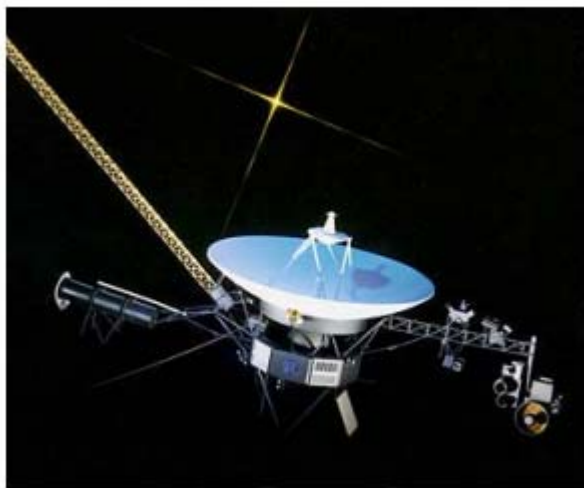


VOYAGER

Space Flight Operations Schedule (SFOS)

Issue Date: November 3, 2021

For the Period: 11/04/21 to 11/22/21 (21/308 – 21/326)



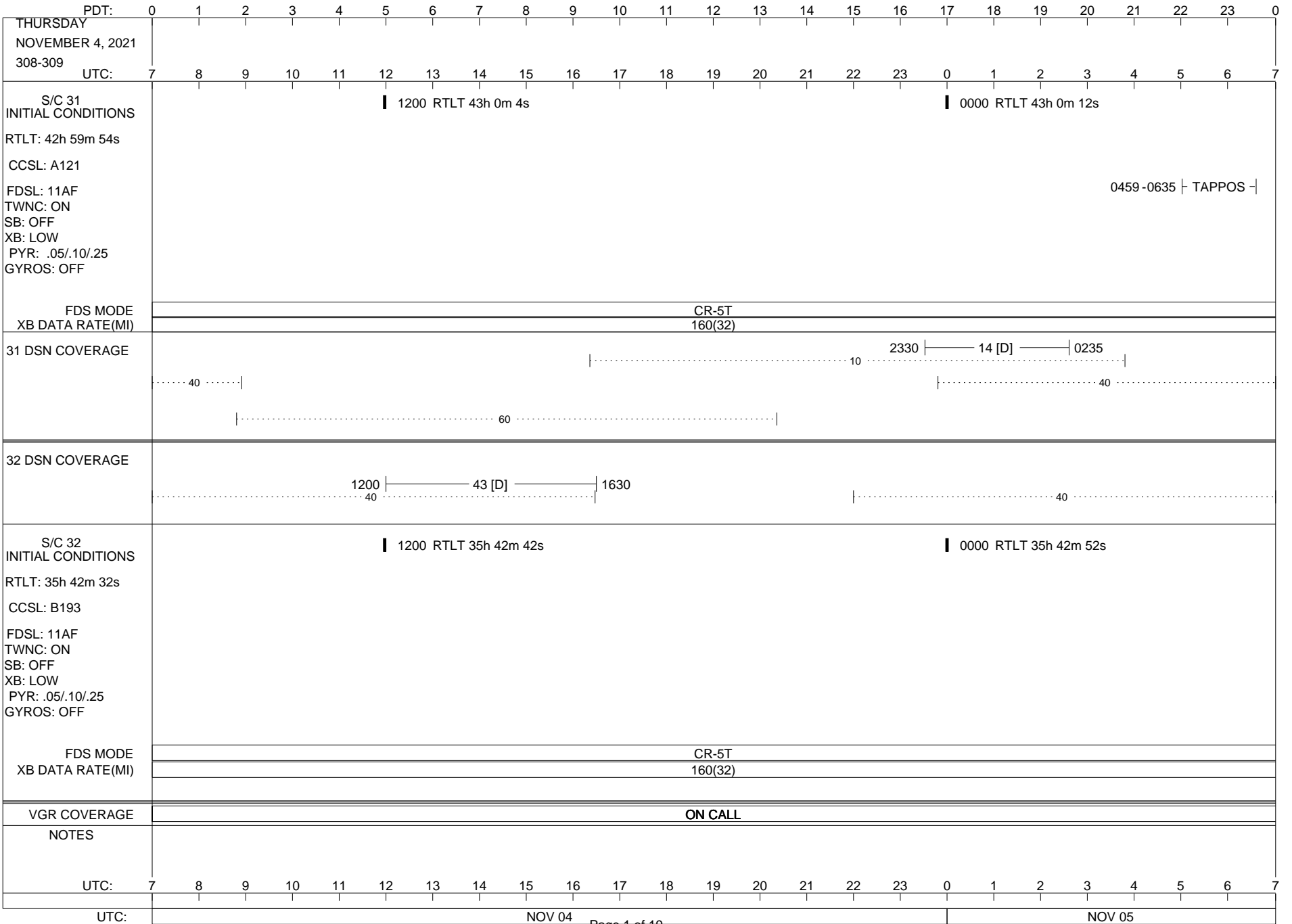
Posted at <https://voyager.jpl.nasa.gov/mission/status/>

