

# VOYAGER

## Space Flight Operations Schedule (SFOS)

Issue Date: June 8, 2016

For the Period: 06/09/16 to 06/26/16 (16-161 – 16-178)

**DSN OPSCHIEF (1) 230-102**

**DSOT (1) 230-102**

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 \*gdyke@airmail.ftops.jpl.nasa.gov  
 \*John.M.Grant@jpl.nasa.gov  
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**OTHER**

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 \* Belinda.Arroyo@jpl.nasa.gov  
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**SCIENCE**

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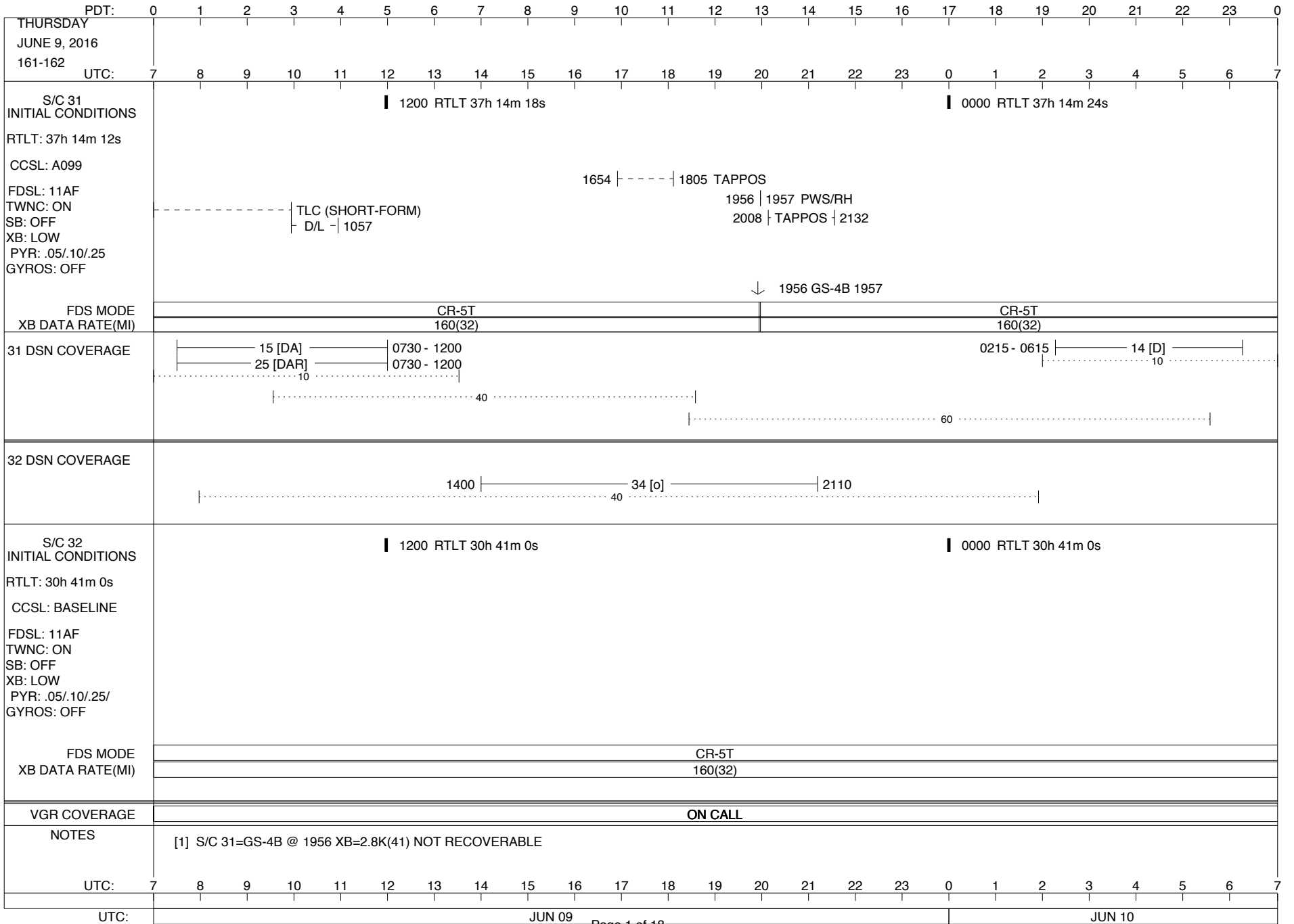
**FLIGHT TEAM (14) 600-100**

