

# VOYAGER

## Space Flight Operations Schedule (SFOS)

Issue Date: February 10, 2016

For the Period: 02/11/16 to 03/06/16 (16-042 – 16-066)

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

**DSOT (1) 230-102**

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 \*rwilliam@airmail.ftops.jpl.nasa.gov

**OTHER**

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

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 \*Leonard.F.Burlaga@nasa.gov  
 \*Donald-Gurnett@uiowa.edu

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

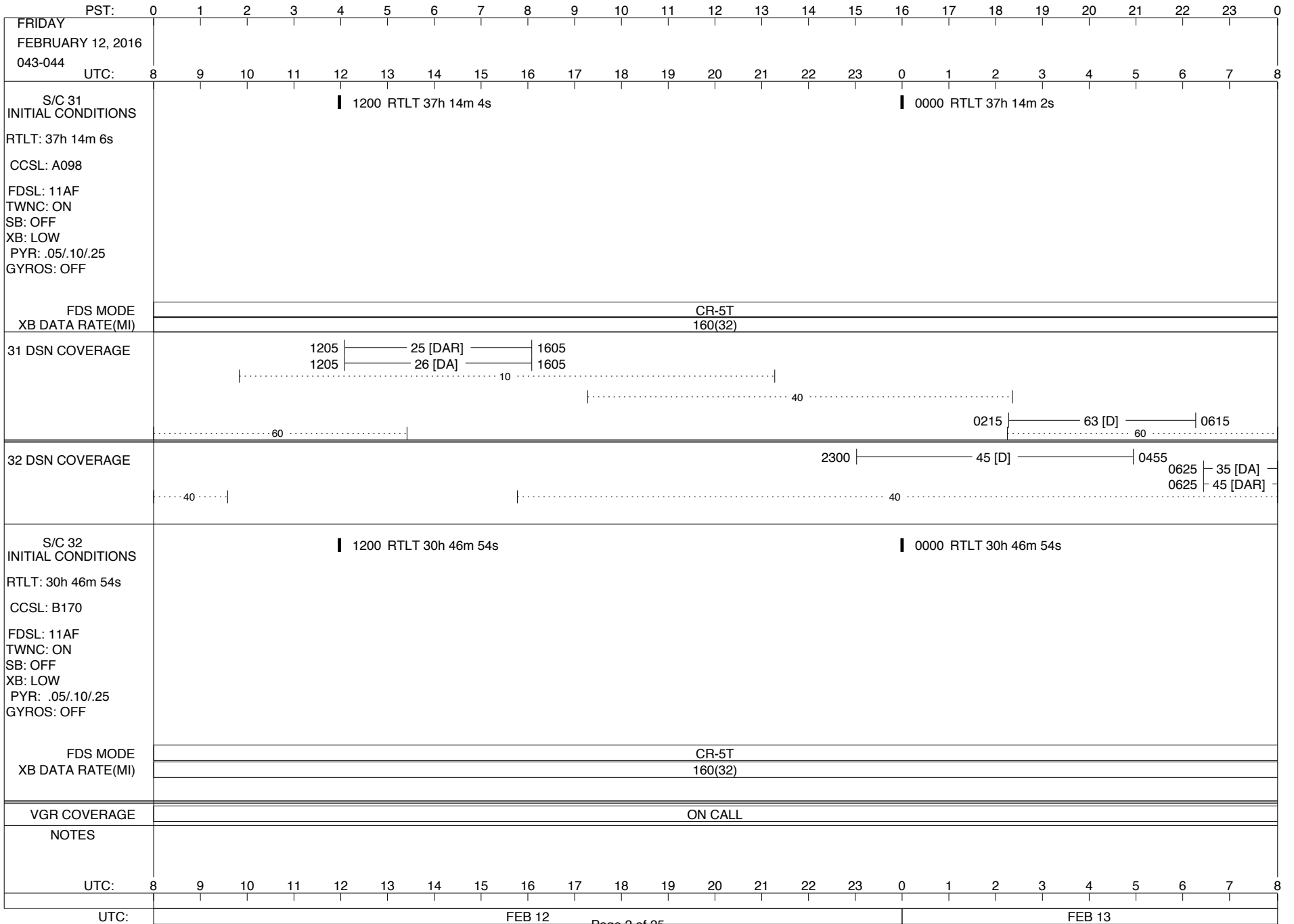
Dodd, S.  
 Hall, J.  
 Howard, S. (3)  
 Ludwig, R. (2)  
 Matsumoto, S.  
 Medina  
 Peralta, F.  
 Weeks, T.  
 Wong, R.  
 Yang, L.  
 Zottarelli, L.  
 \*odivers@san.rr.com

**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

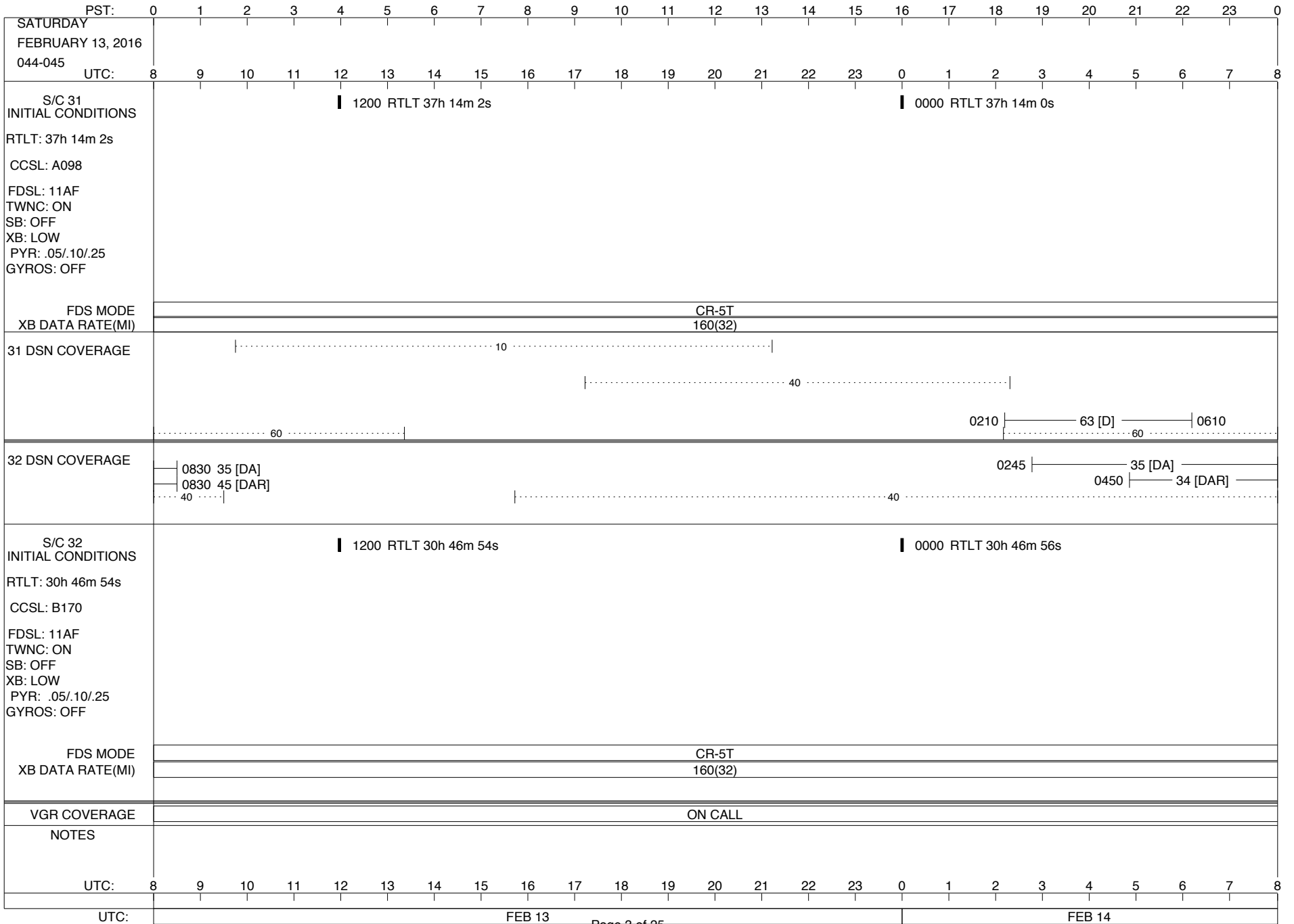
\*Electronic Copy Only  
 (16 – Dist/N: Paper Copies)  
 09/08/10