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

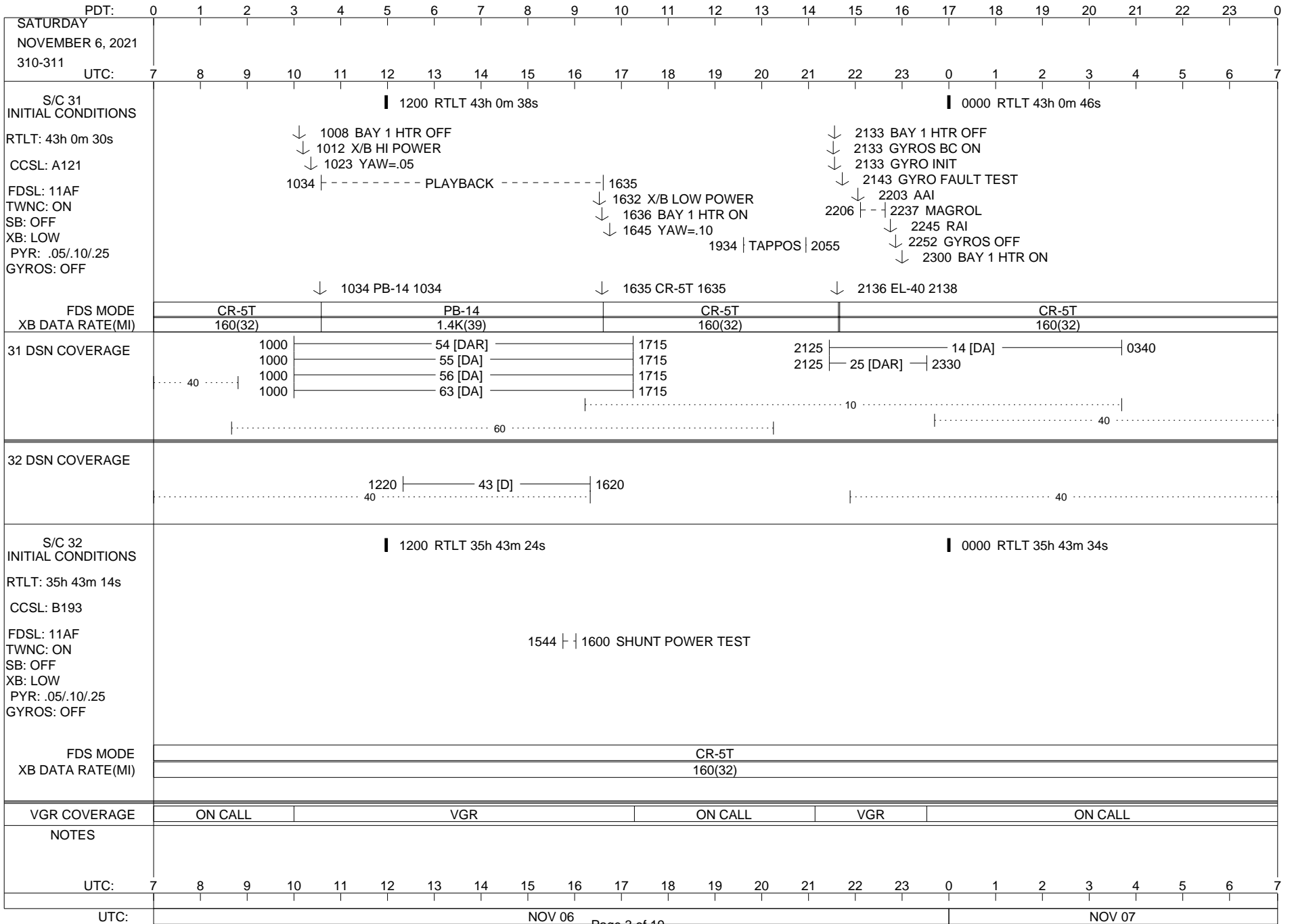
02/27/19

ISSUE DATE: 11/03/21 09:56



ISSUE DATE: 11/03/21 09:56

PDT:	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 5, 2021 309-310																									
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7
S/C 31 INITIAL CONDITIONS RTLT: 43h 0m 12s CCSL: A121 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 43h 0m 20s												0000 RTLT 43h 0m 30s												
	0802 | 0802 PWS/RH												2348 | - TAPPOS - | 0153												
	0813 | TAPPOS | 0934																								
	↓ 0801 GS-4B 0802																								
FDS MODE XB DATA RATE(MI)	CR-5T												CR-5T 160(32)												
31 DSN COVERAGE	.....40.....|												2145 |-----14 [D]-----|0340.....10.....|												
	|-----60-----|												|-----40-----|												
32 DSN COVERAGE	1225 |-----43 [D]-----|1625.....40.....|												0020-0615 |-----43 [H]-----| |-----40-----|												
S/C 32 INITIAL CONDITIONS RTLT: 35h 42m 52s CCSL: B193 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 35h 43m 4s												0000 RTLT 35h 43m 14s												
													▼ 0131 EL-40 (13:15) ▼ 0153 CCSL B194 (13:36) ▼ 0235 CCSTIM F/C (14:18) ▼ 0303 CR-5T (14:46)												
FDS MODE XB DATA RATE(MI)													CR-5T 160(32)												
VGR COVERAGE	ON CALL												VGR						ON CALL						
NOTES																									
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7
UTC:	NOV 05												NOV 06												



