

VOYAGER

Space Flight Operations Schedule (SFOS)

Issue Date: December 8, 2021

For the Period: 12/09/21 to 12/27/21 (21/343 – 21/361)



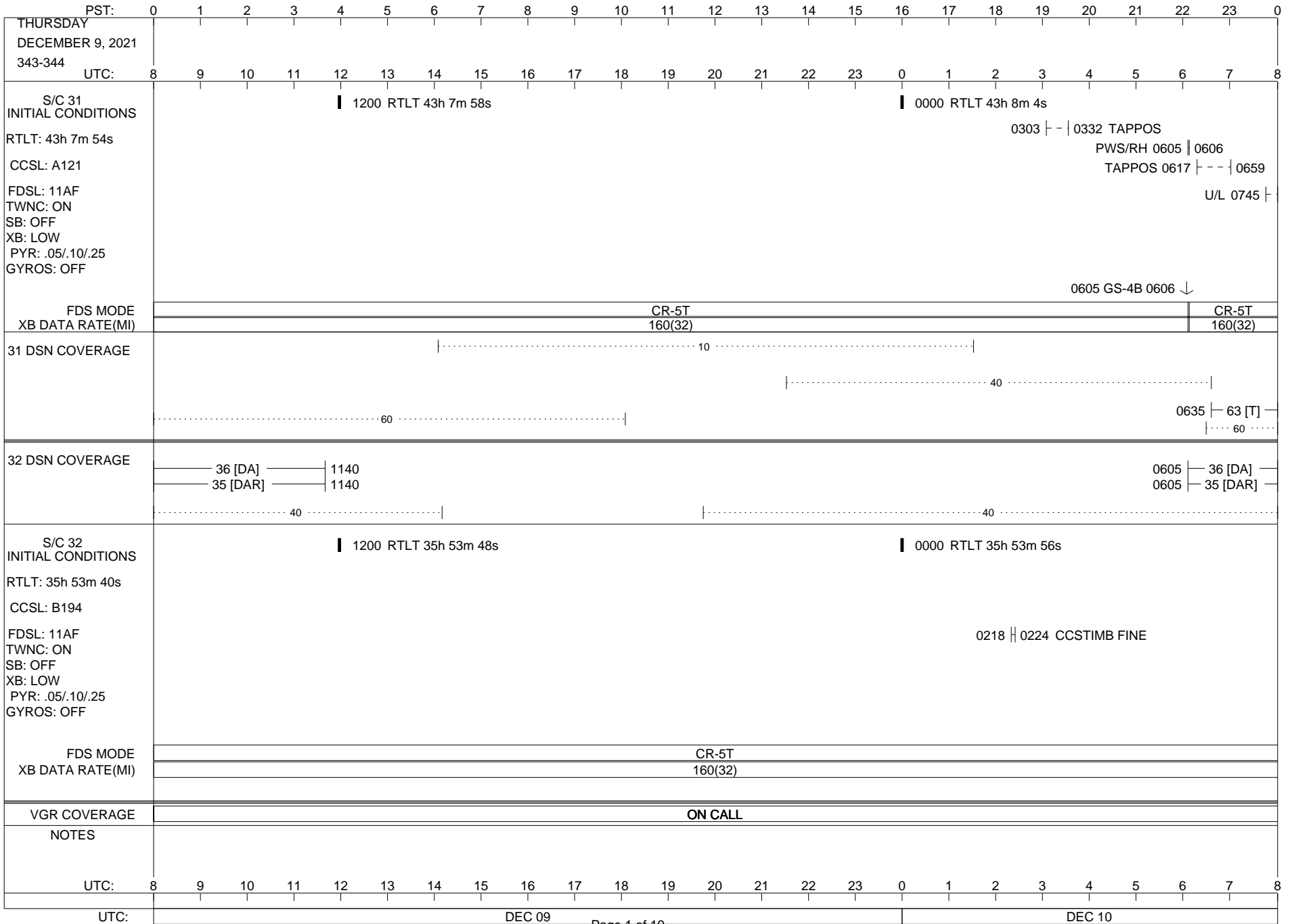
Posted at <https://voyager.jpl.nasa.gov/mission/status/>