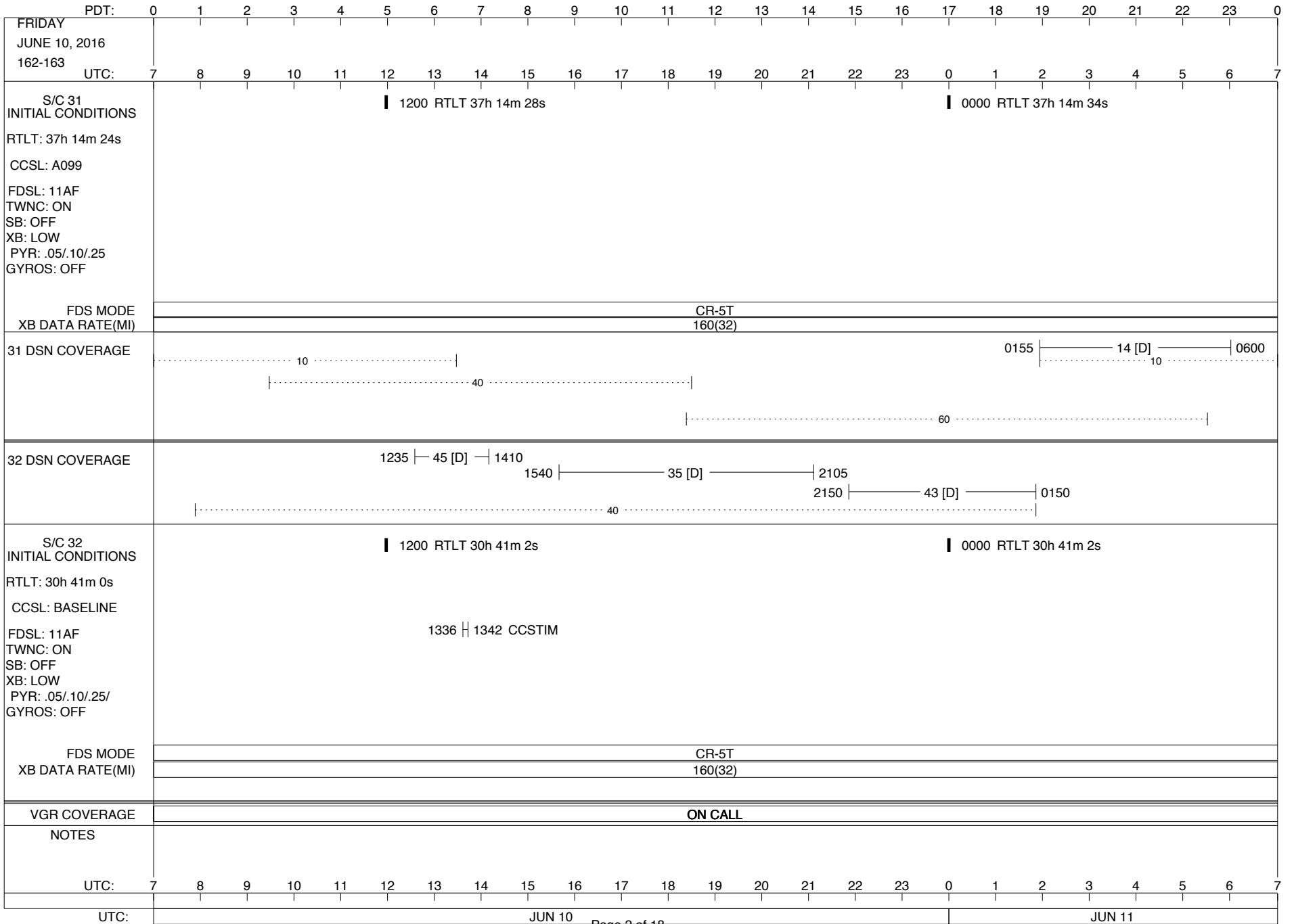
Dodd, S.  
 Hall, J.  
 Howard, S. (3)  
 Ludwig, R. (2)  
 Matsumoto, S.  
 Medina  
 Peralta, F.  
 Weeks, T.  
 Wong, R.  
 Yang, L.  
 Zottarelli, L.  
 \*odivers@san.rr.com

**LEGEND:**  
 ▽ = R/T Command (Last chance or Contingency)  
 ▼ = R/T Command (Scheduled)  
 \* = Result of R/T Command  
 n = (where n = 1,2,3 ..) Special Note, see bottom of page  
 A = Arrayed station  
 B = BLF  
 D = Downlink only pass  
 H = High Power Transmitter  
 R = Array Reference Antenna  
 T = TLC Uplink  
 U = Uplink only pass  
 [o] = Ramp-through

