

VOYAGER

Space Flight Operations Schedule (SFOS)

Issue Date: November 17, 2010

For the Period: 11/17/2010 to 12/13/2010 (10-322 – 10-347)

DSN OPSCHIEF (1) 230-102

SCIENCE

FLIGHT TEAM (14) 600-100

DSOT (1) 230-102

*Zsarina.Bulchand@jpl.nasa.gov
 *gdyke@airmail.ftops.jpl.nasa.gov
 *John.M.Grant@jpl.nasa.gov
 *dmcclena@airmail.ftops.jpl.nasa.gov
 *pquach@airmail.ftops.jpl.nasa.gov
 *mrobles@airmail.ftops.jpl.nasa.gov
 *rwilliam@airmail.ftops.jpl.nasa.gov

CRS *bryant@mail630.gsfc.nasa.gov
 LECP *r.decker@jhupl.edu
 UVS *holberg@argus.lpl.arizona.edu
 MAG *u2mha@lepvox.gsfc.nasa.gov
 PLS *vgr@space.mit.edu
 PWS *wsk@space.physics.uiowa.edu
 *Leonard.F.Burlaga@nasa.gov
 *Donald-Gurnett@uiowa.edu

Dodd, S.
 Hall, J.
 Howard, S. (3)
 Ludwig, R. (2)
 Matsumoto, S.
 Medina, E.
 Peralta, F.
 Weeks, T.
 Wong, R.
 Yang, L
 Zottarelli, L.
 *odivers1@san.rr.com

OTHER

* KMassej@jgld.gdscc.nasa.gov
 * Belinda.Arroyo@jpl.nasa.gov
 * !DL-DSN-MPSETA@dsn.nasa.gov

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 = 7-Point 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

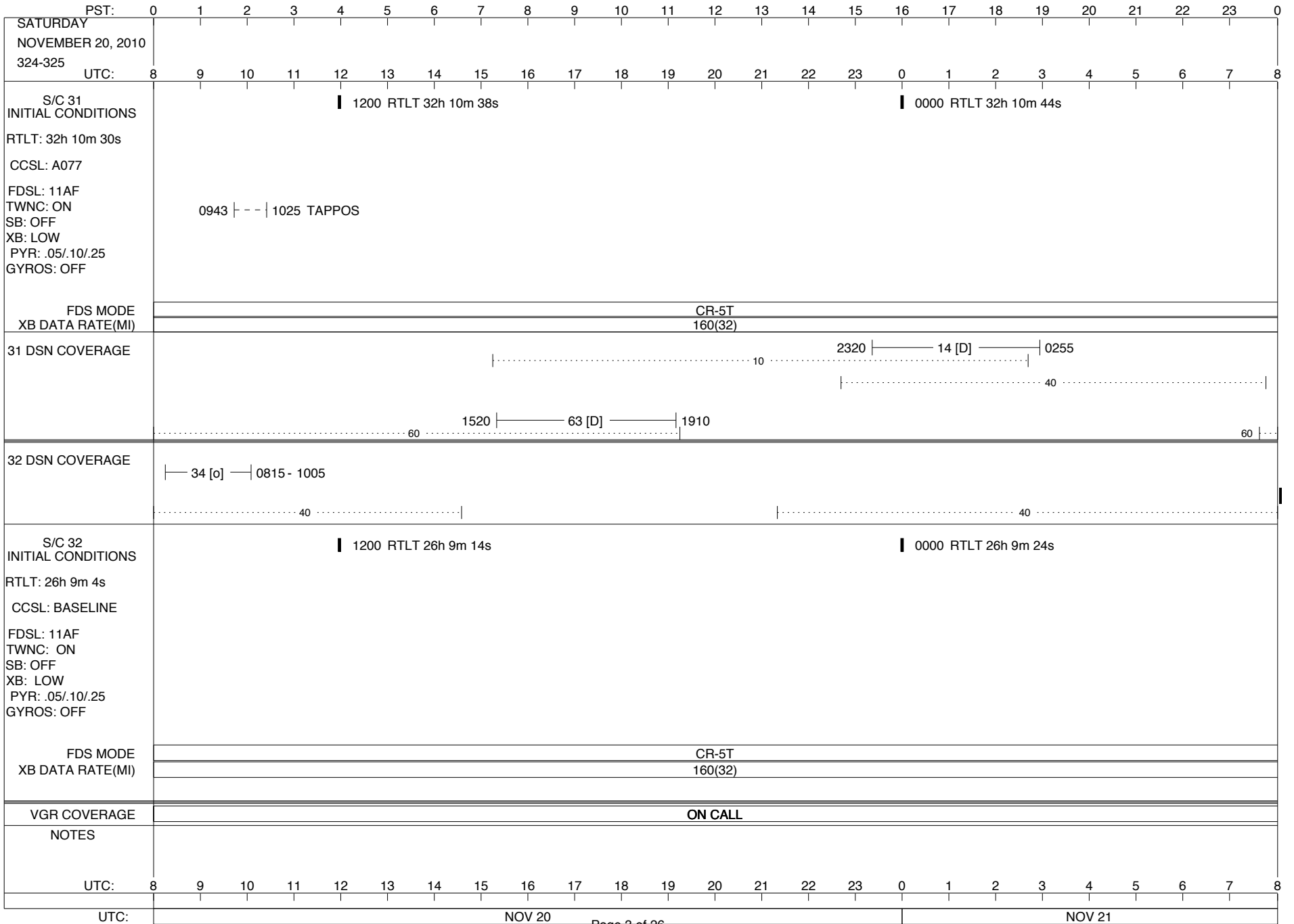
ISSUE DATE: 11/23/10 22:13

PST: 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 NOVEMBER 18, 2010 322-323							
UTC: 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7 8							
S/C 31 INITIAL CONDITIONS RTLTL: 32h 10m 2s CCSL: A077 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	<p>1200 RTLTL 32h 10m 10s</p> <p>0000 RTLTL 32h 10m 16s</p> <p>TLC (SHORT-FORM) ----- D/L - 0138</p> <p>▼ 1800 DUMMY (02:10)</p>						
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)						
31 DSN COVERAGE	<p>2030 ----- 14 [D] ----- 0240</p> <p>..... 10</p> <p>1645 ----- 63 ----- 1920</p> <p>..... 40</p> <p>..... 60</p>						
32 DSN COVERAGE	<p>1130 ----- 43 [D] ----- 1530</p> <p>..... 40</p> <p>..... 40</p>						
S/C 32 INITIAL CONDITIONS RTLTL: 26h 8m 24s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	<p>1200 RTLTL 26h 8m 34s</p> <p>0000 RTLTL 26h 8m 44s</p> <p>* 1259 1304 B150A CHKSUM</p> <p>* * EL-40 1232 ↓ ↓ 1332 CR-5T</p>						
FDS MODE XB DATA RATE(MI)	<table border="1"> <tr> <td>CR-5T</td> <td>EL-40</td> <td>CR-5T</td> </tr> <tr> <td>160(32)</td> <td>40(30)</td> <td>160(32)</td> </tr> </table>	CR-5T	EL-40	CR-5T	160(32)	40(30)	160(32)
CR-5T	EL-40	CR-5T					
160(32)	40(30)	160(32)					
VGR COVERAGE	ON CALL						
NOTES	<p>[1] S/C 32=EL-40 XB=40(30) @ 1232</p> <p>[2] S/C 32=CR-5T XB=160(32) @ 1332</p>						
UTC: 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7 8							
UTC: NOV 18							
Page 1 of 26							
NOV 19							