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

02/27/19

ISSUE DATE: 12/15/21 09:54



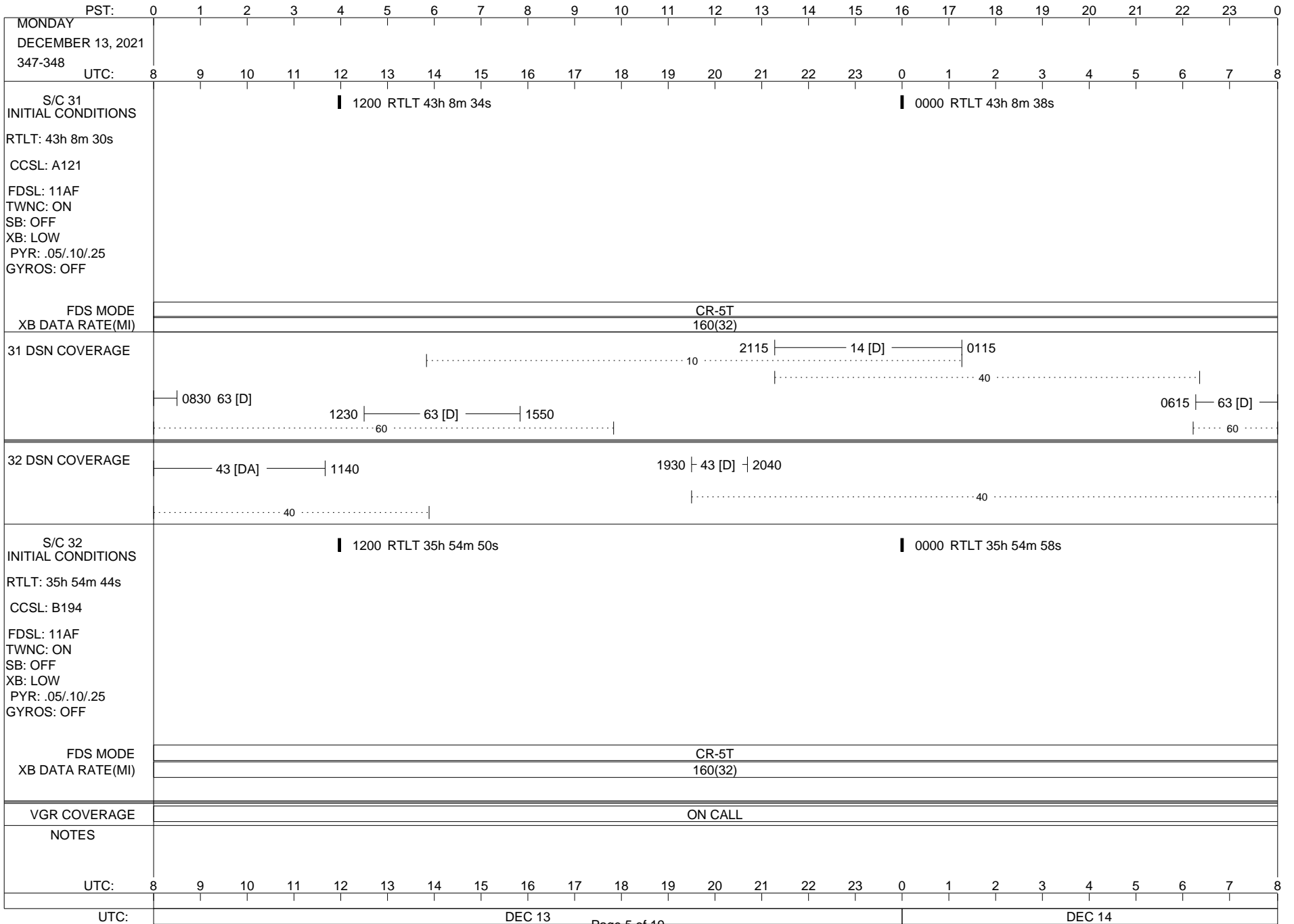
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SATURDAY DECEMBER 11, 2021 345-346																									
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S/C 31 INITIAL CONDITIONS RTLTL: 43h 8m 12s CCSL: A121 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 43h 8m 16s												0000 RTLTL 43h 8m 20s												
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
31 DSN COVERAGE	1400 |----- 14 [D] -----| 1730 |----- 10 -----|												0200 |----- 43 [D] -----| 0615 |----- 40 -----| 0620 |----- 63 [D] -----| |----- 60 -----|												
32 DSN COVERAGE	1045 |----- 43 [D] -----| 1330 |----- 40 -----|												0700 |----- 43 [D] -----| |----- 40 -----|												
S/C 32 INITIAL CONDITIONS RTLTL: 35h 54m 12s CCSL: B194 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 35h 54m 20s												0000 RTLTL 35h 54m 28s												
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
VGR COVERAGE	ON CALL																		VGR	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
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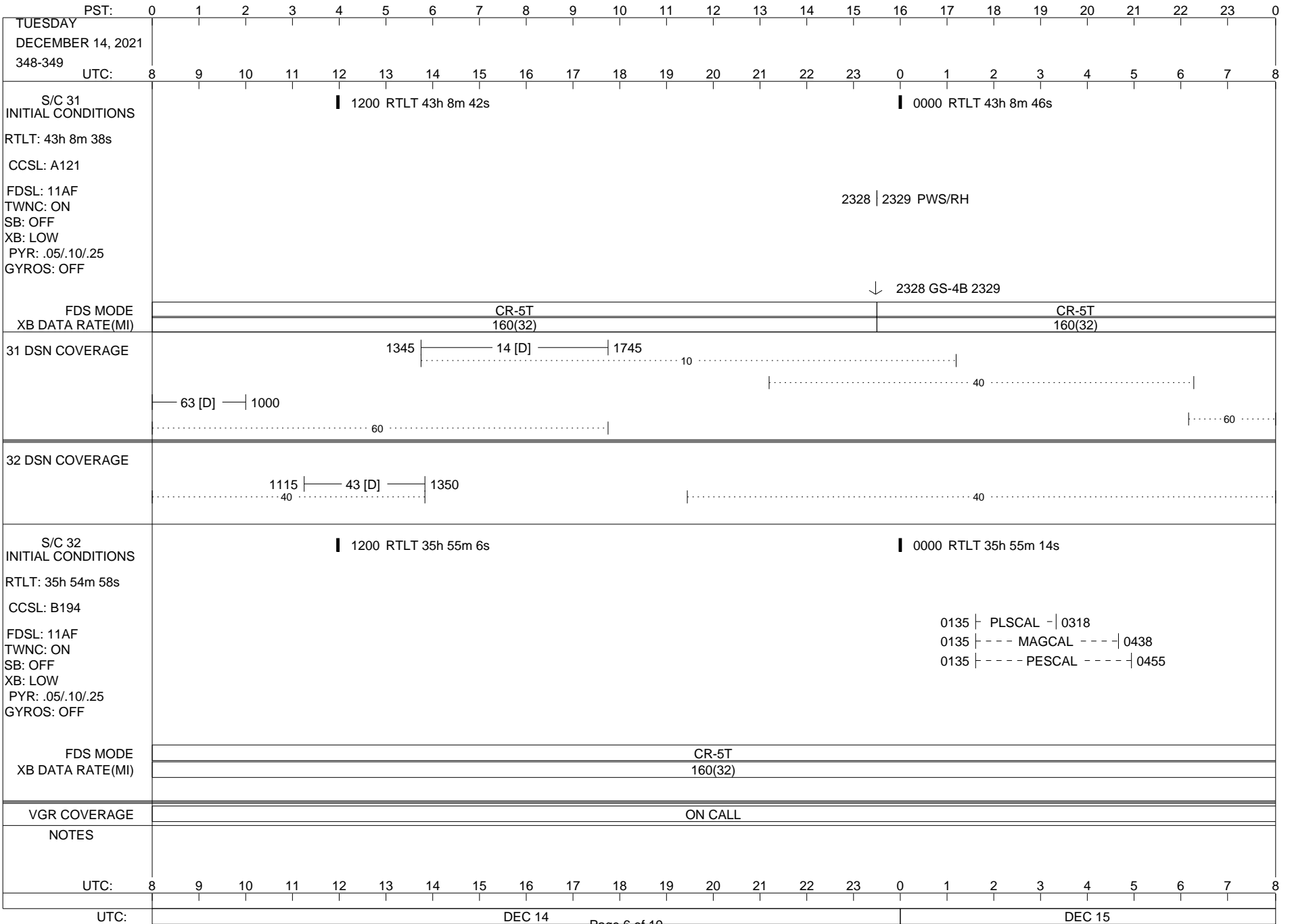
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S/C 31 INITIAL CONDITIONS RTLTL: 43h 8m 20s CCSL: A121 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 43h 8m 26s												0000 RTLTL 43h 8m 30s												
	0905 | 0906 PWS/RH 0917 | - - - - | 1013 TAPPOS ↓ 0905 GS-4B 0906																								
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
31 DSN COVERAGE	.....|.....10.....|.....|.....40.....|.....|.....0620 | 63 [D] |.....												.....|.....60.....|.....|.....60.....											
32 DSN COVERAGE	.....|.....43 [D] |.....|.....1345.....|.....|.....40.....|.....|.....40.....												0345 |.....43 [DA] |..... 0345 |.....36 [DAR] |.....|.....0645											
S/C 32 INITIAL CONDITIONS RTLTL: 35h 54m 28s CCSL: B194 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 35h 54m 36s												0000 RTLTL 35h 54m 44s												
													PUR=.05/.05/.05 0442↓ ASCAL 0446 | - - | 0518 ROLL=.25 0518 ↓ AACSIN FCP SWAP TABLE NOP 0520↓ 1 SID MRO 0521↓ EL-40 0420↓ ↓ 0523 CR-5T												
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																									
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 12												DEC 13												