\*Electronic Copy Only  
 (16 – Dist/N: Paper Copies)  
 09/08/10

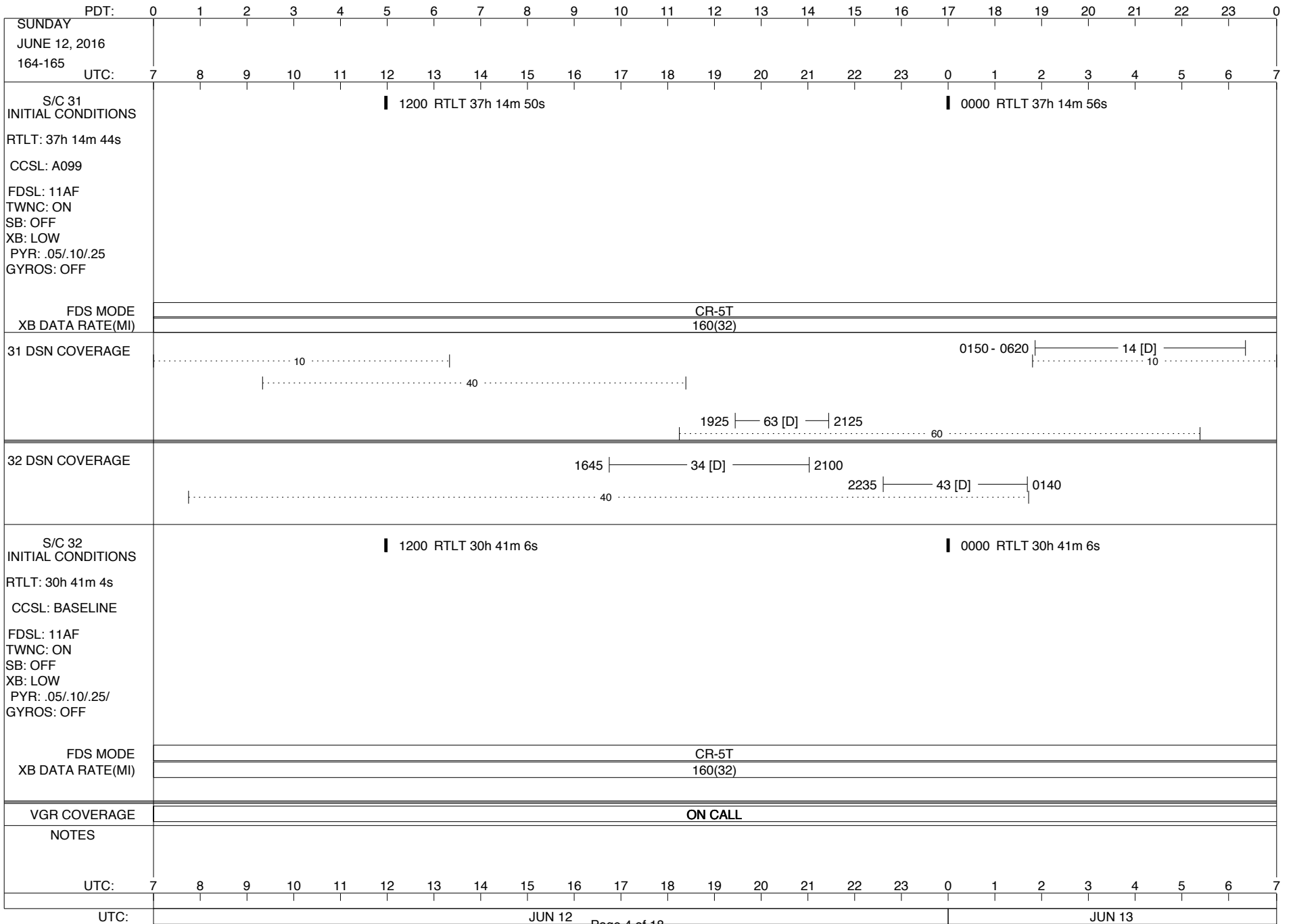
ISSUE DATE: 06/14/16 06:57

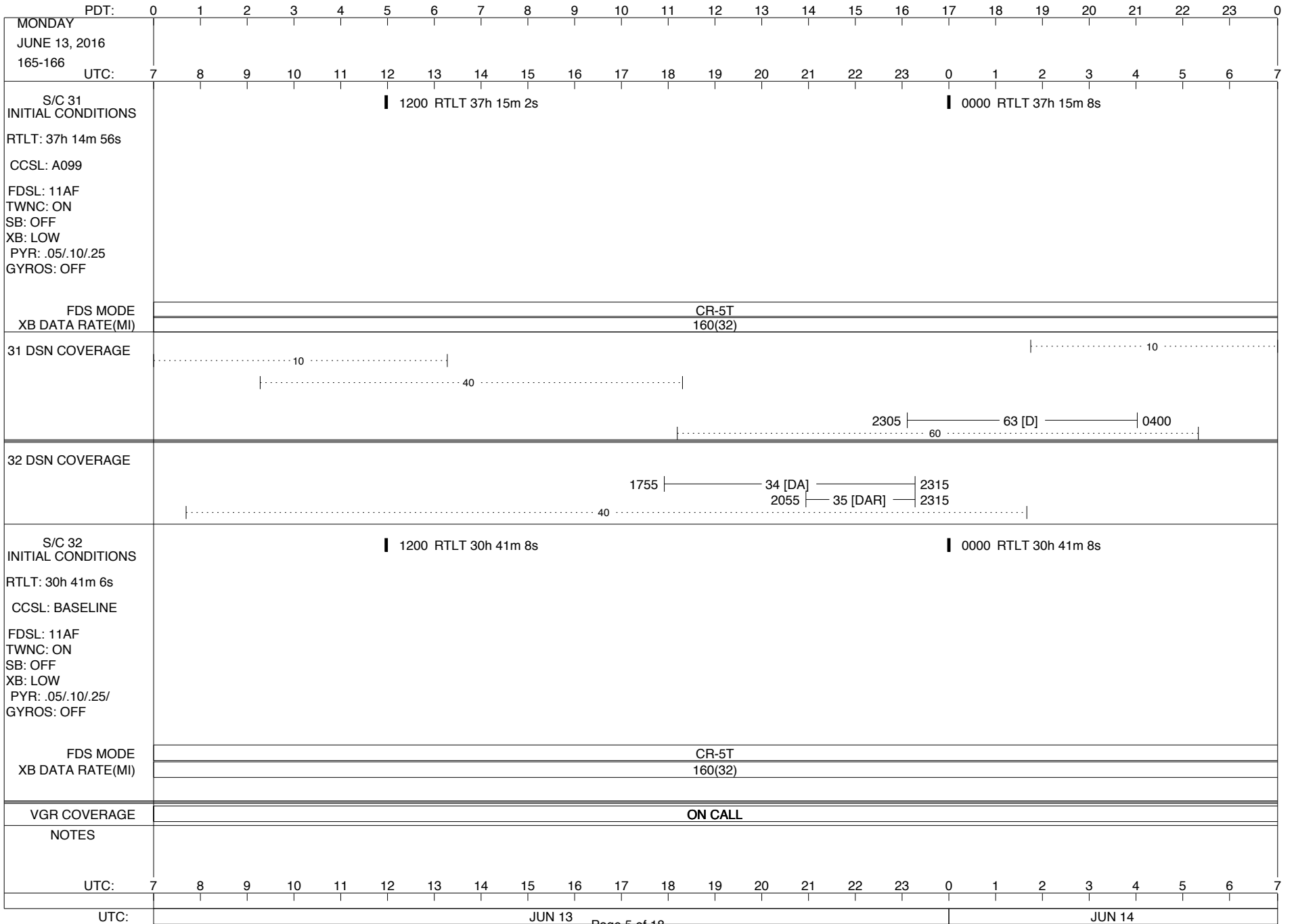




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SATURDAY JUNE 11, 2016 163-164	UTC: 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7
S/C 31 INITIAL CONDITIONS RTLT: 37h 14m 34s CCSL: A099 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 37h 14m 40s												0000 RTLT 37h 14m 44s												
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)												CR-5T 160(32)												
31 DSN COVERAGE	.....  10 .....   .....40.....												0150  -----14 [D]-----  0550  -----10-----  1820  -----63 [D]-----  2105  -----60-----												
32 DSN COVERAGE	.....40.....												1810  -----34 [D]-----  2100 2145  -----43 [D]-----  0145												
S/C 32 INITIAL CONDITIONS RTLT: 30h 41m 2s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25/ GYROS: OFF	1200 RTLT 30h 41m 4s												0000 RTLT 30h 41m 4s												
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)																								
VGR COVERAGE	ON CALL																								
NOTES	[1] S/C 31=GS-4B @ 2256 XB=2.8K(41) NOT RECOVERABLE																								
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7
UTC:	JUN 11												JUN 12												





ISSUE DATE: 06/14/16 06:57

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TUESDAY JUNE 14, 2016 166-167																												
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S/C 31 INITIAL CONDITIONS RTLTL: 37h 15m 8s CCSL: A099 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	█ 1200 RTLTL 37h 15m 14s												█ 0000 RTLTL 37h 15m 20s															
	1319   1320 PWS/RH																											
	↓ 1319 GS-4B 1320																											
FDS MODE	CR-5T												CR-5T															
XB DATA RATE(MI)	160(32)												160(32)															
31 DSN COVERAGE	..... 10																						0525   24 [DA]		0525   26 [DAR]			
	..... 40																						..... 10					
													..... 60															
32 DSN COVERAGE													1325   ..... 35 [D]   ..... 2020															
													..... 40															
S/C 32 INITIAL CONDITIONS RTLTL: 30h 41m 8s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25/ GYROS: OFF	█ 1200 RTLTL 30h 41m 10s												█ 0000 RTLTL 30h 41m 12s															
FDS MODE													CR-5T															
XB DATA RATE(MI)													160(32)															
VGR COVERAGE	ON CALL																											
NOTES	[1] S/C 31=GS-4B @ 1319 XB=2.8K(41) NOT RECOVERABLE																											
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7			
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ISSUE DATE: 06/14/16 06:57

