

# VOYAGER

## Space Flight Operations Schedule (SFOS)

Issue Date: November 6, 2014

For the Period: 11/06/14 to 11/24/14 (14-310 – 14-328)

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

**DSOT (1) 230-102**

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 \*Donald-Gurnett@uiowa.edu

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 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

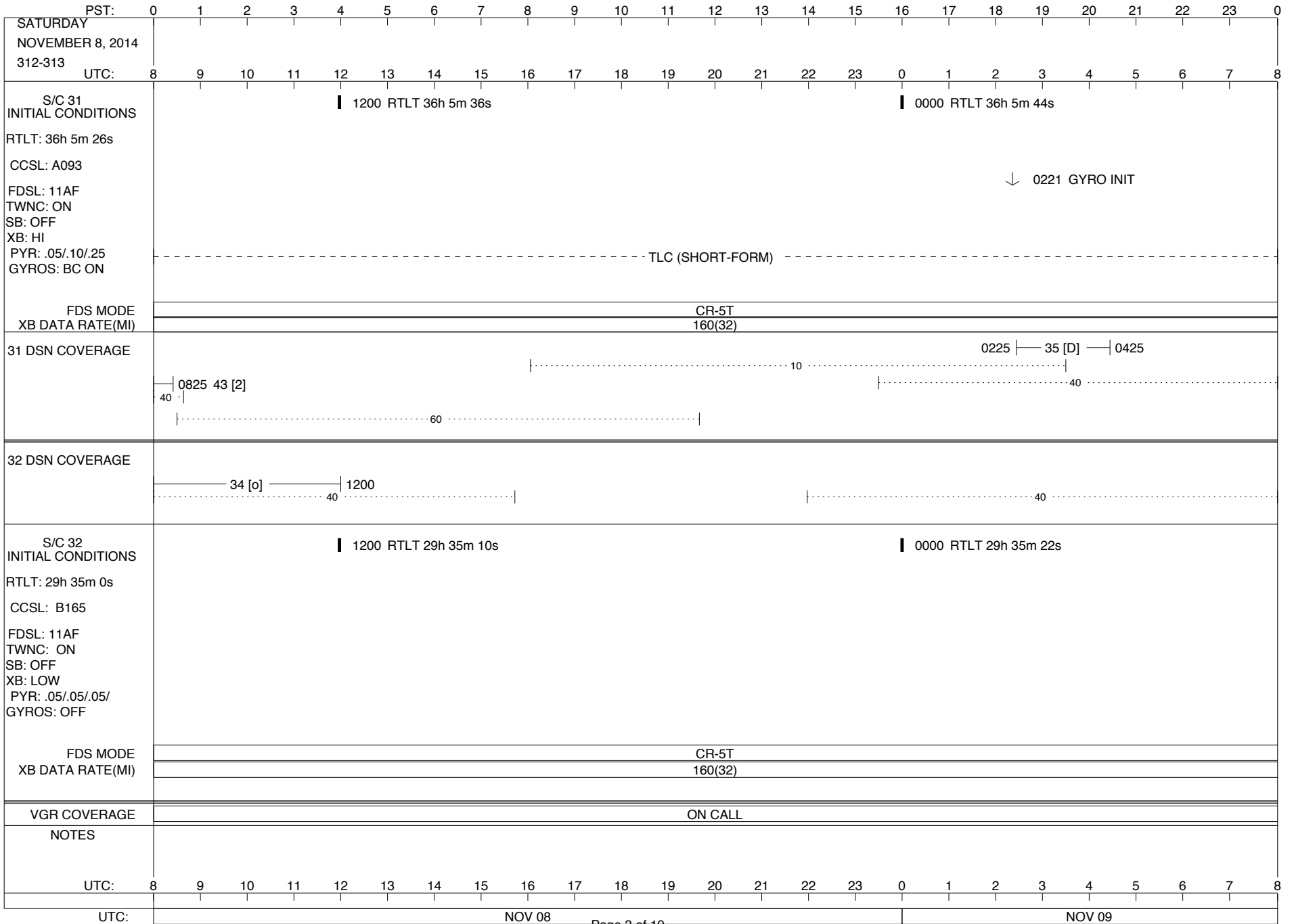
ISSUE DATE: 11/06/14 07:48

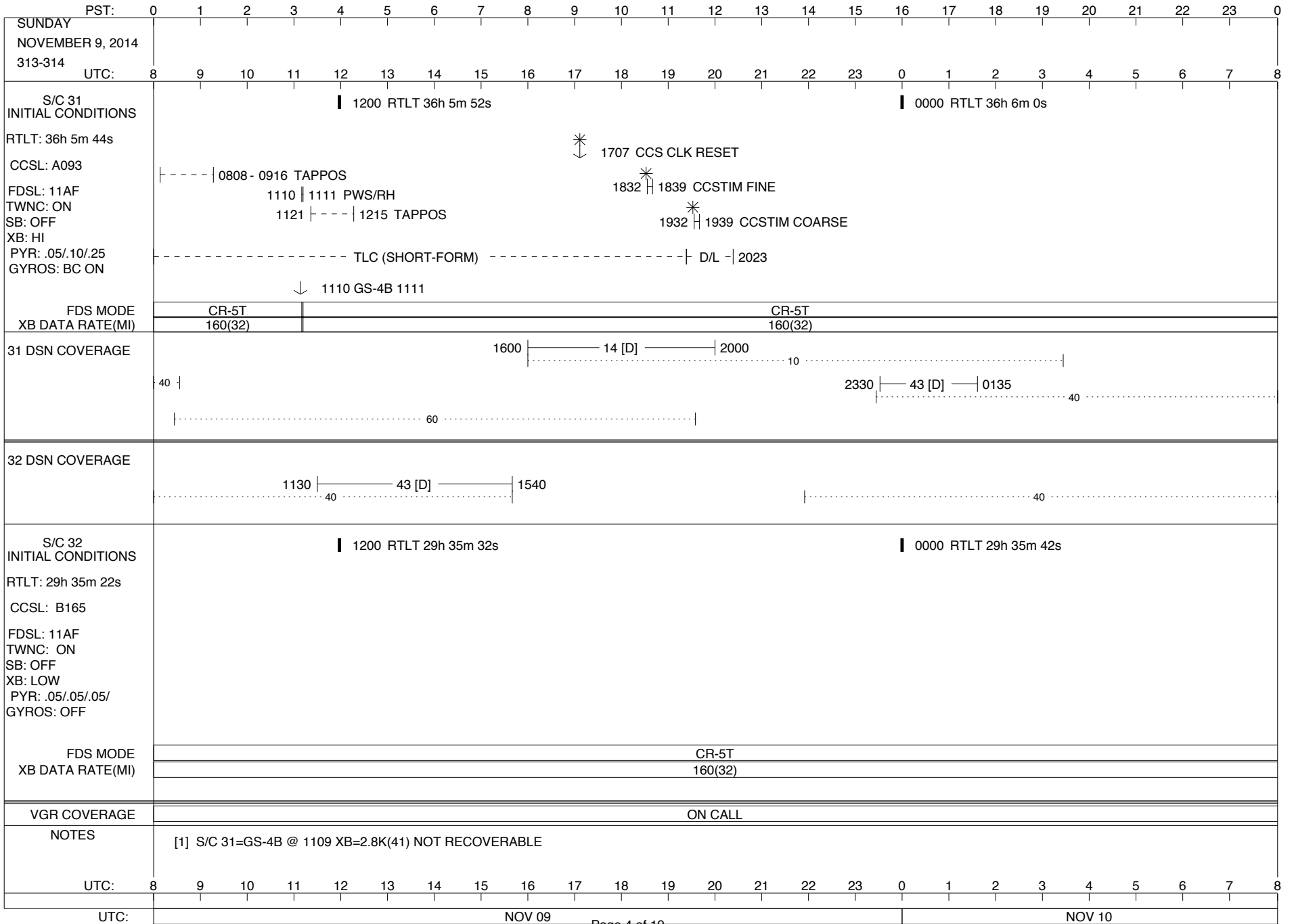
| PST:   | 0 | 1 | 2  | 3  | 4      | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16     | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 0 |
|--|---|---|----|----|--------|----|----|----|----|----|----|----|----|----|----|----|--------|----|----|----|----|----|----|----|---|
| THURSDAY<br>NOVEMBER 6, 2014<br>310-311  |   |   |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |   |
| 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<br>INITIAL CONDITIONS<br>RTLT: 36h 4m 54s<br>CCSL: A093<br>FDSL: 11AF<br>TWNC: ON<br>SB: OFF<br>XB: HI<br>PYR: .05/.10/.25<br>GYROS: BC ON  |   |   |    |    | █ 1200 |    |    |    |    |    |    |    |    |    |    |    | █ 0000 |    |    |    |    |    |    |    |   |
| FDS MODE<br>XB DATA RATE(MI)   |   |   |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |   |
|  |   |   |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |   |
| 31 DSN COVERAGE  |   |   |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |   |
|  |   |   |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |   |
| 32 DSN COVERAGE  |   |   |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |   |
|  |   |   |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |   |
| S/C 32<br>INITIAL CONDITIONS<br>RTLT: 29h 34m 18s<br>CCSL: B165<br>FDSL: 11AF<br>TWNC: ON<br>SB: OFF<br>XB: LOW<br>PYR: .05/.05/.05/<br>GYROS: OFF |   |   |    |    | █ 1200 |    |    |    |    |    |    |    |    |    |    |    | █ 0000 |    |    |    |    |    |    |    |   |
| FDS MODE<br>XB DATA RATE(MI)   |   |   |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |   |
|  |   |   |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |   |
| VGR COVERAGE   |   |   |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |   |
| 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:   |   |   |    |    |        |    |    |    |    |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |   |