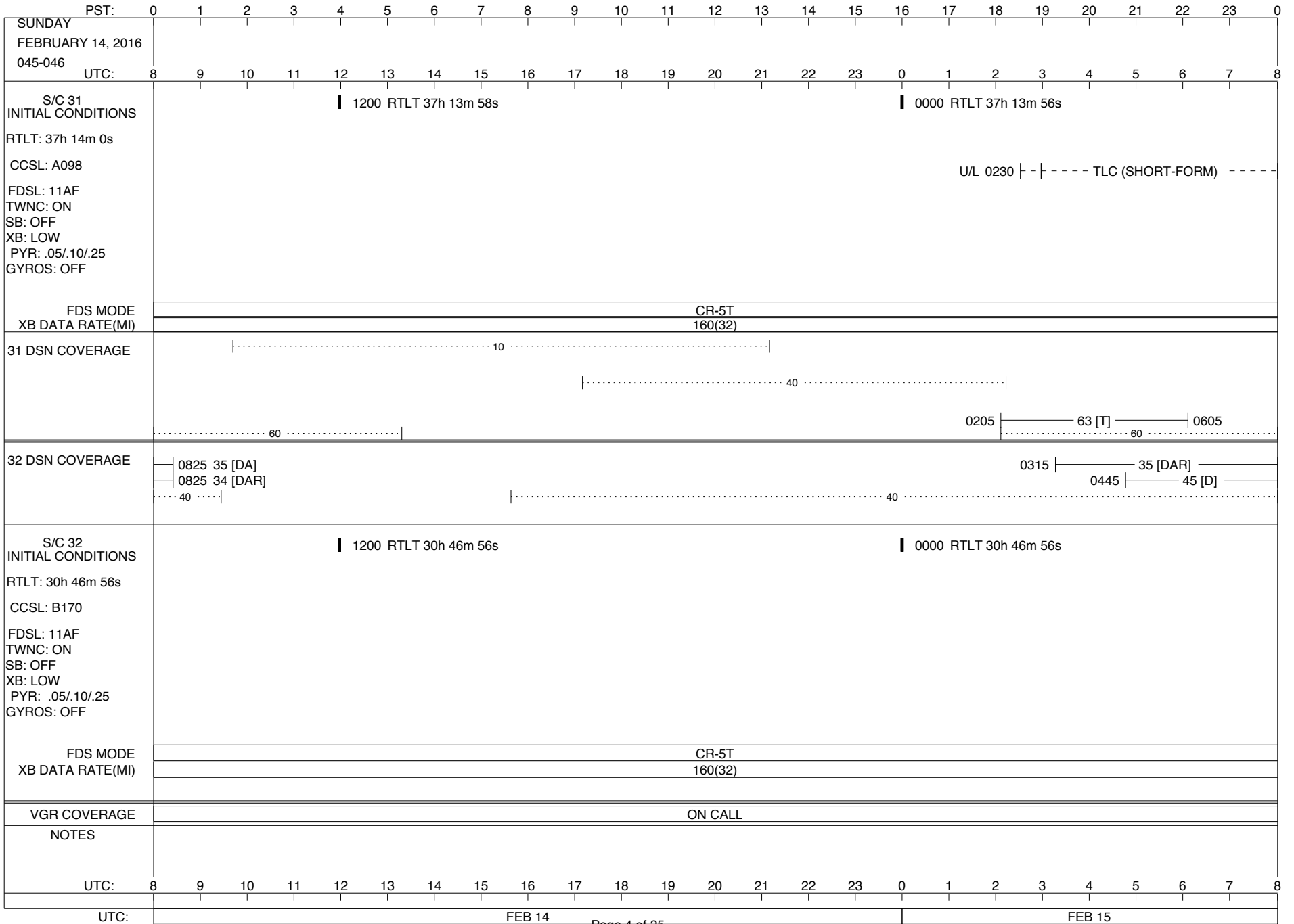
ISSUE DATE: 02/25/16 05:58



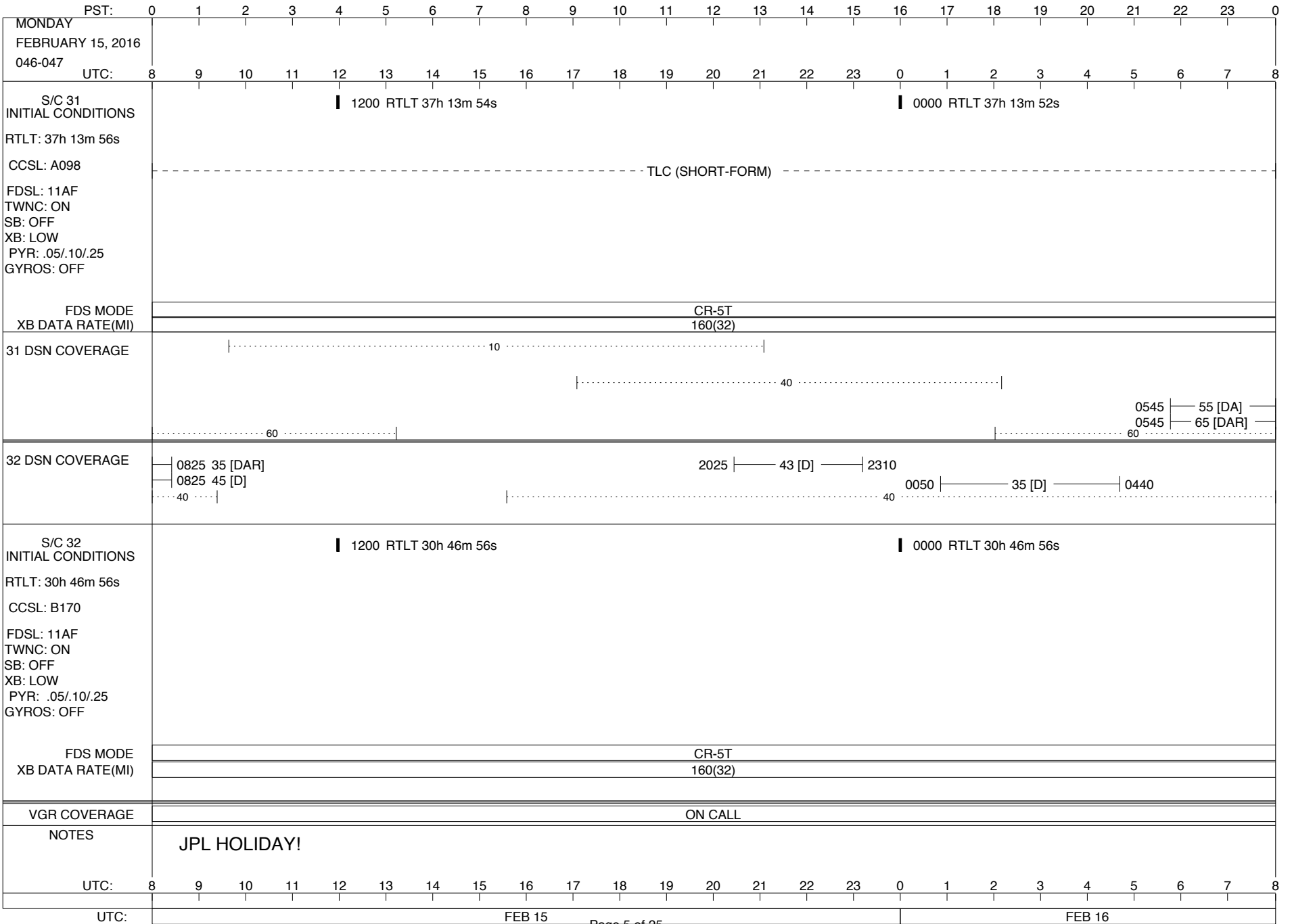
ISSUE DATE: 02/25/16 05:58



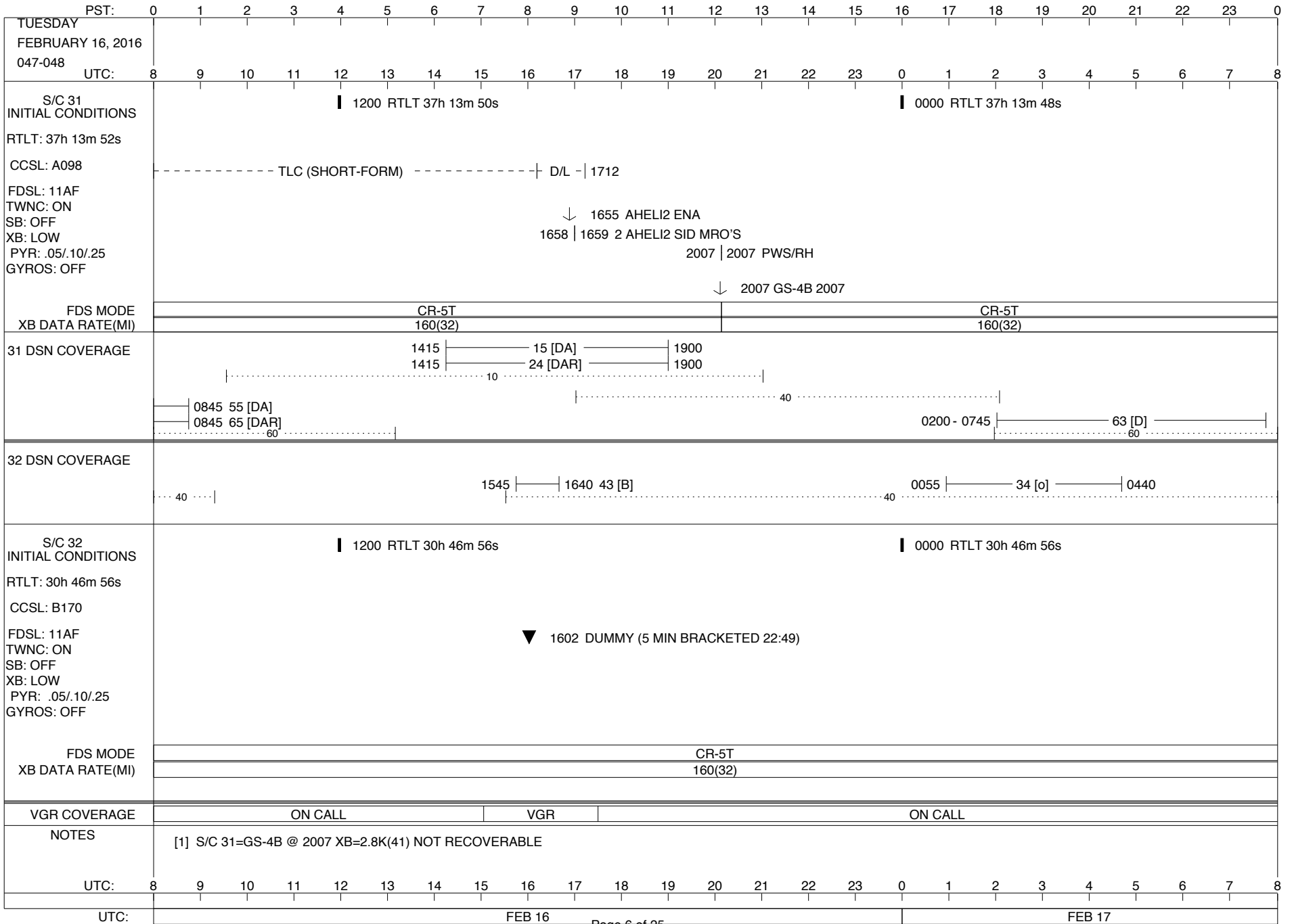
ISSUE DATE: 02/25/16 05:58