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WEDNESDAY JUNE 15, 2016 167-168																									
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S/C 31 INITIAL CONDITIONS RTLT: 37h 15m 20s CCSL: A099 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF						█ 1200 RTLT 37h 15m 26s												█ 0000 RTLT 37h 15m 32s							
FDS MODE													CR-5T												
XB DATA RATE(MI)													160(32)												
31 DSN COVERAGE	24 [DA] ————— 1140 26 [DAR] ————— 1140 ..... 10 ..... ..... 40 ..... ..... 60 .....												..... 0510 ..... 14 [T] ———												
32 DSN COVERAGE	..... 40 .....												2045  ————— 43 [B] —————  0130												
S/C 32 INITIAL CONDITIONS RTLT: 30h 41m 12s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25/ GYROS: OFF						█ 1200 RTLT 30h 41m 12s												█ 0000 RTLT 30h 41m 14s							
FDS MODE													CR-5T												
XB DATA RATE(MI)													160(32)												
VGR COVERAGE	ON CALL												VGR	ON CALL											
NOTES																									
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7
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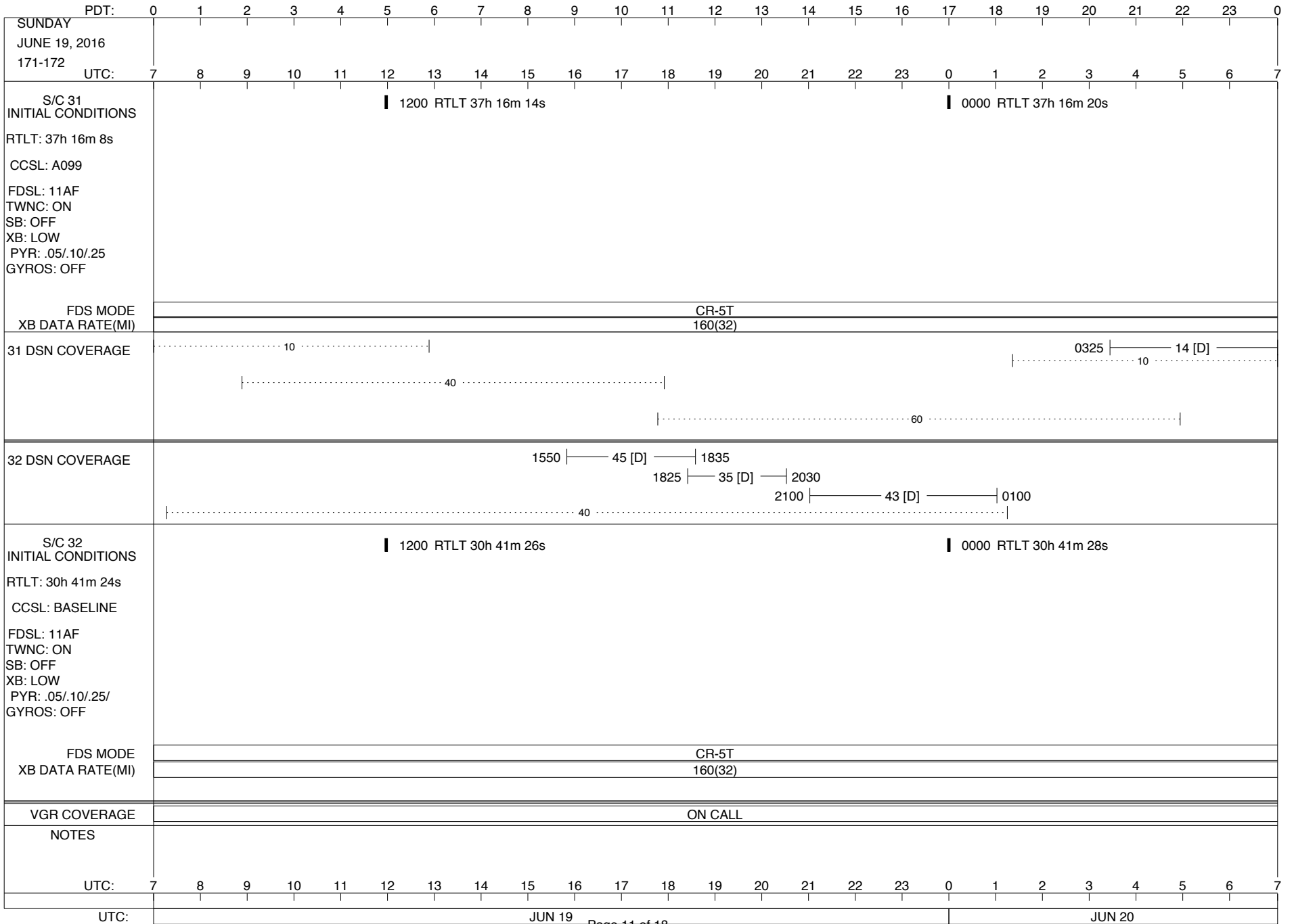
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THURSDAY JUNE 16, 2016 168-169																												
S/C 31 INITIAL CONDITIONS RTLT: 37h 15m 32s CCSL: A099 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 37h 15m 38s												0000 RTLT 37h 15m 44s															
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)												CR-5T 160(32)															
31 DSN COVERAGE	<p>U/L 0815  -----  TLC (SHORT-FORM)  ----- </p> <p>1631   TAPPOS   1755</p> <p>1932   1934 PWS/RH</p> <p>1944   TAPPOS -   2123</p> <p>↓ 1932 GS-4B 1934</p> <p>14 [T]  -----  0910  -----  10</p> <p>----- -----  40  ----- </p> <p>0005  -----  63 [D]  -----  0535</p> <p>60  ----- </p>																											
32 DSN COVERAGE	<p>1640  -----  45 [D]  -----  2040</p> <p>40  ----- </p>																											
S/C 32 INITIAL CONDITIONS RTLT: 30h 41m 14s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25/ GYROS: OFF	1200 RTLT 30h 41m 16s												0000 RTLT 30h 41m 18s															
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)																											
VGR COVERAGE	VGR												ON CALL															
NOTES	[1] S/C 31=GS-4B @ 1932 XB=2.8K(41) NOT RECOVERABLE																											
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ISSUE DATE: 06/14/16 06:57