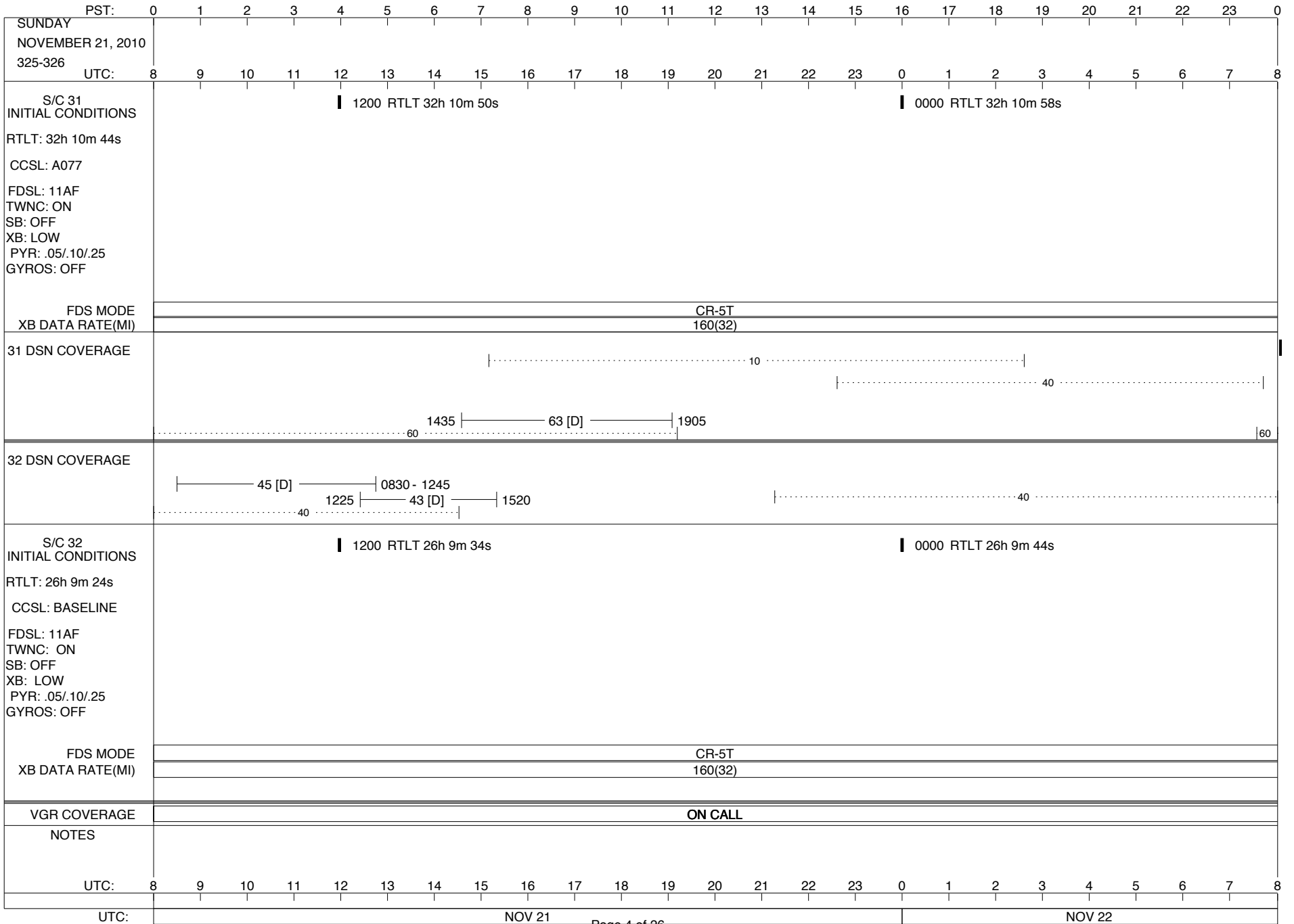
ISSUE DATE: 11/23/10 22:13

PST:		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			
FRIDAY NOVEMBER 19, 2010 323-324																													
UTC:		8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8			
S/C 31 INITIAL CONDITIONS RTLT: 32h 10m 16s CCSL: A077 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF		█ 1200 RTLT 32h 10m 24s												█ 0000 RTLT 32h 10m 30s															
FDS MODE															CR-5T														
XB DATA RATE(MI)															160(32)														
31 DSN COVERAGE																													
32 DSN COVERAGE																													
S/C 32 INITIAL CONDITIONS RTLT: 26h 8m 44s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF		█ 1200 RTLT 26h 8m 54s												█ 0000 RTLT 26h 9m 4s															
FDS MODE															CR-5T														
XB DATA RATE(MI)															160(32)														
VGR COVERAGE		ON CALL																											
NOTES		[1] S/C 31=GS-4B @ 0735 XB=2.8K(41) NOT RECOVERABLE																											
UTC:		8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8			
UTC:		NOV 19														NOV 20													