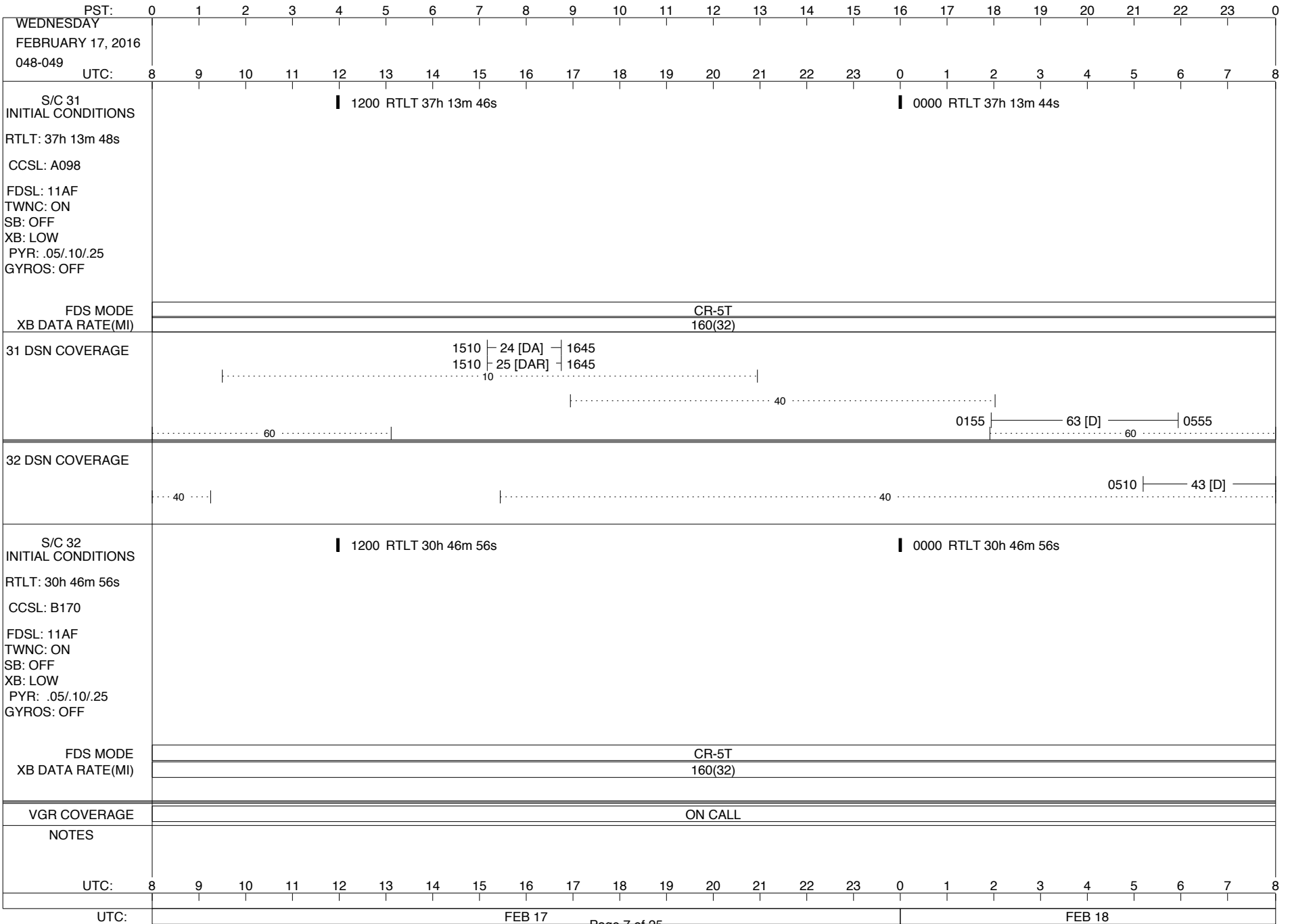
ISSUE DATE: 02/25/16 05:58



ISSUE DATE: 02/25/16 05:58



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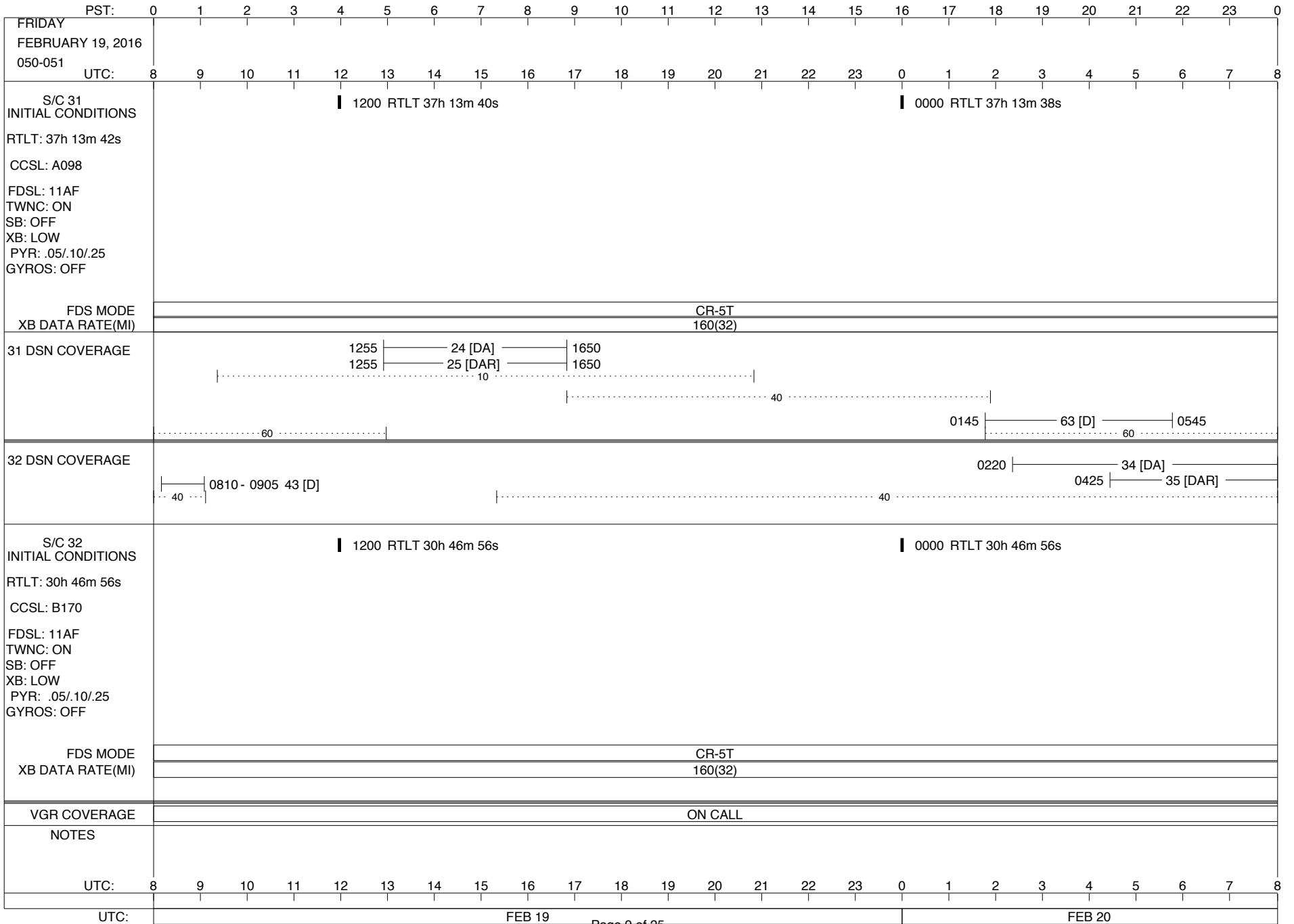