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FRIDAY JUNE 17, 2016 169-170																									
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S/C 31 INITIAL CONDITIONS RTLT: 37h 15m 44s CCSL: A099 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 37h 15m 50s												0000 RTLT 37h 15m 56s												
FDS MODE XB DATA RATE(MI)													CR-5T 160(32)												
31 DSN COVERAGE	.....10.....												.....10.....												
	.....40.....												.....60.....												
													1930  -----63 [D]-----  2330												
32 DSN COVERAGE	.....40.....												.....60.....												
	1245  -----43 [D]-----  2045																								
S/C 32 INITIAL CONDITIONS RTLT: 30h 41m 18s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25/ GYROS: OFF	1200 RTLT 30h 41m 18s												0000 RTLT 30h 41m 20s												
FDS MODE XB DATA RATE(MI)													CR-5T 160(32)												
VGR COVERAGE	ON CALL												VGR						ON CALL						
NOTES																									
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7
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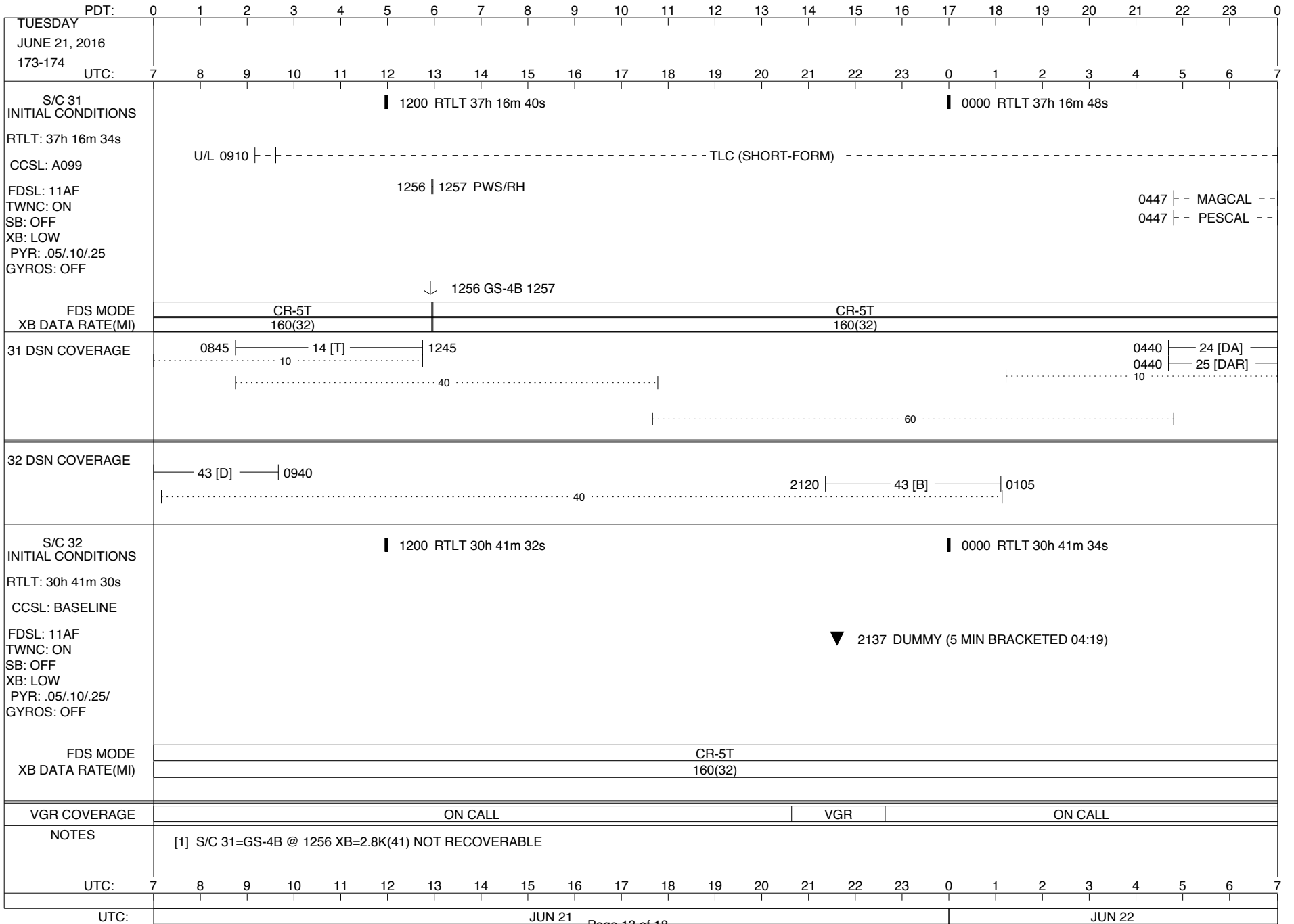
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SATURDAY JUNE 18, 2016 170-171	UTC: 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7
S/C 31 INITIAL CONDITIONS RTLTL: 37h 15m 56s CCSL: A099 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 37h 16m 2s												0000 RTLTL 37h 16m 8s												
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)												CR-5T 160(32)												
31 DSN COVERAGE	.....  10 .....												.....  10 .....												
	.....  40 .....												.....  40 .....												
	.....  2150   .....  63 [D]   .....  0345												.....  60 .....												
32 DSN COVERAGE	.....  1340   .....  34 [o]   .....  2035												.....  40 .....												
S/C 32 INITIAL CONDITIONS RTLTL: 30h 41m 20s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25/ GYROS: OFF	1200 RTLTL 30h 41m 22s												0000 RTLTL 30h 41m 24s												
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)												CR-5T 160(32)												
VGR COVERAGE	ON CALL												ON CALL												
NOTES	[1] S/C 31=GS-4B @ 2233 XB=2.8K(41) NOT RECOVERABLE																								
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7
UTC:	JUN 18												JUN 19												



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MONDAY JUNE 20, 2016 172-173																																				
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7											
S/C 31 INITIAL CONDITIONS RTLT: 37h 16m 20s CCSL: A099 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 37h 16m 28s												0000 RTLT 37h 16m 34s																							
FDS MODE XB DATA RATE(MI)													CR-5T 160(32)																							
31 DSN COVERAGE	14 [D]   0825 .....  .....  40 .....  .....  60 .....												.....  10 .....  .....  10 .....																							
32 DSN COVERAGE	1310  -----  35 [D]  -----  2025												2140  --- 35 [DA] ---  2350 2140  --- 45 [DAR] ---  2350 .....  40 .....												43 [D] 0655											
S/C 32 INITIAL CONDITIONS RTLT: 30h 41m 28s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25/ GYROS: OFF	1200 RTLT 30h 41m 30s												0000 RTLT 30h 41m 30s																							
FDS MODE XB DATA RATE(MI)													CR-5T 160(32)																							
VGR COVERAGE	ON CALL																																			
NOTES																																				
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7											
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ISSUE DATE: 06/14/16 06:57