ISSUE DATE: 11/03/21 09:56

PDT:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
SUNDAY NOVEMBER 7, 2021 311-312																								
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6
S/C 31 INITIAL CONDITIONS RTLTL: 43h 0m 46s CCSL: A121 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05.100.255 GYROS: OFF	1200 RTLT 43h 0m 56s												0000 RTLT 43h 1m 4s											
	0759 | TAPPOS | 0921												1102 | 1103 PWS/RH											
	1113 | - - - - | 1221 TAPPOS												1101 GS-4B 1103											
FDS MODE	CR-5T												CR-5T											
XB DATA RATE(MI)	160(32)												160(32)											
31 DSN COVERAGE	.....|.....10.....|.....												.....|.....40.....|.....											
	.....40.....|.....60.....|.....1635 |----- 63 [D] -----| 2010																							
32 DSN COVERAGE	0745 |----- 43 [D] -----| 1615												2300 |----- 43 [o] -----| 0355											
	.....40.....|.....												.....40.....|.....											
S/C 32 INITIAL CONDITIONS RTLTL: 35h 43m 34s CCSL: B193 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/.25 GYROS: OFF	1200 RTLT 35h 43m 46s												0000 RTLT 35h 43m 56s											
	* 1346 || 1350 B194 CHKSUM																							
	* 1419 || 1425 CCSTIM FINE																							
	1436 || 1439 COARSE																							
	EL-40 1316 ↓												* ↓ 1447 CR-5T											
FDS MODE	CR-5T												EL-40											
XB DATA RATE(MI)	160(32)												40(30)											
													CR-5T											
													160(32)											
VGR COVERAGE	ON CALL												VGR											
													ON CALL											
NOTES	[1] S/C 32=EL-40 @ 1316 XB=40(30) [2] S/C 32=CR-5T @ 1447 XB=160(32)																							
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6
UTC:	NOV 07																		NOV 08					

ISSUE DATE: 11/03/21 09:56

PST:	22	23	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
MONDAY NOVEMBER 8, 2021 312-313																											
UTC:	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	
S/C 31 INITIAL CONDITIONS RTLTL: 43h 1m 4s CCSL: A121 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05.100.255 GYROS: OFF	1200 RTLTL 43h 1m 12s											0000 RTLTL 43h 1m 20s															
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)											CR-5T 160(32)															
31 DSN COVERAGE	<p>1605 |-----| 14 [D] |-----| 2000</p> <p>.....40.....|.....40.....</p> <p>|.....60.....|</p>																										
32 DSN COVERAGE	<p>1035 |-----| 43 [D] |-----| 1610</p> <p>.....40.....|.....40.....</p>																										
S/C 32 INITIAL CONDITIONS RTLTL: 35h 43m 56s CCSL: B193 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/.25 GYROS: OFF	1200 RTLTL 35h 44m 6s											0000 RTLTL 35h 44m 16s															
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)																										
VGR COVERAGE	ON CALL											VGR					ON CALL										
NOTES																											
UTC:	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	
UTC:	NOV 08																NOV 09										

TUESDAY		23	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
NOVEMBER 9, 2021																											
313-314																											
UTC:		7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	
S/C 31 INITIAL CONDITIONS RTLT: 43h 1m 20s CCSL: A121 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05.100.255 GYROS: OFF		█ 1200 RTLT 43h 1m 28s											█ 0000 RTLT 43h 1m 36s														
FDS MODE XB DATA RATE(MI)		CR-5T 160(32)											CR-5T 160(32)														
31 DSN COVERAGE		.....40 .....| .....60 .....| .....10 .....| .....40 .....|											0030 |----- 14 [D] -----| 0325													
		0830 |----- 63 [D] -----| 1115																									
32 DSN COVERAGE		.....40 .....| .....60 .....| .....10 .....| .....40 .....|											0920 |----- 43 [D] -----| 1555													
S/C 32 INITIAL CONDITIONS RTLT: 35h 44m 16s CCSL: B193 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/.25 GYROS: OFF		█ 1200 RTLT 35h 44m 28s											█ 0000 RTLT 35h 44m 38s														
FDS MODE XB DATA RATE(MI)		CR-5T 160(32)																									
VGR COVERAGE		ON CALL																									
NOTES																											
UTC:		7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	
UTC:		NOV 09													NOV 10												

ISSUE DATE: 11/03/21 09:56

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

WEDNESDAY
NOVEMBER 10, 2021
314-315
UTC: 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7

S/C 31
INITIAL CONDITIONS
RTLT: 43h 1m 36s
CCSL: A121
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05.100.255
GYROS: OFF
1200 RTLT 43h 1m 44s
0000 RTLT 43h 1m 52s
1716 |---- MAGCAL ----| 2018
1716 |----- PESCAL -----| 2037

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

31 DSN COVERAGE
1705 |----- 14 [D] -----| 2230
..... 40| 40
|..... 60|

32 DSN COVERAGE
1135 |----- 43 [D] -----| 1535
..... 40| 40
2210 |----- 43 [H1oB] -----| 0335
|..... 40|

S/C 32
INITIAL CONDITIONS
RTLT: 35h 44m 38s
CCSL: B193
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF
1200 RTLT 35h 44m 48s
0000 RTLT 35h 44m 58s
DUMMY (5 MIN BRACKETED 14:47) 0302▼

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

VGR COVERAGE
ON CALL
VGR
ON CALL

NOTES
[1] B194 BACKUP U/L TRACK, HP TRX DRV ON >= 23:03

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

UTC: NOV 10 NOV 11

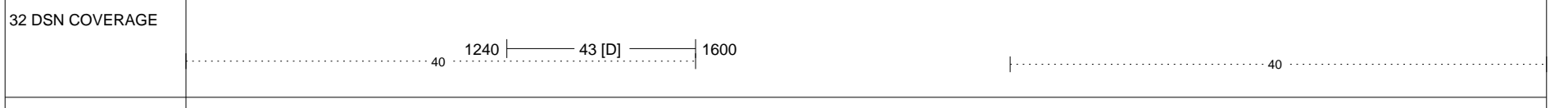
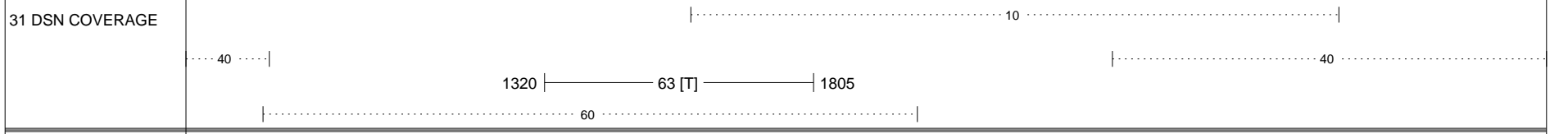
ISSUE DATE: 11/03/21 09:56