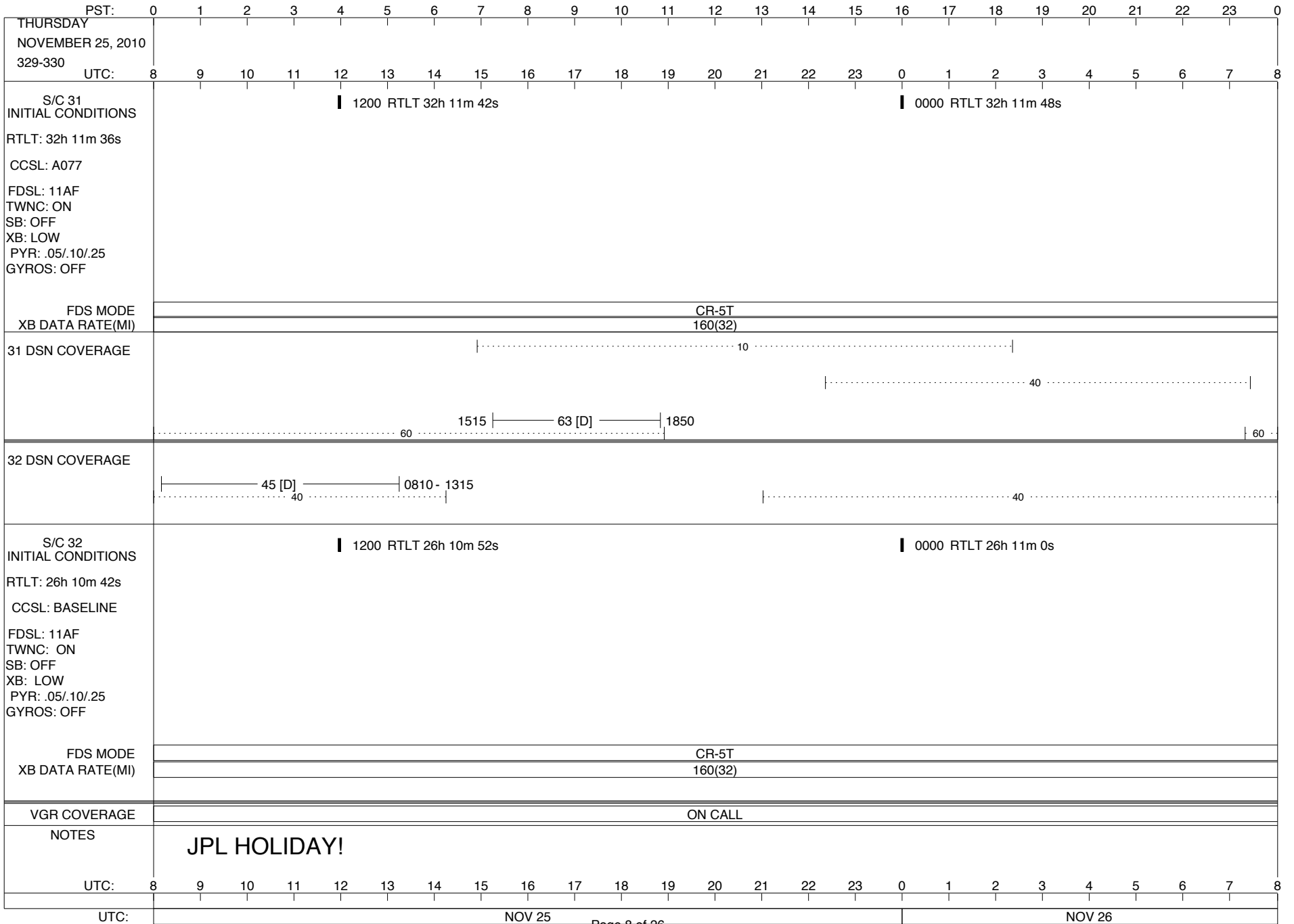
ISSUE DATE: 11/23/10 22:13



ISSUE DATE: 11/23/10 22:13



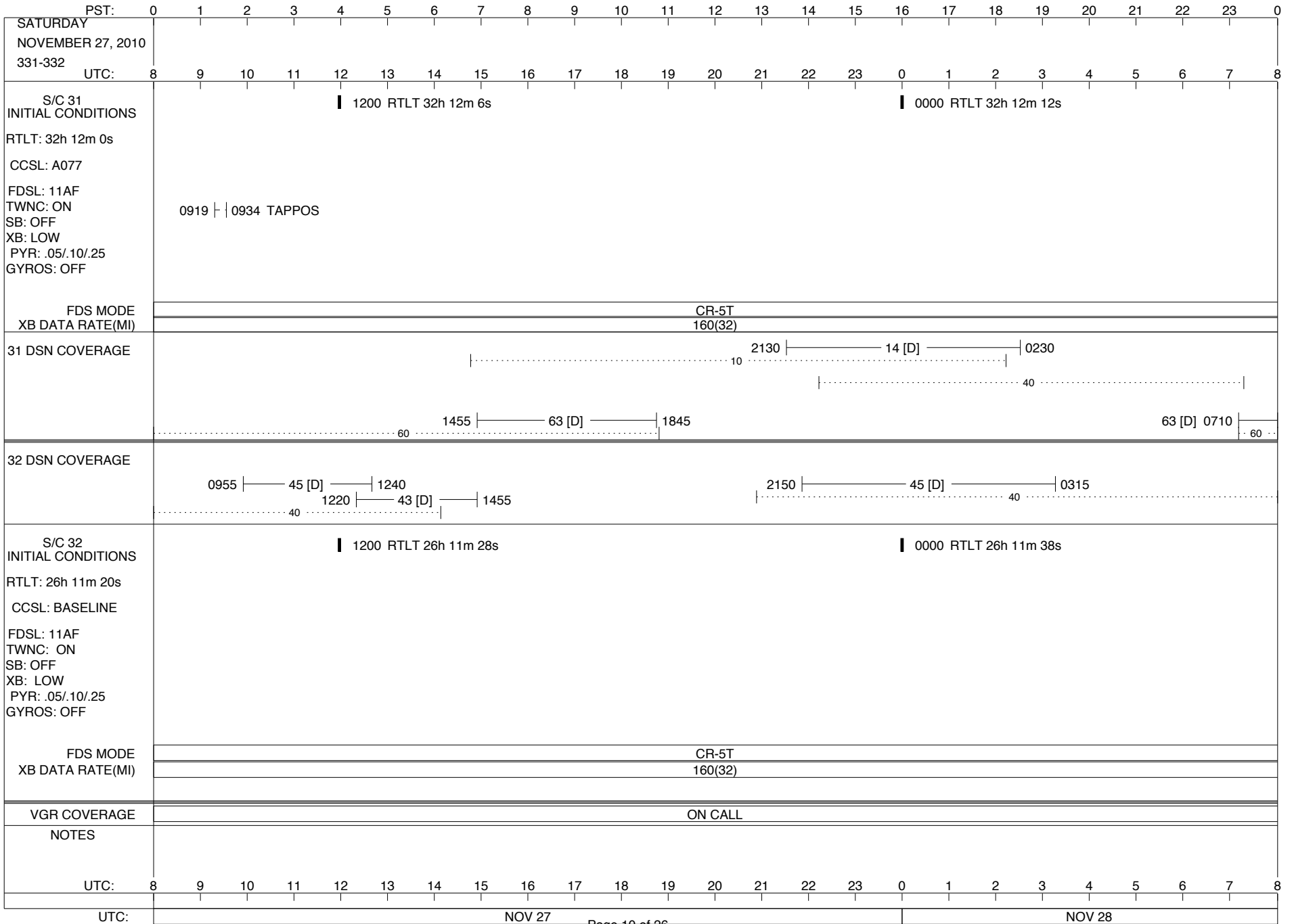
ISSUE DATE: 11/23/10 22:13



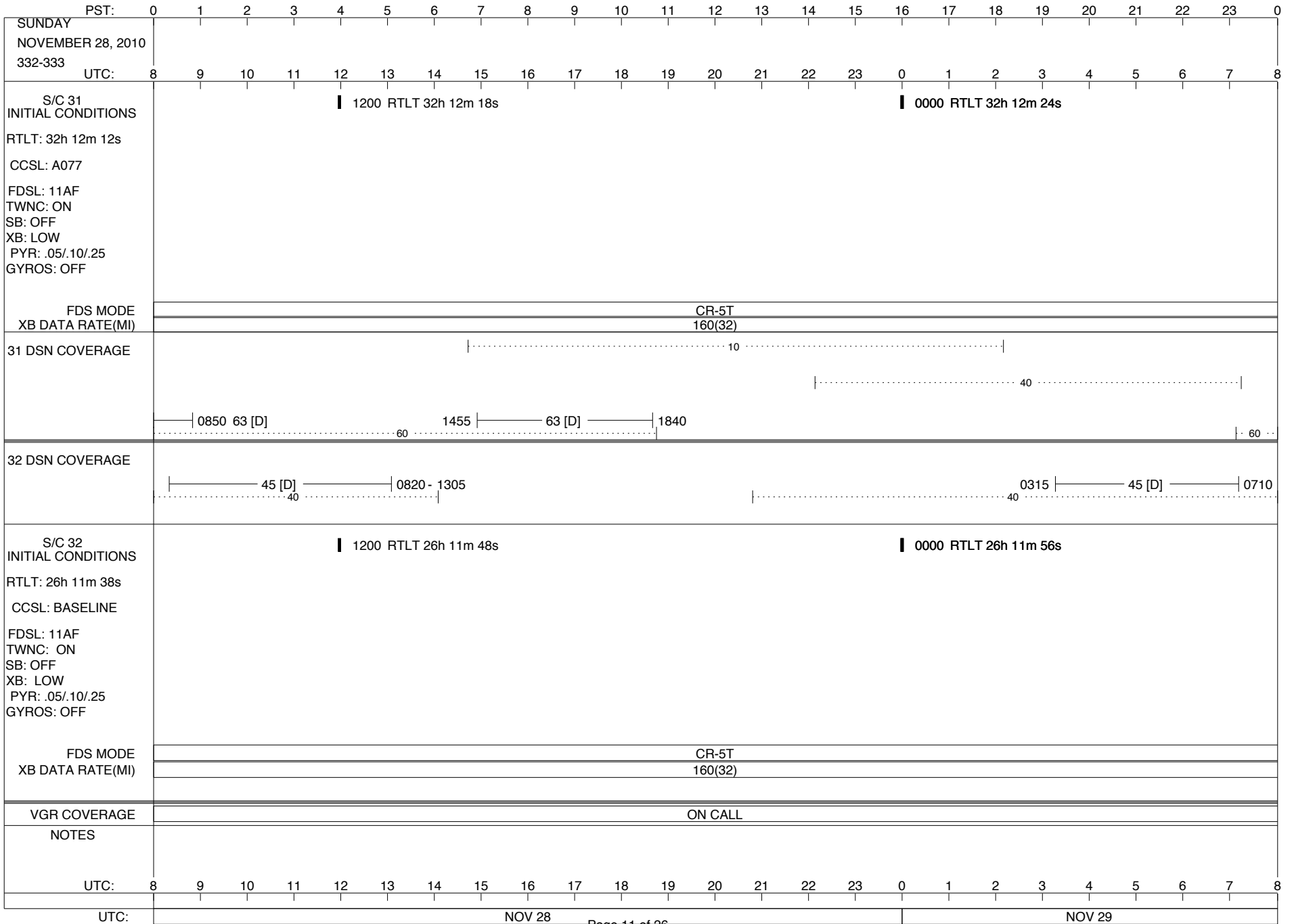
ISSUE DATE: 11/23/10 22:13

PST:	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
FRIDAY NOVEMBER 26, 2010 330-331	UTC: 8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8
S/C 31 INITIAL CONDITIONS RTLT: 32h 11m 48s CCSL: A077 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 32h 11m 54s												0000 RTLT 32h 12m 0s												
FDS MODE	CR-5T																								
XB DATA RATE(MI)	160(32)																								
31 DSN COVERAGE	1430 ----- 63 [D] ----- 1850												0410 ----- 0438 TAPPOS PWS/RH 0712 - 0713												
32 DSN COVERAGE	0945 ----- 43 [D] ----- 1345												0712 GS-4B 0713 ↓												
S/C 32 INITIAL CONDITIONS RTLT: 26h 11m 0s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 26h 11m 10s												0000 RTLT 26h 11m 20s												
FDS MODE	CR-5T																								
XB DATA RATE(MI)	160(32)																								
VGR COVERAGE	ON CALL																								
NOTES	[1] S/C 31=GS-4B @ 0712 XB=2.8K(41) NOT RECOVERABLE JPL HOLIDAY!																								
UTC: 8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8	
UTC:	NOV 26												NOV 27												

ISSUE DATE: 11/23/10 22:13



ISSUE DATE: 11/23/10 22:13



ISSUE DATE: 11/23/10 22:13

TUESDAY NOVEMBER 30, 2010 334-335		PST: 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
UTC: 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7 8		
S/C 31 INITIAL CONDITIONS RTLT: 32h 12m 36s CCSL: A077 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <p>1200 RTLT 32h 12m 42s</p> </div> <div style="width: 48%;"> <p>0000 RTLT 32h 12m 48s</p> </div> </div> <p style="text-align: right;">0049 0049 PWS/RH</p> <p style="text-align: right;">↓ 0049 GS-4B 0049</p>	
