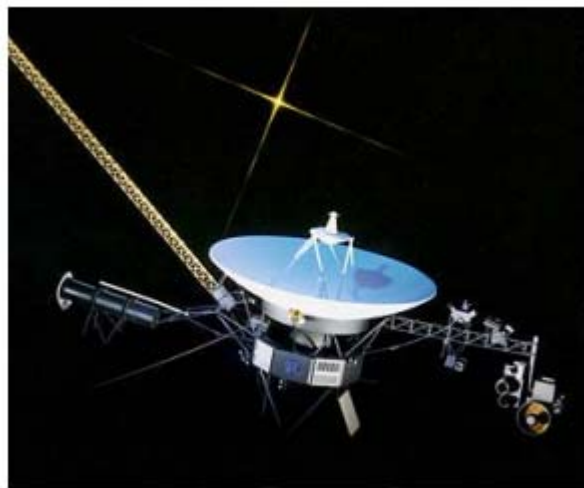


# VOYAGER

## Space Flight Operations Schedule (SFOS)

Issue Date: November 18, 2020

For the Period: 11/19/20 to 12/07/20 (20/324 – 20/342)



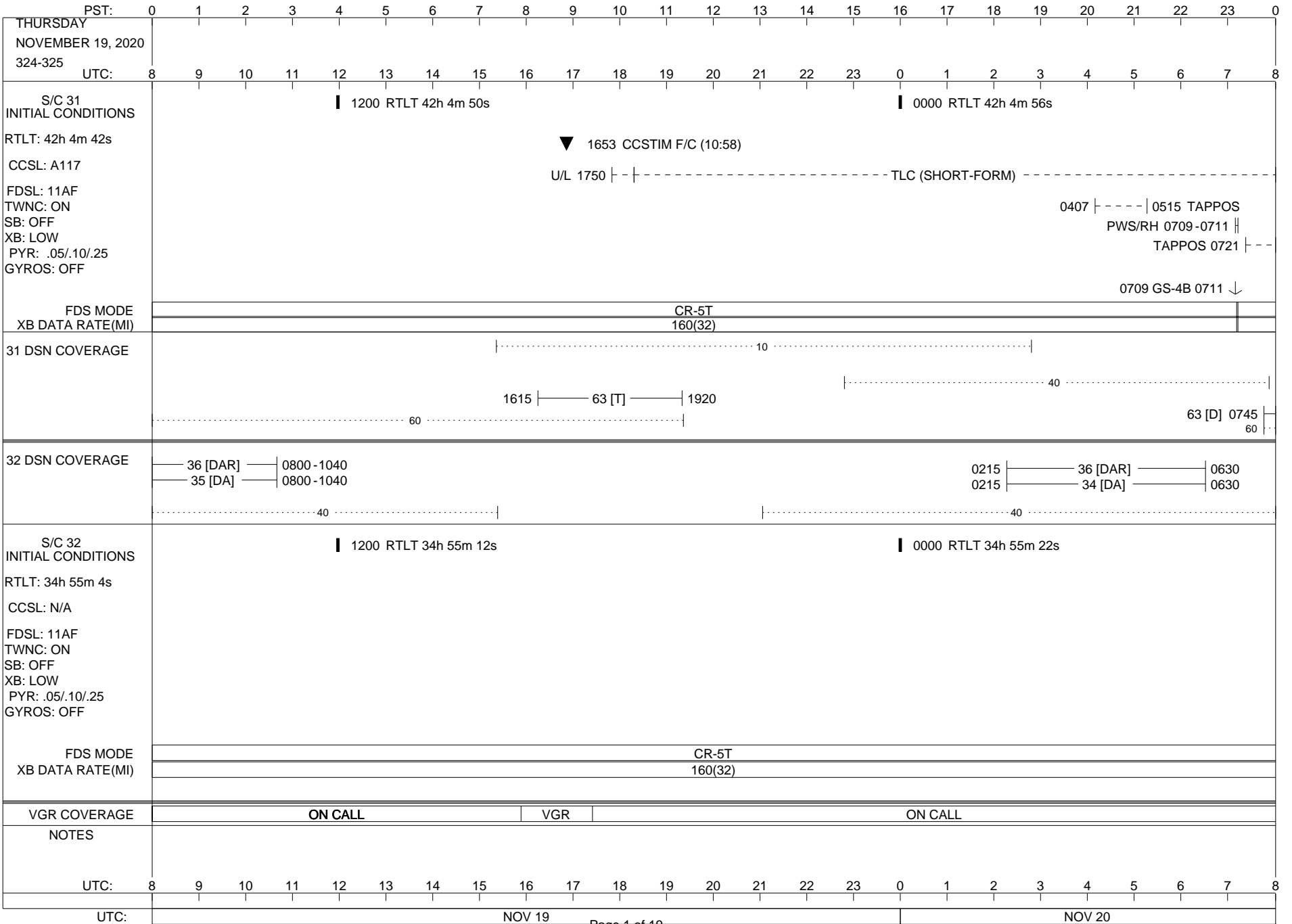
Posted at <https://voyager.jpl.nasa.gov/mission/status/>