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

THURSDAY
NOVEMBER 11, 2021
315-316
UTC: 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7

S/C 31
INITIAL CONDITIONS
RTLT: 43h 1m 52s
CCSL: A121
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05.100.255
GYROS: OFF
1200 RTLT 43h 2m 0s
0000 RTLT 43h 2m 8s
▼ 1412 LEPT D2 OFF (09:14)
▼ 1455 CCS DIAG (09:57)
U/L 1520 | - | - - - - - TLC (SHORT-FORM) - - - - -

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



S/C 32
INITIAL CONDITIONS
RTLT: 35h 44m 58s
CCSL: B193
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF
1200 RTLT 35h 45m 8s
0000 RTLT 35h 45m 20s

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

VGR COVERAGE ON CALL VGR ON CALL

NOTES

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

UTC: NOV 11 NOV 12

ISSUE DATE: 11/03/21 09:56

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

FRIDAY
NOVEMBER 12, 2021
316-317
UTC: 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7

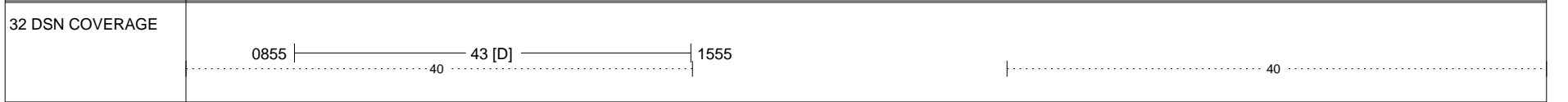
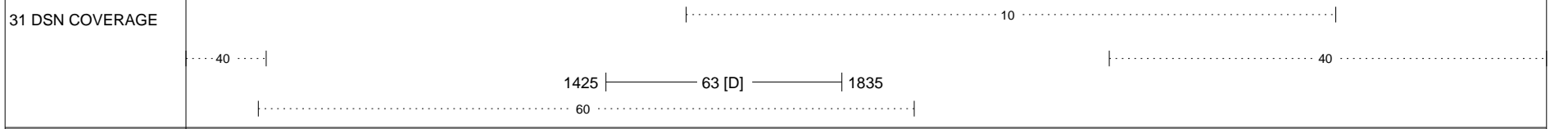
S/C 31
INITIAL CONDITIONS
RTLT: 43h 2m 8s
CCSL: A121
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05.100.255
GYROS: OFF

1200 RTLT 43h 2m 16s

0000 RTLT 43h 2m 24s

TLC (SHORT-FORM)

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



S/C 32
INITIAL CONDITIONS
RTLT: 35h 45m 20s
CCSL: B193
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/10/.25
GYROS: OFF