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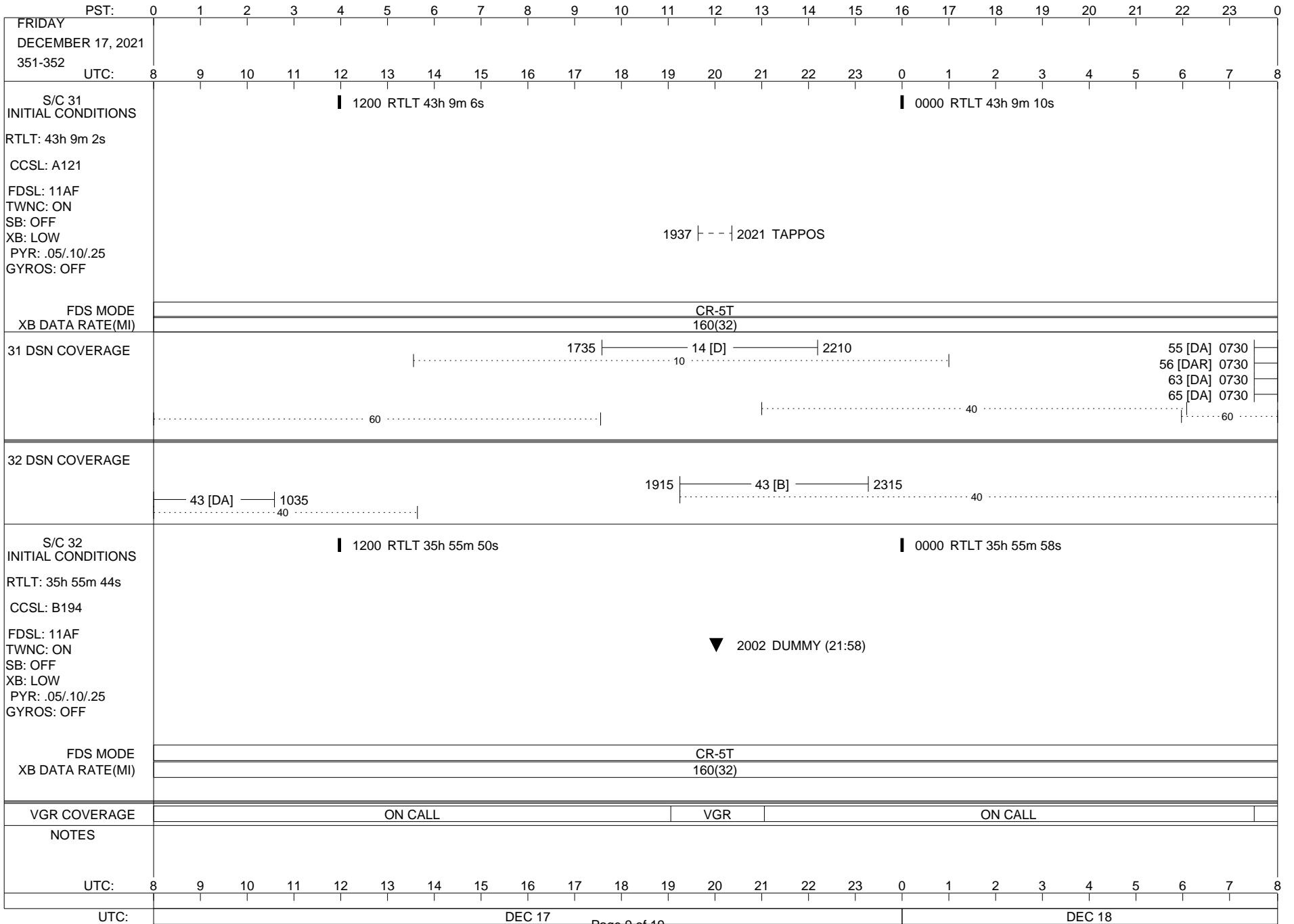
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WEDNESDAY																													
DECEMBER 15, 2021																													
349-350																													
UTC:		8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8			
S/C 31 INITIAL CONDITIONS		1200 RTLT 43h 8m 50s														0000 RTLT 43h 8m 54s													
RTLTL: 43h 8m 46s																1614 |----- FULL MRO -----| 2242													
CCSL: A121																1614 |-- AACS --| 1759													
FDSL: 11AF																1800 |--- FDS ---| 2011													
TWNC: ON																2012 | CCSA | 2127													
SB: OFF																2128 | CCSB | 2242													
XB: LOW																													
PYR: .05/.10/.25																													
GYROS: OFF																													
FDS MODE		CR-5T							EL-40							CR-5T													
XB DATA RATE(MI)		160(32)							40(30)							160(32)													
31 DSN COVERAGE		<p>1555 |----- 14 (red transmitter) -----| 2325</p> <p>..... 10</p> <p>..... 40</p> <p>..... 60</p> <p>..... 0605-0715 | 63 [D] |</p> <p>..... 60</p>																											
32 DSN COVERAGE		<p>..... 43 [D] -----| 0830-1345</p> <p>..... 40</p> <p>..... 40</p> <p>0020 |----- 43 [D] -----| 0530</p> <p>..... 40</p>																											
S/C 32 INITIAL CONDITIONS		1200 RTLT 35h 55m 22s														0000 RTLT 35h 55m 28s													
RTLTL: 35h 55m 14s																													
CCSL: B194																													
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									VGR									ON CALL									
NOTES		<p>[1] S/C 31=EL-40 @ 1559 XB=40(30)</p> <p>[2] S/C 31=CR-5T @ 2243 XB=160(32)</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 15														DEC 16													