**LEGEND:**

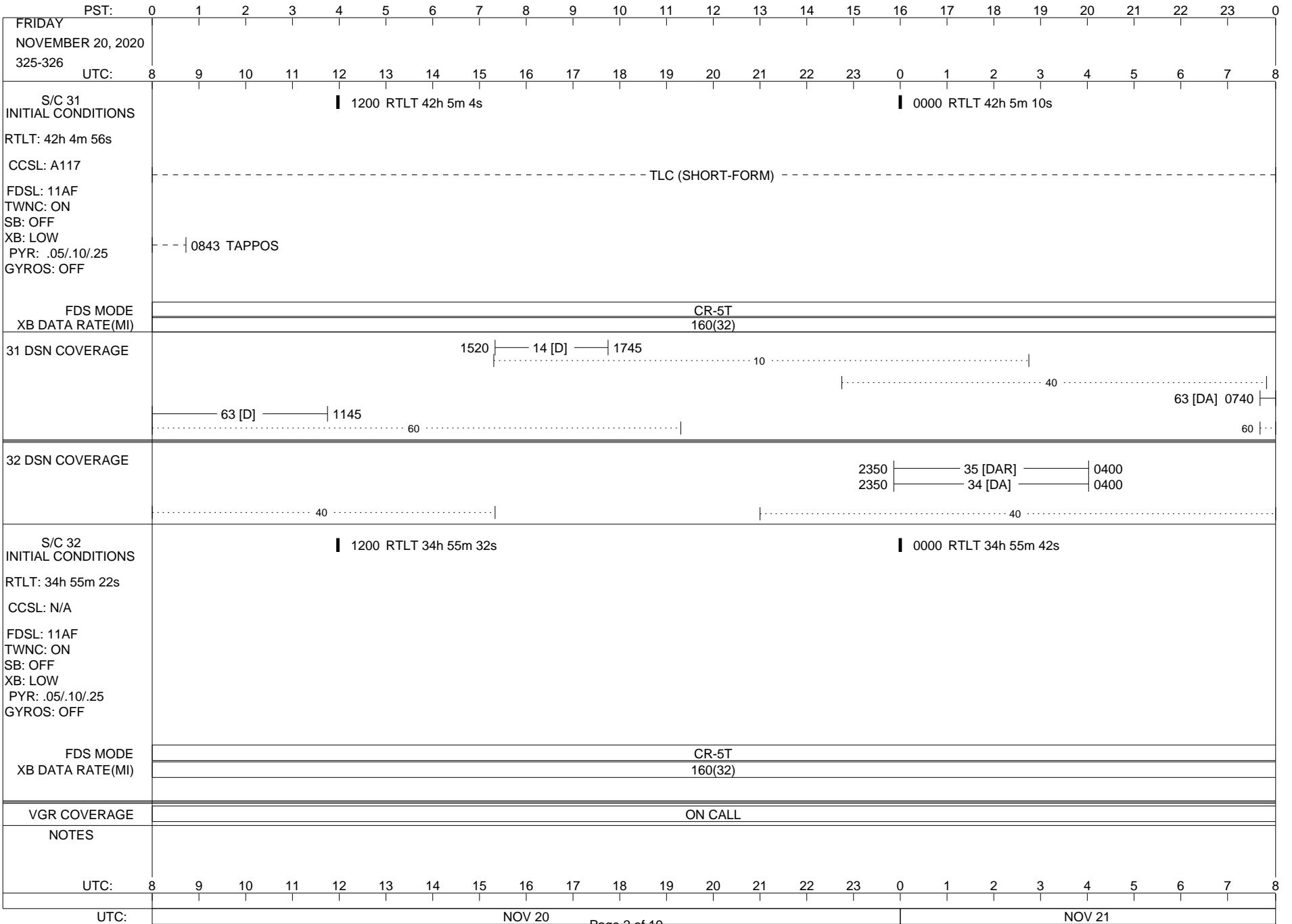
- ▽ = R/T Command (Last chance or Contingency)
- ▼ = R/T Command (Scheduled)
- \* = Result of R/T Command
- n = (where n = 1,2,3 ..) Special Note, see bottom of page
- A = Arrayed station
- B = BLF
- D = Downlink only pass
- H = High Power Transmitter
- R = Array Reference Antenna
- T = TLC Uplink
-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

02/27/19

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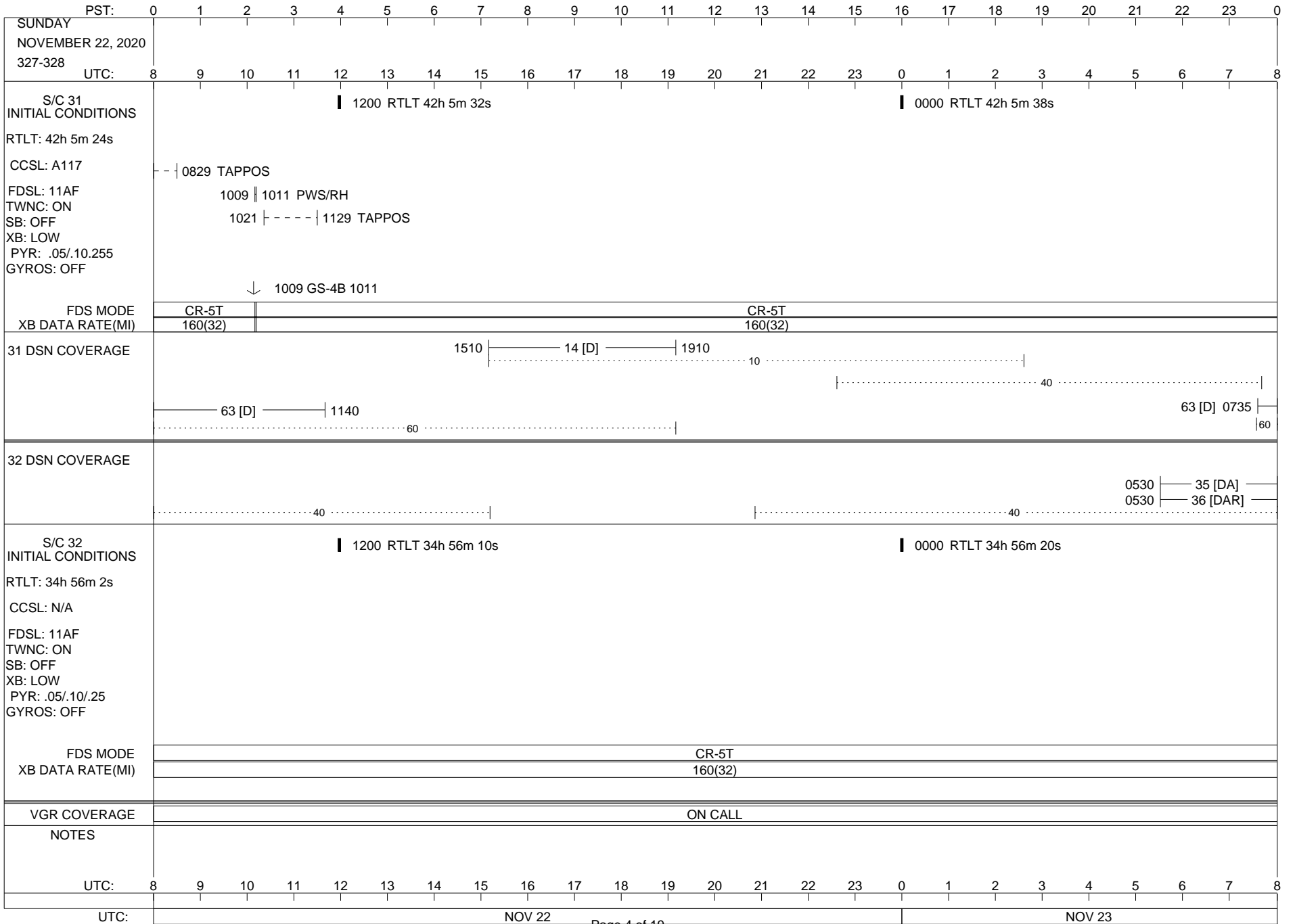
ISSUE DATE: 11/18/20 10:31