1200 RTLT 35h 45m 30s

0000 RTLT 35h 45m 40s

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

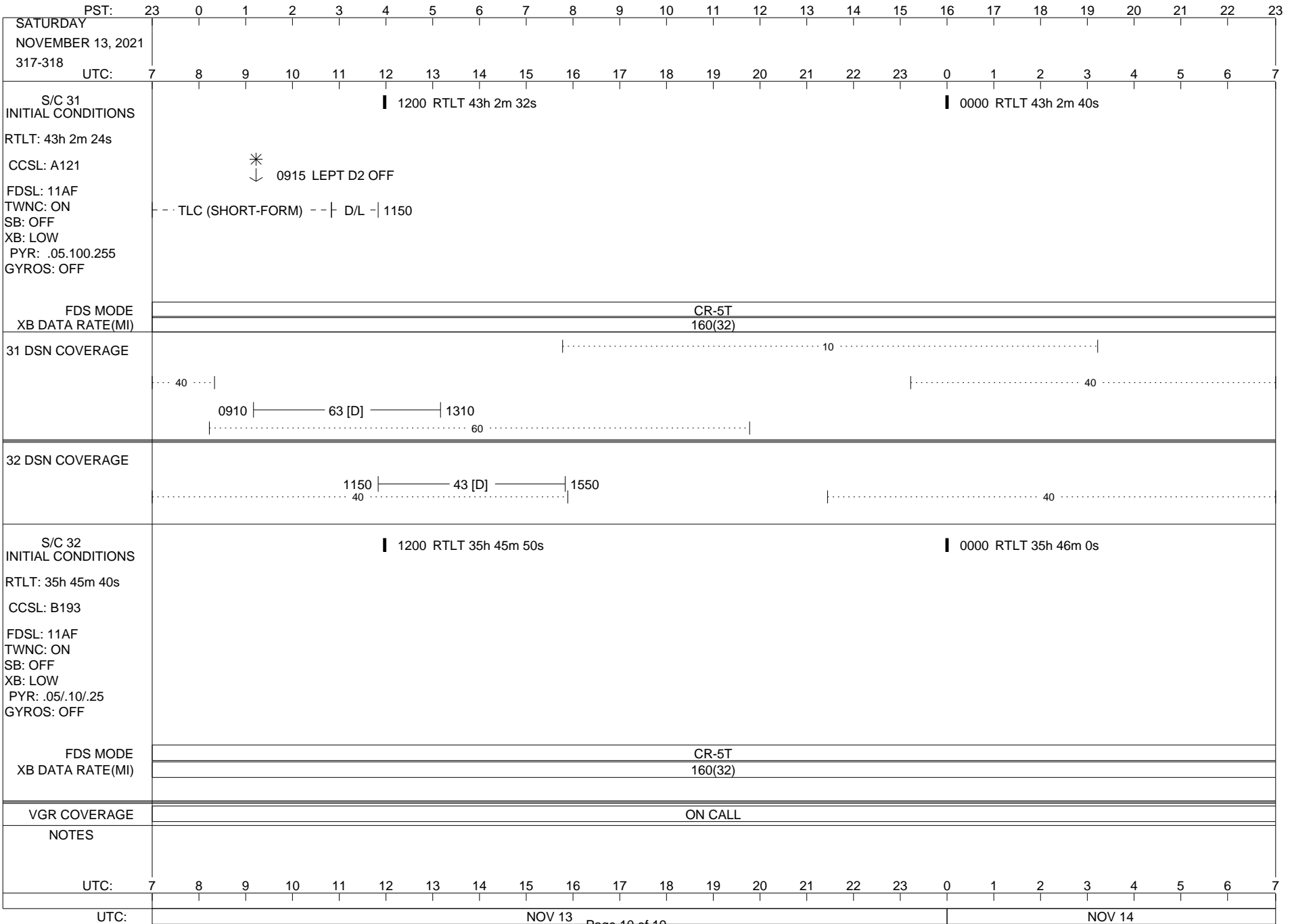
VGR COVERAGE ON CALL

NOTES

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

UTC: NOV 12 Page 9 of 19 NOV 13

ISSUE DATE: 11/03/21 09:56



ISSUE DATE: 11/03/21 09:56

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

SUNDAY
NOVEMBER 14, 2021
318-319
UTC: 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7

S/C 31
INITIAL CONDITIONS
RTLT: 43h 2m 40s
CCSL: A121
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05.100.255
GYROS: OFF

1200 RTLT 43h 2m 48s

0000 RTLT 43h 2m 56s

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



S/C 32
INITIAL CONDITIONS
RTLT: 35h 46m 0s
CCSL: B193
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/10/.25
GYROS: OFF