ISSUE DATE: 11/06/14 07:48

| 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<br>NOVEMBER 7, 2014<br>311-312  | 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<br>INITIAL CONDITIONS<br>RTLT: 36h 5m 10s<br>CCSL: A093<br>FDSL: 11AF<br>TWNC: ON<br>SB: OFF<br>XB: HI<br>PYR: .05/.10/.25<br>GYROS: BC ON  | 1200 RTLT 36h 5m 18s   |   |    |    |    |    |    |    |    |    |    |    | 0000 RTLT 36h 5m 26s              |    |    |    |    |    |    |    |    |    |    |    |   |
| FDS MODE<br>XB DATA RATE(MI)   | CR-5T<br>160(32)   |   |    |    |    |    |    |    |    |    |    |    |                                   |    |    |    |    |    |    |    |    |    |    |    |   |
| 31 DSN COVERAGE  | 40  -----  60  |   |    |    |    |    |    |    |    |    |    |    | 10  -----  4040  -----  43 [2]    |    |    |    |    |    |    |    |    |    |    |    |   |
| 32 DSN COVERAGE  | 1145  -----  43 [D]  -----  1545   |   |    |    |    |    |    |    |    |    |    |    | 40  -----  40 0610  -----  34 [o] |    |    |    |    |    |    |    |    |    |    |    |   |
| S/C 32<br>INITIAL CONDITIONS<br>RTLT: 29h 34m 38s<br>CCSL: B165<br>FDSL: 11AF<br>TWNC: ON<br>SB: OFF<br>XB: LOW<br>PYR: .05/.05/.05/<br>GYROS: OFF | 1200 RTLT 29h 34m 50s  |   |    |    |    |    |    |    |    |    |    |    | 0000 RTLT 29h 35m 0s              |    |    |    |    |    |    |    |    |    |    |    |   |
| FDS MODE<br>XB DATA RATE(MI)   | CR-5T<br>160(32)   |   |    |    |    |    |    |    |    |    |    |    |                                   |    |    |    |    |    |    |    |    |    |    |    |   |
| VGR COVERAGE   | ON CALL  |   |    |    |    |    |    |    |    |    |    |    | VGR                               |    |    |    |    |    |    |    |    |    |    |    |   |
| NOTES  | [1] S/C 31=GS-4B @ 0809 XB=2.8K(41) NOT RECOVERABLE<br>[2] A093C BACKUP UPLINK SUPPORT |   |    |    |    |    |    |    |    |    |    |    |                                   |    |    |    |    |    |    |    |    |    |    |    |   |
| 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 07   |   |    |    |    |    |    |    |    |    |    |    | NOV 08                            |    |    |    |    |    |    |    |    |    |    |    |   |

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ISSUE DATE: 11/06/14 07:48

| 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                       |  |  |   |    |    |    |    |    |    |    |    |    |    |                      |    |    |        |    |    |         |    |    |     |    |    |   |  |  |
| NOVEMBER 10, 2014            |  |  |   |    |    |    |    |    |    |    |    |    |    |                      |    |    |        |    |    |         |    |    |     |    |    |   |  |  |
| 314-315                      |  |  |   |    |    |    |    |    |    |    |    |    |    |                      |    |    |        |    |    |         |    |    |     |    |    |   |  |  |
| 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<br>INITIAL CONDITIONS |  | 1200 RTLT 36h 6m 8s  |   |    |    |    |    |    |    |    |    |    |    | 0000 RTLT 36h 6m 16s |    |    |        |    |    |         |    |    |     |    |    |   |  |  |
| RTLT: 36h 6m 0s              |  |  |   |    |    |    |    |    |    |    |    |    |    |                      |    |    |        |    |    |         |    |    |     |    |    |   |  |  |
| CCSL: A093                   |  |  |   |    |    |    |    |    |    |    |    |    |    |                      |    |    |        |    |    |         |    |    |     |    |    |   |  |  |
| FDSL: 11AF                   |  |  |   |    |    |    |    |    |    |    |    |    |    |                      |    |    |        |    |    |         |    |    |     |    |    |   |  |  |
| TWNC: ON                     |  |  |   |    |    |    |    |    |    |    |    |    |    |                      |    |    |        |    |    |         |    |    |     |    |    |   |  |  |
| SB: OFF                      |  |  |   |    |    |    |    |    |    |    |    |    |    |                      |    |    |        |    |    |         |    |    |     |    |    |   |  |  |
| XB: HI                       |  |  |   |    |    |    |    |    |    |    |    |    |    |                      |    |    |        |    |    |         |    |    |     |    |    |   |  |  |
| PYR: .05/.10/.25             |  |  |   |    |    |    |    |    |    |    |    |    |    |                      |    |    |        |    |    |         |    |    |     |    |    |   |  |  |
| GYROS: BC ON                 |  |  |   |    |    |    |    |    |    |    |    |    |    |                      |    |    |        |    |    |         |    |    |     |    |    |   |  |  |
| FDS MODE                     |  | CR-5T  |   |    |    |    |    |    |    |    |    |    |    |                      |    |    |        |    |    |         |    |    |     |    |    |   |  |  |
| XB DATA RATE(MI)             |  | 160(32)  |   |    |    |    |    |    |    |    |    |    |    |                      |    |    |        |    |    |         |    |    |     |    |    |   |  |  |
| 31 DSN COVERAGE              |  | <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>40   ..... 60 .....</p> </div> <div style="width: 45%;"> <p>2320  ----- 14 [D] -----  0320</p> <p>..... 10 .....  ----- 40 .....</p> </div> </div>       |   |    |    |    |    |    |    |    |    |    |    |                      |    |    |        |    |    |         |    |    |     |    |    |   |  |  |
| 32 DSN COVERAGE              |  | <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>1135  ----- 43 [D] -----  1535</p> <p>..... 40 .....</p> </div> <div style="width: 45%;"> <p>..... 40 .....  ----- 43 [Ho] -----  0550</p> </div> </div> |   |    |    |    |    |    |    |    |    |    |    |                      |    |    |        |    |    |         |    |    |     |    |    |   |  |  |
| S/C 32<br>INITIAL CONDITIONS |  | 1200 RTLT 29h 35m 52s  |   |    |    |    |    |    |    |    |    |    |    | 0000 RTLT 29h 36m 4s |    |    |        |    |    |         |    |    |     |    |    |   |  |  |
| RTLT: 29h 35m 42s            |  |  |   |    |    |    |    |    |    |    |    |    |    |                      |    |    |        |    |    |         |    |    |     |    |    |   |  |  |
| CCSL: B165                   |  |  |   |    |    |    |    |    |    |    |    |    |    |                      |    |    |        |    |    |         |    |    |     |    |    |   |  |  |
| FDSL: 11AF                   |  |  |   |    |    |    |    |    |    |    |    |    |    |                      |    |    |        |    |    |         |    |    |     |    |    |   |  |  |
| TWNC: ON                     |  |  |   |    |    |    |    |    |    |    |    |    |    |                      |    |    |        |    |    |         |    |    |     |    |    |   |  |  |
| SB: OFF                      |  |  |   |    |    |    |    |    |    |    |    |    |    |                      |    |    |        |    |    |         |    |    |     |    |    |   |  |  |
| XB: LOW                      |  |  |   |    |    |    |    |    |    |    |    |    |    |                      |    |    |        |    |    |         |    |    |     |    |    |   |  |  |
| PYR: .05/.05/.05/            |  |  |   |    |    |    |    |    |    |    |    |    |    |                      |    |    |        |    |    |         |    |    |     |    |    |   |  |  |
| GYROS: OFF                   |  |  |   |    |    |    |    |    |    |    |    |    |    |                      |    |    |        |    |    |         |    |    |     |    |    |   |  |  |
| FDS MODE                     |  | CR-5T  |   |    |    |    |    |    |    |    |    |    |    |                      |    |    |        |    |    |         |    |    |     |    |    |   |  |  |
| XB DATA RATE(MI)             |  | 160(32)  |   |    |    |    |    |    |    |    |    |    |    |                      |    |    |        |    |    |         |    |    |     |    |    |   |  |  |
| VGR COVERAGE                 |  | ON CALL  |   |    |    |    |    |    |    |    |    |    |    | VGR                  |    |    |        |    |    | ON CALL |    |    | VGR |    |    |   |  |  |
| 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:                         |  | NOV 10   |   |    |    |    |    |    |    |    |    |    |    |                      |    |    | NOV 11 |    |    |         |    |    |     |    |    |   |  |  |