ISSUE DATE: 12/15/21 09:54

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 16, 2021 350-351	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: 43h 8m 54s CCSL: A121 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 43h 8m 58s												0000 RTLTL 43h 9m 2s												
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
31 DSN COVERAGE	.....|.....10.....|.....												.....|.....2250|-----43 [D]|-----0250|.....40.....|.....60.....|.....												
32 DSN COVERAGE	0850|-----43 [D]|-----1330|.....40.....|.....												.....|.....0335|-----36 [DAR]|-----0655|.....40.....|.....0335|-----43 [DA]|-----												
S/C 32 INITIAL CONDITIONS RTLTL: 35h 55m 28s CCSL: B194 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 35h 55m 36s												0000 RTLTL 35h 55m 44s												
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
VGR COVERAGE	ON CALL												VGR						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 16												Page 8 of 19						DEC 17						

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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 DECEMBER 18, 2021 352-353																													
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: 43h 9m 10s CCSL: A121 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF		1200 RTLT 43h 9m 12s														0000 RTLT 43h 9m 16s													
		↓ 0811 BAY 1 HTR OFF																											
		↓ 0815 X/B HI POWER																											
		↓ 0823 YAW=.05																											
		|----- PLAYBACK -----|														0833-1511													
																1508 X/B LOW POWER													
																↓ 1512 BAY 1 HTR ON													
																↓ 1520 YAW=.10													
																1658 |---| 1738 TAPPOS													
		↓ 0833 PB-14 0833														↓ 1511 CR-5T 1511													
FDS MODE		PB-14														CR-5T													
XB DATA RATE(MI)		1.4K(39)														160(32)													
31 DSN COVERAGE		55 [DA] 1530																											
		56 [DAR] 1530																											
		63 [DA] 1530														|----- 40 -----|													
		65 [DA] 1530																											
		..... 60														0600 |--- 63 [D] ---													
		|----- 10 -----|														|----- 60 -----|													
32 DSN COVERAGE		..... 40														1910 |----- 43 [D] -----| 2310													
		|----- 40 -----|														|----- 40 -----|													
S/C 32 INITIAL CONDITIONS RTLT: 35h 55m 58s CCSL: B194 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF		1200 RTLT 35h 56m 4s														0000 RTLT 35h 56m 12s													
FDS MODE																CR-5T													
XB DATA RATE(MI)																160(32)													
VGR COVERAGE		VGR														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 18														DEC 19													

ISSUE DATE: 12/15/21 09:54

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 DECEMBER 19, 2021 353-354	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: 43h 9m 16s CCSL: A121 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 43h 9m 20s												0000 RTLT 43h 9m 24s												
0841 GS-4B 0843	0841 -0843 PWS/RH 0853 | TAPPOS | 1031												2205 DUMMY (17:14) U/L 2230 | - | TLC (SHORT-FORM) -----												
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)																								
31 DSN COVERAGE	63 [D] | 1000 60												2135 | 14 [T] | 0030 40 60												
32 DSN COVERAGE	0920 | 43 [D] | 1330 40												1905 | 43 [o] | 0300 40 43 [D] 0710 |												
S/C 32 INITIAL CONDITIONS RTLT: 35h 56m 12s CCSL: B194 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 35h 56m 18s												0000 RTLT 35h 56m 26s												
1917 | 1935 SHUNT POWER TEST 1958 PLS SUPP HTR OFF 2017 | 2035 SHUNT POWER TEST																									
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)																								
VGR COVERAGE	ON CALL												VGR						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 19												Page 11 of 19						DEC 20						