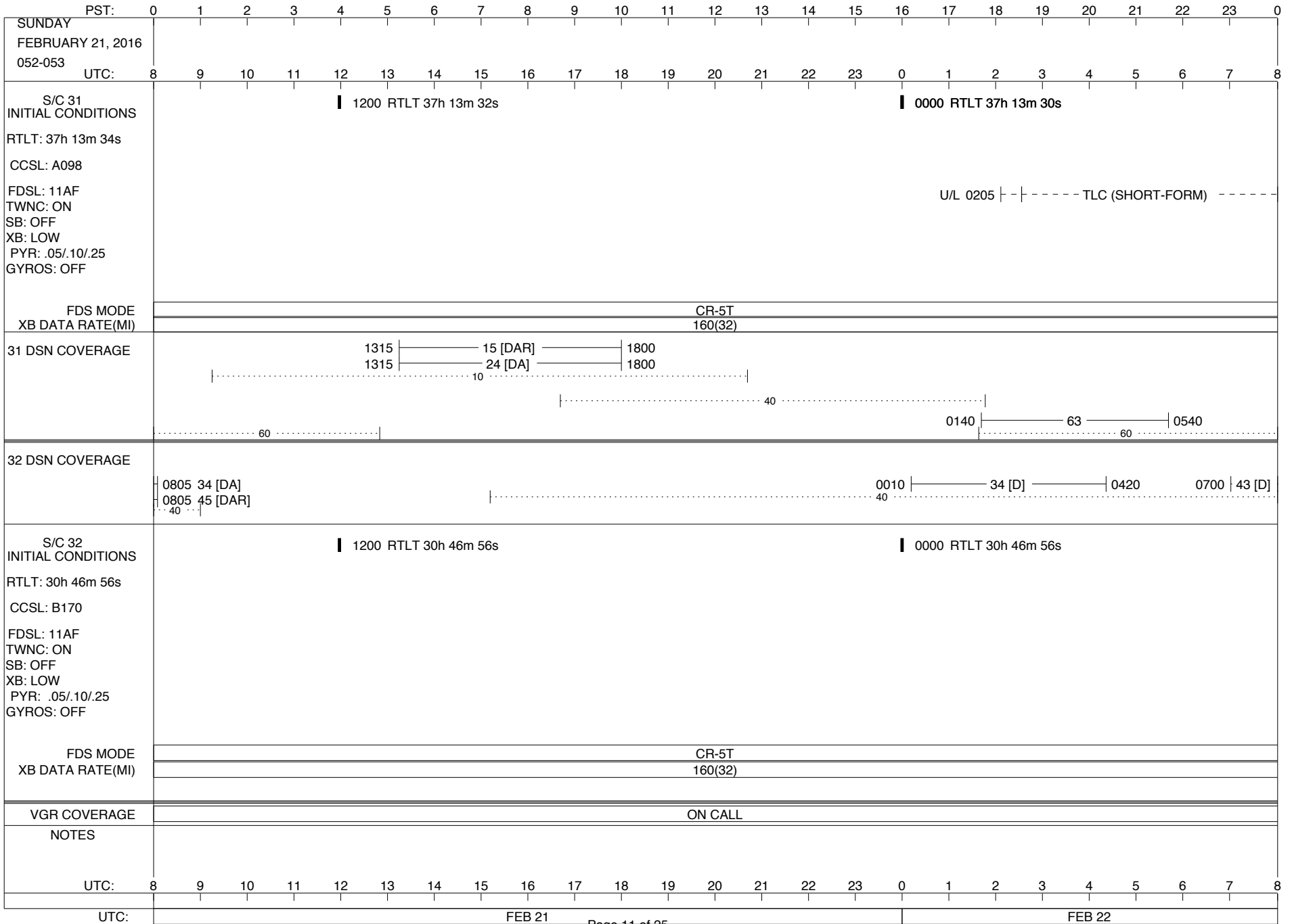
ISSUE DATE: 02/25/16 05:58

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THURSDAY FEBRUARY 18, 2016 049-050	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: 37h 13m 44s CCSL: A098 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	█ 1200 RTLTL 37h 13m 42s												█ 0000 RTLTL 37h 13m 42s												
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
31 DSN COVERAGE	1340  ----- 24 [DA] -----  1630 1340  ----- 25 [DAR] -----  1630  ----- 10 -----   ----- 40 -----   ----- 60 -----												0150  ----- 63 [D] -----  0550  ----- 60 -----												
32 DSN COVERAGE	43 [D]   0910  ----- 40 -----												0005  ----- 45 [D] -----  0405  ----- 40 -----												
S/C 32 INITIAL CONDITIONS RTLTL: 30h 46m 56s CCSL: B170 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	█ 1200 RTLTL 30h 46m 56s												█ 0000 RTLTL 30h 46m 56s												
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 @ 0220 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:	FEB 18												FEB 19												