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)	CR-5T 160(32)
31 DSN COVERAGE	<p>1840 ----- 14 [D] ----- 2245</p> <p style="text-align: center;">10</p> <p style="text-align: right;">40</p> <p>0840 63 [D] ----- 60 ----- 1720 63 [D] ----- 1835</p> <p style="text-align: right;">60</p>	
32 DSN COVERAGE	<p>45 [D] ----- 0800 - 1200</p> <p style="text-align: center;">40</p> <p style="text-align: right;">40</p>	
S/C 32 INITIAL CONDITIONS RTLT: 26h 12m 14s CCSL: B150 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <p>1200 RTLT 26h 12m 24s</p> </div> <div style="width: 48%;"> <p>0000 RTLT 26h 12m 32s</p> </div> </div>	
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)	
VGR COVERAGE	ON CALL	
NOTES	[1] S/C 31=GS-4B @ 0049 XB=2.8K(41) NOT RECOVERABLE	
UTC: 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7 8		
UTC: NOV 30		DEC 01

ISSUE DATE: 11/23/10 22:13

PST:	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		
WEDNESDAY DECEMBER 1, 2010 335-336																											
UTC:	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8		
S/C 31 INITIAL CONDITIONS RTLT: 32h 12m 48s CCSL: A077 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/25 GYROS: OFF					█ 1200																						
FDS MODE														CR-5T													
XB DATA RATE(MI)														160(32)													
31 DSN COVERAGE																											
32 DSN COVERAGE																											
S/C 32 INITIAL CONDITIONS RTLT: 26h 12m 32s CCSL: B150 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/25 GYROS: OFF																											
FDS MODE														CR-5T													
XB DATA RATE(MI)														160(32)													
VGR COVERAGE														ON CALL													
NOTES																											
UTC:	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8		
UTC:	DEC 01													DEC 02													

