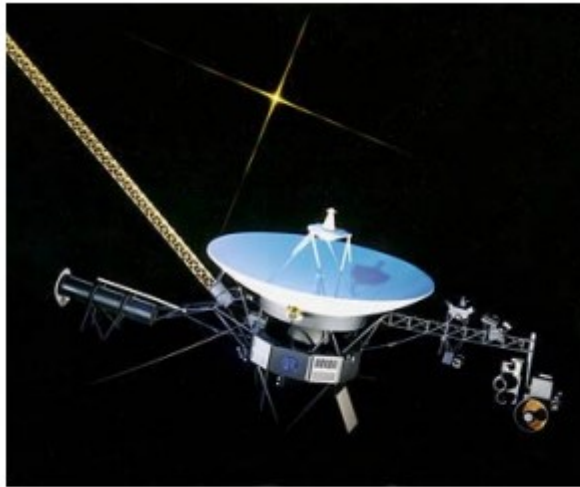


# VOYAGER

## Space Flight Operations Schedule (SFOS)

Issue Date: September 25, 2019

For the Period: 09/26/19 to 10/14/19 (19/269 – 19/287)



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

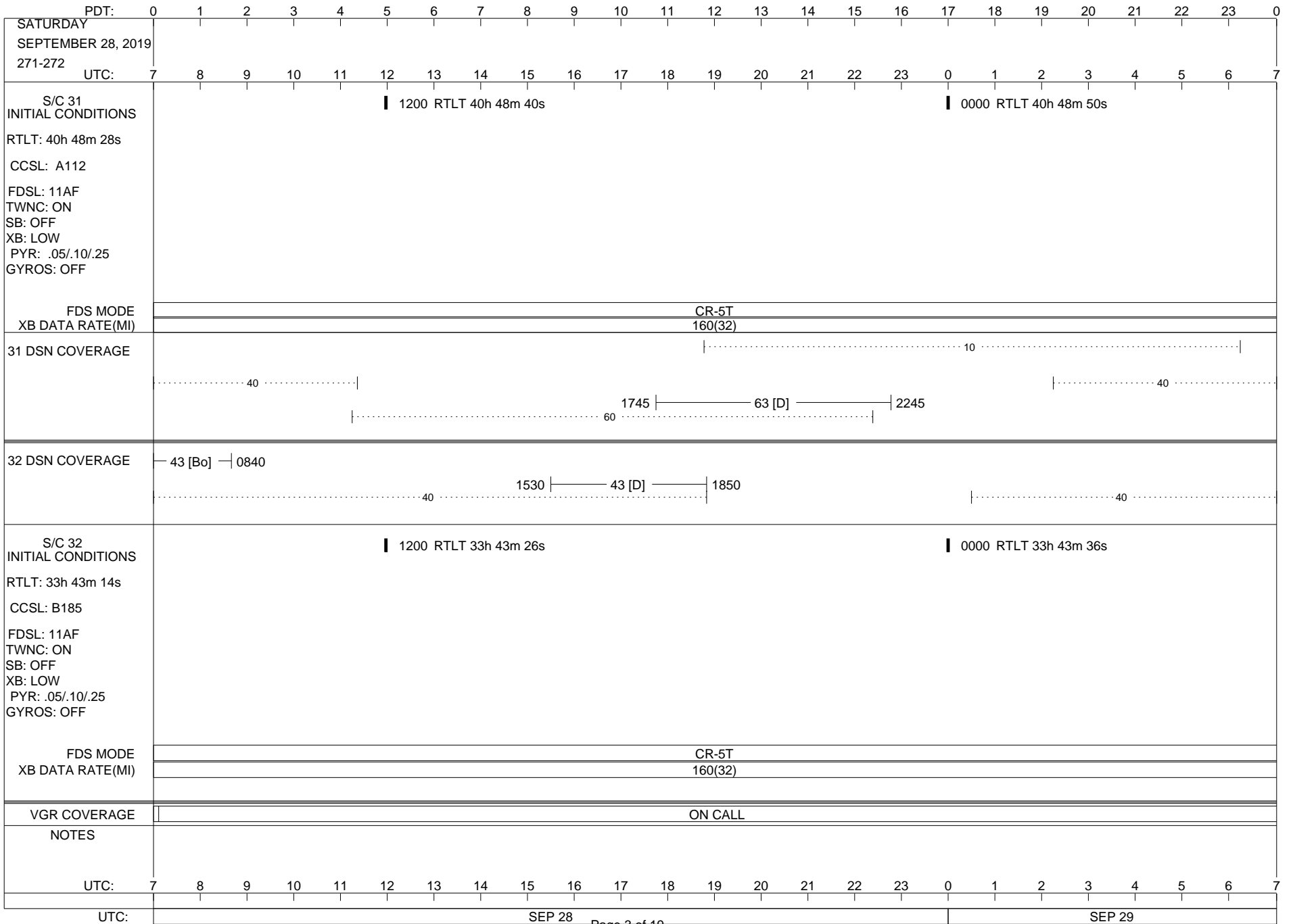
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THURSDAY SEPTEMBER 26, 2019 269-270																									
UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7
S/C 31 INITIAL CONDITIONS RTLTL: 40h 47m 42s CCSL: A112 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF						█ 1200																			
FDS MODE XB DATA RATE(MI)																									
31 DSN COVERAGE																									
32 DSN COVERAGE																									
S/C 32 INITIAL CONDITIONS RTLTL: 33h 42m 30s CCSL: B185 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF						█ 1200																			
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:																									