1200 RTLT 35h 46m 10s

0000 RTLT 35h 46m 20s

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

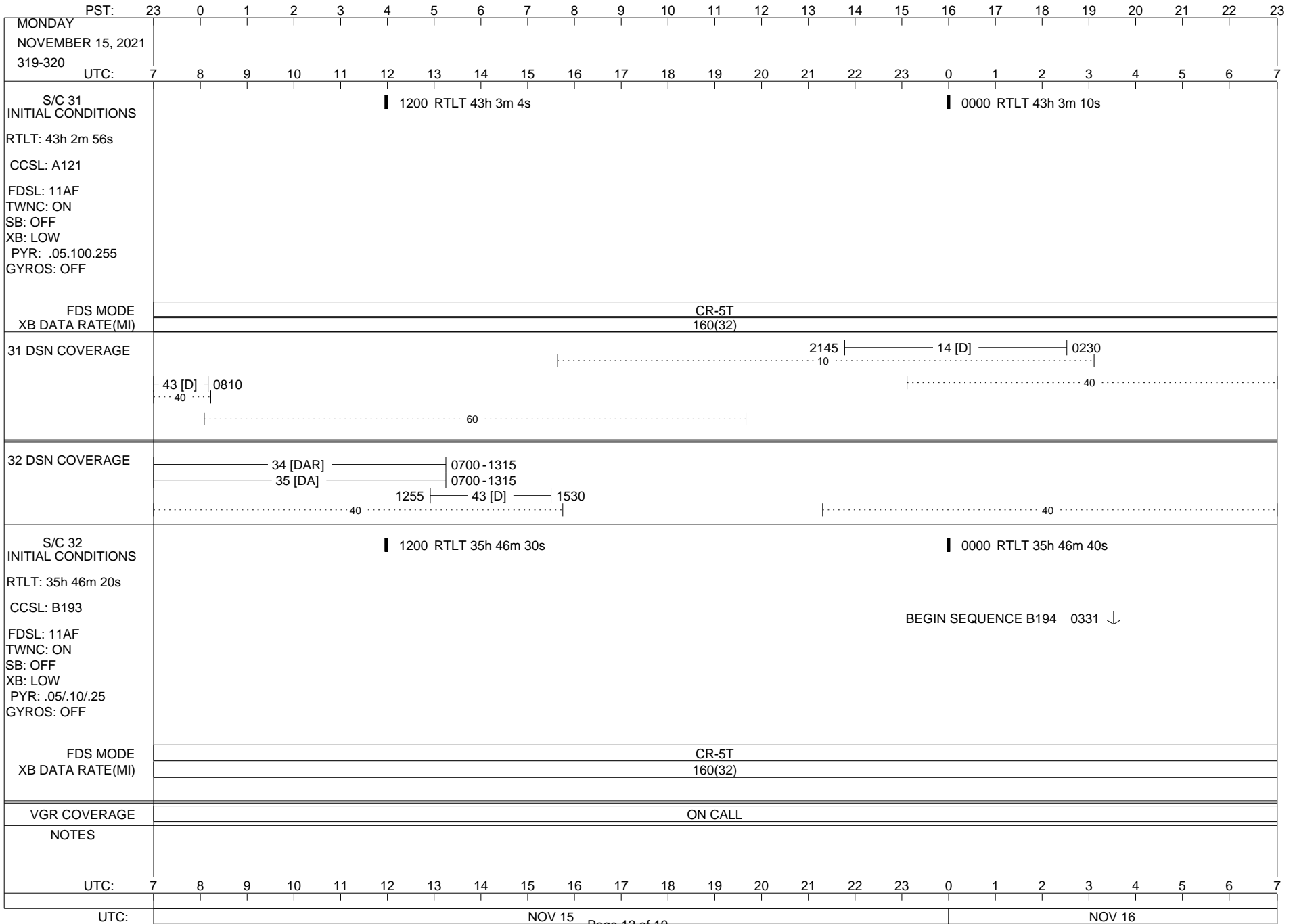
VGR COVERAGE ON CALL

NOTES

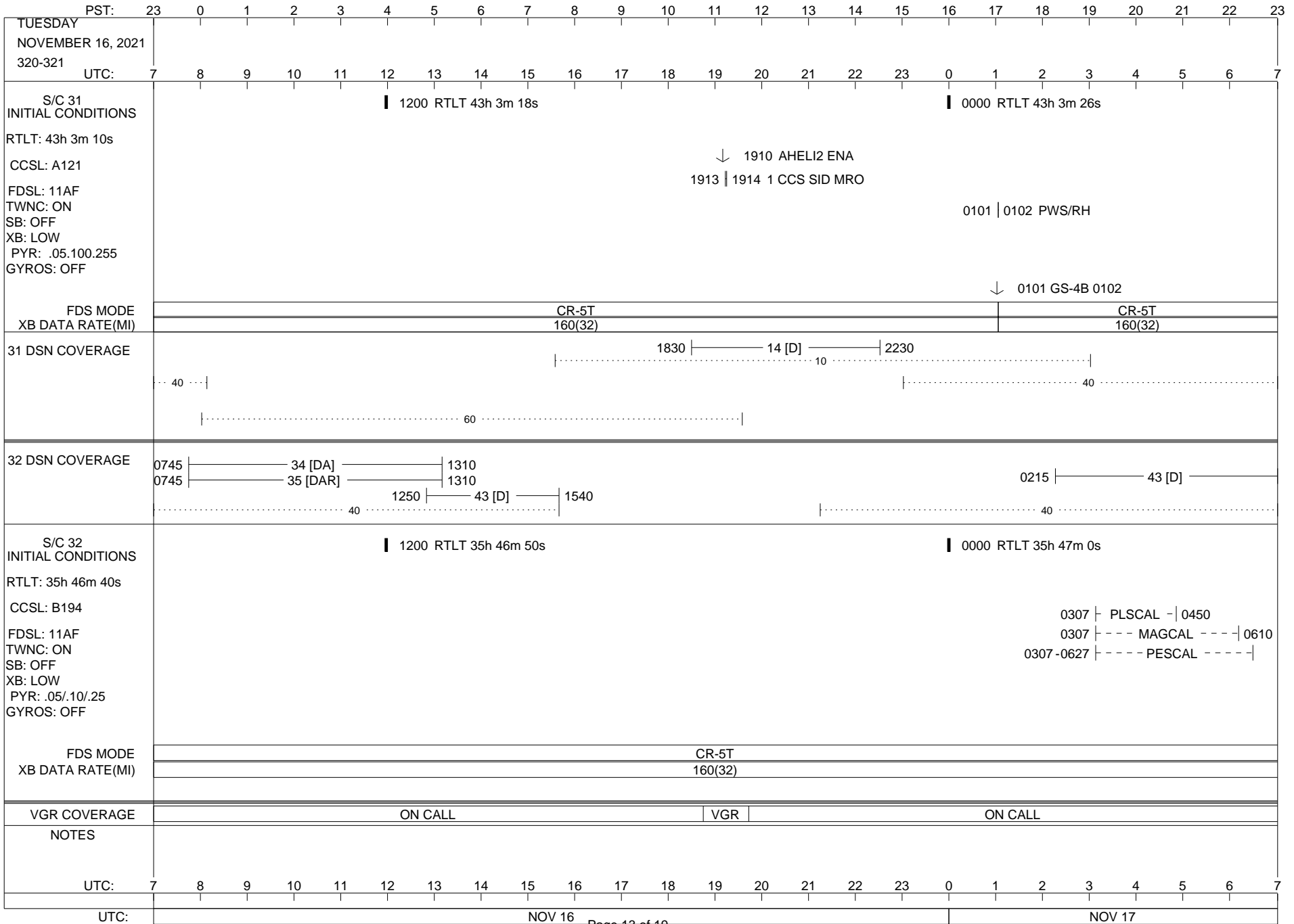
UTC: 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7

UTC: NOV 14 Page 11 of 19 NOV 15

ISSUE DATE: 11/03/21 09:56



ISSUE DATE: 11/03/21 09:56



ISSUE DATE: 11/03/21 09:56

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

WEDNESDAY
NOVEMBER 17, 2021
321-322
UTC: 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7

S/C 31
INITIAL CONDITIONS
RTLT: 43h 3m 26s
CCSL: A121
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05.100.255
GYROS: OFF

1200 RTLT 43h 3m 34s

0000 RTLT 43h 3m 40s

1756 | | 1812 SHUNT POWER TEST

FDS MODE
XB DATA RATE(MI)

CR-5T

160(32)