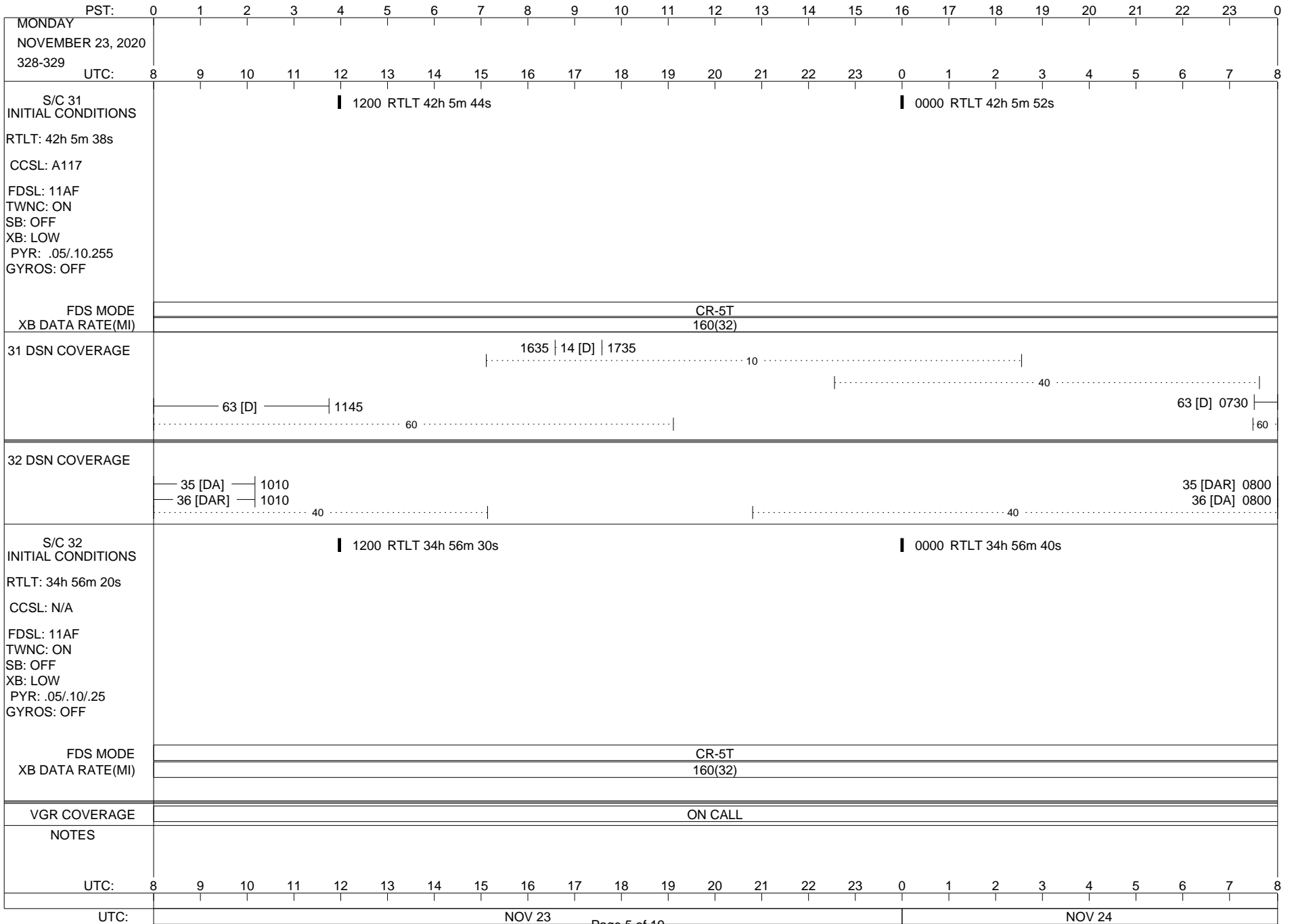
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SATURDAY NOVEMBER 21, 2020 326-327																												
S/C 31 INITIAL CONDITIONS		1200 RTLT 42h 5m 18s												0000 RTLT 42h 5m 24s														
RTLT: 42h 5m 10s		* 1058    1105 CCSTIM FINE 1128    1131 COARSE																										
CCSL: A117		--- TLC (SHORT-FORM) ---   D/L -   1323																										
FDSL: 11AF		↓ 1318 PYR = .05/.05/.05																										
TWNC: ON		1323   -   1355 ASCAL																										
SB: OFF		↓ 1355 PYR = .05/.10/.25																										
XB: LOW		↓ 1356 AAC SIN FCP SWAP TABLE NOP																										
PYR: .05/.10/.25		↓ 1357 1 SID MRO																										
GYROS: OFF		1256 EL-40 1358 ↓ ↓ 1400 CR-5T																										
FDS MODE		CR-5T						EL-40						CR-5T														
XB DATA RATE(MI)		160(32)						40(30)						160(32)														
31 DSN COVERAGE		1515  ----- 14 [D] -----  1915  ----- 10 -----   ----- 40 -----  63 [DA]  ----- 1410 1210  ----- 55 [DAR] -----  1410  ----- 60 -----  63 [D] 0740    ----- 60 -----																										
32 DSN COVERAGE		2325  ----- 35 [DAR] -----  0335 2325  ----- 34 [DA] -----  0335  ----- 40 -----   ----- 40 -----																										
S/C 32 INITIAL CONDITIONS		1200 RTLT 34h 55m 52s												0000 RTLT 34h 56m 2s														
RTLT: 34h 55m 42s																												
CCSL: N/A																												
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		[1] S/C 31=EL-40 @ 1358 XB=40(30) [2] S/C 31=CR-5T @ 1400 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		
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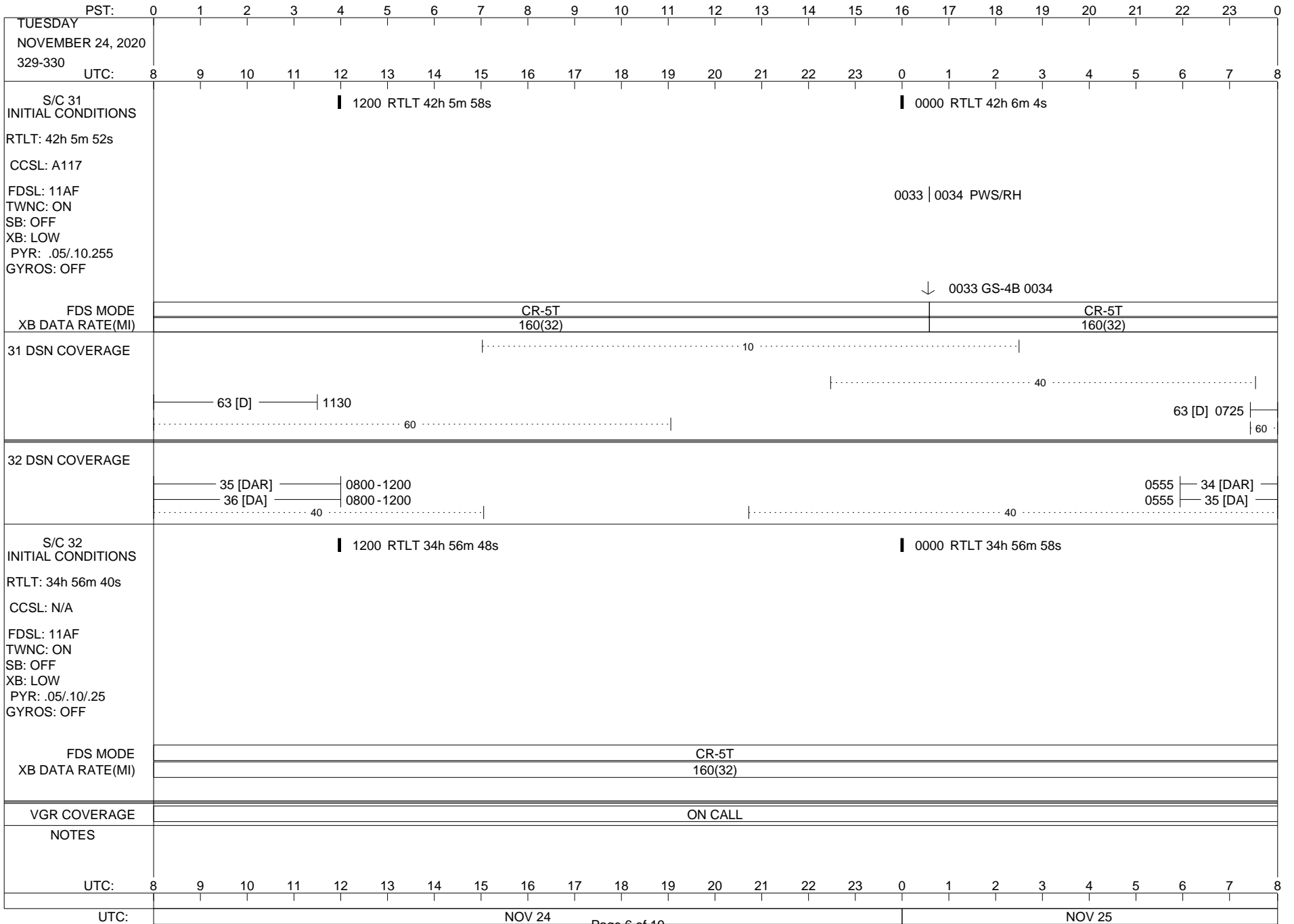
ISSUE DATE: 11/18/20 10:31



