 OF 1, MSG 141

MSG 142 - ENTRY CHECKLIST DELTAS

Please submit deltas to the Entry Checklist via this template as a Flight Note or as a Flight Note Attachment. Inputs will be included in the Entry Checklist Updates entry message.

ENTRY CHECKLIST DELTAS

PAGE	PROCEDURE	ACTION
5-8	NH3 ACT (ENT, POST LDG)	Use the following NH3 Controller: L1 NH3 CNTLR B – PRI/GPC
5-22	NH3 RECONFIG (ENT, ASP EXT PWR UP)	Use the following NH3 Controller: L1 NH3 CNTLR A – PRI/GPC

END OF PAGE 1 OF 2, MSG 142

THIS TABLE MAY BE CUT AND PASTED OVER THE OLD OMS He PRESS/ΔV/BURN TIME TABLE, ENT PG FS2-6.

OMS He PRESS/ΔV/BURN TIME

OMS% GAGE	OMS He Press	OMS ΔV	RCS ΔV	RCS BURN MIN:SEC
32.1	2650	175	144	4:26
30	2570	163	134	4:07
28	2490	150	124	3:48
26	2410	137	114	3:29
24	2330	125	103	3:10
22	2250	112	93	2:51
20	2170	100	83	2:32
18	2090	87	72	2:13
16	2010	74	62	1:54
14	1930	62	52	1:35
12	1850	49	41	1:15
10	1770	36	30	0:56
8	1690	23	20	0:36
6	1610	11	9	0:16

NOTE: Uses assumed vehicle weight of **209,950** lbs.

MSG 143A - ENTRY SUMMARY

ORBIT IS 189 X 181 NM (POST SIMPLEX BURN)
DEORBIT DELTA V WILL BE APPROXIMATELY 339 FPS WITH AN OUT-OF-PLANE
THRUST ANGLE OF 23 DEG.

AT THE DEORBIT BURN, YOU WILL HAVE (%):
L OX = 32.7 R OX = 32.2
L FU = 32.1 R FU = 32.1

THE PREDICTED POST DEORBIT BURN OMS QUANTITIES ARE AS FOLLOWS (%):
L OX = 6.1 R OX = 5.5
L FU = 5.5 R FU = 5.7

FORWARD RCS DUMP: FU TO 0%

CG AT EI: X = 1083.2
CG AT M2.5: X = 1082.1
Y = -0.3

ATMOS ITEM: 22
ELEV. SCHED: AUTO
BODY BENDING FILTER: NOM

SITE: **KSC** REV: **201**	SITE: **KSC** REV: **202**
CROSS RANGE WILL BE 702 NM A/L	CROSS RANGE WILL BE 224 NM A/R
ROLL REVERSAL HISTORY:	ROLL REVERSAL HISTORY:
V= 9100 FPS	V= 19200 FPS
V= 5000 FPS	V= 10200 FPS
V= 2700 FPS	V= 4500 FPS
DEORBIT TIG: 12/16:50	DEORBIT TIG: 12/18:24
LANDING APPROX: 12/17:55	LANDING APPROX: 12/19:29
WX FCST: SCT050 SCT200 VIS 7 SLGT CHC BKN050	WX FCST: SCT050 SCT200 VIS 7 SLGT CHC BKN050
WIND FCST:	WIND FCST:
50K 260/80	50K 260/80
38K 260/80	38K 260/80
28K 260/70	28K 260/70
20K 230/40	20K 230/40
12K 230/25	12K 230/25
7K 210/30	7K 210/30
3K 190/20	3K 190/20
1K 180/20	1K 180/20
SFC 170/13P21	SFC 170/13P21

END OF PAGE 1 OF 2, MSG 143A

MSG 143A - ENTRY SUMMARY

ALTIMETER: 29.92	ALTIMETER: 29.92
DENSITY ALTITUDE: 1722	DENSITY ALTITUDE: 1722
HAC PROCEDURES:	HAC PROCEDURES:
LEFT OVHD TO KSC15	LEFT OVHD TO KSC15
TURN ANGLE 210 DEG	TURN ANGLE 260 DEG
AIM POINT: CI	AIM POINT: CI
SPEEDBRAKE: NOM	SPEEDBRAKE: NOM
TD 2700 FT AT 195 KTS	TD 2700 FT AT 195 KTS
3K SPEEDBRAKE: 18%	3K SPEEDBRAKE: 18%
NAV AIDS STATUS: GREEN	NAV AIDS STATUS: GREEN

CONUS NOTAMS:

EDWARDS (EDW) – LAKEBED RUNWAY 15/33 GREEN, 18L UNUSABLE

WHITE SANDS (NOR) – ALL LAKEBED RWYS GREEN

24 HOUR DELAYED DEORBIT: SITE KSC ORBIT 217 TIG 13/17:13 MET

END OF PAGE 2 OF 2, MSG 143A

MSG 144 - BLANK ENTRY SUMMARY

```
ORBIT IS ___ X ___ NM
DEORBIT DELTA V WILL BE APPROXIMATELY ___ FPS IN-PLANE/OUT-OF-PLANE
WITH _____ LBS WASTING.

AT THE DEORBIT BURN, YOU WILL HAVE (%):
    L  OX = ____        R  OX = ____
    L  FU = ____        R  FU = ____

THE PREDICTED POST DEORBIT BURN OMS QUANTITIES ARE AS FOLLOWS (%):
    L  OX = ____        R  OX = ____
    L  FU = ____        R  FU = ____

FORWARD RCS DUMP: ___ TO ___ %

CG AT EI:      X = _______
CG AT M2.5:    X = _______
               Y = _______

ATMOS ITEM: 22
ELEV. SCHED: AUTO
BODY BENDING FILTER: NOM
---------------------------------------------------------------------------
 SITE: ___     REV: ___                    |  SITE: ___  REV: ___
                                           |
CROSS RANGE WILL BE ___ NM L/R             | CROSS RANGE WILL BE ___ NM L/R
                                           |
ROLL REVERSAL HISTORY:                     | ROLL REVERSAL HISTORY:
        V=  _____ FPS                      |        V= _____ FPS
        V=  _____ FPS                      |        V= _____ FPS
        V=  _____ FPS                      |        V= _____ FPS
                                           |
                                           |
DEORBIT TIG:    __/__:__                   | DEORBIT TIG:    __/__:__
LANDING APPROX: __/__:__                   | LANDING APPROX: __/__:__
                                           |
WX FCST:_____                              | WX FCST:_____
                                           |
                                           |
WIND FCST:                                 | WIND FCST:
          50K    ___/___                   |        50K    ___/___
          38K    ___/___                   |        38K    ___/___
          28K    ___/___                   |        28K    ___/___
          20K    ___/___                   |        20K    ___/___
          12K    ___/___                   |        12K    ___/___
           7K    ___/___                   |         7K    ___/___
           3K    ___/___                   |         3K    ___/___
           1K    ___/___                   |         1K    ___/___
         SFC     ___/___                   |       SFC     ___/___
                                           |
ALTIMETER: _____                           | ALTIMETER: _____
DENSITY ALTITUDE: _____ FT                 | DENSITY ALTITUDE: _____ FT
                                           |
HAC PROCEDURES:                            | HAC PROCEDURES:
```

END OF PAGE 1 OF 2, MSG 144

MSG 144 - BLANK ENTRY SUMMARY

```
 L/R OVHD TO _____                      |  L/R OVHD TO _____
 TURN ANGLE ___ DEG                     |  TURN ANGLE ___ DEG
 AIM POINT: NOM/CI                      |  AIM POINT: NOM/CI
 SPEEDBREAKE: NOM/SF                    |  SPEEDBREAKE: NOM/SF
 TD ____ FT AT ___ KTS                  |  TD ____ FT AT ___ KTS
 3K SPEEDBREAKE: __%                    |  3K SPEEDBREAKE: __%
 NAV AIDS STATUS: _____                 |  NAV AIDS STATUS: _____
-----------------------------------------------------------------------
CONUS NOTAMS:
        EDWARDS (EDW) – _____
        WHITE SANDS (NOR) – _____

24 HOUR DELAYED DEORBIT: SITE ___ ORBIT ___ TIG __/__:__ MET

-----------------------------------------------------------------------
 SITE: ___  REV: ___                    |  SITE: ___  REV: ___
                                        |
CROSS RANGE WILL BE ___ NM L/R          | CROSS RANGE WILL BE ___ NM L/R
                                        |
ROLL REVERSAL HISTORY:                  | ROLL REVERSAL HISTORY:
        V= _____ FPS                    |    V= _____ FPS
        V= _____ FPS                    |    V= _____ FPS
        V= _____ FPS                    |    V= _____ FPS
                                        |
                                        |
DEORBIT TIG:    __/__:__                | DEORBIT TIG:    __/__:__
LANDING APPROX: __/__:__                | LANDING APPROX: __/__:__
                                        |
WX FCST:_____                           | WX FCST:_____
                                        |
                                        |
WIND FCST:                              | WIND FCST:
          50K    ___/___                |     50K    ___/___
          38K    ___/___                |     38K    ___/___
          28K    ___/___                |     28K    ___/___
          20K    ___/___                |     20K    ___/___
          12K    ___/___                |     12K    ___/___
           7K    ___/____               |      7K    ___/___
           3K    ___/____               |      3K    ___/___
           1K    ___/____               |      1K    ___/___
          SFC     ___/____              |     SFC     ___/___
                                        |
ALTIMETER: _____                        | ALTIMETER: _____
DENSITY ALTITUDE: _____ FT              | DENSITY ALTITUDE: _____ FT
                                        |
HAC PROCEDURES:                         | HAC PROCEDURES:
 L/R OVHD TO _____                      |  L/R OVHD TO _____
 TURN ANGLE ___ DEG                     |  TURN ANGLE ___ DEG
 AIM POINT: NOM/CI                      |  AIM POINT: NOM/CI
 SPEEDBREAKE: NOM/SF                    |  SPEEDBREAKE: NOM/SF
 TD ____ FT AT ___ KTS                  |  TD ____ FT AT ___ KTS
 3K SPEEDBREAKE: __%                    |  3K SPEEDBREAKE: __%
 NAV AIDS STATUS: _____                 |  NAV AIDS STATUS: _____
```

END OF PAGE 2 OF 2, MSG 144

MSG 145 - FIW ENTRY SUMMARY

SYSTEM #	FAILURE	IMPACT	WORK AROUND
EPS	FC3 O2 flow meter instrumentation was lost. (SPEC 69 FUEL CELLS, FC3 FLOW O2)	Loss of FC3 reactant flow insight (The H2 flowmeter was unpowered prior to flight due to an anomaly on STS-124). Fuel cell flows are used to monitor fuel cell purges and fuel cell health.	FC3 O2 Flow FDA has been inhibited. MCC will use cryo pressures, purge line temps, and FC Performance to verify FC3 purge flow.
GNC	-Z Star Tracker received a Pressure Fail BITE when powered-up prior to Undock.	None. Pressure loss does not affect star tracker performance. BITE displayed for -Z S TRK on SPEC 22	None. Nominal star tracker ops for the remainder of the mission.

END OF PAGE 1 OF 1, MSG 145