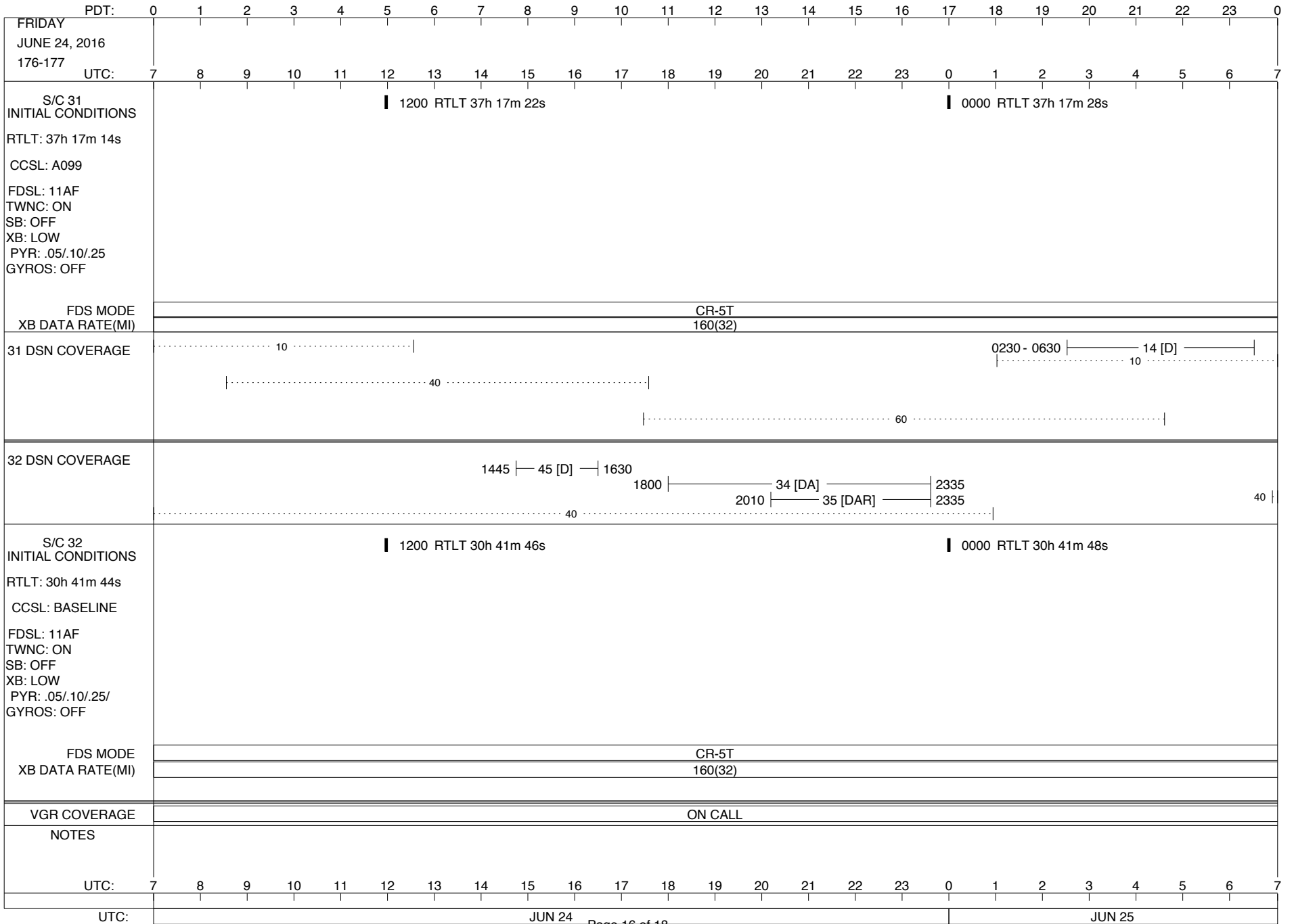


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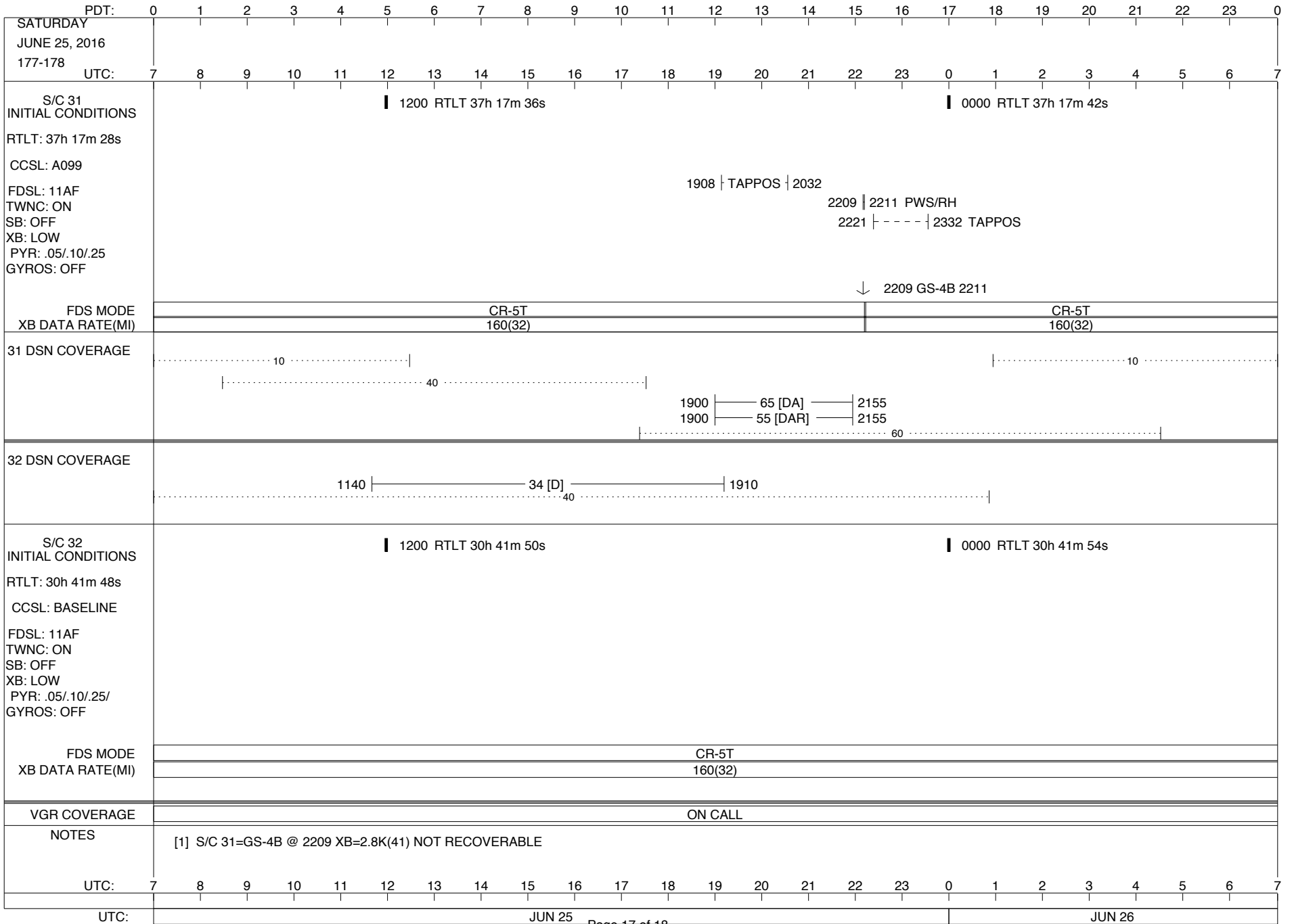
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WEDNESDAY JUNE 22, 2016 174-175																												
S/C 31 INITIAL CONDITIONS RTLTL: 37h 16m 48s CCSL: A099 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 37h 16m 54s												0000 RTLT 37h 17m 0s															
FDS MODE XB DATA RATE(MI)													CR-5T 160(32)															
31 DSN COVERAGE	<p>24 [DA] 1110 ..... 10</p> <p>25 [DAR] 1110</p> <p>10</p> <p>40</p> <p>2205 63 0150</p> <p>60</p>																											
32 DSN COVERAGE	<p>1305 35 [D] 1950</p> <p>40</p>																											
S/C 32 INITIAL CONDITIONS RTLTL: 30h 41m 34s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25/ GYROS: OFF	1200 RTLT 30h 41m 38s												0000 RTLT 30h 41m 40s															
FDS MODE XB DATA RATE(MI)													CR-5T 160(32)															
VGR COVERAGE	ON CALL												VGR						ON CALL									
NOTES																												
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7			
UTC:	JUN 22														JUN 23													

PDT:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	
THURSDAY JUNE 23, 2016 175-176																										
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	
S/C 31 INITIAL CONDITIONS RTLTL: 37h 17m 0s CCSL: A099 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 37h 17m 8s												0000 RTLTL 37h 17m 14s													
FDS MODE	CR-5T												CR-5T													
XB DATA RATE(MI)	160(32)												160(32)													
31 DSN COVERAGE	..... 10.....										..... 10.....															
	.....40.....										.....60.....															
	.....0030 .....63 [D] .....0505										.....0505															
32 DSN COVERAGE	1145  -----34 [o]----- 1700										1730  -----35 [DA]----- 2145															
	.....40.....										2015  45 [DAR] 2145															