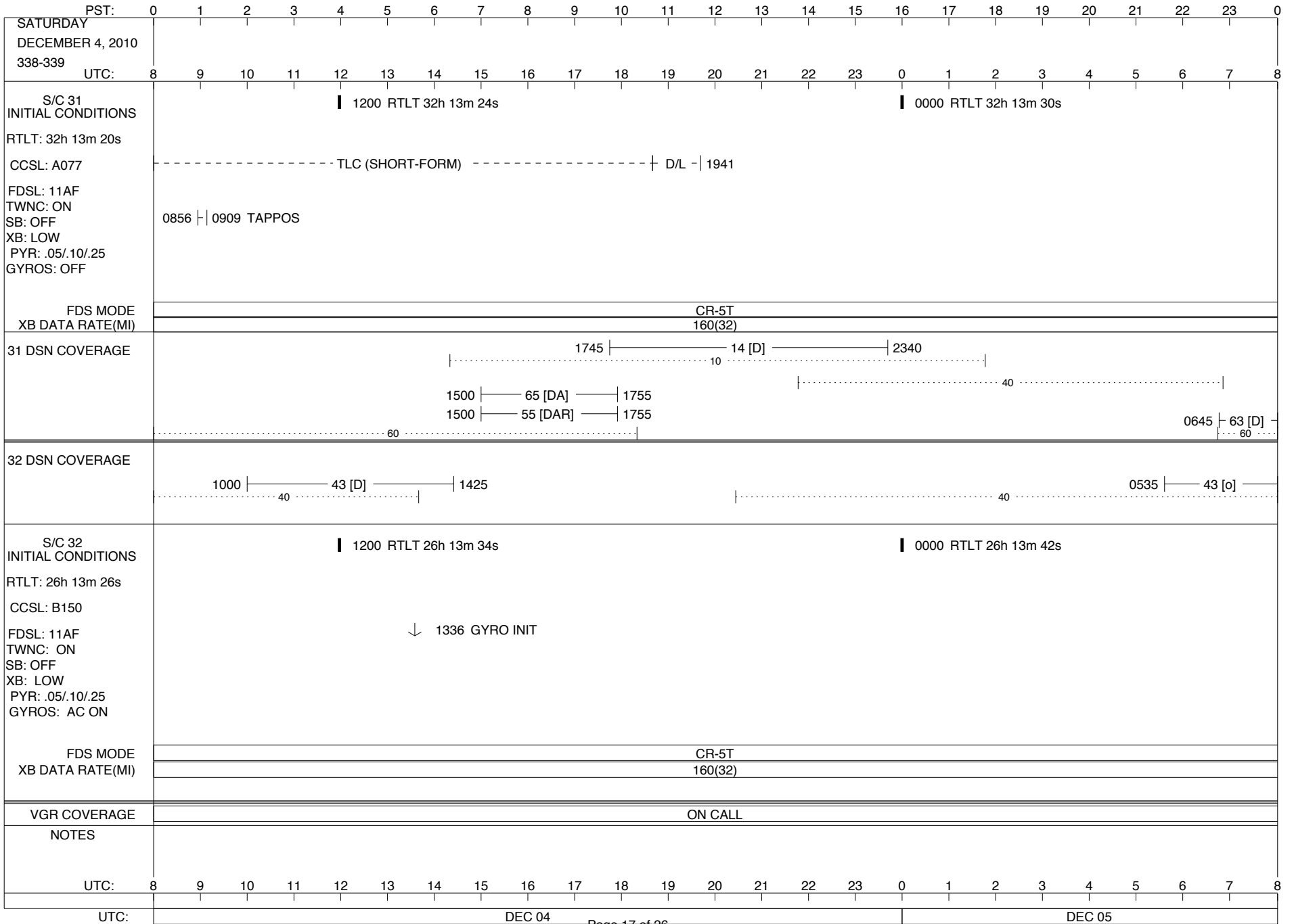
ISSUE DATE: 11/23/10 22:13

PST:	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 DECEMBER 2, 2010 336-337																									
UTC:	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8
S/C 31 INITIAL CONDITIONS RTLT: 32h 12m 58s CCSL: A077 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	█ 1200 RTLT 32h 13m 4s												█ 0000 RTLT 32h 13m 10s												
FDS MODE XB DATA RATE(MI)													CR-5T 160(32)												
31 DSN COVERAGE	1410 14 [D] 1545											 10 40 60 1545 63 1825 60 63 [T] 0710 60												
32 DSN COVERAGE	45 [D] 0830 - 1025 1005 43 [D] 1435											 40 40 43 [o] 0740												
S/C 32 INITIAL CONDITIONS RTLT: 26h 12m 50s CCSL: B150 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	█ 1200 RTLT 26h 13m 0s												█ 0000 RTLT 26h 13m 8s												
FDS MODE XB DATA RATE(MI)													CR-5T 160(32)												
VGR COVERAGE	ON CALL				VGR ON CALL				VGR				ON CALL												
NOTES	↓ 1333 GYROS AC ON ↓ 1336 GYRO INIT ↓ 1345 GYRO FAULT TEST ----- COMMAND MORATORIUM -----																								
UTC:	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8
UTC:	DEC 02												DEC 03												

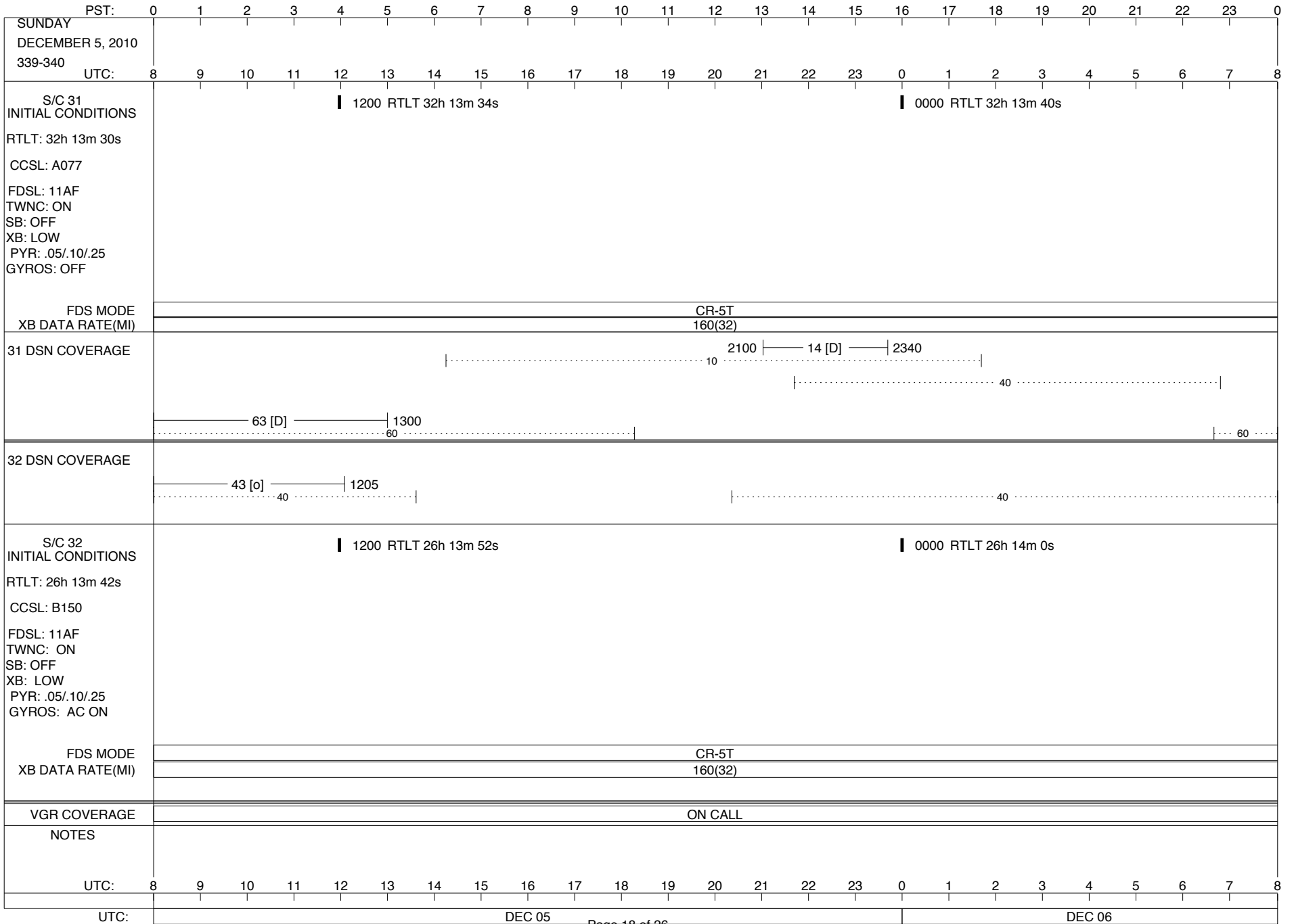
ISSUE DATE: 11/23/10 22:13

PST: 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	
FRIDAY DECEMBER 3, 2010 337-338	
UTC: 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7 8	
S/C 31 INITIAL CONDITIONS RTLTL: 32h 13m 10s CCSL: A077 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	<p>1200 RTLTL 32h 13m 14s</p> <p>0000 RTLTL 32h 13m 20s</p> <p>U/L 1000 - - - - - TLC (SHORT-FORM) - - - - -</p> <p>0346 0347 TAPPOS PWS/RH 0649 0650</p> <p>0649 GS-4B 0650 ↓</p>
FDS MODE	CR-5T
XB DATA RATE(MI)	160(32)
31 DSN COVERAGE	<p>..... 10</p> <p>..... 40</p> <p>63 [T] 1030</p> <p>..... 60</p>
32 DSN COVERAGE	<p>..... 40</p> <p>43 [o] 1430</p> <p>..... 40</p>
S/C 32 INITIAL CONDITIONS RTLTL: 26h 13m 8s CCSL: B150 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: AC ON	<p>1200 RTLTL 26h 13m 16s</p> <p>0000 RTLTL 26h 13m 26s</p> <p>1122 COMMAND MORATORIUM</p>
FDS MODE	CR-5T
XB DATA RATE(MI)	160(32)
VGR COVERAGE	ON CALL
NOTES	[1] S/C 31=GS-4B @ 0649 XB=2.8K(41) NOT RECOVERABLE
UTC: 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7 8	
UTC:	DEC 03 Page 16 of 26 DEC 04