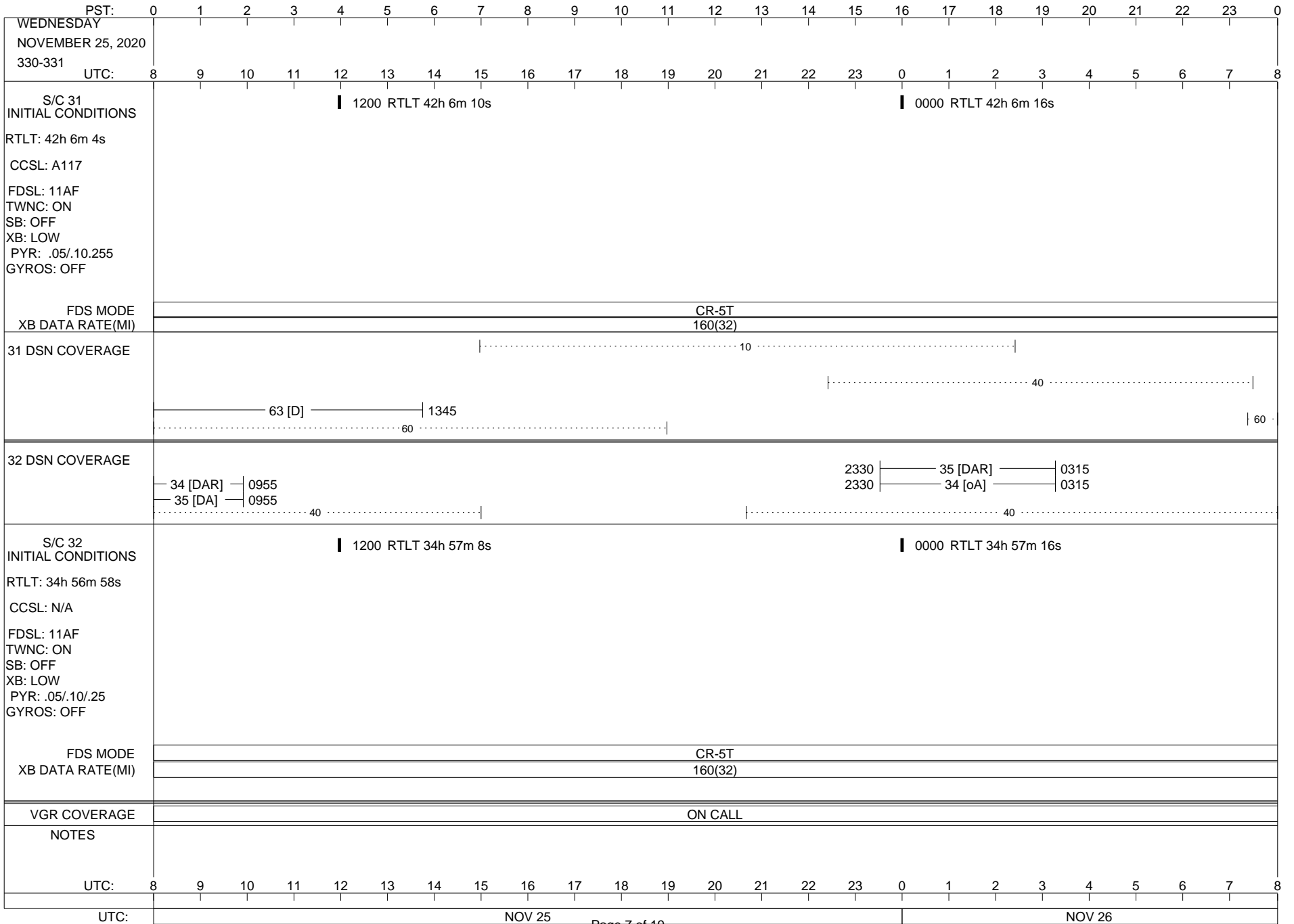
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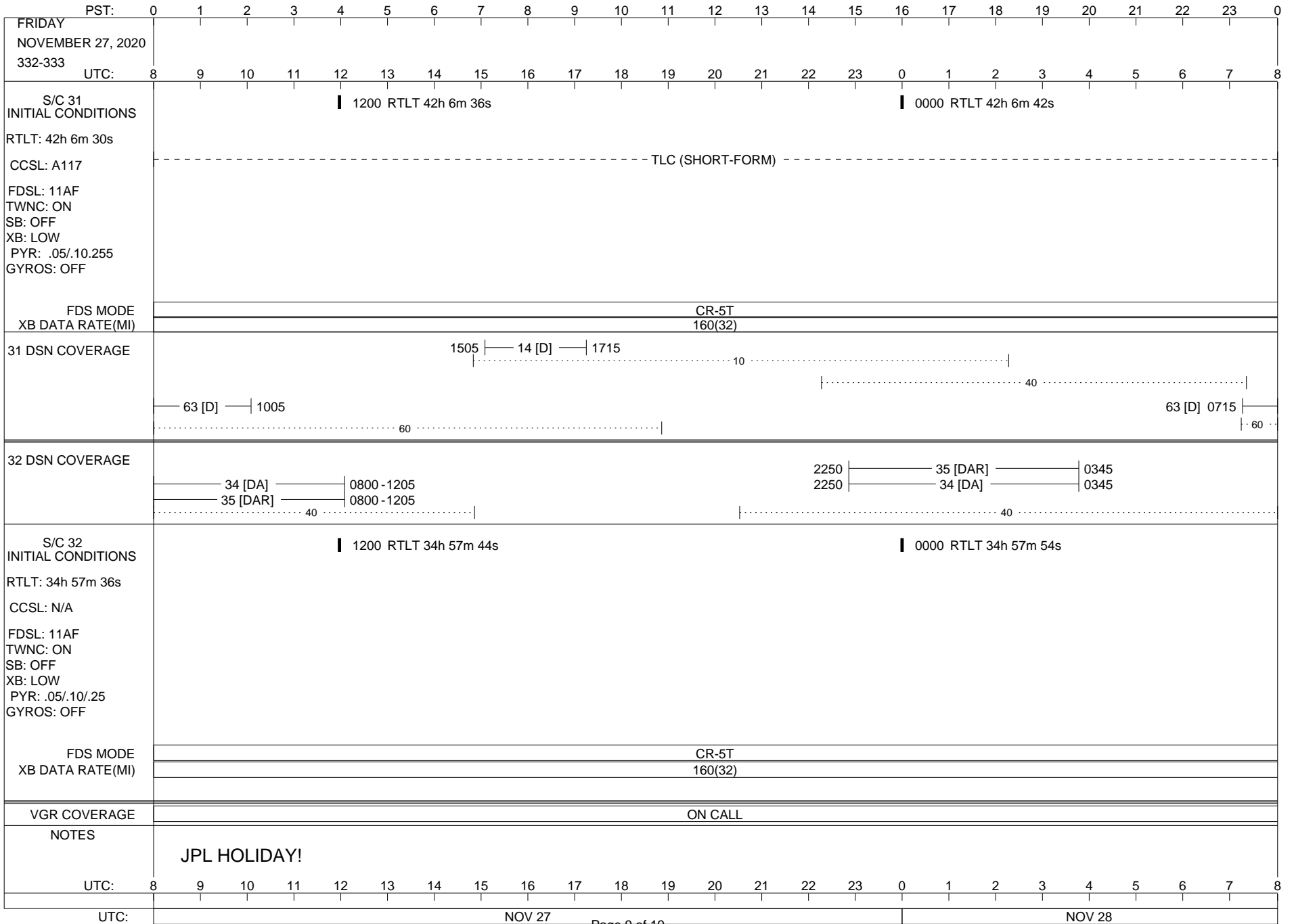