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MONDAY DECEMBER 20, 2021 354-355	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: 43h 9m 24s CCSL: A121 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 43h 9m 26s												0000 RTLTL 43h 9m 30s															
----- TLC (SHORT-FORM) -----																												
FDS MODE XB DATA RATE(MI)													CR-5T 160(32)															
31 DSN COVERAGE	|.....10.....2130 | 14 [D] | 2230.....|												|.....40.....0545 | 63 [D] |.....60.....|															
32 DSN COVERAGE	|.....40.....43 [D] | 0940.....|												|.....40.....1930 | 43 [D] | 2040.....|															
S/C 32 INITIAL CONDITIONS RTLTL: 35h 56m 26s CCSL: B194 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 35h 56m 32s												0000 RTLTL 35h 56m 40s															
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 20														DEC 21													

ISSUE DATE: 12/15/21 09:54

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 DECEMBER 21, 2021 355-356	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: 43h 9m 30s CCSL: A121 FDLS: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 43h 9m 34s												0000 RTLTL 43h 9m 36s												
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)												CR-5T 160(32)												
31 DSN COVERAGE	1320 |----- 14 [D] -----| 1810 |----- 10 -----|												2304 | 2305 PWS/RH ↓ 2304 GS-4B 2305 |----- 40 -----|												
	63 [D] |----- 1025 -----| |----- 60 -----|												0540 | 63 [D] | 0640 |----- 60 -----|												
32 DSN COVERAGE	0920 |----- 43 [D] -----| 1325 |----- 40 -----|												2320 |----- 43 [D] -----| |----- 40 -----|												
S/C 32 INITIAL CONDITIONS RTLTL: 35h 56m 40s CCSL: B194 FDLS: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 35h 56m 46s												0000 RTLTL 35h 56m 52s												
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)												EL-40 40(30)						CR-5T 160(32)						
VGR COVERAGE	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
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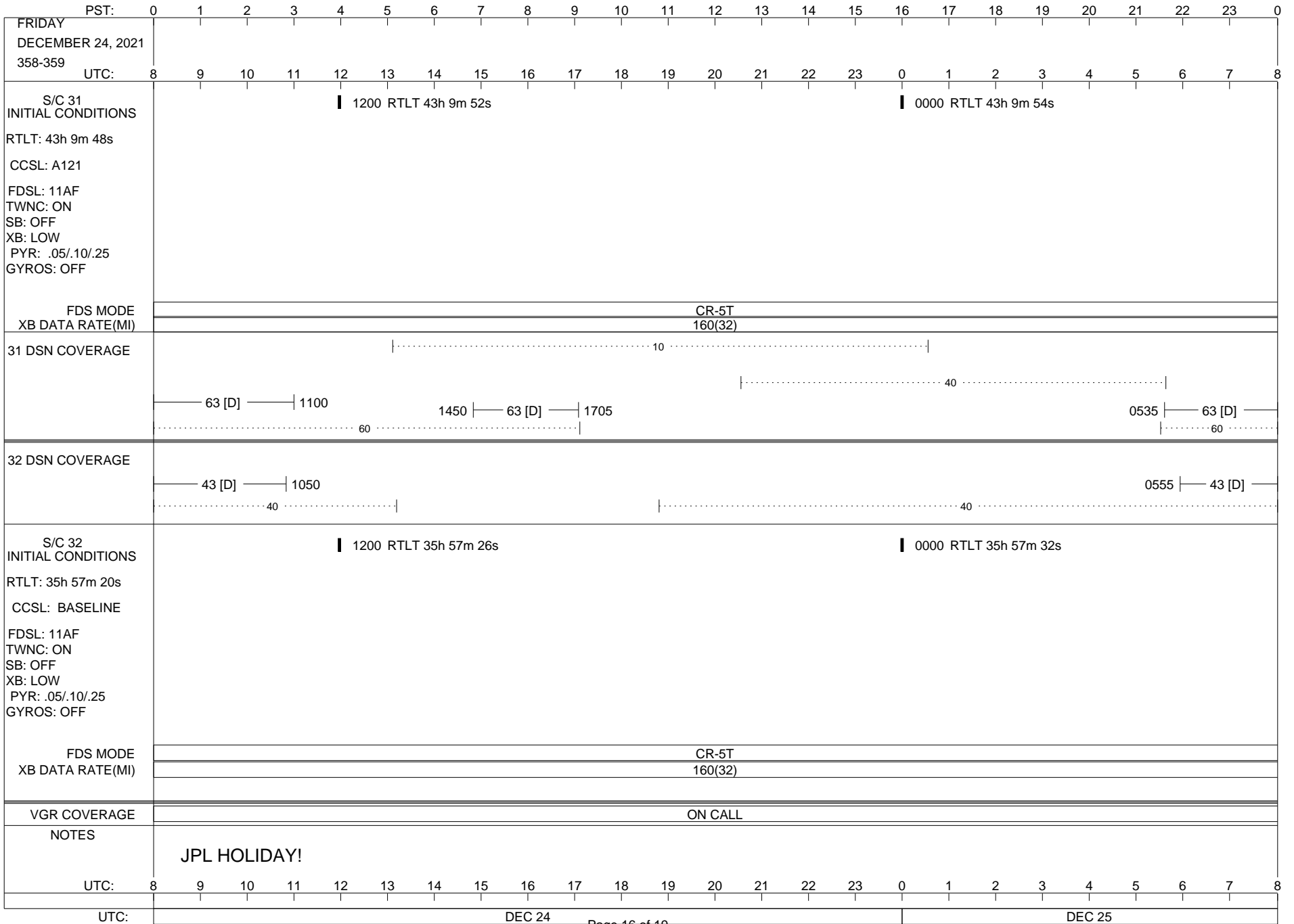
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WEDNESDAY																													
DECEMBER 22, 2021																													
356-357																													
UTC:		8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8			
S/C 31 INITIAL CONDITIONS		█ 1200 RTLT 43h 9m 40s														█ 0000 RTLT 43h 9m 42s													
RTLT: 43h 9m 36s																													
CCSL: A121																													
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		<p>1315 |----- 14 [D] -----| 2030</p> <p>..... 10 ..... |----- 40 -----|</p> <p>..... 60 ..... |----- 63 [D] -----|</p> <p>..... 60 ..... |----- 60 -----|</p>																											
32 DSN COVERAGE		<p>----- 43 [D] -----| 1320</p> <p>..... 40 ..... |----- 40 -----|</p>																											
S/C 32 INITIAL CONDITIONS		█ 1200 RTLT 35h 57m 0s														█ 0000 RTLT 35h 57m 6s													
RTLT: 35h 56m 52s																													
CCSL: B194																													
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 22														DEC 23													