31 DSN COVERAGE
40
1600 | 63 [D] | 1930
60

32 DSN COVERAGE
0710 43 [D]
1135 | 43 [D] | 1535
40

S/C 32
INITIAL CONDITIONS
RTLT: 35h 47m 0s
CCSL: B194
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

1200 RTLT 35h 47m 10s

0000 RTLT 35h 47m 20s

FDS MODE
XB DATA RATE(MI)

CR-5T

160(32)

VGR COVERAGE
ON CALL

NOTES

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

UTC: NOV 17 NOV 18

ISSUE DATE: 11/03/21 09:56

PST:	23	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
THURSDAY NOVEMBER 18, 2021 322-323																										
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	
S/C 31 INITIAL CONDITIONS RTLTL: 43h 3m 40s CCSL: A121 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05.100.255 GYROS: OFF						1200													0000							
FDS MODE XB DATA RATE(MI)																										
31 DSN COVERAGE																										
32 DSN COVERAGE																										
S/C 32 INITIAL CONDITIONS RTLTL: 35h 47m 20s CCSL: B194 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF						1200													0000							
FDS MODE XB DATA RATE(MI)																										
VGR COVERAGE																										
NOTES																										
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7	
UTC:																										

ISSUE DATE: 11/03/21 09:56

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

FRIDAY
NOVEMBER 19, 2021
323-324
UTC: 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7

S/C 31
INITIAL CONDITIONS
RTLT: 43h 3m 54s
CCSL: A121
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05.100.255
GYROS: OFF
1200 RTLT 43h 4m 2s
0000 RTLT 43h 4m 10s
0716-0716 PWS/RH
TAPPOS 0727-0848
CCS DIAG (23:59) 0455▼
U/L 0520 | - |
TLC (SHORT-FORM) | - - - - |
0715 GS-4B 0716

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

31 DSN COVERAGE
0755 43 [D]
1600 63 [D] 1900
0405 43 [T]
60

32 DSN COVERAGE
35 [DA] 1300
34 [DAR] 1300
1240 43 [D] 1530
2105 43 [o] 0300
40

S/C 32
INITIAL CONDITIONS
RTLT: 35h 47m 40s
CCSL: B194
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/10/.25
GYROS: OFF
1200 RTLT 35h 47m 50s
0000 RTLT 35h 48m 0s

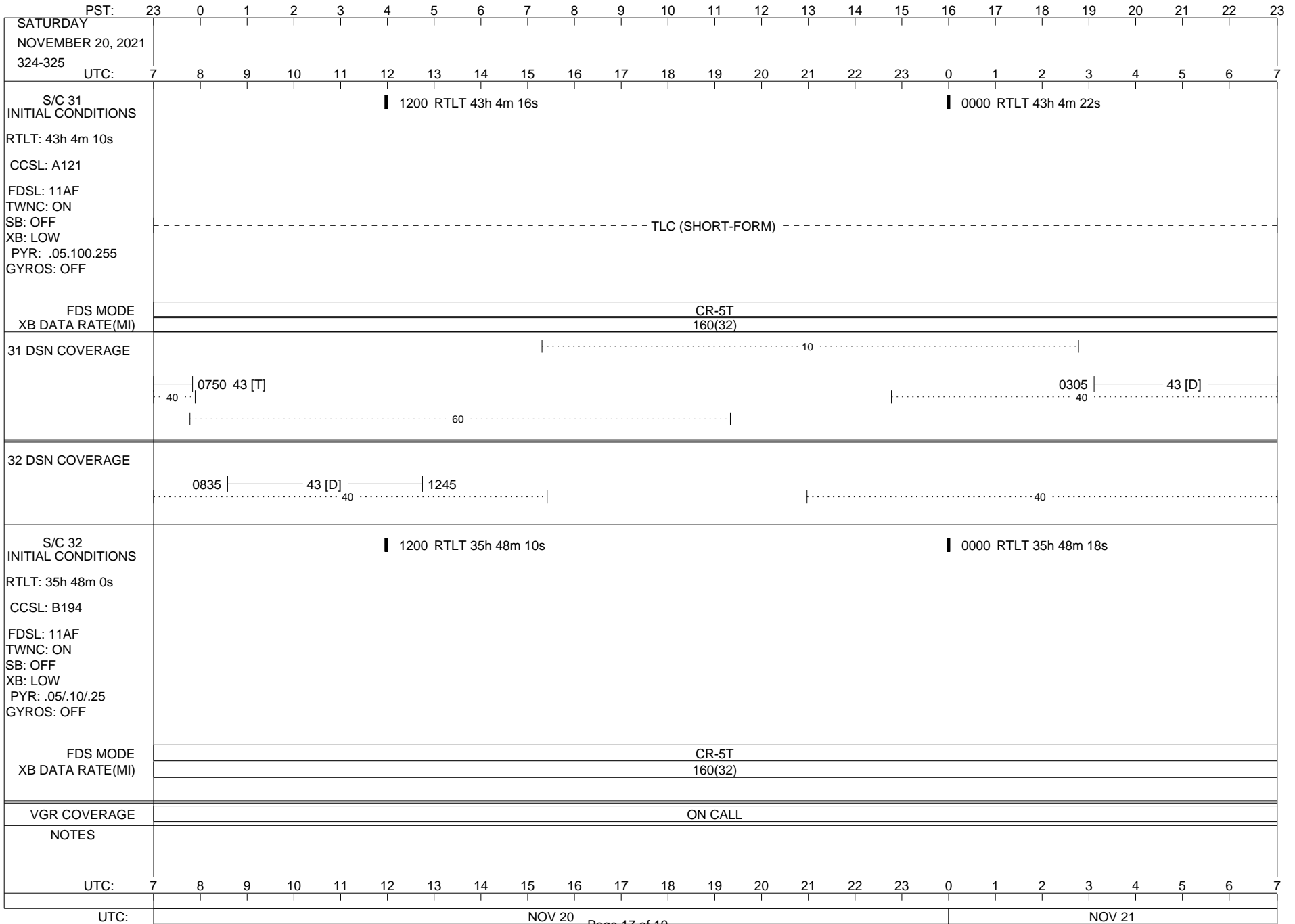
FDS MODE
XB DATA RATE(MI) CR-5T
160(32)