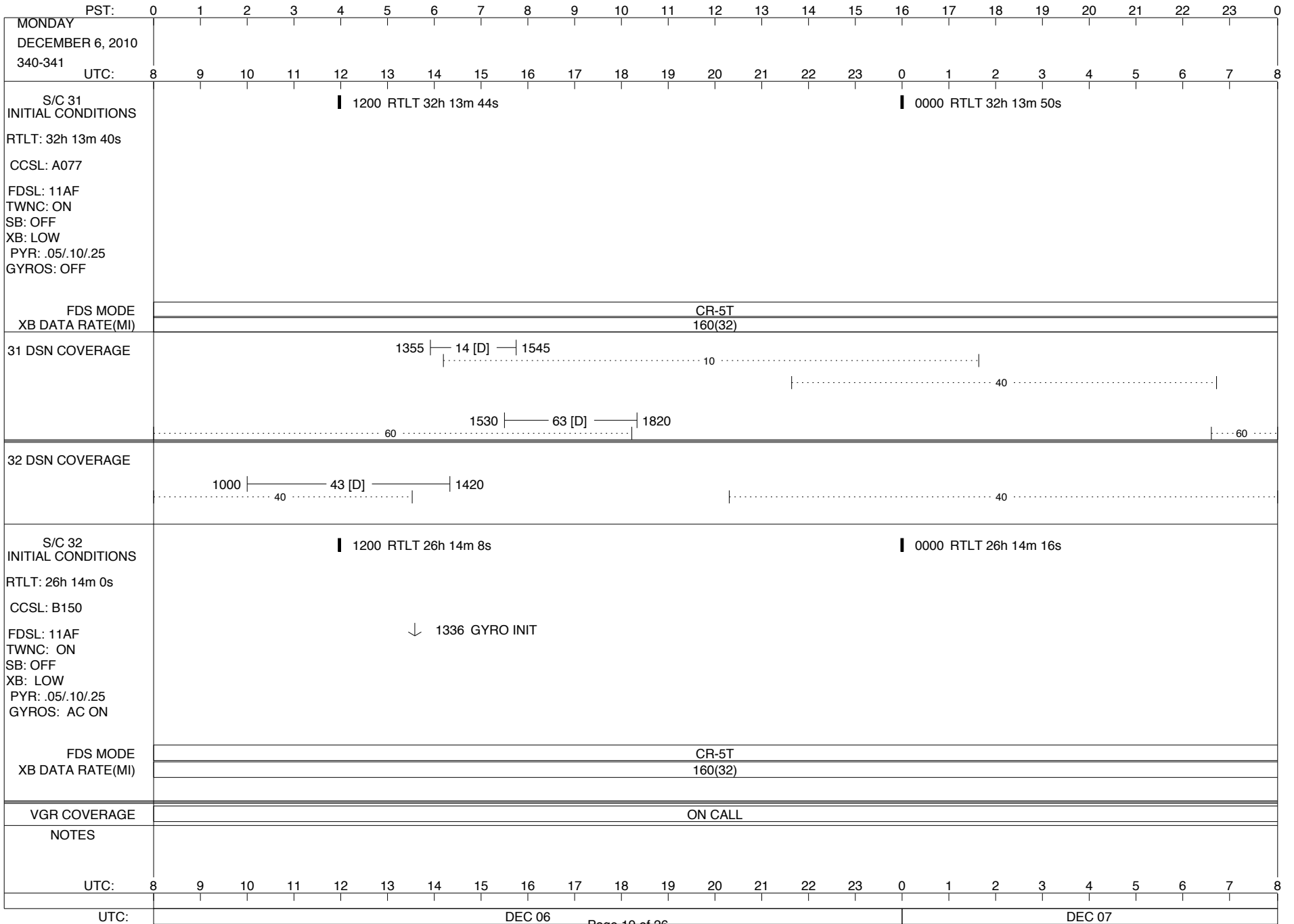
ISSUE DATE: 11/23/10 22:13



ISSUE DATE: 11/23/10 22:13



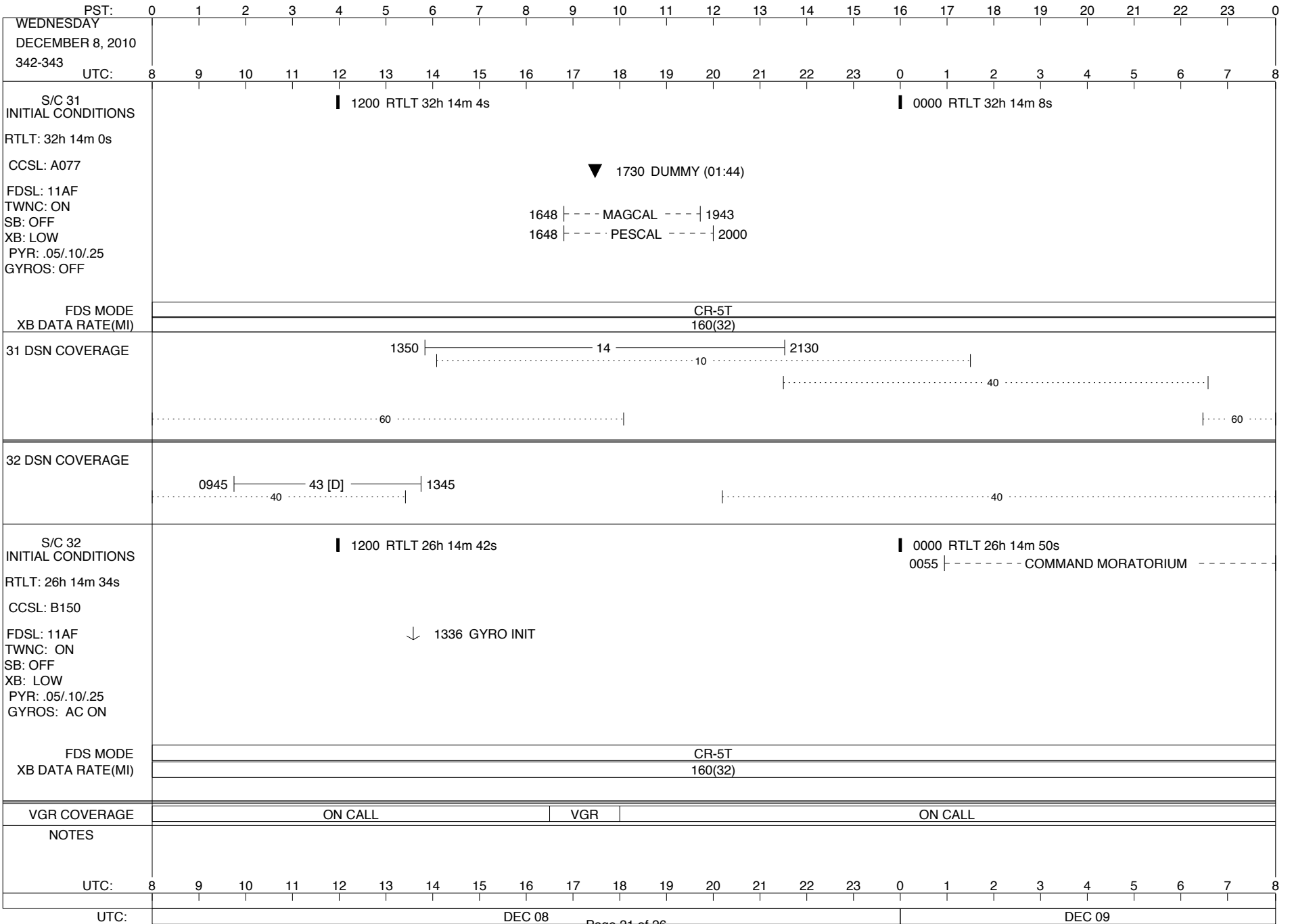
ISSUE DATE: 11/23/10 22:13



ISSUE DATE: 11/23/10 22:13

TUESDAY		PST: 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																							
DECEMBER 7, 2010																									
341-342		UTC: 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7 8																							
S/C 31 INITIAL CONDITIONS		1200 RTLT 32h 13m 54s												0000 RTLT 32h 14m 0s											
RTLT: 32h 13m 50s																									
CCSL: A077																									
FDSL: 11AF		0025 0026 PWS/RH																							
TWNC: ON																									
SB: OFF																									
XB: LOW																									
PYR: .05/.10/.25																									
GYROS: OFF																									
FDS MODE		CR-5T												CR-5T											
XB DATA RATE(MI)		160(32)												160(32)											
31 DSN COVERAGE		<p>.....10.....</p> <p>.....40.....</p> <p>1325 -----63 [D]----- 1815</p> <p>6060</p>																							
32 DSN COVERAGE		<p>1015 -----43 [B]----- 1415</p> <p>4040</p>																							
S/C 32 INITIAL CONDITIONS		1200 RTLT 26h 14m 24s												0000 RTLT 26h 14m 34s											
RTLT: 26h 14m 16s																									
CCSL: B150																									
FDSL: 11AF		▼ 1252 DUMMY (5 MIN BRACKETED 15:07)																							
TWNC: ON																									
SB: OFF																									
XB: LOW																									
PYR: .05/.10/.25																									
GYROS: AC ON																									
FDS MODE		CR-5T																							
XB DATA RATE(MI)		160(32)																							