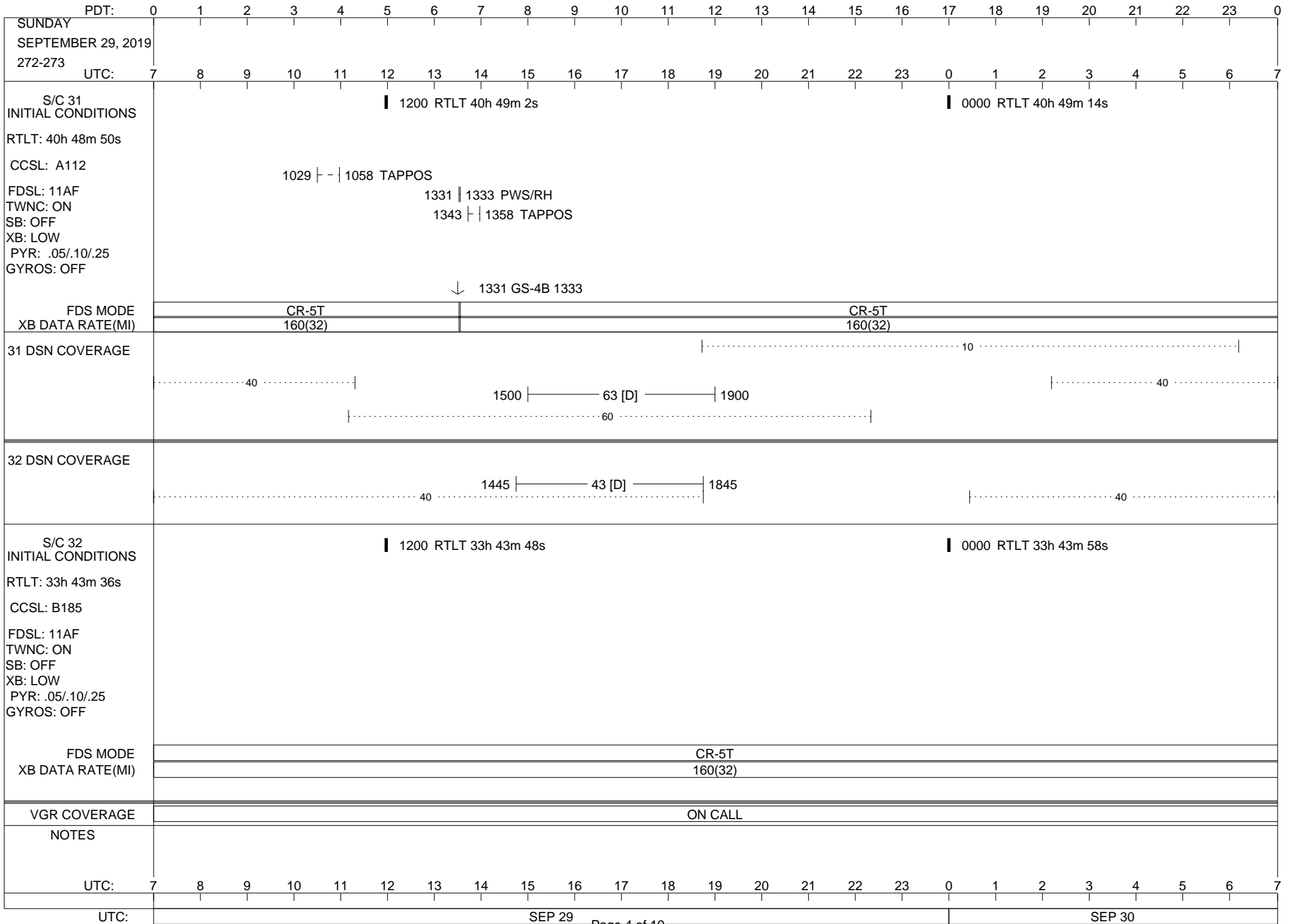
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PDT:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0
FRIDAY SEPTEMBER 27, 2019 270-271	UTC: 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7
S/C 31 INITIAL CONDITIONS RTLT: 40h 48m 4s CCSL: A112 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/.25 GYROS: OFF	1200 RTLT 40h 48m 16s												0000 RTLT 40h 48m 28s												
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)												CR-5T 160(32)												
31 DSN COVERAGE	40												10												
	1955												63 [D] 2250												
32 DSN COVERAGE	1135												0450												
	43 [D] 1535												43 [Bo]												
S/C 32 INITIAL CONDITIONS RTLT: 33h 42m 52s CCSL: B185 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/.25 GYROS: OFF	1200 RTLT 33h 43m 4s												0000 RTLT 33h 43m 14s												
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)												DUMMY (5 MIN BRACKETED 15:51) 0607▼												
VGR COVERAGE	ON CALL																						VGR		
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:	SEP 27												SEP 28												