ISSUE DATE: 11/06/14 07:48

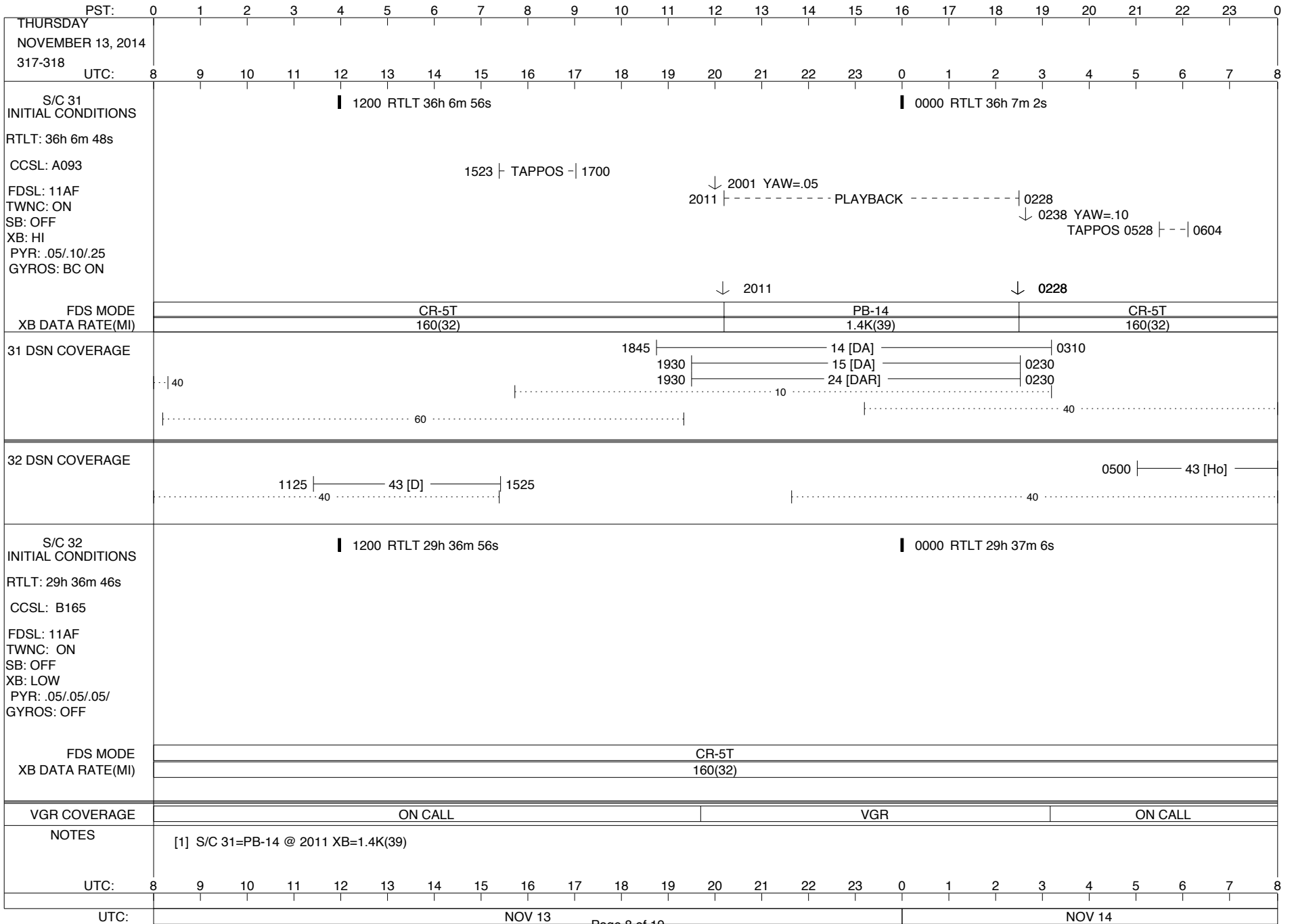
|   |   |  |
|---|---|--|
| TUESDAY<br>NOVEMBER 11, 2014<br>315-316   |   | PST: 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 |
| UTC: 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7 8  |   |  |
| S/C 31<br>INITIAL CONDITIONS<br>RTLT: 36h 6m 16s<br>CCSL: A093<br>FDSL: 11AF<br>TWNC: ON<br>SB: OFF<br>XB: HI<br>PYR: .05/.10/.25<br>GYROS: BC ON | 1200 RTLT 36h 6m 24s  | 0000 RTLT 36h 6m 32s   |
| FDS MODE<br>XB DATA RATE(MI)  | CR-5T<br>160(32)  | CR-5T<br>160(32)   |
| 31 DSN COVERAGE   | 0015   14 [D]   0315<br>40   ..... 40 .....<br>..... 60 ..... |  |
| 32 DSN COVERAGE   | 43 [Ho]   1530<br>40 ..... 40 .....                           |  |
| S/C 32<br>INITIAL CONDITIONS<br>RTLT: 29h 36m 4s<br>CCSL: B165<br>FDSL: 11AF<br>TWNC: ON<br>SB: OFF<br>XB: LOW<br>PYR: .05/.05/.05/<br>GYROS: OFF | 1200 RTLT 29h 36m 14s   | 0000 RTLT 29h 36m 24s  |
| FDS MODE<br>XB DATA RATE(MI)  | CR-5T<br>160(32)  |  |
| VGR COVERAGE  | ON CALL   |  |
| NOTES   | [1] S/C 31=GS-4B @ 0133 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 11   |   | NOV 12   |