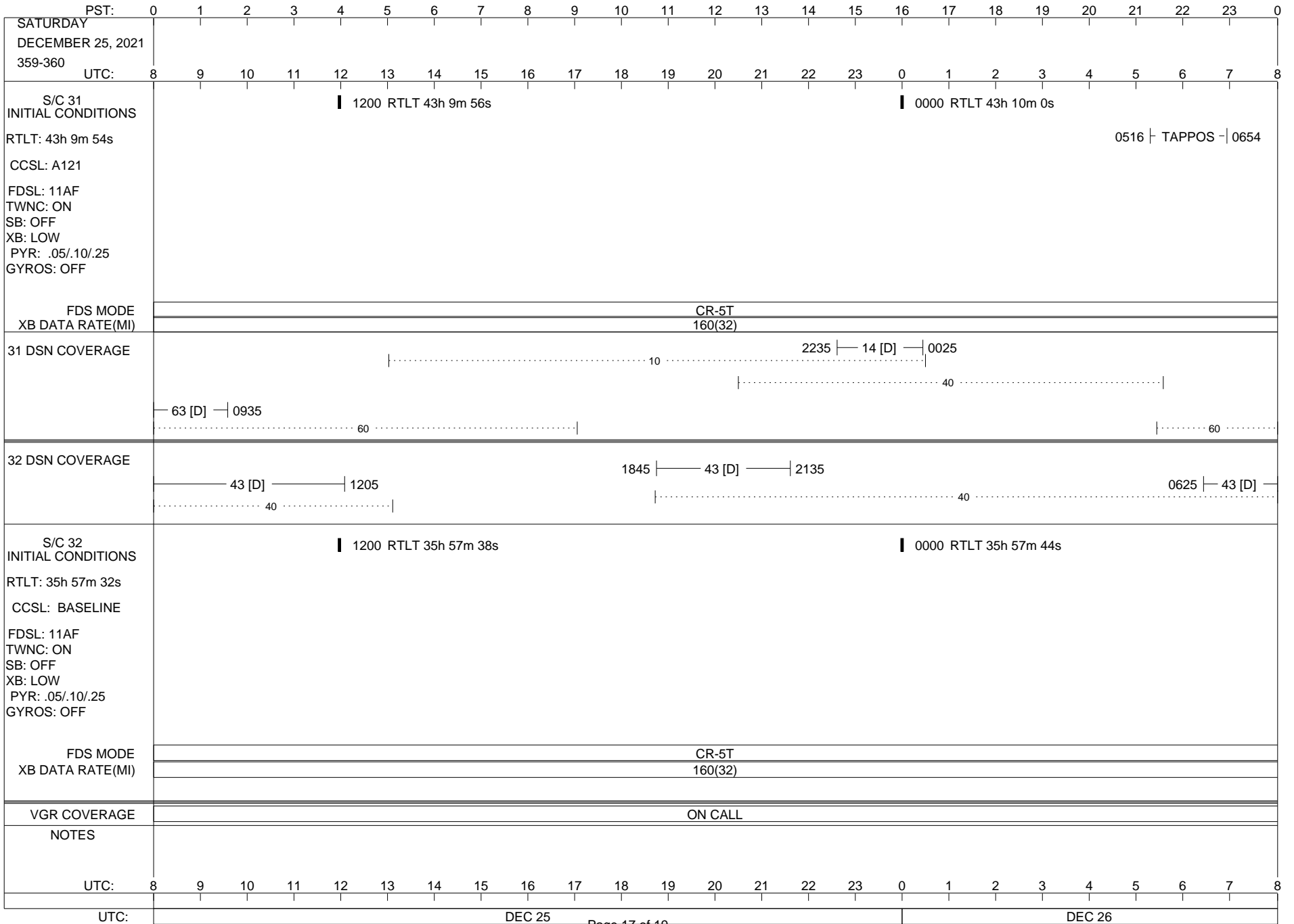
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THURSDAY DECEMBER 23, 2021 357-358	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8
S/C 31 INITIAL CONDITIONS RTLTL: 43h 9m 42s CCSL: A121 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 43h 9m 46s												0000 RTLTL 43h 9m 48s												
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
31 DSN COVERAGE	1310 |----- 14 [D] -----| 1545												0030 |----- 43 [D] -----| 0540												
	60												60												
32 DSN COVERAGE	0915 |----- 43 [D] -----| 1315				1850 |----- 43 [B] -----| 2340				0625 |----- 43 [D] -----|																
	40				40				40																
S/C 32 INITIAL CONDITIONS RTLTL: 35h 57m 6s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 35h 57m 12s												0000 RTLTL 35h 57m 20s												
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
VGR COVERAGE	ON CALL												ON CALL												
NOTES	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:	DEC 23												DEC 24												