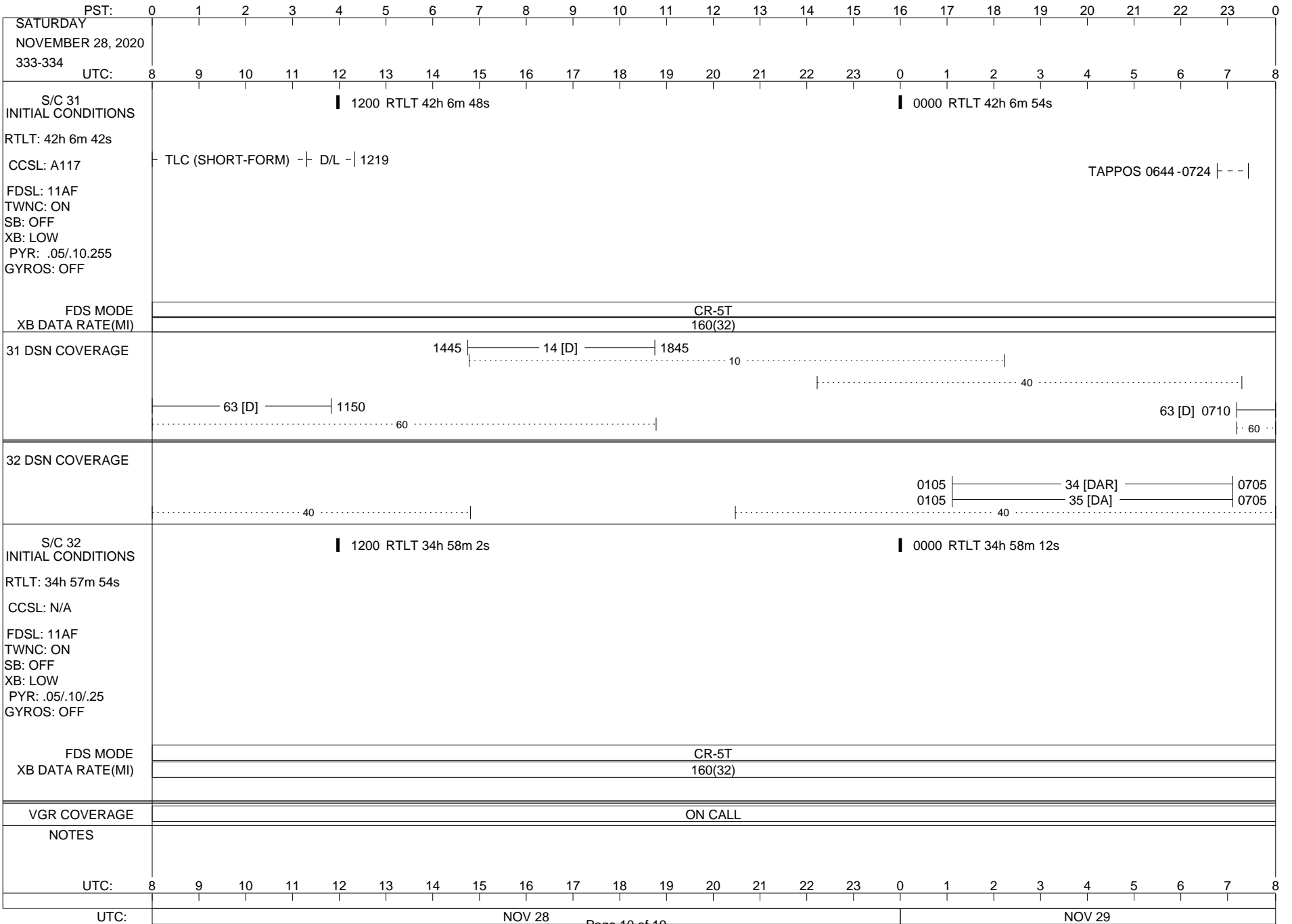
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THURSDAY NOVEMBER 26, 2020 331-332																									
UTC:	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	8
S/C 31 INITIAL CONDITIONS RTLT: 42h 6m 16s CCSL: A117 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10.255 GYROS: OFF	█ 1200 RTLT 42h 6m 24s											█ 0000 RTLT 42h 6m 30s													
	▼ 1620 CCS DIAG (10:26)											U/L 1645   -   ----- TLC (SHORT-FORM) -----													
												0344   - - -   0438 TAPPOS PWS/RH 0646   0647 TAPPOS 0658 -0738   - -   0646 GS-4B 0647 ↓													
FDS MODE												CR-5T											CR-5T		
XB DATA RATE(MI)												160(32)											160(32)		
31 DSN COVERAGE	1510  -----  14 [T]  -----  1855											-----  10 .....  -----  40 .....  -----  60 .....  -----  63 [D] 0720  -----  60													
32 DSN COVERAGE	-----  40 .....  -----											-----  40 .....  -----  40 ..... 34 [DA] 0800 35 [DAR] 0800													
S/C 32 INITIAL CONDITIONS RTLT: 34h 57m 16s CCSL: N/A FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	█ 1200 RTLT 34h 57m 26s											█ 0000 RTLT 34h 57m 36s													
FDS MODE												CR-5T													
XB DATA RATE(MI)												160(32)													
VGR COVERAGE	ON CALL							VGR							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:	NOV 26											NOV 27													