S/C 32 INITIAL CONDITIONS RTLTL: 30h 41m 40s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25/ GYROS: OFF	1200 RTLTL 30h 41m 42s												0000 RTLTL 30h 41m 44s													
FDS MODE	CR-5T												CR-5T													
XB DATA RATE(MI)	160(32)												160(32)													
VGR COVERAGE	ON CALL												ON CALL													
NOTES	[1] S/C 31=GS-4B @ 1909 XB=2.8K(41) NOT RECOVERABLE																									
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	
UTC:	JUN 23													JUN 24												





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ISSUE DATE: 06/14/16 06:57

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SUNDAY JUNE 26, 2016 178-179																											
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7		
S/C 31 INITIAL CONDITIONS RTLTL: 37h 17m 42s CCSL: A099 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	<div style="text-align: center;"> <p>1200 RTLTL 37h 17m 50s</p> </div>																										
FDS MODE XB DATA RATE(MI)														CR-5T 160(32)													
31 DSN COVERAGE	<div style="display: flex; justify-content: space-between;"> <div style="text-align: center;"> <p>0825  -----  14 [D]  -----  1225</p> <p>..... -----  10  ----- </p> <p>..... -----  40  ----- </p> </div> </div>																										
32 DSN COVERAGE	<div style="display: flex; justify-content: space-between;"> <div style="text-align: center;"> <p>1550  -----  35 [D]  -----  2000</p> </div> <div style="text-align: center;"> <p>2155   34 [DA]   2325</p> <p>2155   35 [DAR]   2325</p> </div> </div>																										
S/C 32 INITIAL CONDITIONS RTLTL: 30h 41m 54s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25/ GYROS: OFF	<div style="text-align: center;"> <p>1200 RTLTL 30h 41m 56s</p> </div>																										
FDS MODE XB DATA RATE(MI)														CR-5T 160(32)													
VGR COVERAGE	ON CALL																										
NOTES																											
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7		
UTC:	JUN 26													JUN 27													