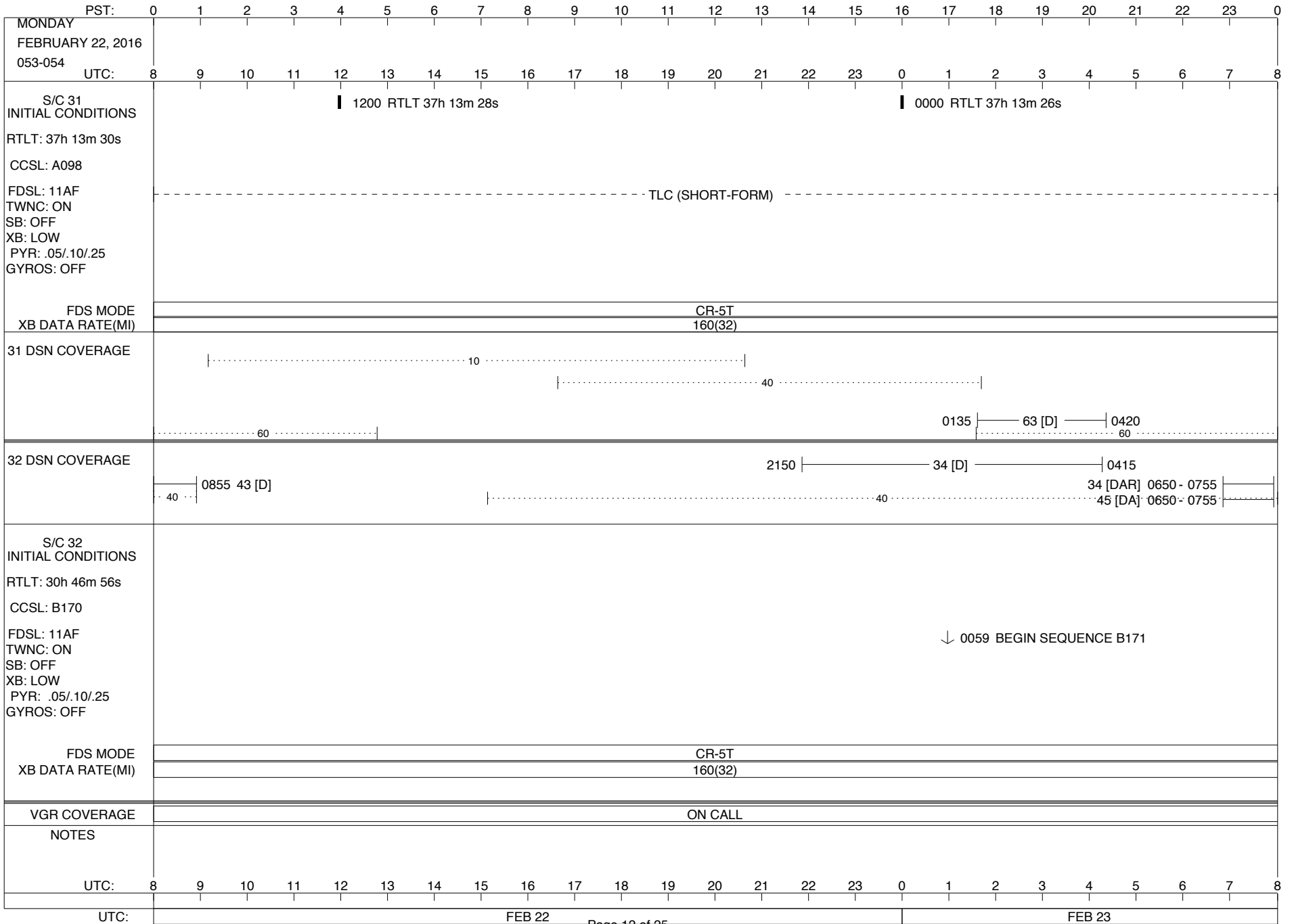
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SATURDAY FEBRUARY 20, 2016 051-052																													
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S/C 31 INITIAL CONDITIONS		1200 RTLT 37h 13m 36s												0000 RTLT 37h 13m 34s															
RTLT: 37h 13m 38s																													
CCSL: A098																													
FDSL: 11AF																													
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>Diagram for 31 DSN COVERAGE: Shows coverage from 1420 to 1620 with data rates of 15 [DA] and 25 [DAR]. Includes a 40-minute duration and a 60-minute duration. Coverage ends at 0145 with a 63 [D] duration and 0430 with a 60-minute duration.</p>																											
32 DSN COVERAGE		<p>Diagram for 32 DSN COVERAGE: Shows coverage from 0805 to 0025 with data rates of 34 [DA] and 45 [DAR]. Includes a 40-minute duration and a 34 [D] duration. Coverage ends at 0025 with a 34 [DA] and 0705 duration, and a 45 [DAR] and 0705 duration.</p>																											
S/C 32 INITIAL CONDITIONS		1200 RTLT 30h 46m 56s												0000 RTLT 30h 46m 56s															
RTLT: 30h 46m 56s																													
CCSL: B170																													
FDSL: 11AF																													
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)											
VGR COVERAGE		ON CALL																											
NOTES		[1] S/C 31=GS-4B @ 0519 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:		FEB 20																FEB 21											



ISSUE DATE: 02/25/16 05:58



ISSUE DATE: 02/25/16 05:58

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			
TUESDAY FEBRUARY 23, 2016 054-055																												
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S/C 31 INITIAL CONDITIONS RTLTL: 37h 13m 26s CCSL: A098 FDLSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/25 GYROS: OFF	1200 RTLTL 37h 13m 24s														0000 RTLTL 37h 13m 22s													
FDS MODE	CR-5T														CR-5T													
XB DATA RATE(MI)	160(32)														160(32)													
31 DSN COVERAGE	1400   24 [DAR]   1900 1400   25 [DA]   1900														1942   1943 PWS/RH													
32 DSN COVERAGE	1505   43 [B]   1735														0430   43 [D]													
S/C 32 INITIAL CONDITIONS RTLTL: 30h 46m 56s CCSL: B171 FDLSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/25 GYROS: OFF	1200 RTLTL 30h 46m 54s														0000 RTLTL 30h 46m 54s													
FDS MODE	CR-5T							EL-40							CR-5T													
XB DATA RATE(MI)	160(32)							40(30)							160(32)													
VGR COVERAGE	ON CALL							VGR							ON CALL													
NOTES	[1] S/C 31=GS-4B @ 1942 XB=2.8K(41) NOT RECOVERABLE [2] S/C 32=EL-40 @ 1551 XB=40(30)																											
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			
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ISSUE DATE: 02/25/16 05:58

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 FEBRUARY 24, 2016 055-056																									
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: 37h 13m 22s CCSL: A098 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 37h 13m 20s												0000 RTLT 37h 13m 18s												
FDS MODE													CR-5T												
XB DATA RATE(MI)													160(32)												
31 DSN COVERAGE	-----10-----												-----40-----												
	-----60-----												0130  -----63 [D]-----  0415  -----60-----												
32 DSN COVERAGE	-----0850 43 [D]-----												2215  -----45 [D]-----  0030 0310 - 0745  -----35 [DAR]-----   -----40-----  0405 - 0745  -----34 [DA]-----												
S/C 32 INITIAL CONDITIONS RTLT: 30h 46m 54s CCSL: B171 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 30h 46m 52s												0000 RTLT 30h 46m 52s												
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:	FEB 24												FEB 25												