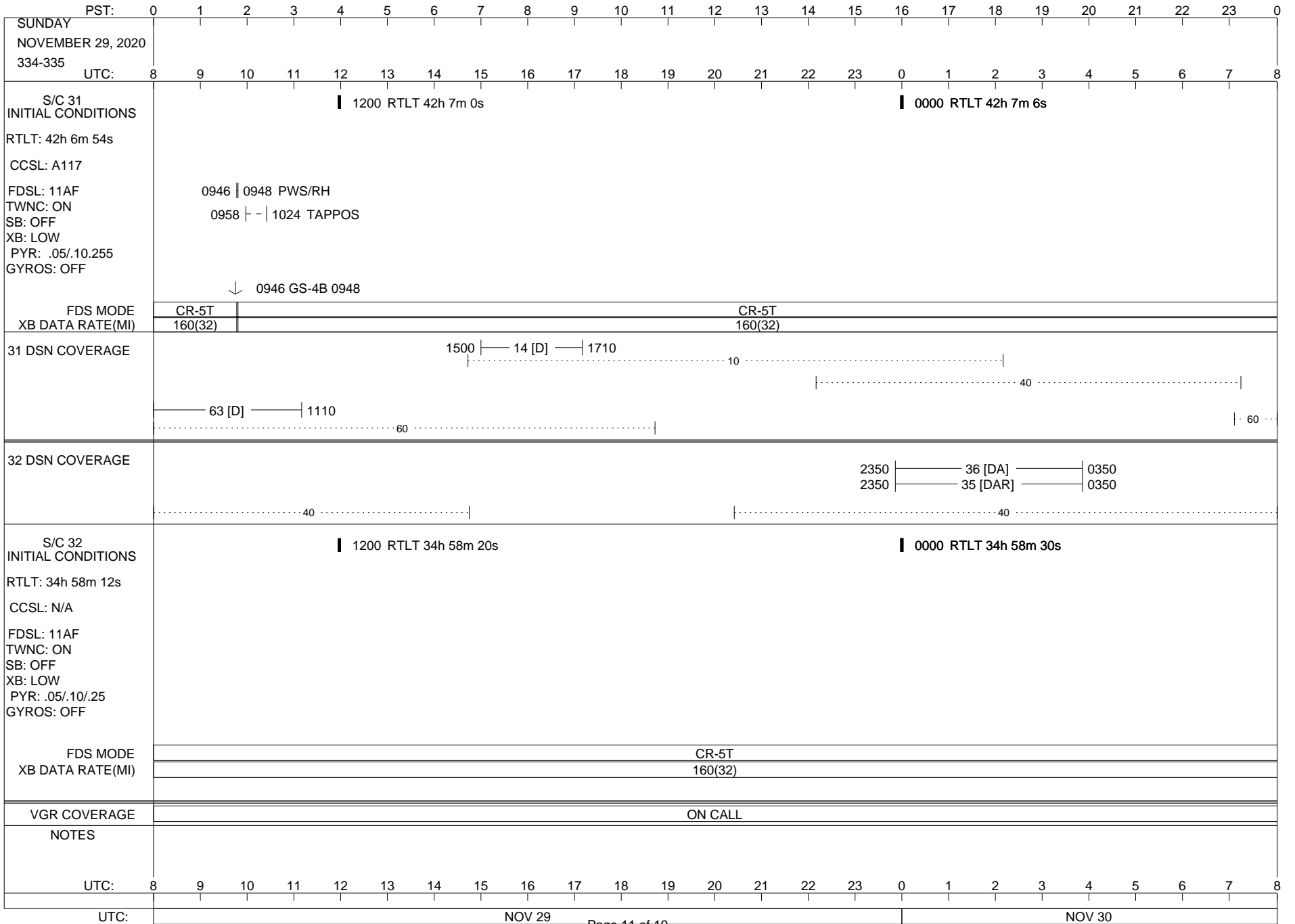
ISSUE DATE: 11/18/20 10:31



ISSUE DATE: 11/18/20 10:31



ISSUE DATE: 11/18/20 10:31



ISSUE DATE: 11/18/20 10:31

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 30, 2020 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 RTLTL: 42h 7m 6s CCSL: A117 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10.255 GYROS: OFF	█ 1200 RTLTL 42h 7m 12s												█ 0000 RTLTL 42h 7m 16s													
FDS MODE XB DATA RATE(MI)													CR-5T 160(32)													
31 DSN COVERAGE	1440  ----- 14 [D] -----  1750												----- 10 -----   ----- 40 -----  60  ----- 63 [D] 0705 -----   ----- 60 -----													
32 DSN COVERAGE	40  -----												0015  ----- 35 [DAR] -----  0435 0015  ----- 34 [DA] -----  0435  ----- 40 -----													
S/C 32 INITIAL CONDITIONS RTLTL: 34h 58m 30s CCSL: N/A FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	█ 1200 RTLTL 34h 58m 38s												█ 0000 RTLTL 34h 58m 48s													
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:	NOV 30													DEC 01												

ISSUE DATE: 11/18/20 10:31

TUESDAY DECEMBER 1, 2020 336-337		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: 42h 7m 16s CCSL: A117 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10.255 GYROS: OFF	1200 RTLT 42h 7m 22s	0000 RTLT 42h 7m 28s
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)	CR-5T 160(32)
31 DSN COVERAGE	1435   14 [D]   1700 63 [D]   1225	0009   0010 PWS/RH ↓ 0009 GS-4B 0010
32 DSN COVERAGE		0515   35 [DA] 0515   36 [DAR]
S/C 32 INITIAL CONDITIONS RTLT: 34h 58m 48s CCSL: N/A FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 34h 58m 56s	0000 RTLT 34h 59m 6s
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 01		DEC 02

ISSUE DATE: 11/18/20 10:31

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 2, 2020  
 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  
 RTLT: 42h 7m 28s  
 CCSL: A117  
 FDSL: 11AF  
 TWNC: ON  
 SB: OFF  
 XB: LOW  
 PYR: .05/.10.255  
 GYROS: OFF

1200 RTLT 42h 7m 34s 0000 RTLT 42h 7m 40s

1520 CCS DIAG (09:27)

U/L 1545 |---| TLC (SHORT-FORM) |---|

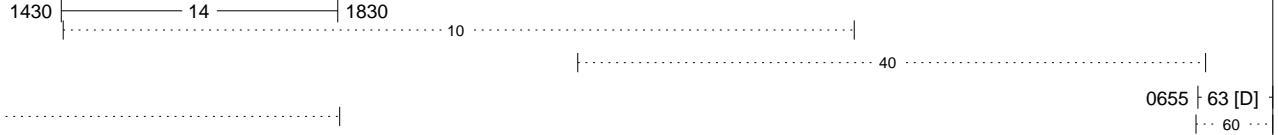
↓ 1638 GYROS AC ON  
 ↓ 1638 BAY 1 HTR OFF  
 1638 |---| 1738 CONDITIONING  
 ↓ 1738 GYROS OFF  
 ↓ 1747 BAY 1 HTR ON

↓ 1642 EL-40 1643

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: 34h 59m 6s  
 CCSL: N/A  
 FDSL: 11AF  
 TWNC: ON  
 SB: OFF  
 XB: LOW  
 PYR: .05/.10/.25  
 GYROS: OFF