ISSUE DATE: 09/30/19 12:21



ISSUE DATE: 09/30/19 12:21



ISSUE DATE: 09/30/19 12:21

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
MONDAY SEPTEMBER 30, 2019 273-274	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: 40h 49m 14s CCSL: A112 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 40h 49m 26s												0000 RTLTL 40h 49m 36s												
FDS MODE XB DATA RATE(MI)													CR-5T 160(32)												
31 DSN COVERAGE	40												0450   14 [D]   0605 1915   63 [D]   2240												
32 DSN COVERAGE	40												1425   43 [D]   1840												
S/C 32 INITIAL CONDITIONS RTLTL: 33h 43m 58s CCSL: B185 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 33h 44m 10s												0000 RTLTL 33h 44m 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:	SEP 30												OCT 01												

ISSUE DATE: 09/30/19 12:21

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	
TUESDAY OCTOBER 1, 2019 274-275	
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: 40h 49m 36s CCSL: A112 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 40h 49m 48s 0000 RTLT 40h 50m 0s 0355   0356 PWS/RH ↓ 0355 GS-4B 0356
FDS MODE	CR-5T
XB DATA RATE(MI)	160(32)
31 DSN COVERAGE	0310   14 [D]   0600 2100   63 [D]   2235 40 ..... .....60 .....
32 DSN COVERAGE	1330   43 [D]   1835 40 ..... .....40 .....
S/C 32 INITIAL CONDITIONS RTLT: 33h 44m 20s CCSL: B185 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 33h 44m 32s 0000 RTLT 33h 44m 42s
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: OCT 01   OCT 02	