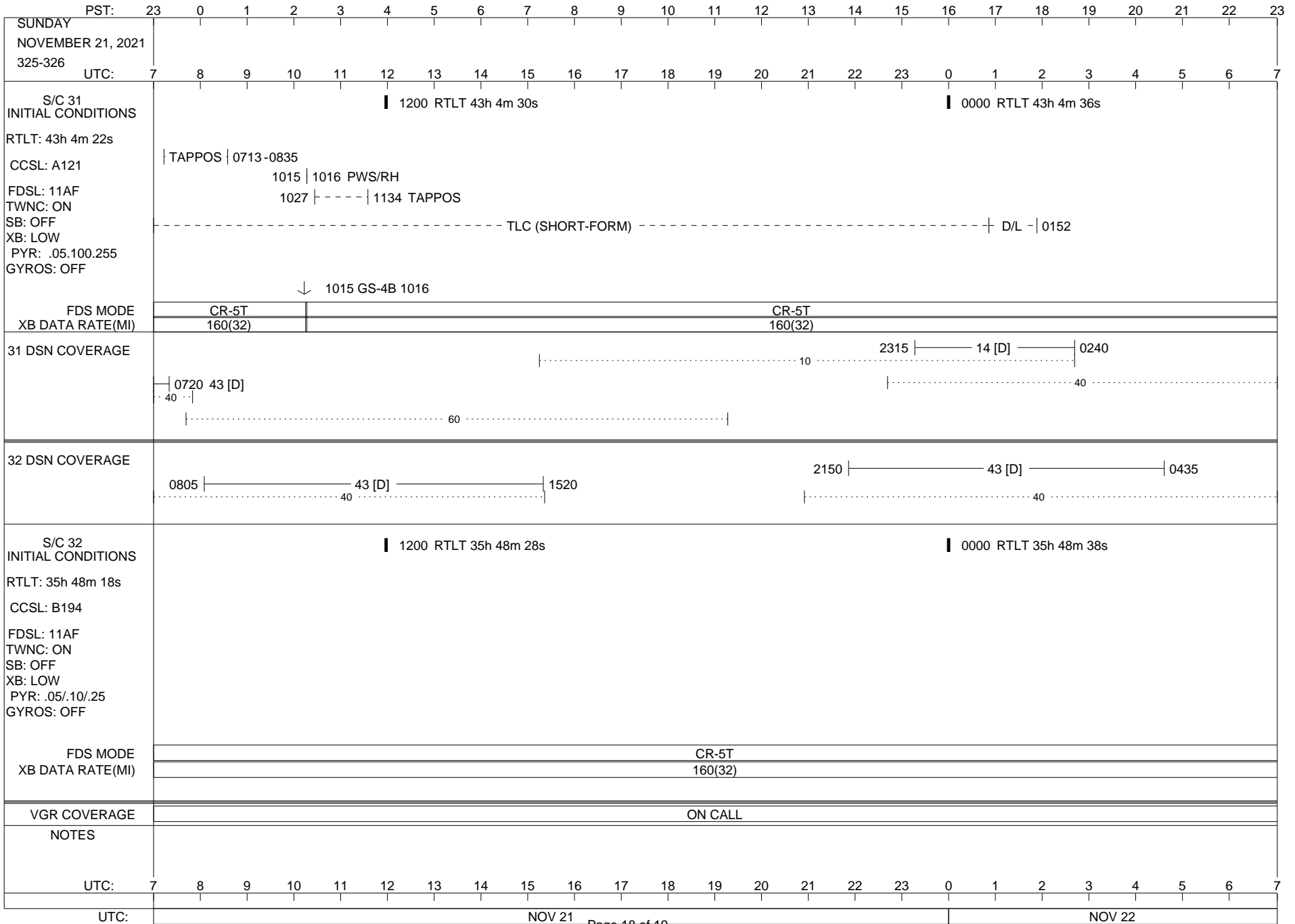
VGR COVERAGE ON CALL VGR ON CALL

NOTES

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

UTC: NOV 19 NOV 20





ISSUE DATE: 11/03/21 09:56

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

MONDAY
NOVEMBER 22, 2021
326-327
UTC: 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5 6 7

S/C 31
INITIAL CONDITIONS
RTLTL: 43h 4m 36s
CCSL: A121
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05.100.255
GYROS: OFF

1200 RTLT 43h 4m 44s

0000 RTLT 43h 4m 50s

FDS MODE
XB DATA RATE(MI)

CR-5T
160(32)

31 DSN COVERAGE



32 DSN COVERAGE



S/C 32
INITIAL CONDITIONS
RTLTL: 35h 48m 38s
CCSL: B194
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/10/.25
GYROS: OFF

1200 RTLT 35h 48m 48s

0000 RTLT 35h 48m 58s

FDS MODE
XB DATA RATE(MI)

CR-5T
160(32)

VGR COVERAGE

ON CALL

NOTES

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

UTC: NOV 22 Page 19 of 19 NOV 23