1200 RTLT 34h 59m 14s 0000 RTLT 34h 59m 22s

FDS MODE  
 XB DATA RATE(MI)

CR-5T 160(32)

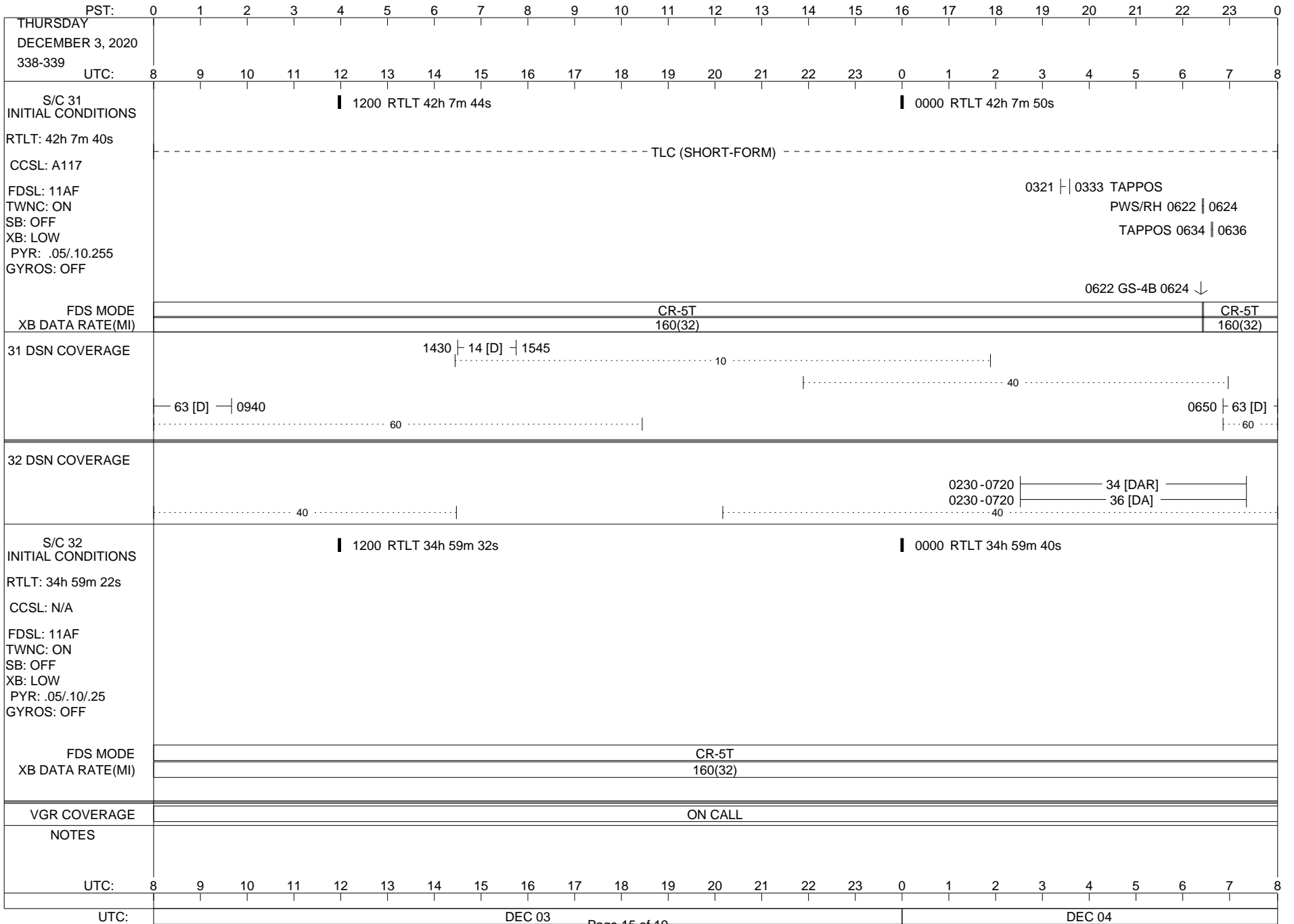
VGR COVERAGE

ON CALL VGR ON CALL

NOTES

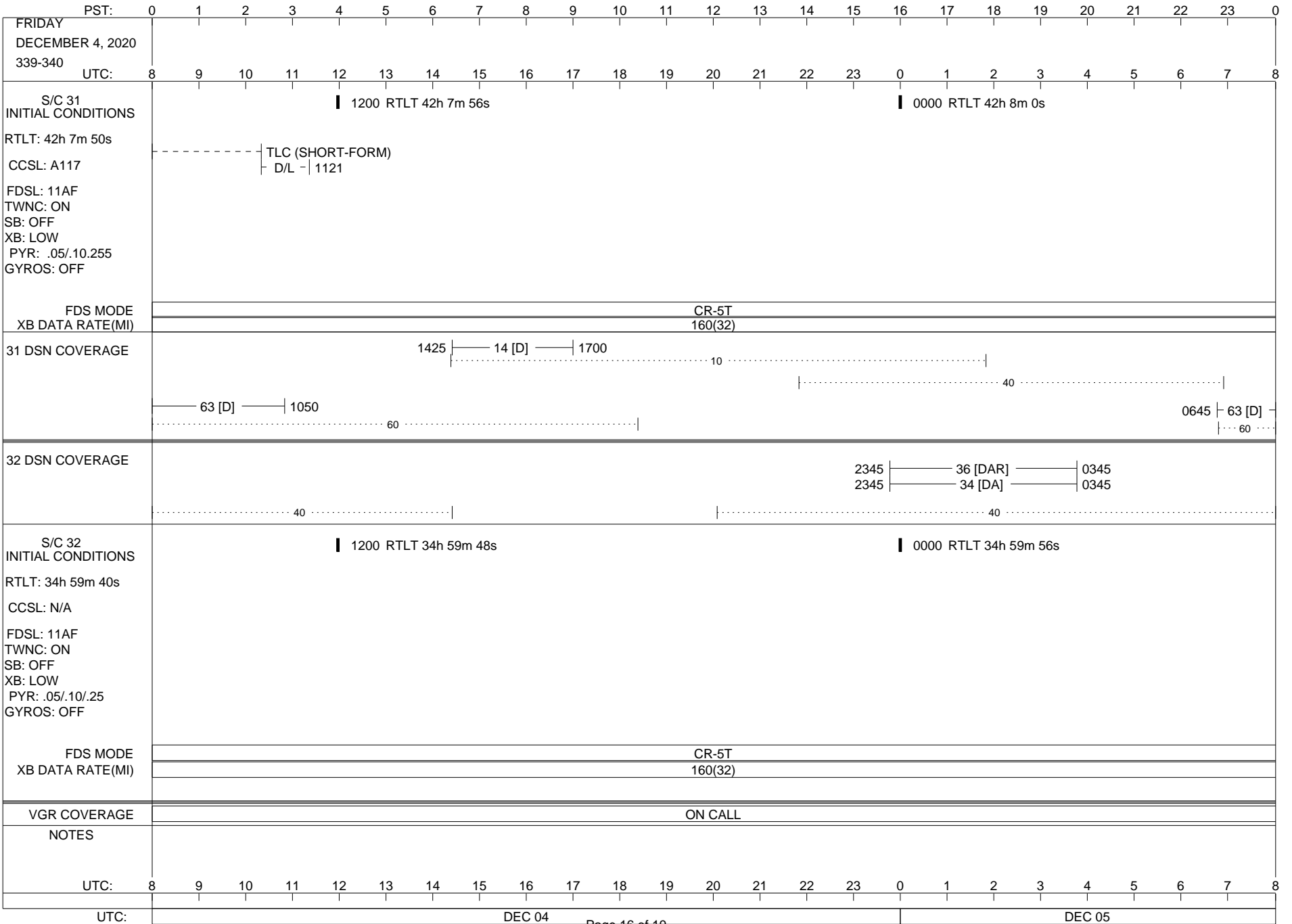
UTC: 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7 8