ISSUE DATE: 09/30/19 12:21

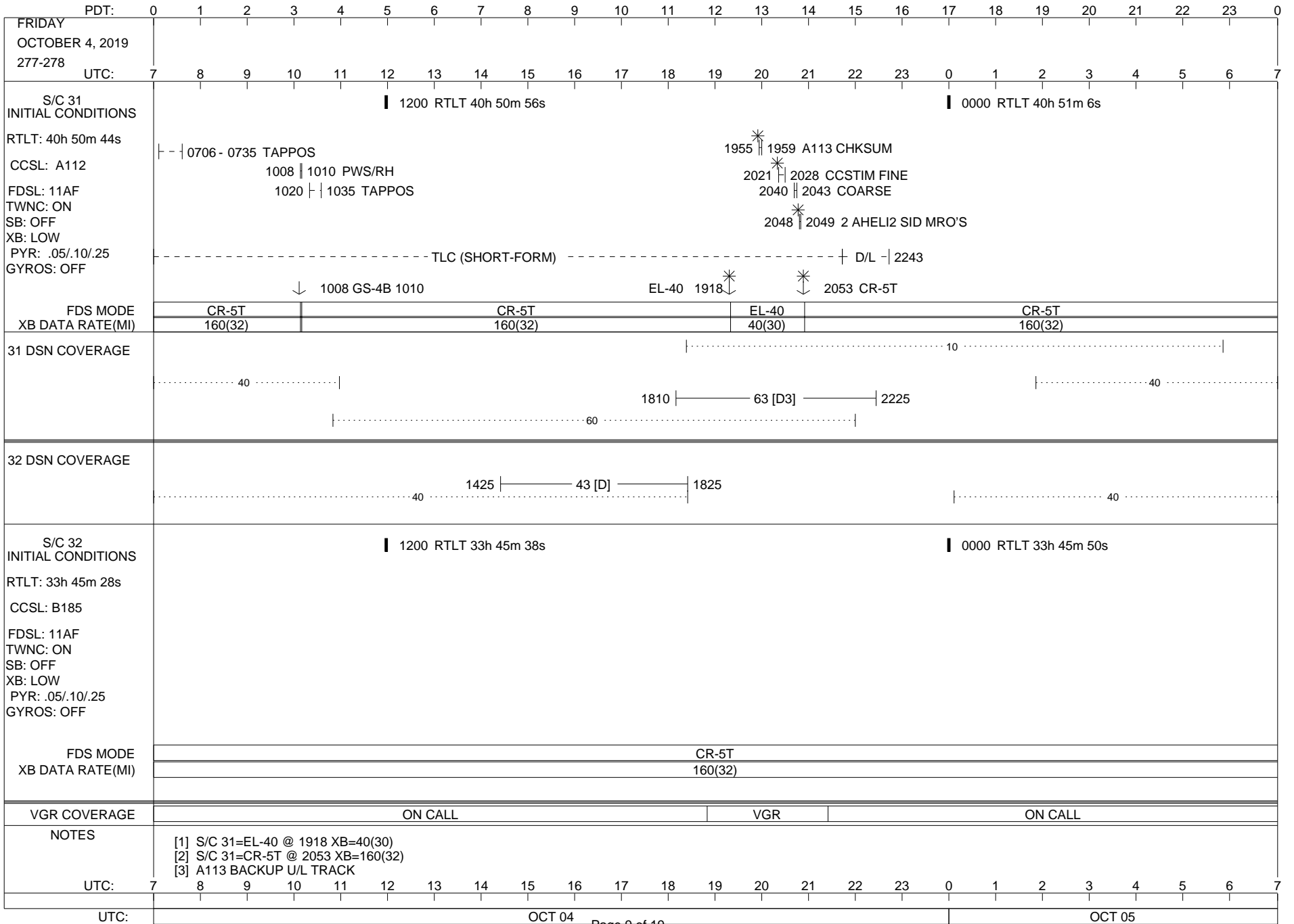
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UTC:	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	1	2	3	4	5	6	7			
WEDNESDAY OCTOBER 2, 2019 275-276																												
S/C 31 INITIAL CONDITIONS RTLTL: 40h 50m 0s CCSL: A112 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 40h 50m 10s												0000 RTLT 40h 50m 22s															
FDS MODE XB DATA RATE(MI)													CR-5T 160(32)															
31 DSN COVERAGE	<p>0140  -----  14 [T]  -----  0555</p> <p>40  -----  2055  -----  63 [D]  -----  2230</p> <p>60  -----  40</p>																											
32 DSN COVERAGE	<p>1325  -----  43 [D]  -----  1835</p> <p>40  -----  40</p>																											
S/C 32 INITIAL CONDITIONS RTLTL: 33h 44m 42s CCSL: B185 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 33h 44m 54s												0000 RTLT 33h 45m 4s															
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:	OCT 02														OCT 03													