VGR COVERAGE		ON CALL																							
NOTES		[1] S/C 31=GS-4B @ 0025 XB=2.8K(41) NOT RECOVERABLE																							
UTC: 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7 8																									
UTC:		DEC 07												DEC 08											

ISSUE DATE: 11/23/10 22:13



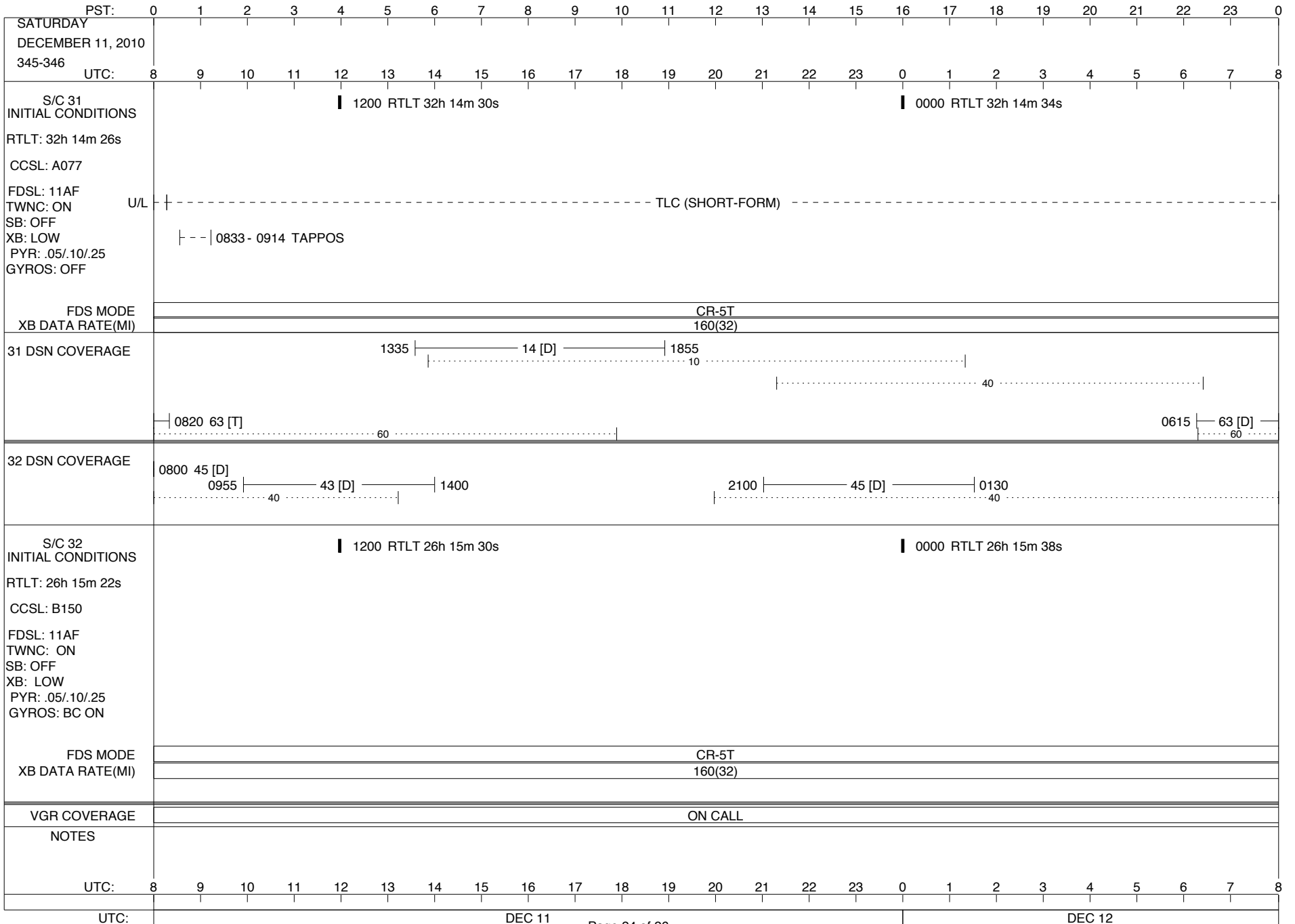
ISSUE DATE: 11/23/10 22:13

PST:	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 DECEMBER 9, 2010 343-344																										
UTC:	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8	
S/C 31 INITIAL CONDITIONS RTLTL: 32h 14m 8s CCSL: A077 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 32h 14m 14s												0000 RTLTL 32h 14m 18s													
FDS MODE XB DATA RATE(MI)													CR-5T 160(32)													
31 DSN COVERAGE	1340 ----- 14 [D] ----- 1740 ----- 10 ----- ----- 40 ----- ----- 60 -----																									
32 DSN COVERAGE	1005 ----- 43 [D] ----- 1410 ----- 40 -----												0155 ----- 45 [D] ----- 0430 ----- 40 -----													
S/C 32 INITIAL CONDITIONS RTLTL: 26h 14m 50s CCSL: B150 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: AC ON	1200 RTLTL 26h 14m 58s												0000 RTLTL 26h 15m 6s													
FDS MODE XB DATA RATE(MI)													CR-5T 160(32)													
VGR COVERAGE	ON CALL												VGR ON CALL													
NOTES	<p style="text-align: center;">----- COMMAND MORATORIUM -----</p> <p style="text-align: right;">↓ 0240 GYROS BC ON ↓ 0241 GYRO INIT ↓ 0250 GYRO FAULT TEST 0340 0347 CCSTIMB (FINE)</p>																									
UTC:	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8	
UTC:	DEC 09												DEC 10													