ISSUE DATE: 11/18/20 10:31





ISSUE DATE: 11/18/20 10:31



ISSUE DATE: 11/18/20 10:31

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 5, 2020  
340-341  
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: 42h 8m 0s  
CCSL: A117  
FDSL: 11AF  
TWNC: ON  
SB: OFF  
XB: LOW  
PYR: .05/.10.255  
GYROS: OFF

1200 RTLTL 42h 8m 6s

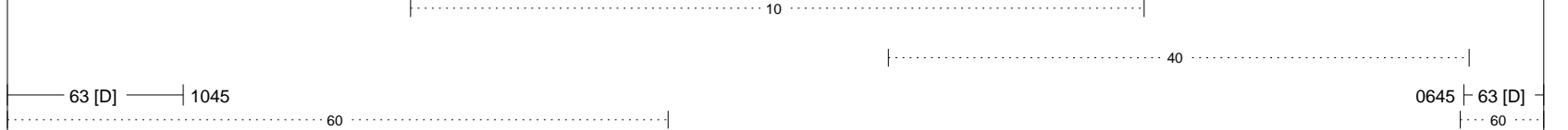
0000 RTLTL 42h 8m 10s

TAPPOS 0621 || 0622

FDS MODE  
XB DATA RATE(MI)

CR-5T  
160(32)

31 DSN COVERAGE



32 DSN COVERAGE



S/C 32  
INITIAL CONDITIONS  
RTLTL: 34h 59m 56s  
CCSL: N/A  
FDSL: 11AF  
TWNC: ON  
SB: OFF  
XB: LOW  
PYR: .05/.10/.25  
GYROS: OFF

1200 RTLTL 35h 0m 6s

0000 RTLTL 35h 0m 14s

FDS MODE  
XB DATA RATE(MI)

CR-5T  
160(32)

VGR COVERAGE

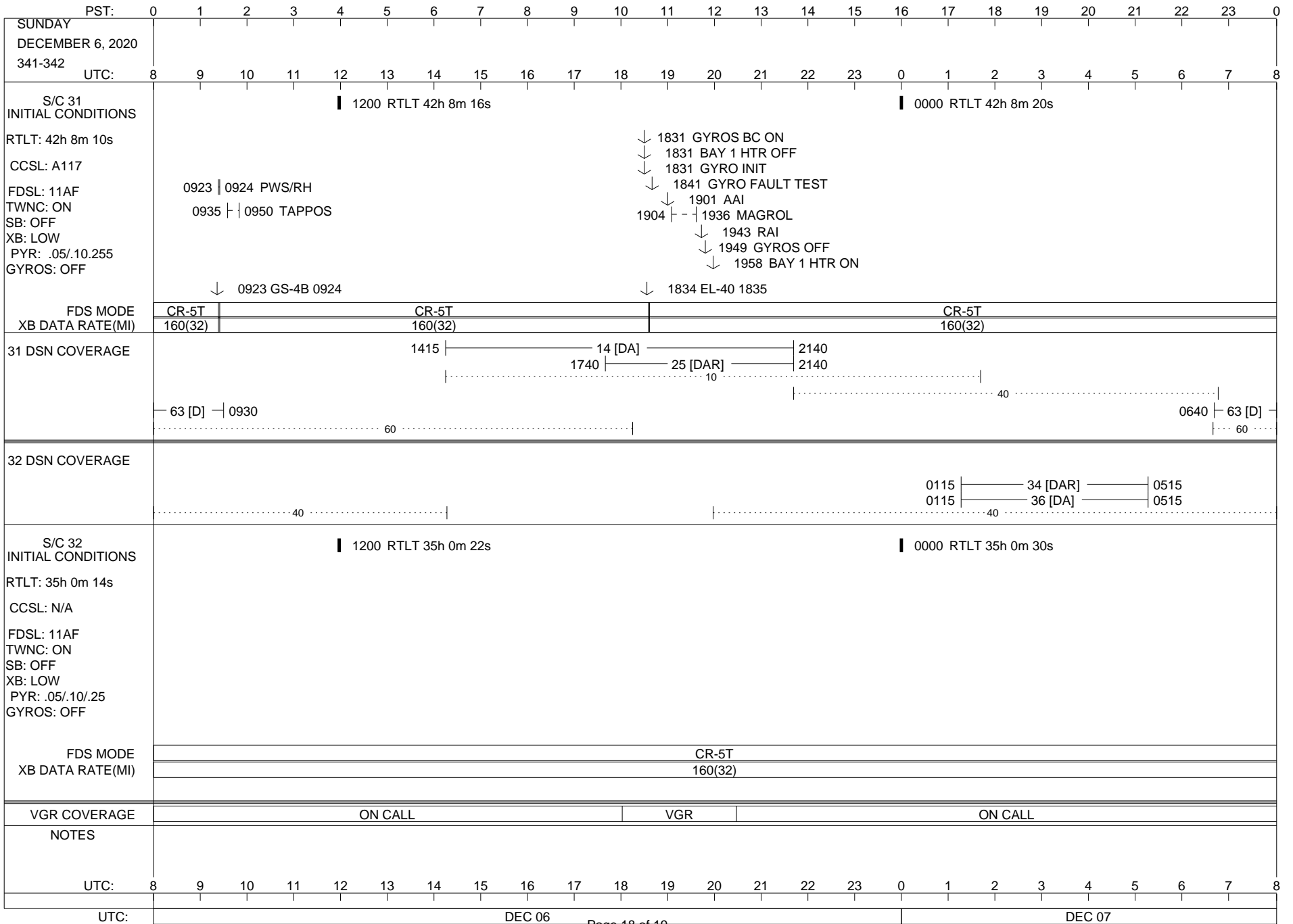
ON CALL

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 05 Page 17 of 19 DEC 06

ISSUE DATE: 11/18/20 10:31



ISSUE DATE: 11/18/20 10:31

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
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FDS MODE XB DATA RATE(MI)													CR-5T 160(32)												
31 DSN COVERAGE	1410   14 [D]   1545																								
	63 [D]   1020																								
	..... 60 .....																								
32 DSN COVERAGE	..... 40 .....																								
S/C 32 INITIAL CONDITIONS RTLT: 35h 0m 30s CCSL: N/A FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	█ 1200 RTLT 35h 0m 38s																								
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 07												DEC 08												