ISSUE DATE: 09/30/19 12:21

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	
THURSDAY OCTOBER 3, 2019 276-277																										
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: 40h 50m 22s CCSL: A112 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/25 GYROS: OFF						█ 1200 RTLT 40h 50m 32s												█ 0000 RTLT 40h 50m 44s								
FDS MODE													CR-5T													
XB DATA RATE(MI)													160(32)													
31 DSN COVERAGE																			0155						0555	
32 DSN COVERAGE																										
S/C 32 INITIAL CONDITIONS RTLT: 33h 45m 4s CCSL: B185 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/10/25 GYROS: OFF						█ 1200 RTLT 33h 45m 16s												█ 0000 RTLT 33h 45m 28s								
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:	OCT 03													OCT 04												

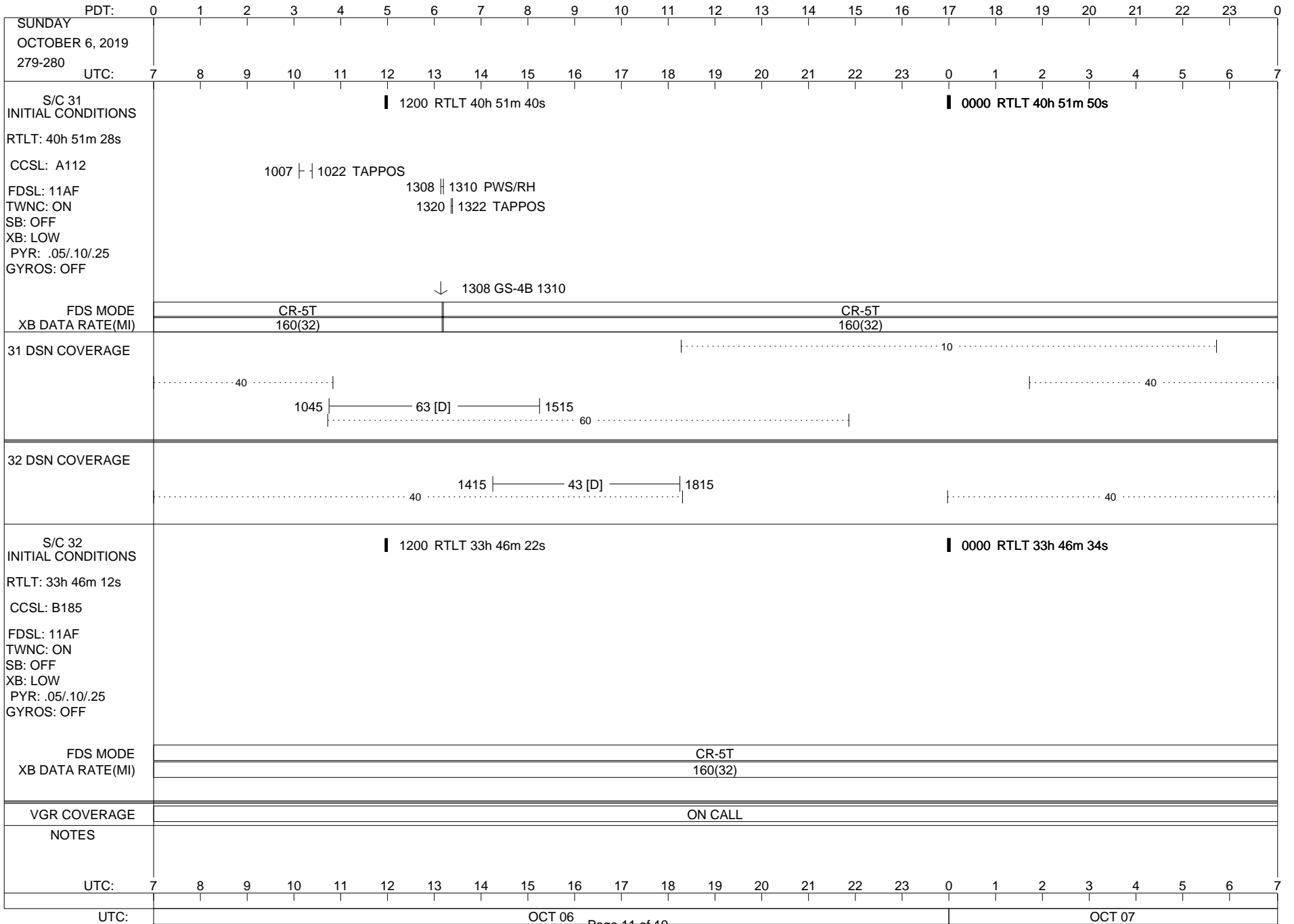
ISSUE DATE: 09/30/19 12:21



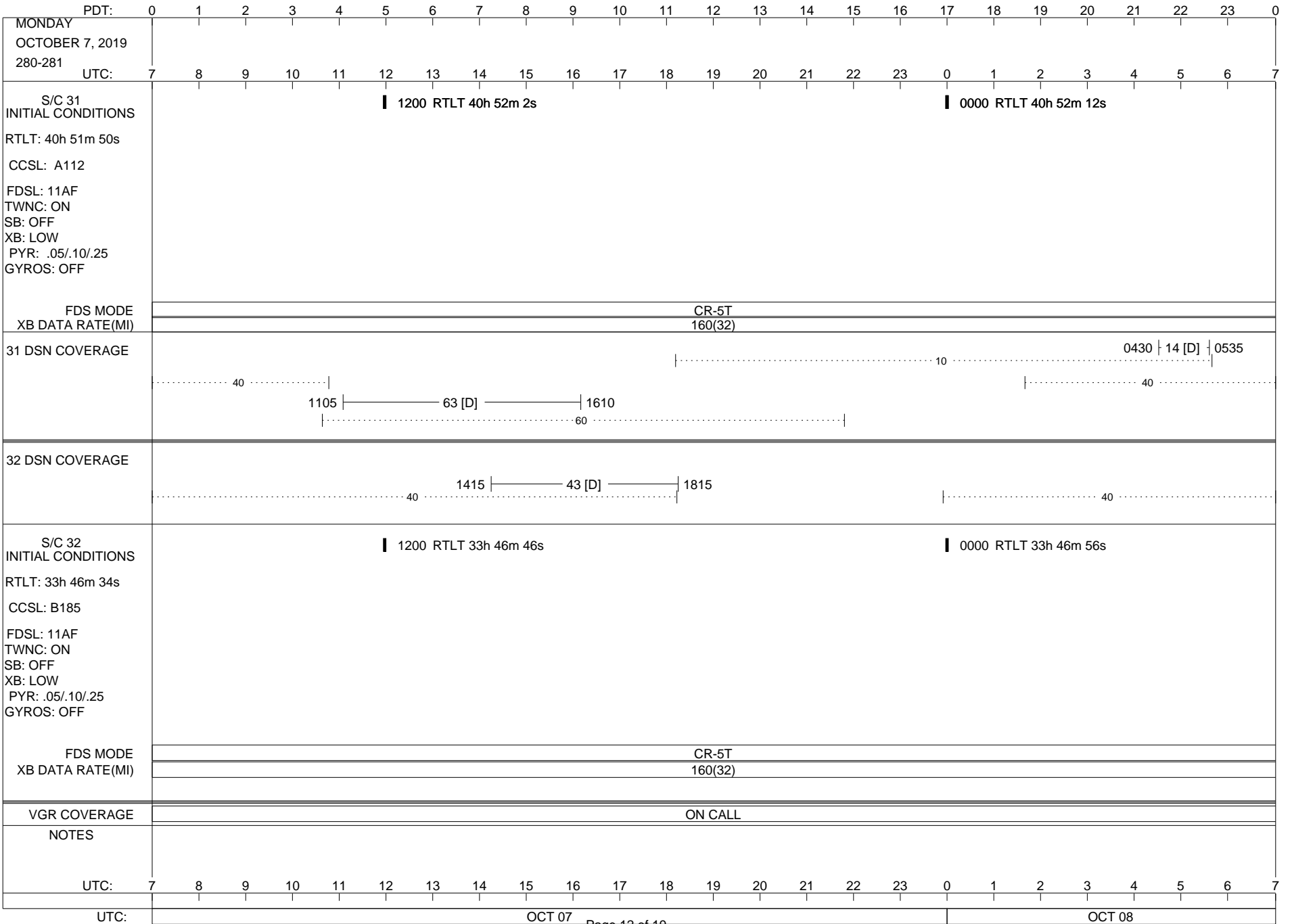
ISSUE DATE: 09/30/19 12:21

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
SATURDAY OCTOBER 5, 2019 278-279																									
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: 40h 51m 6s CCSL: A112 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 40h 51m 18s												0000 RTLT 40h 51m 28s												