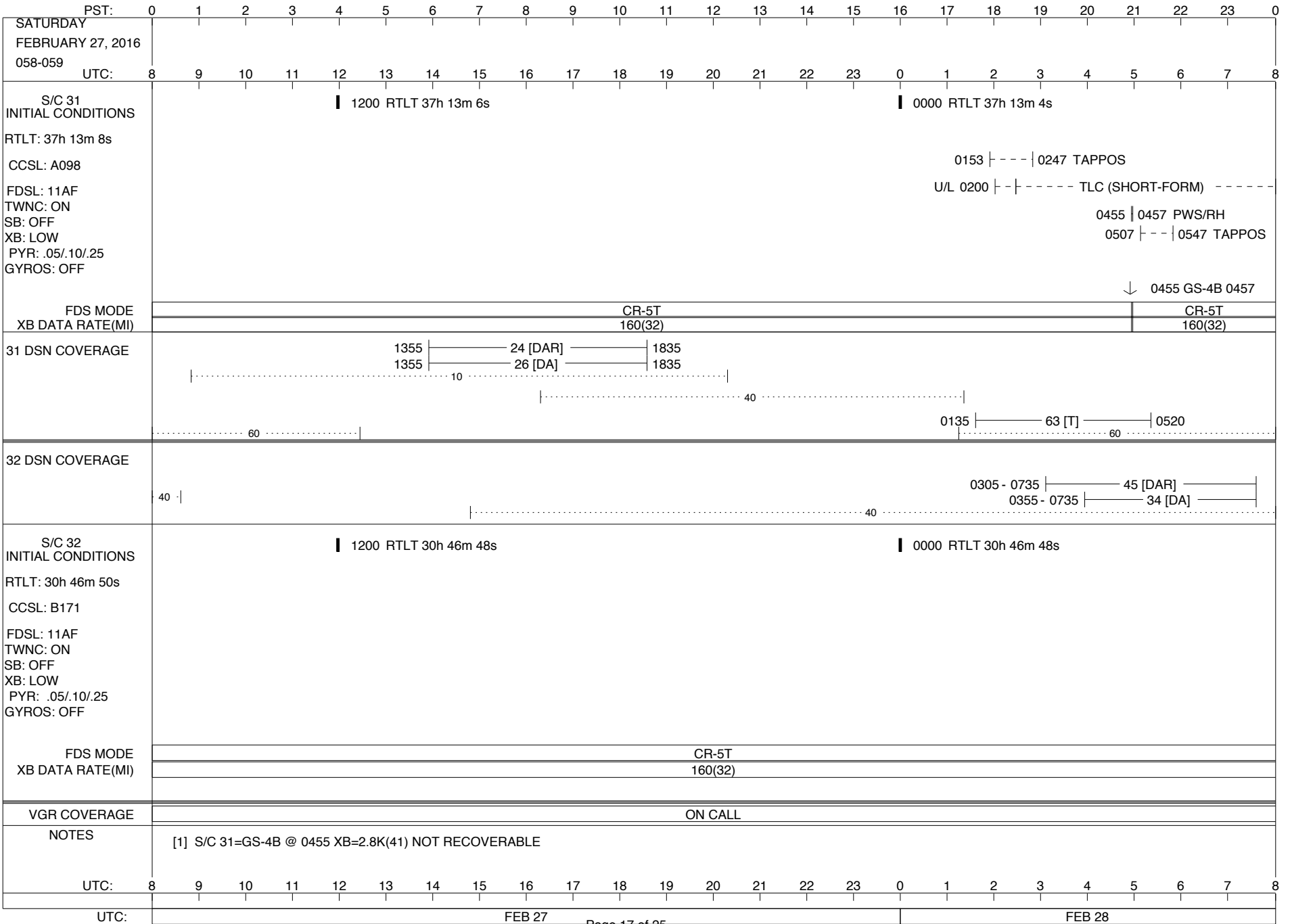
ISSUE DATE: 02/25/16 05:58

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THURSDAY FEBRUARY 25, 2016 056-057																									
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: 37h 13m 18s CCSL: A098 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	█ 1200 RTLTL 37h 13m 14s												█ 0000 RTLTL 37h 13m 12s												
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
31 DSN COVERAGE	<p>1325  -----  15 [DAR]  -----  1725</p> <p>1325  -----  24 [DA]  -----  1725</p> <p>..... -----  10 ..... -----  40 ..... -----  0125  -----  63 [D]  -----  0625</p> <p>..... -----  60 ..... -----  60</p>																								
32 DSN COVERAGE	<p>..... -----  40 ..... -----  40 ..... -----  0310 - 0740  -----  35 [DAR]</p> <p>..... -----  40 ..... -----  40 ..... -----  0355 - 0740  -----  45 [DA]</p>																								
S/C 32 INITIAL CONDITIONS RTLTL: 30h 46m 52s CCSL: B171 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	█ 1200 RTLTL 30h 46m 52s												█ 0000 RTLTL 30h 46m 50s												
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
VGR COVERAGE	ON CALL																								
NOTES	[1] S/C 31=GS-4B @ 0155 XB=2.8K(41) NOT RECOVERABLE																								
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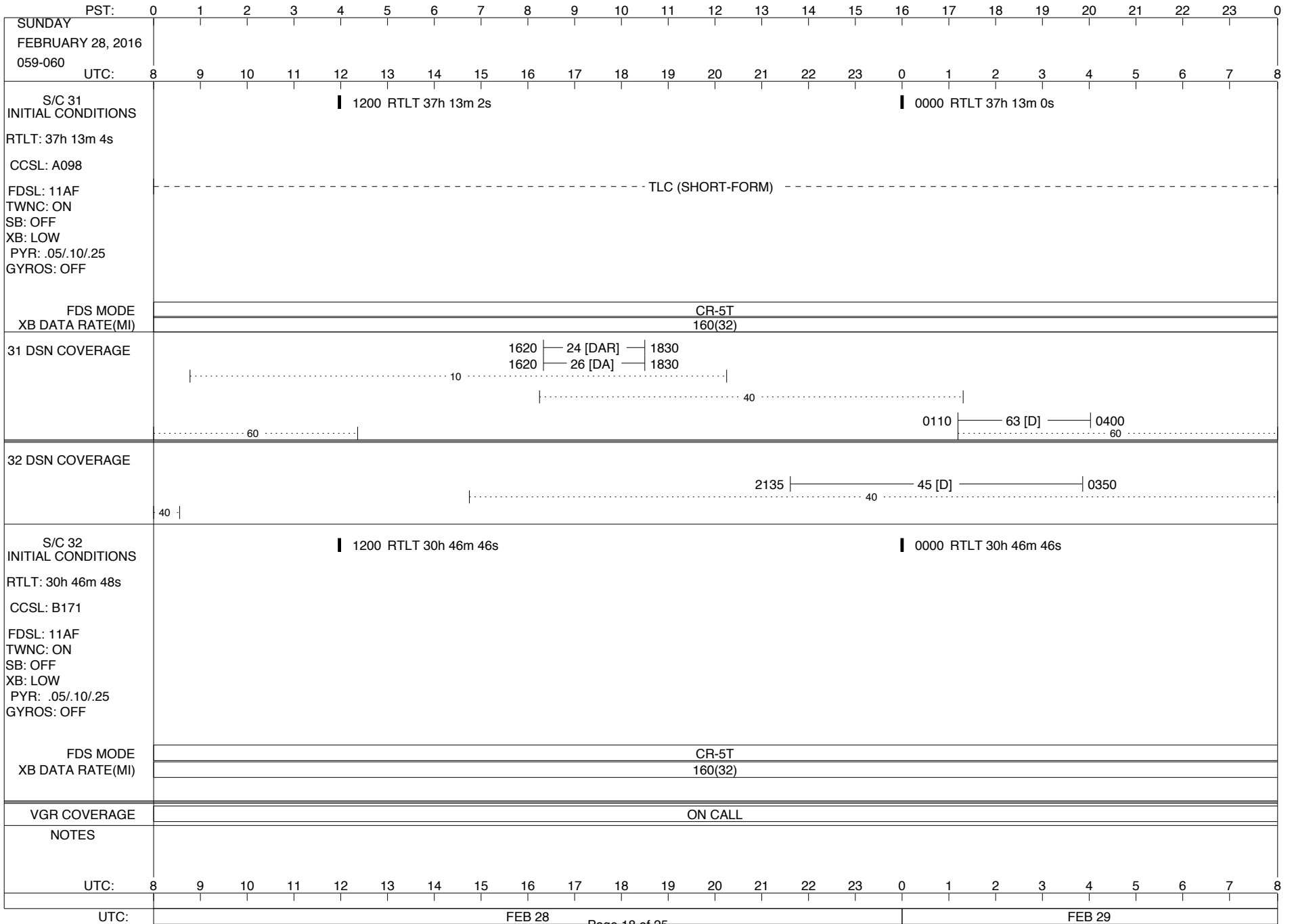


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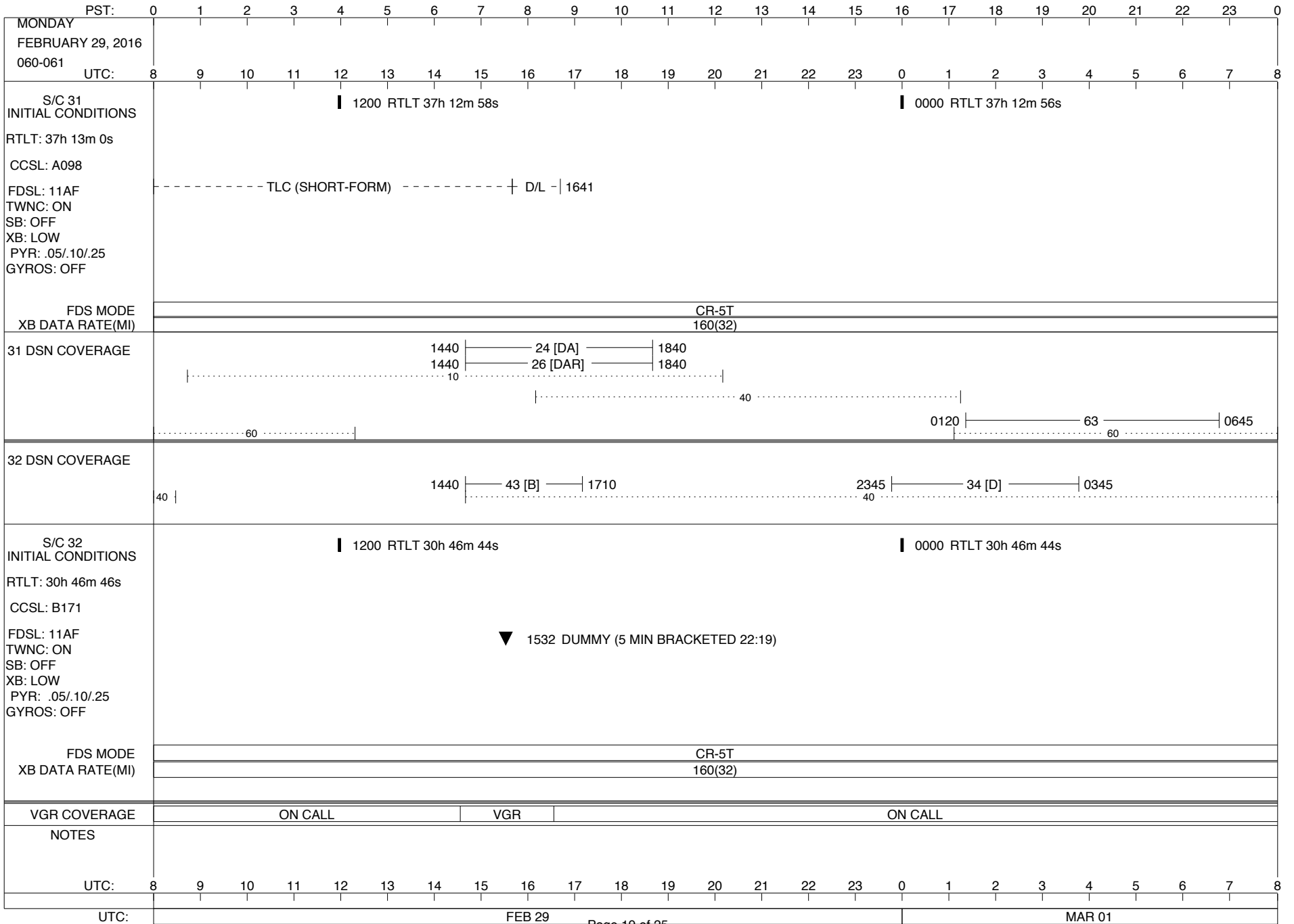
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FRIDAY																											
FEBRUARY 26, 2016																											
057-058																											
UTC:		8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8	
S/C 31 INITIAL CONDITIONS						█												█									
RTLT: 37h 13m 12s																											
CCSL: A098																											
FDSL: 11AF																											
TWNC: ON																											
SB: OFF																											
XB: LOW																											
PYR: .05/10/25																											
GYROS: OFF																											
FDS MODE													CR-5T														
XB DATA RATE(MI)													160(32)														
31 DSN COVERAGE		.....10.....											.....40.....														
		.....60.....											0120  -----63 [D]-----  0405  .....60.....														
32 DSN COVERAGE		40  .....											2130  -----34 [o]-----  0340  .....40.....														
S/C 32 INITIAL CONDITIONS						█												█									
RTLT: 30h 46m 50s																											
CCSL: B171																											
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																											
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ISSUE DATE: 02/25/16 05:58