ISSUE DATE: 11/23/10 22:13

PST:	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	
FRIDAY DECEMBER 10, 2010 344-345																										
UTC:	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8	
S/C 31 INITIAL CONDITIONS	1200 RTLT 32h 14m 22s												0000 RTLT 32h 14m 26s													
RTLT: 32h 14m 18s													0323 - 0350 TAPPOS													
CCSL: A077													PWS/RH 0625 0626													
FDSL: 11AF													U/L 0750													
TWNC: ON																										
SB: OFF																										
XB: LOW																										
PYR: .05/.10/.25																										
GYROS: OFF																										
FDS MODE	CR-5T												CR-5T													
XB DATA RATE(MI)	160(32)												160(32)													
31 DSN COVERAGE	1335 14 [D] 1535												10													
	60												40													
	1530 63 [D] 1755												0620 63 [T] 60													
32 DSN COVERAGE	1000 43 [D] 1405												0400 - 0800 45 [D]													
	40												40													
S/C 32 INITIAL CONDITIONS	1200 RTLT 26h 15m 14s												0000 RTLT 26h 15m 22s													
RTLT: 26h 15m 6s	COMMAND MORATORIUM												0025													
CCSL: B150																										
FDSL: 11AF																										
TWNC: ON																										
SB: OFF																										
XB: LOW																										
PYR: .05/.10/.25																										
GYROS: BC ON																										
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 @ 0625 XB=2.8K(41) NOT RECOVERABLE																									
UTC:	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8	
UTC:	DEC 10												DEC 11													

ISSUE DATE: 11/23/10 22:13

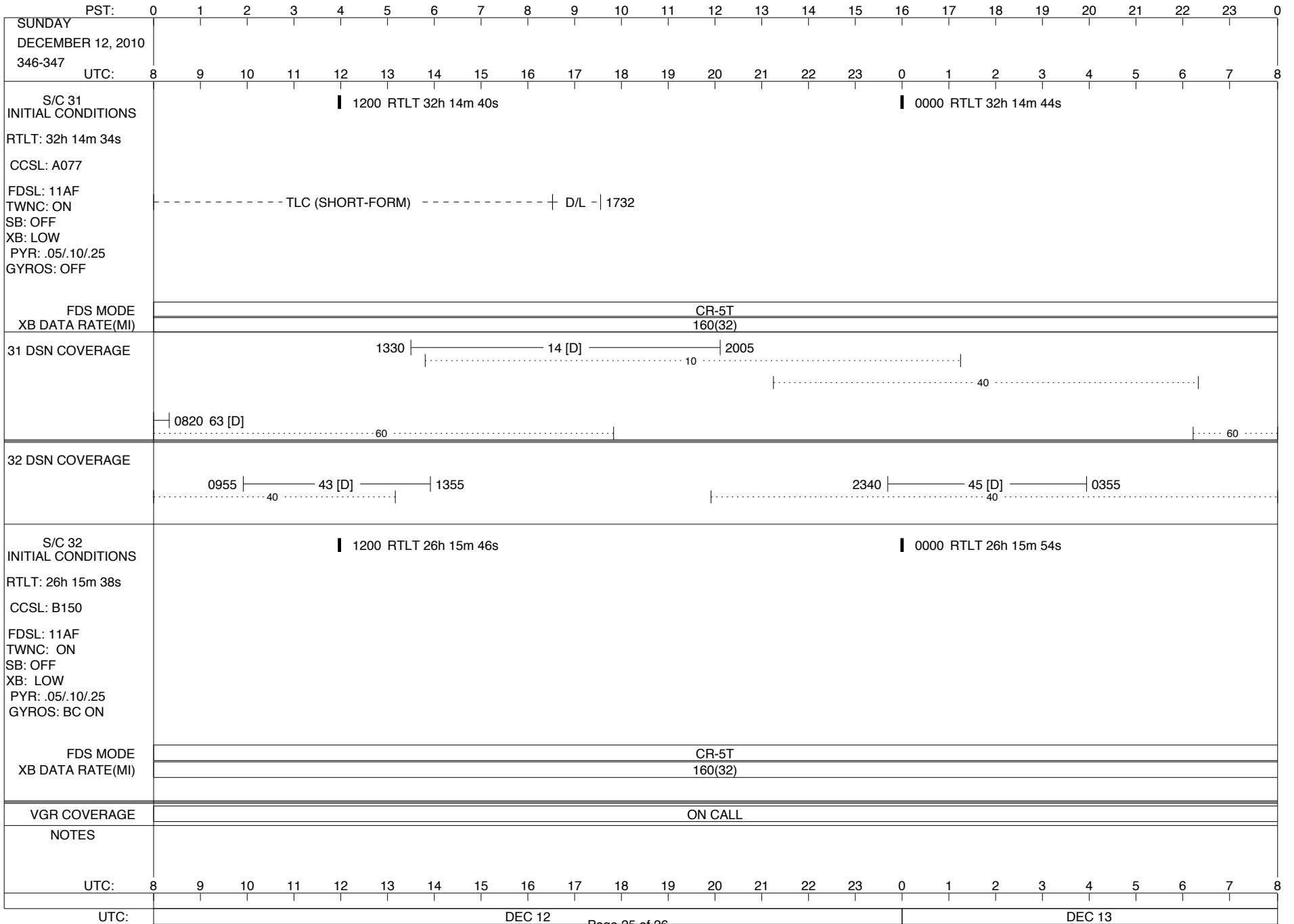


UTC:

DEC 11

DEC 12

ISSUE DATE: 11/23/10 22:13



ISSUE DATE: 11/23/10 22:13

PST:	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
MONDAY DECEMBER 13, 2010 347-348																									
UTC:	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8
S/C 31 INITIAL CONDITIONS RTLT: 32h 14m 44s CCSL: A077 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	<div style="text-align: center;"> </div>																								
FDS MODE XB DATA RATE(MI)													CR-5T 160(32)												
31 DSN COVERAGE	<div style="text-align: center;"> </div>																								
32 DSN COVERAGE	<div style="text-align: center;"> </div>																								
S/C 32 INITIAL CONDITIONS RTLT: 26h 15m 54s CCSL: B150 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: BC ON	<div style="text-align: center;"> </div>																								
FDS MODE XB DATA RATE(MI)													CR-5T 160(32)												
VGR COVERAGE	ON CALL																								
NOTES																									
UTC:	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8
UTC:	DEC 13												DEC 14												