ISSUE DATE: 11/06/14 07:48

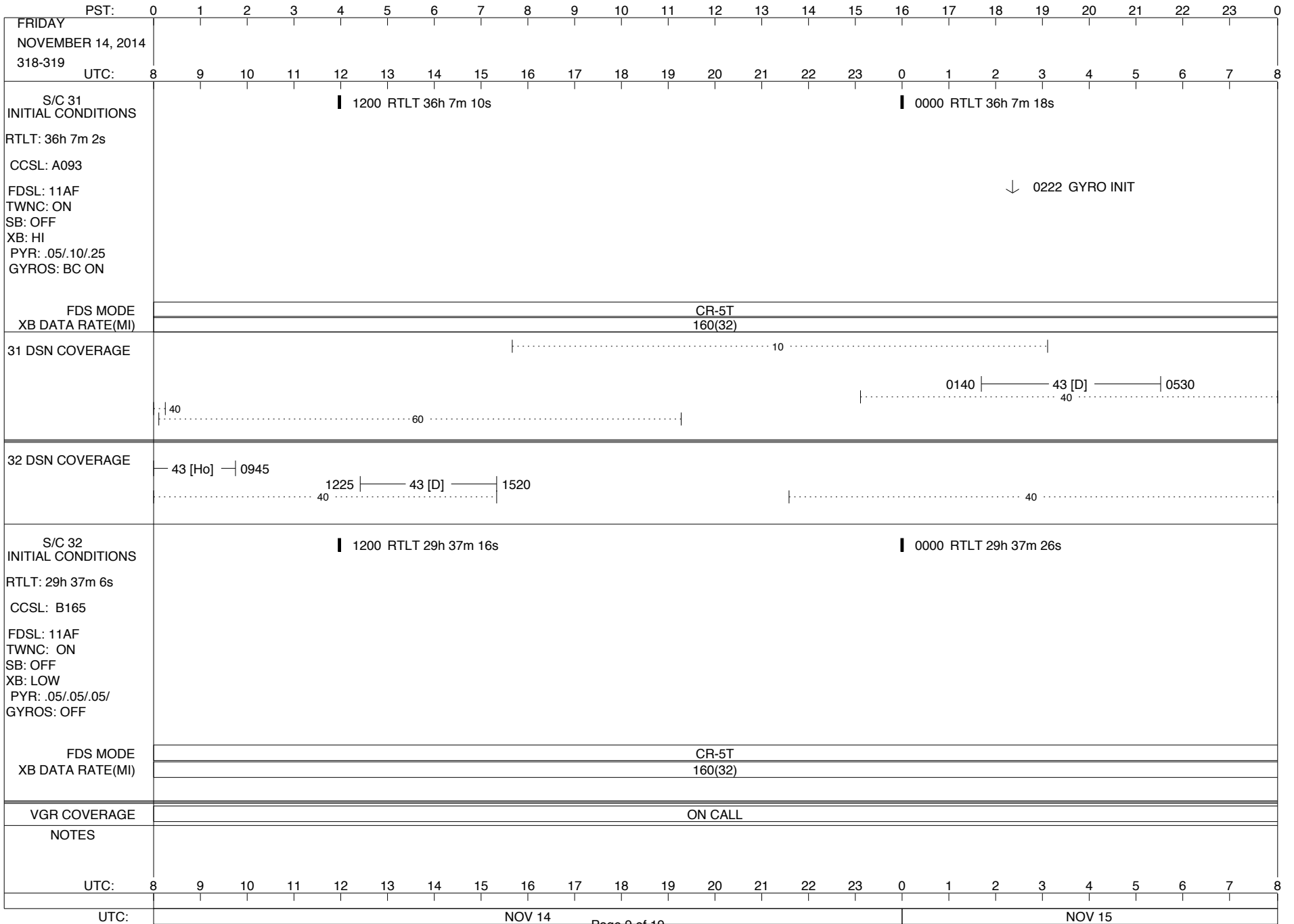
| PST:  | 0   | 1 | 2  | 3  | 4   | 5  | 6  | 7  | 8       | 9  | 10 | 11 | 12   | 13 | 14     | 15 | 16      | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 0 |  |  |  |
|---|---|---|----|----|-----|----|----|----|---------|----|----|----|--|----|--------|----|---------|----|----|----|----|----|----|----|---|--|--|--|
| WEDNESDAY<br>NOVEMBER 12, 2014<br>316-317   |   |   |    |    |     |    |    |    |         |    |    |    |  |    |        |    |         |    |    |    |    |    |    |    |   |  |  |  |
| 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<br>INITIAL CONDITIONS<br>RTLTL: 36h 6m 32s<br>CCSL: A093<br>FDSL: 11AF<br>TWNC: ON<br>SB: OFF<br>XB: HI<br>PYR: .05/.10/.25<br>GYROS: BC ON  | 1200 RTLTL 36h 6m 40s   |   |    |    |     |    |    |    |         |    |    |    | 0000 RTLTL 36h 6m 48s  |    |        |    |         |    |    |    |    |    |    |    |   |  |  |  |
| FDS MODE  |   |   |    |    |     |    |    |    |         |    |    |    | CR-5T  |    |        |    |         |    |    |    |    |    |    |    |   |  |  |  |
| XB DATA RATE(MI)  |   |   |    |    |     |    |    |    |         |    |    |    | 160(32)  |    |        |    |         |    |    |    |    |    |    |    |   |  |  |  |
| 31 DSN COVERAGE   |   |   |    |    |     |    |    |    |         |    |    |    | 1745  ----- 25 [D] -----  2130<br>..... ----- 10 ----- <br>..... ----- 40 ----- <br>..... ----- 60 ----- |    |        |    |         |    |    |    |    |    |    |    |   |  |  |  |
| 32 DSN COVERAGE   |   |   |    |    |     |    |    |    |         |    |    |    | 1125  ----- 43 [D] -----  1525<br>..... ----- 40 ----- <br>..... ----- 40 -----                          |    |        |    |         |    |    |    |    |    |    |    |   |  |  |  |
| S/C 32<br>INITIAL CONDITIONS<br>RTLTL: 29h 36m 24s<br>CCSL: B165<br>FDSL: 11AF<br>TWNC: ON<br>SB: OFF<br>XB: LOW<br>PYR: .05/.05/.05/<br>GYROS: OFF | 1200 RTLTL 29h 36m 34s  |   |    |    |     |    |    |    |         |    |    |    | 0000 RTLTL 29h 36m 46s   |    |        |    |         |    |    |    |    |    |    |    |   |  |  |  |
| 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 32=EL-40 @ 1211 XB=40(30)<br>[2] S/C 32=CR-5T @ 1311 XB=160(32) |   |    |    |     |    |    |    |         |    |    |    |  |    |        |    |         |    |    |    |    |    |    |    |   |  |  |  |
| 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 12  |   |    |    |     |    |    |    |         |    |    |    |  |    | NOV 13 |    |         |    |    |    |    |    |    |    |   |  |  |  |