ISSUE DATE: 02/25/16 05:58



ISSUE DATE: 02/25/16 05:58

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

TUESDAY  
MARCH 1, 2016  
061-062

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: 37h 12m 56s  
CCSL: A098  
FDSL: 11AF  
TWNC: ON  
SB: OFF  
XB: LOW  
PYR: .05/.10/.25  
GYROS: OFF

1200 RTLT 37h 12m 54s

0000 RTLT 37h 12m 52s

1918 | 1919 PWS/RH

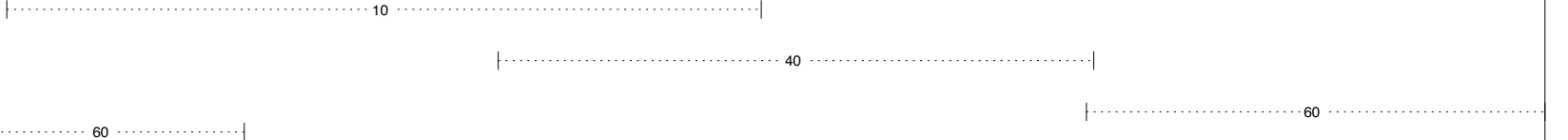
↓ 1918 GS-4B 1919

FDS MODE  
XB DATA RATE(MI)

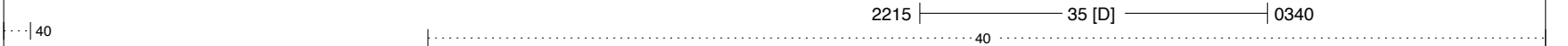
CR-5T  
160(32)

CR-5T  
160(32)

31 DSN COVERAGE



32 DSN COVERAGE



S/C 32  
INITIAL CONDITIONS  
RTLT: 30h 46m 44s  
CCSL: B171  
FDSL: 11AF  
TWNC: ON  
SB: OFF  
XB: LOW  
PYR: .05/.10/.25  
GYROS: OFF

1200 RTLT 30h 46m 42s

0000 RTLT 30h 46m 42s

FDS MODE  
XB DATA RATE(MI)

CR-5T  
160(32)

VGR COVERAGE

ON CALL

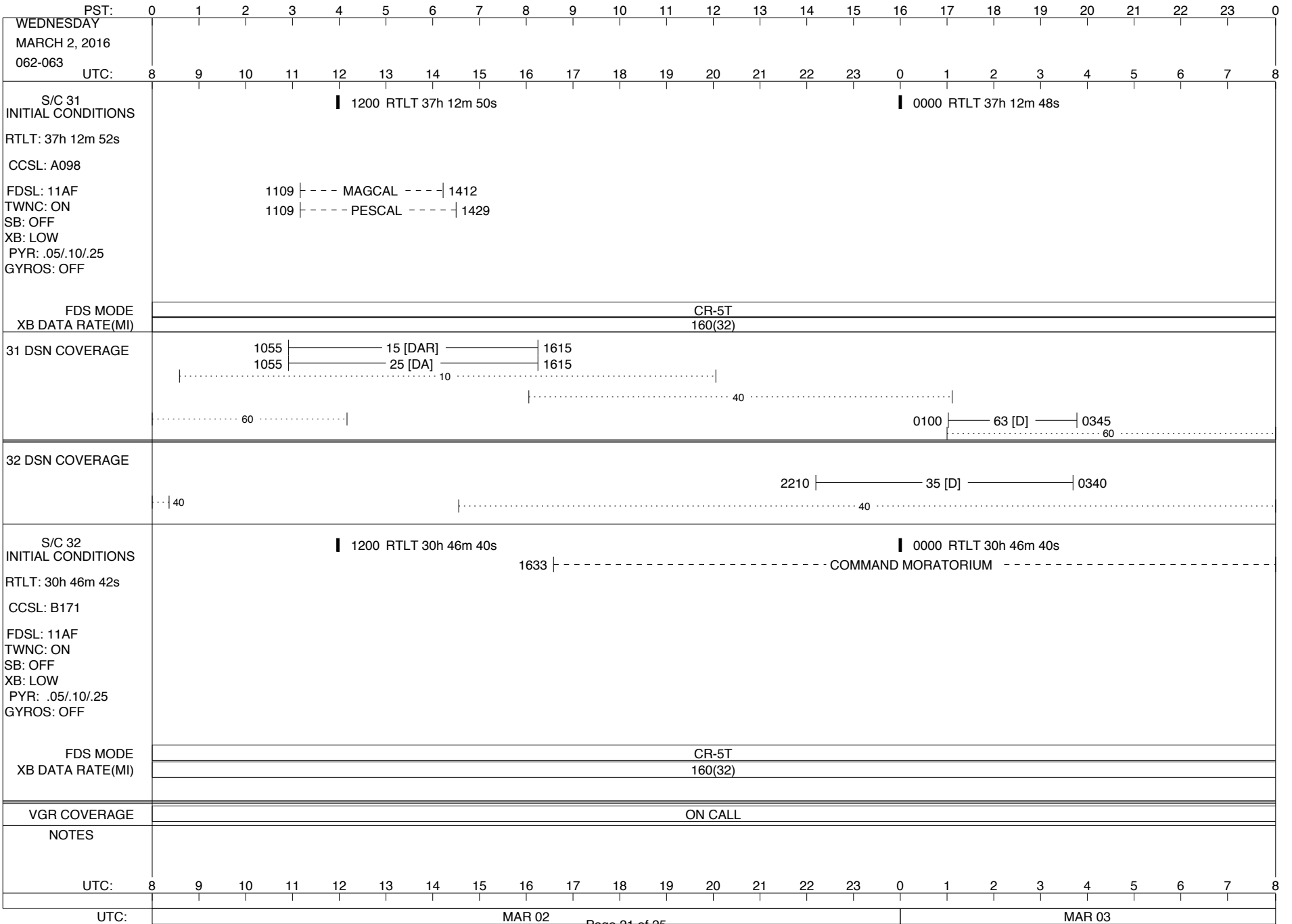
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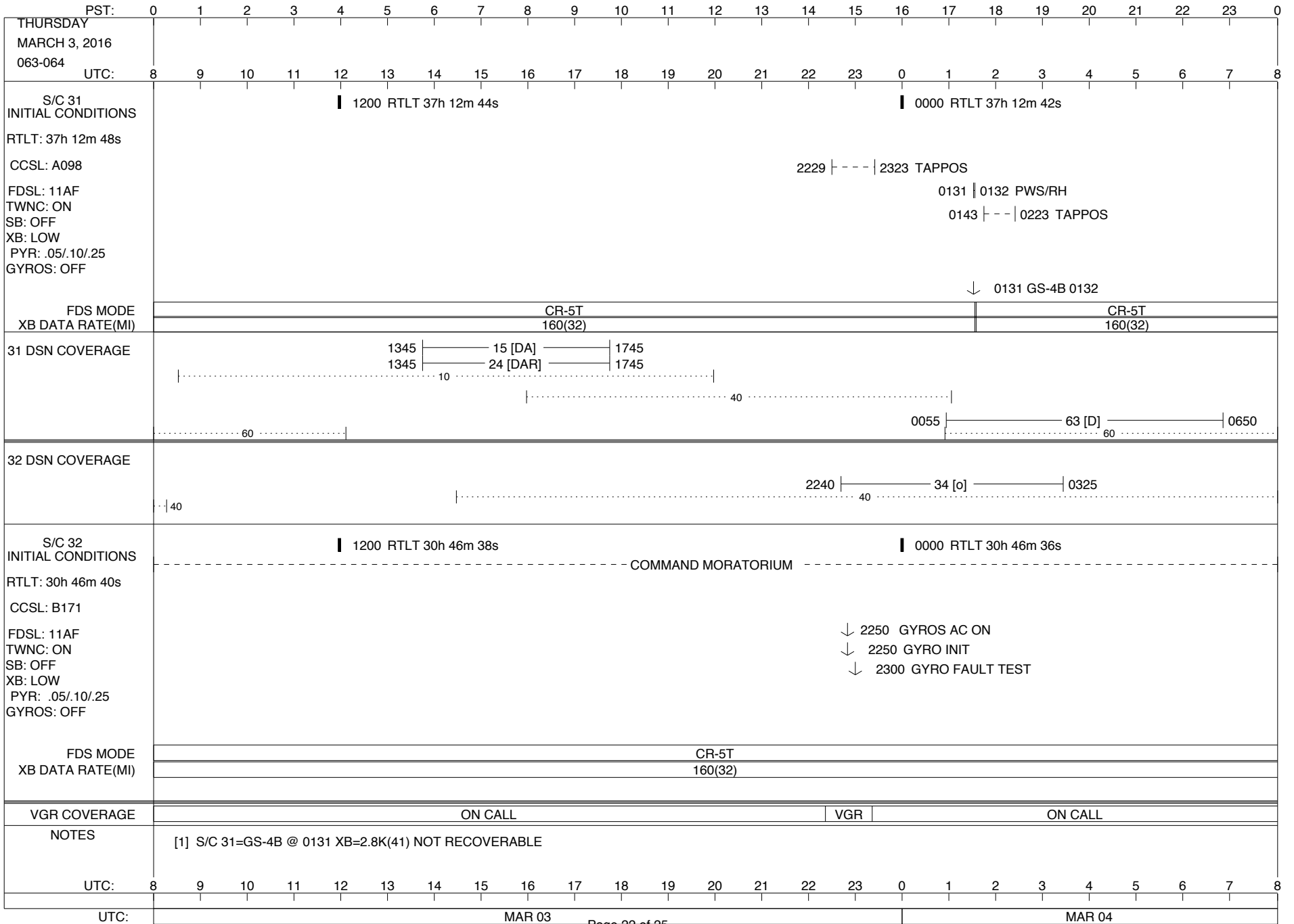
[1] S/C 31=GS-4B @ 1918 XB=2.8K(41) NOT RECOVERABLE