ISSUE DATE: 12/15/21 09:54



ISSUE DATE: 12/15/21 09:54



ISSUE DATE: 12/15/21 09:54

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
DECEMBER 26, 2021
360-361
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: 43h 10m 0s
CCSL: A121
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF
1200 RTLT 43h 10m 2s
0000 RTLT 43h 10m 4s
0818-0819 PWS/RH
TAPPOS 0830-0954
1050 CCS DIAG (06:00)
U/L 1115 | - | - - - - - TLC (SHORT-FORM) - - - - -
0818 GS-4B 0819

FDS MODE
XB DATA RATE(MI) CR-5T
160(32)

31 DSN COVERAGE
0955 |-----| 63 [T] |-----| 1605
60 |-----| 40 |-----| 0525 |-----| 63 [D] |-----| 60

32 DSN COVERAGE
43 [D] |-----| 1215
40 |-----| 1840 |-----| 43 [D] |-----| 2340
40 |-----|

S/C 32
INITIAL CONDITIONS
RTLT: 35h 57m 44s
CCSL: BASELINE
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF
1200 RTLT 35h 57m 50s
0000 RTLT 35h 57m 56s

FDS MODE
XB DATA RATE(MI) CR-5T
160(32)

VGR COVERAGE ON CALL VGR 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 26 DEC 27

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 27, 2021 361-362	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: 43h 10m 4s CCSL: A121 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/25 GYROS: OFF	<div style="text-align: center;"> <p>1200 RTLTL 43h 10m 8s</p> </div>																								
FDS MODE XB DATA RATE(MI)													CR-5T 160(32)												
31 DSN COVERAGE	<div style="text-align: center;"> <p>63 [D] | 1105 60</p> </div>																								
32 DSN COVERAGE	<div style="text-align: center;"> <p>0900 | 43 [D] | 1300 40</p> </div>																								
S/C 32 INITIAL CONDITIONS RTLTL: 35h 57m 56s CCSL: BASELINE FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/25 GYROS: OFF	<div style="text-align: center;"> <p>1200 RTLTL 35h 58m 2s</p> </div>																								
FDS MODE XB DATA RATE(MI)													CR-5T 160(32)												
VGR COVERAGE	ON CALL																								
NOTES	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:	DEC 27												DEC 28												