ISSUE DATE: 11/06/14 07:48



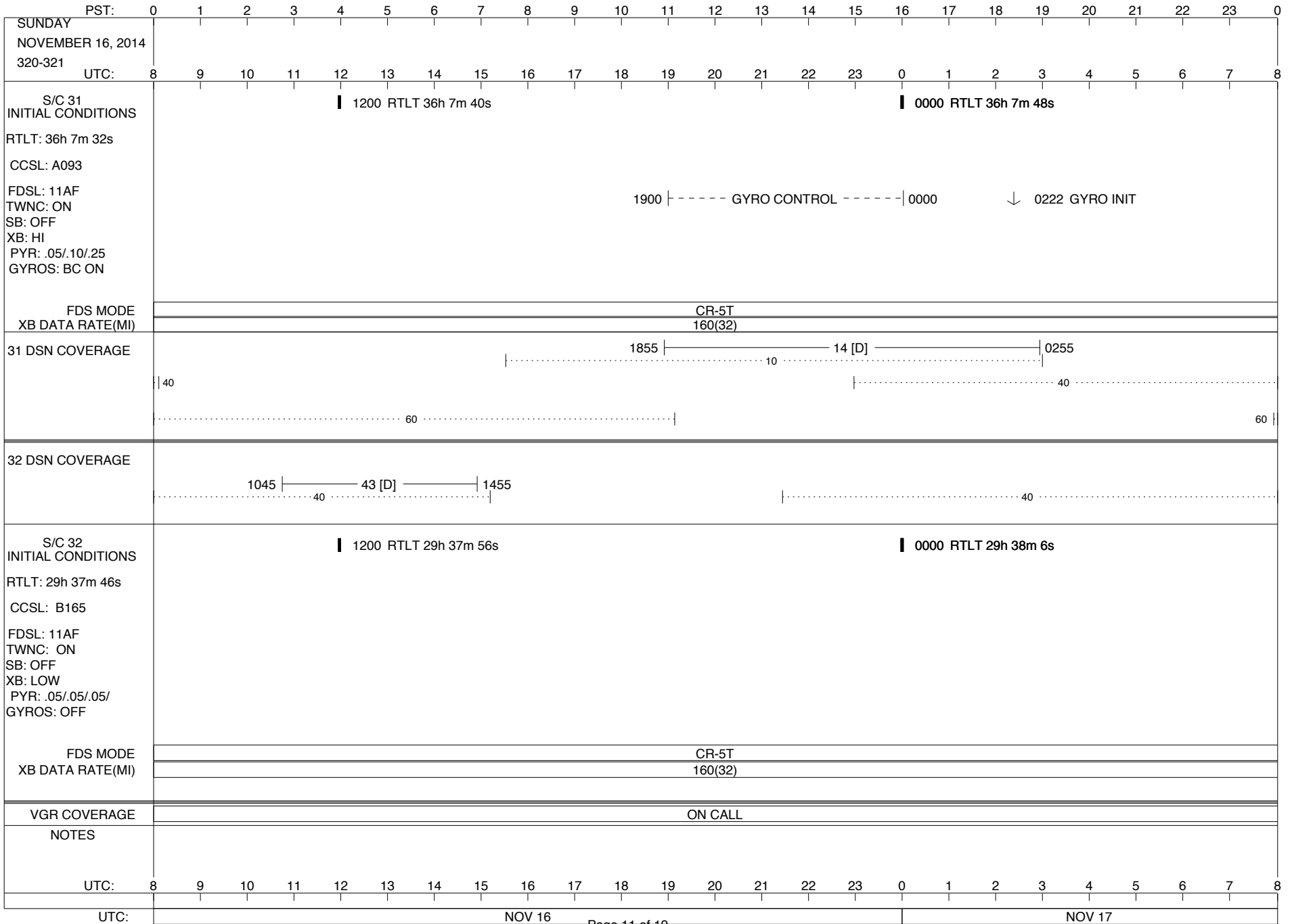
ISSUE DATE: 11/06/14 07:48



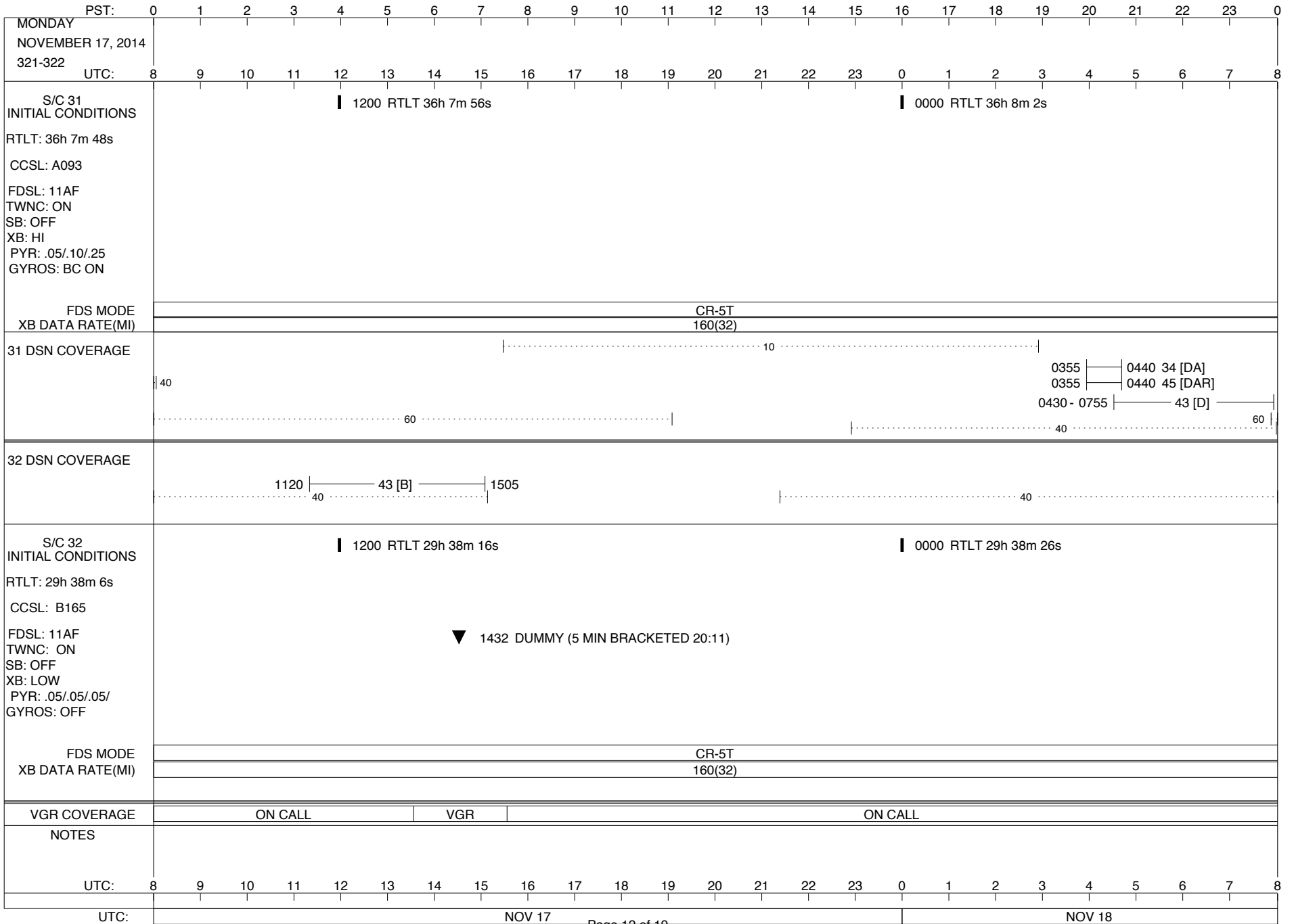
ISSUE DATE: 11/06/14 07:48

| 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<br>NOVEMBER 15, 2014<br>319-320  |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |
| 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<br>INITIAL CONDITIONS<br>RTLTL: 36h 7m 18s<br>CCSL: A093<br>FDSL: 11AF<br>TWNC: ON<br>SB: OFF<br>XB: HI<br>PYR: .05/.10/.25<br>GYROS: BC ON  |   |   |    |    | █  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |
|   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |
| FDS MODE  |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |
| XB DATA RATE(MI)  |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |
| 31 DSN COVERAGE   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |
|   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |
| 32 DSN COVERAGE   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |
|   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |
| S/C 32<br>INITIAL CONDITIONS<br>RTLTL: 29h 37m 26s<br>CCSL: B165<br>FDSL: 11AF<br>TWNC: ON<br>SB: OFF<br>XB: LOW<br>PYR: .05/.05/.05/<br>GYROS: OFF |   |   |    |    | █  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |
|   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |
| FDS MODE  |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |
| XB DATA RATE(MI)  |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |
| VGR COVERAGE  |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |
| 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:  |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |

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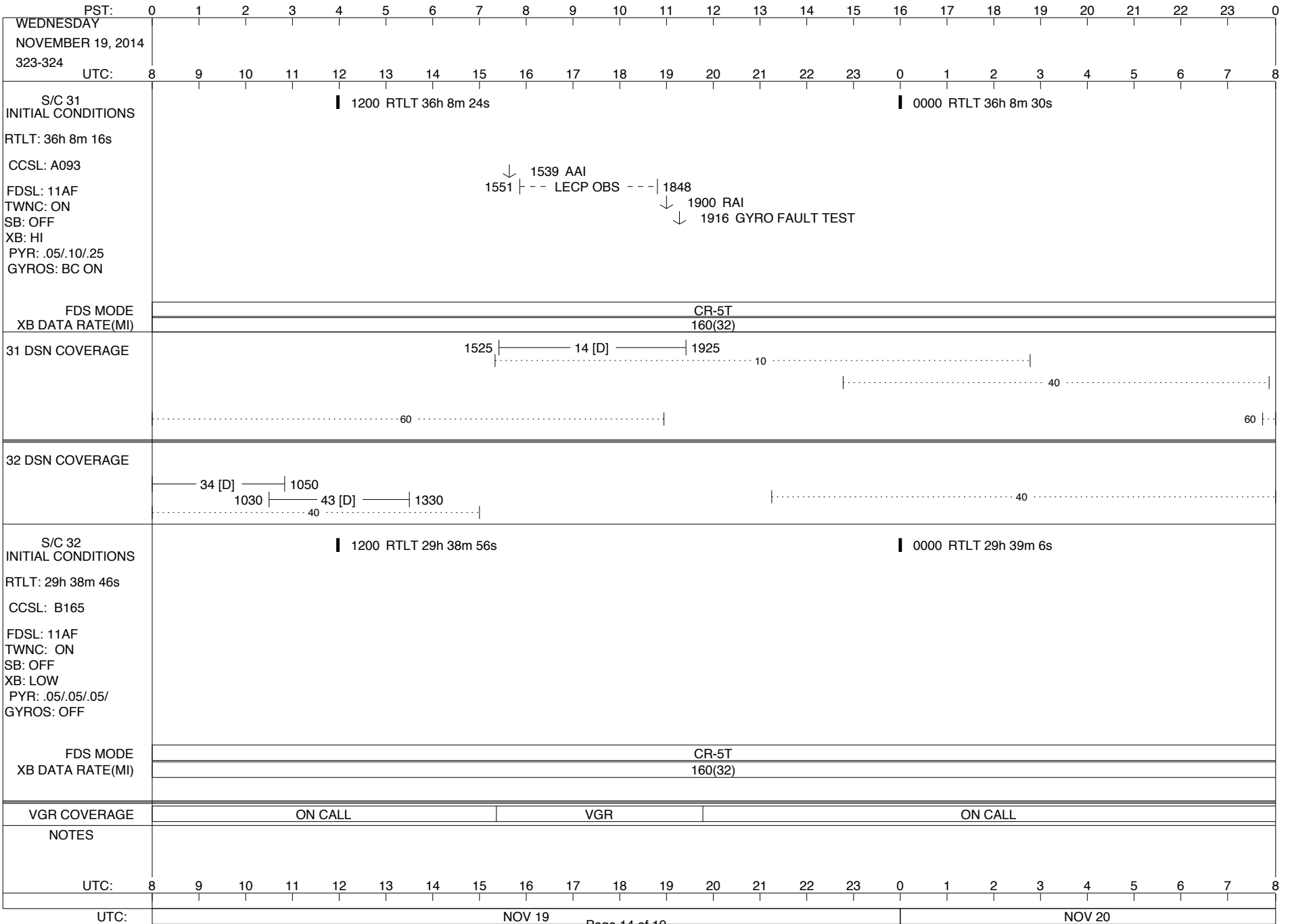