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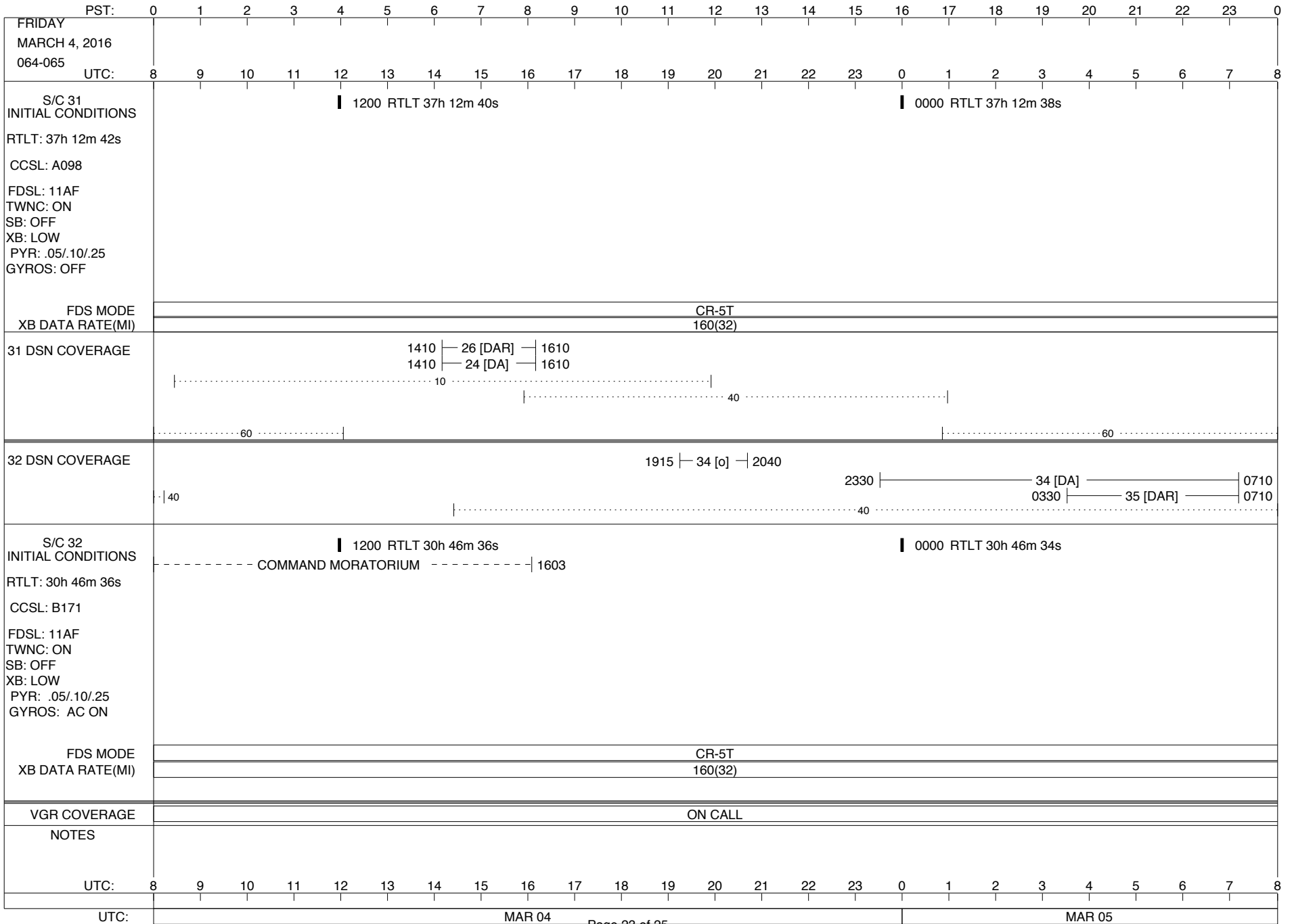
UTC: MAR 01 Page 20 of 25 MAR 02

ISSUE DATE: 02/25/16 05:58





ISSUE DATE: 02/25/16 05:58





ISSUE DATE: 02/25/16 05:58

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
SATURDAY MARCH 5, 2016 065-066	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: 37h 12m 38s CCSL: A098 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	█ 1200 RTLTL 37h 12m 36s												█ 0000 RTLTL 37h 12m 34s												
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
31 DSN COVERAGE	1420  ----- 24 [DA] -----  1820 1420  ----- 26 [DAR] -----  1820  ----- 10 -----   ----- 40 -----   ----- 60 -----												0129  ---  0209 TAPPOS 0432   0432 PWS/RH 0443  ---  0509 TAPPOS ↓ 0431 GS-4B 0432 0050  ----- 63 [D] -----  0450  ----- 60 -----												
32 DSN COVERAGE	40  ----- 40 -----												2230  ----- 34 [D] -----  0325												
S/C 32 INITIAL CONDITIONS RTLTL: 30h 46m 34s CCSL: B171 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: AC ON	█ 1200 RTLTL 30h 46m 34s												█ 0000 RTLTL 30h 46m 32s												
FDS MODE	CR-5T												↓ 2250 GYRO INIT												
XB DATA RATE(MI)	160(32)																								
VGR COVERAGE	ON CALL																								
NOTES	[1] S/C 31=GS-4B @ 0431 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:	MAR 05												MAR 06												

ISSUE DATE: 02/25/16 05:58

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
SUNDAY MARCH 6, 2016 066-067																									
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: 37h 12m 34s CCSL: A098 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	<div style="text-align: center;"> <p>1200 RTLT 37h 12m 34s</p> </div>																								
FDS MODE													CR-5T												
XB DATA RATE(MI)													160(32)												
31 DSN COVERAGE	<div style="text-align: center;"> <p>10</p> </div>																								
	<div style="text-align: center;"> <p>60</p> </div>																								
32 DSN COVERAGE	<div style="text-align: center;"> <p>40</p> </div>																								
S/C 32 INITIAL CONDITIONS RTLT: 30h 46m 32s CCSL: B171 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: AC ON	<div style="text-align: center;"> <p>1200 RTLT 30h 46m 32s</p> </div>																								
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:	MAR 06												MAR 07												