ISSUE DATE: 11/06/14 07:48



|   |  | 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<br>NOVEMBER 18, 2014<br>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<br>INITIAL CONDITIONS<br>RTLTL: 36h 8m 2s<br>CCSL: A093<br>FDSL: 11AF<br>TWNC: ON<br>SB: OFF<br>XB: HI<br>PYR: .05/.10/.25<br>GYROS: BC ON   |  | 1200 RTLTL 36h 8m 10s  |  |  |  |  |  |  |  |  |  |  |  | 0000 RTLTL 36h 8m 16s  |  |  |  |  |  |  |  |  |  |  |  |
| FDS MODE  |  | CR-5T  |  |  |  |  |  |  |  |  |  |  |  | CR-5T                  |  |  |  |  |  |  |  |  |  |  |  |
| XB DATA RATE(MI)  |  | 160(32)  |  |  |  |  |  |  |  |  |  |  |  | 160(32)                |  |  |  |  |  |  |  |  |  |  |  |
| 31 DSN COVERAGE   |  | <p>..... .....10..... .....</p> <p>..... .....40..... .....</p> <p>.....60..... .....60 .....</p>            |  |  |  |  |  |  |  |  |  |  |  |                        |  |  |  |  |  |  |  |  |  |  |  |
| 32 DSN COVERAGE   |  | <p>-----43 [D]----- 0840 - 1505-----</p> <p>-----40----- .....40..... .....</p> <p>0355 -----34 [D]-----</p> |  |  |  |  |  |  |  |  |  |  |  |                        |  |  |  |  |  |  |  |  |  |  |  |
| S/C 32<br>INITIAL CONDITIONS<br>RTLTL: 29h 38m 26s<br>CCSL: B165<br>FDSL: 11AF<br>TWNC: ON<br>SB: OFF<br>XB: LOW<br>PYR: .05/.05/.05/<br>GYROS: OFF |  | 1200 RTLTL 29h 38m 36s   |  |  |  |  |  |  |  |  |  |  |  | 0000 RTLTL 29h 38m 46s |  |  |  |  |  |  |  |  |  |  |  |
| FDS MODE  |  |  |  |  |  |  |  |  |  |  |  |  |  | CR-5T                  |  |  |  |  |  |  |  |  |  |  |  |
| XB DATA RATE(MI)  |  |  |  |  |  |  |  |  |  |  |  |  |  | 160(32)                |  |  |  |  |  |  |  |  |  |  |  |
| VGR COVERAGE  |  | ON CALL  |  |  |  |  |  |  |  |  |  |  |  |                        |  |  |  |  |  |  |  |  |  |  |  |
| NOTES   |  | [1] S/C 31=GS-4B @ 0110 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 18  |  |  |  |  |  |  |  |  |  |  |  | NOV 19                 |  |  |  |  |  |  |  |  |  |  |  |

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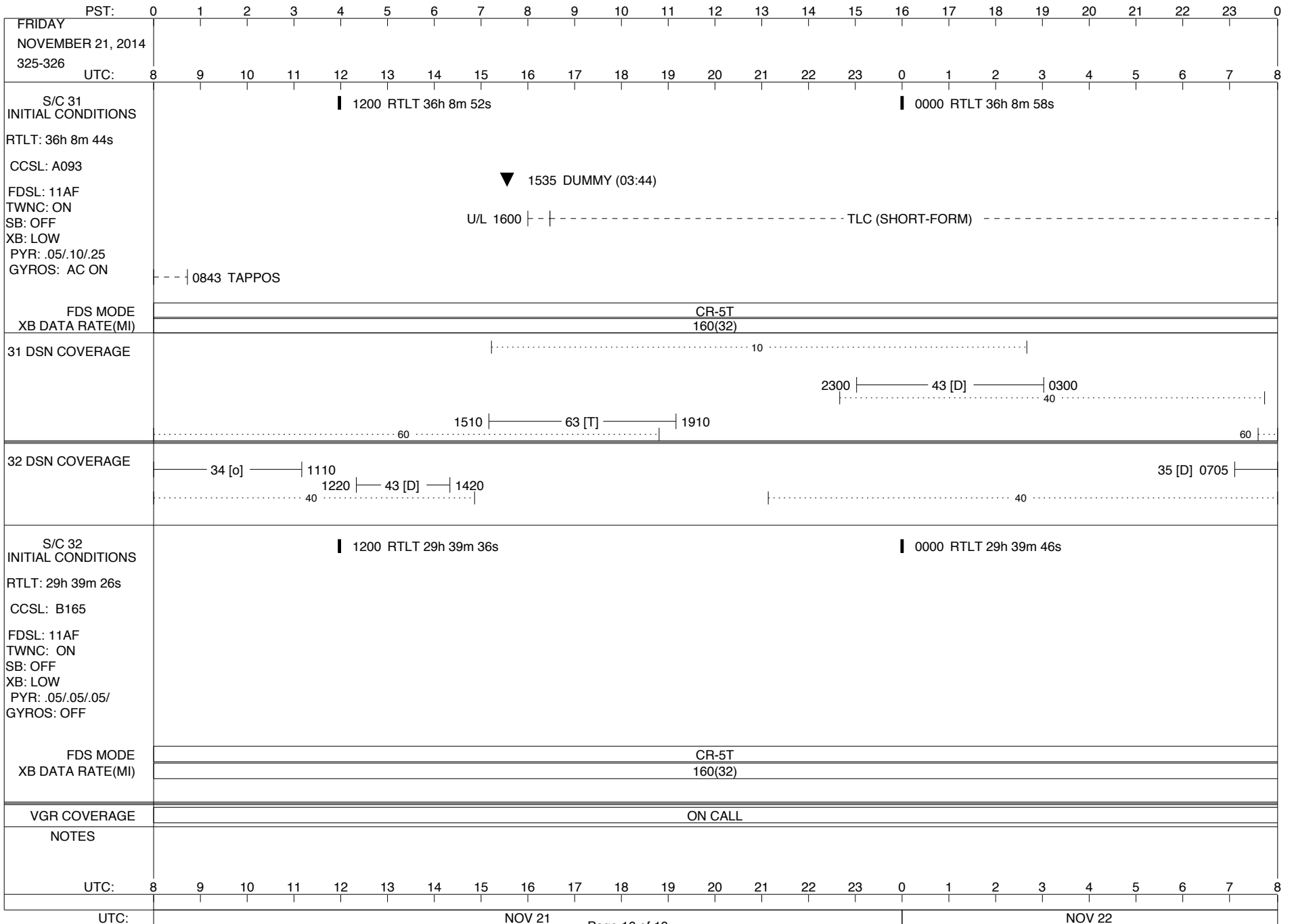


ISSUE DATE: 11/06/14 07:48

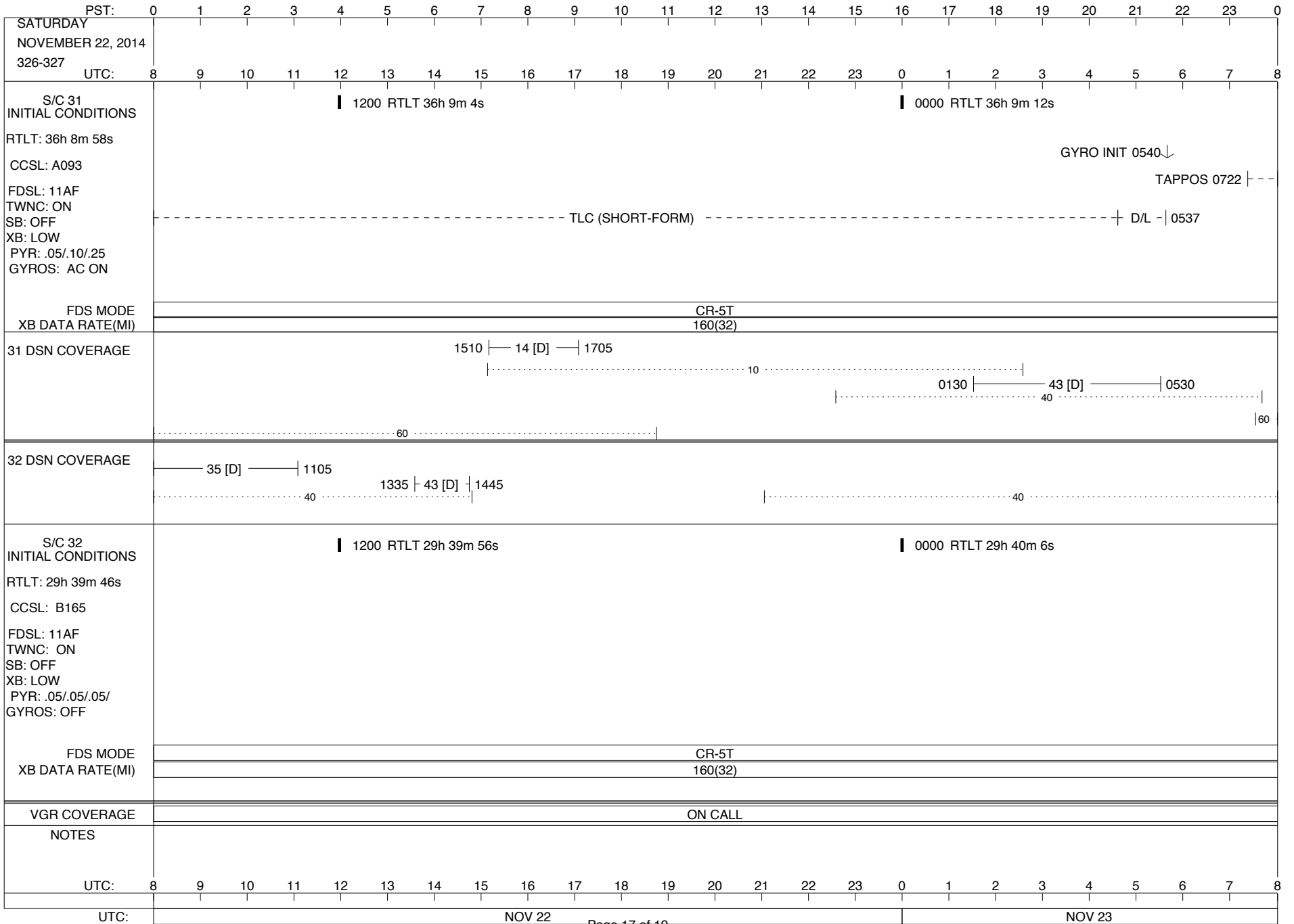
| PST:  | 0   | 1 | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12   | 13 | 14 | 15 | 16 | 17 | 18      | 19 | 20 | 21 | 22 | 23 | 0 |  |
|---|---|---|----|----|----|----|----|----|----|----|----|----|--|----|----|----|----|----|---------|----|----|----|----|----|---|--|
| THURSDAY<br>NOVEMBER 20, 2014<br>324-325  |   |   |    |    |    |    |    |    |    |    |    |    |  |    |    |    |    |    |         |    |    |    |    |    |   |  |
| 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<br>INITIAL CONDITIONS<br>RTLT: 36h 8m 30s<br>CCSL: A093<br>FDSL: 11AF<br>TWNC: ON<br>SB: OFF<br>XB: HI<br>PYR: .05/.10/.25<br>GYROS: BC ON | <p>1200 RTLT 36h 8m 38s</p>   |   |    |    |    |    |    |    |    |    |    |    | <p>0000 RTLT 36h 8m 44s</p> <p>0213 AAI<br/>0225   - - LECP OBS - -   0457<br/>0421   TAPPOS   0543<br/>RAI 0509<br/>GYRO FAULT TEST 0525<br/>X/B LOW POWER 0533<br/>BAY 1 HTR ON 0537<br/>DISA GYRO FAULT TEST 0538<br/>GYRO SWAP AC ON 0539<br/>GYRO INIT 0539<br/>GYRO FAULT TEST 0549<br/>PWS/RH 0724 - 0725<br/>TAPPOS 0735<br/>0724 GS-4B 0725</p> |    |    |    |    |    |         |    |    |    |    |    |   |  |
| FDS MODE  | CR-5T   |   |    |    |    |    |    |    |    |    |    |    |  |    |    |    |    |    |         |    |    |    |    |    |   |  |
| XB DATA RATE(MI)  | 160(32)   |   |    |    |    |    |    |    |    |    |    |    |  |    |    |    |    |    |         |    |    |    |    |    |   |  |
| 31 DSN COVERAGE   | <p>..... .....10..... .....</p> <p>.....60..... .....</p> <p>..... .....0130 .....43 [D] .....0545 .....</p> <p>..... .....40..... .....</p> <p>.....60 .....</p> |   |    |    |    |    |    |    |    |    |    |    |  |    |    |    |    |    |         |    |    |    |    |    |   |  |
| 32 DSN COVERAGE   | <p>.....1055 .....43 [D] .....1455 .....</p> <p>.....40..... .....40.....</p> <p>.....34 [o] 0715 .....</p>   |   |    |    |    |    |    |    |    |    |    |    |  |    |    |    |    |    |         |    |    |    |    |    |   |  |
| S/C 32<br>INITIAL CONDITIONS<br>RTLT: 29h 39m 6s<br>CCSL: B165<br>FDSL: 11AF<br>TWNC: ON<br>SB: OFF<br>XB: LOW<br>PYR: .05/.05/.05/<br>GYROS: OFF | <p>1200 RTLT 29h 39m 16s</p>  |   |    |    |    |    |    |    |    |    |    |    | <p>0000 RTLT 29h 39m 26s</p>   |    |    |    |    |    |         |    |    |    |    |    |   |  |
| FDS MODE  | CR-5T   |   |    |    |    |    |    |    |    |    |    |    |  |    |    |    |    |    |         |    |    |    |    |    |   |  |
| XB DATA RATE(MI)  | 160(32)   |   |    |    |    |    |    |    |    |    |    |    |  |    |    |    |    |    |         |    |    |    |    |    |   |  |
| VGR COVERAGE  | ON CALL   |   |    |    |    |    |    |    |    |    |    |    | VGR  |    |    |    |    |    | ON CALL |    |    |    |    |    |   |  |
| NOTES   | <p>[1] S/C 31=GS-4B @ 0724 XB=2.8K(41) NOT RECOVERABLE</p> <p>[2] S/C 31=GS-4B @ 07:2 XB=2.8K(41) NOT RECOVERABLE</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 20  |   |    |    |    |    |    |    |    |    |    |    | NOV 21   |    |    |    |    |    |         |    |    |    |    |    |   |  |



ISSUE DATE: 11/06/14 07:48



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ISSUE DATE: 11/06/14 07:48

| 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<br>NOVEMBER 23, 2014<br>327-328 |  |   |    |    |    |    |    |    |    |    |    |    |                         |    |        |    |    |    |    |    |    |    |    |    |   |  |  |  |
| 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<br>INITIAL CONDITIONS           | █ 1200 RTLT 36h 9m 18s                                       |   |    |    |    |    |    |    |    |    |    |    | █ 0000 RTLT 36h 9m 24s  |    |        |    |    |    |    |    |    |    |    |    |   |  |  |  |
| RTLT: 36h 9m 12s                       |  |   |    |    |    |    |    |    |    |    |    |    |                         |    |        |    |    |    |    |    |    |    |    |    |   |  |  |  |
| CCSL: A093                             |  |   |    |    |    |    |    |    |    |    |    |    |                         |    |        |    |    |    |    |    |    |    |    |    |   |  |  |  |
| FDSL: 11AF                             |  |   |    |    |    |    |    |    |    |    |    |    |                         |    |        |    |    |    |    |    |    |    |    |    |   |  |  |  |
| TWNC: ON                               |  |   |    |    |    |    |    |    |    |    |    |    |                         |    |        |    |    |    |    |    |    |    |    |    |   |  |  |  |
| SB: OFF                                |  |   |    |    |    |    |    |    |    |    |    |    |                         |    |        |    |    |    |    |    |    |    |    |    |   |  |  |  |
| XB: LOW                                |  |   |    |    |    |    |    |    |    |    |    |    |                         |    |        |    |    |    |    |    |    |    |    |    |   |  |  |  |
| PYR: .05/.10/.25                       |  |   |    |    |    |    |    |    |    |    |    |    |                         |    |        |    |    |    |    |    |    |    |    |    |   |  |  |  |
| GYROS: AC ON                           |  |   |    |    |    |    |    |    |    |    |    |    |                         |    |        |    |    |    |    |    |    |    |    |    |   |  |  |  |
|  | --   0829 TAPPOS   |   |    |    |    |    |    |    |    |    |    |    |                         |    |        |    |    |    |    |    |    |    |    |    |   |  |  |  |
|  | 1023   1025 PWS/RH   |   |    |    |    |    |    |    |    |    |    |    |                         |    |        |    |    |    |    |    |    |    |    |    |   |  |  |  |
|  | 1035   ---   1129 TAPPOS                                     |   |    |    |    |    |    |    |    |    |    |    |                         |    |        |    |    |    |    |    |    |    |    |    |   |  |  |  |
|  | ↓ 1023 GS-4B 1025  |   |    |    |    |    |    |    |    |    |    |    |                         |    |        |    |    |    |    |    |    |    |    |    |   |  |  |  |
| FDS MODE                               | CR-5T  |   |    |    |    |    |    |    |    |    |    |    | CR-5T                   |    |        |    |    |    |    |    |    |    |    |    |   |  |  |  |
| XB DATA RATE(MI)                       | 160(32)  |   |    |    |    |    |    |    |    |    |    |    | 160(32)                 |    |        |    |    |    |    |    |    |    |    |    |   |  |  |  |
| 31 DSN COVERAGE                        | ..... .....10..... .....                                     |   |    |    |    |    |    |    |    |    |    |    |                         |    |        |    |    |    |    |    |    |    |    |    |   |  |  |  |
|  | .....60..... .....0340 - 0735  .....43 [D]..... .....60..... |   |    |    |    |    |    |    |    |    |    |    |                         |    |        |    |    |    |    |    |    |    |    |    |   |  |  |  |
| 32 DSN COVERAGE                        | .....1045  .....43 [D]..... 1445..... .....40.....           |   |    |    |    |    |    |    |    |    |    |    |                         |    |        |    |    |    |    |    |    |    |    |    |   |  |  |  |
| S/C 32<br>INITIAL CONDITIONS           | █ 1200 RTLT 29h 40m 14s                                      |   |    |    |    |    |    |    |    |    |    |    | █ 0000 RTLT 29h 40m 24s |    |        |    |    |    |    |    |    |    |    |    |   |  |  |  |
| RTLT: 29h 40m 6s                       |  |   |    |    |    |    |    |    |    |    |    |    |                         |    |        |    |    |    |    |    |    |    |    |    |   |  |  |  |
| CCSL: B165                             |  |   |    |    |    |    |    |    |    |    |    |    |                         |    |        |    |    |    |    |    |    |    |    |    |   |  |  |  |
| FDSL: 11AF                             |  |   |    |    |    |    |    |    |    |    |    |    |                         |    |        |    |    |    |    |    |    |    |    |    |   |  |  |  |
| TWNC: ON                               |  |   |    |    |    |    |    |    |    |    |    |    |                         |    |        |    |    |    |    |    |    |    |    |    |   |  |  |  |
| SB: OFF                                |  |   |    |    |    |    |    |    |    |    |    |    |                         |    |        |    |    |    |    |    |    |    |    |    |   |  |  |  |
| XB: LOW                                |  |   |    |    |    |    |    |    |    |    |    |    |                         |    |        |    |    |    |    |    |    |    |    |    |   |  |  |  |
| PYR: .05/.05/.05/                      |  |   |    |    |    |    |    |    |    |    |    |    |                         |    |        |    |    |    |    |    |    |    |    |    |   |  |  |  |
| GYROS: OFF                             |  |   |    |    |    |    |    |    |    |    |    |    |                         |    |        |    |    |    |    |    |    |    |    |    |   |  |  |  |
| FDS MODE                               |  |   |    |    |    |    |    |    |    |    |    |    | CR-5T                   |    |        |    |    |    |    |    |    |    |    |    |   |  |  |  |
| XB DATA RATE(MI)                       |  |   |    |    |    |    |    |    |    |    |    |    | 160(32)                 |    |        |    |    |    |    |    |    |    |    |    |   |  |  |  |
| VGR COVERAGE                           | ON CALL  |   |    |    |    |    |    |    |    |    |    |    |                         |    |        |    |    |    |    |    |    |    |    |    |   |  |  |  |
| NOTES                                  | [1] S/C 31=GS-4B @ 1023 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 23   |   |    |    |    |    |    |    |    |    |    |    |                         |    | NOV 24 |    |    |    |    |    |    |    |    |    |   |  |  |  |

ISSUE DATE: 11/06/14 07:48

| 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<br>NOVEMBER 24, 2014<br>328-329   |   |   |    |    |    |    |    |    |    |    |    |    |         |    |    |    |    |    |    |    |    |    |    |    |   |
| 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<br>INITIAL CONDITIONS<br>RTLT: 36h 9m 24s<br>CCSL: A093<br>FDSL: 11AF<br>TWNC: ON<br>SB: OFF<br>XB: LOW<br>PYR: .05/.10/.25<br>GYROS: AC ON | <div style="text-align: center;"> <p>1200 RTLT 36h 9m 32s</p> </div>  |   |    |    |    |    |    |    |    |    |    |    |         |    |    |    |    |    |    |    |    |    |    |    |   |
| FDS MODE   |   |   |    |    |    |    |    |    |    |    |    |    | CR-5T   |    |    |    |    |    |    |    |    |    |    |    |   |
| XB DATA RATE(MI)   |   |   |    |    |    |    |    |    |    |    |    |    | 160(32) |    |    |    |    |    |    |    |    |    |    |    |   |
| 31 DSN COVERAGE  | <div style="text-align: center;"> <p>60</p> </div>                    |   |    |    |    |    |    |    |    |    |    |    |         |    |    |    |    |    |    |    |    |    |    |    |   |
| 32 DSN COVERAGE  | <div style="text-align: center;"> <p>1040 43 [D] 1440</p> </div>      |   |    |    |    |    |    |    |    |    |    |    |         |    |    |    |    |    |    |    |    |    |    |    |   |
| S/C 32<br>INITIAL CONDITIONS<br>RTLT: 29h 40m 24s<br>CCSL: B165<br>FDSL: 11AF<br>TWNC: ON<br>SB: OFF<br>XB: LOW<br>PYR: .05/.05/.05/<br>GYROS: OFF | <div style="text-align: center;"> <p>1200 RTLT 29h 40m 34s</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:   | NOV 24  |   |    |    |    |    |    |    |    |    |    |    | NOV 25  |    |    |    |    |    |    |    |    |    |    |    |   |