FDS MODE													CR-5T												
XB DATA RATE(MI)													160(32)												
31 DSN COVERAGE	-----40-----												0145  -----14 [D]-----  0545  -----40-----												
32 DSN COVERAGE	-----40-----												1420  -----43 [B]-----  1820  -----40-----												
S/C 32 INITIAL CONDITIONS RTLT: 33h 45m 50s CCSL: B185 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 33h 46m 0s												0000 RTLT 33h 46m 12s												
FDS MODE													CR-5T												
XB DATA RATE(MI)													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:	OCT 05												OCT 06												

ISSUE DATE: 09/30/19 12:21



ISSUE DATE: 09/30/19 12:21



ISSUE DATE: 09/30/19 12:21

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	
TUESDAY OCTOBER 8, 2019 281-282																										
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: 40h 52m 12s CCSL: A112 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 40h 52m 24s												0000 RTLTL 40h 52m 34s													
FDS MODE	CR-5T												CR-5T													
XB DATA RATE(MI)	160(32)												160(32)													
31 DSN COVERAGE	.....40.....												.....10.....													
	.....60.....												.....40.....													
	.....2035   63 [D]   2205												0440   14   0535													
32 DSN COVERAGE	.....40.....												.....40.....													
	.....1310   43 [D]   1805																									
S/C 32 INITIAL CONDITIONS RTLTL: 33h 46m 56s CCSL: B185 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 33h 47m 8s												0000 RTLTL 33h 47m 18s													
FDS MODE	CR-5T												CR-5T													
XB DATA RATE(MI)	160(32)												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:	OCT 08												OCT 09													



ISSUE DATE: 09/30/19 12:21

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

THURSDAY  
OCTOBER 10, 2019  
283-284

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: 40h 52m 56s  
CCSL: A112  
FDSL: 11AF  
TWNC: ON  
SB: OFF  
XB: LOW  
PYR: .05/.10/.25  
GYROS: OFF

1200 RTLTL 40h 53m 8s

0000 RTLTL 40h 53m 18s

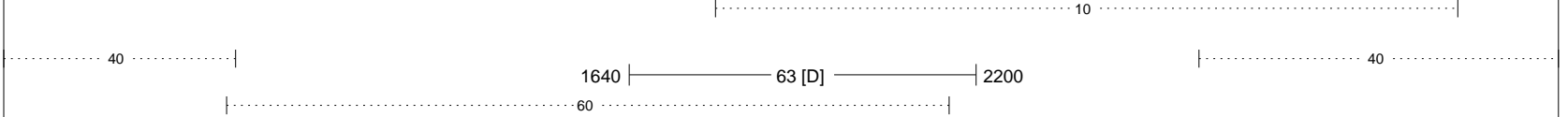
TLC (SHORT-FORM)

TAPPOS 0644 - 0659

FDS MODE  
XB DATA RATE(MI)

CR-5T  
160(32)

31 DSN COVERAGE



32 DSN COVERAGE



S/C 32  
INITIAL CONDITIONS  
RTLTL: 33h 47m 42s  
CCSL: B185  
FDSL: 11AF  
TWNC: ON  
SB: OFF  
XB: LOW  
PYR: .05/.10/.25  
GYROS: OFF

1200 RTLTL 33h 47m 52s

0000 RTLTL 33h 48m 4s

1448 | 1505 SHUNT POWER TEST

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: OCT 10 Page 15 of 19 OCT 11





ISSUE DATE: 09/30/19 12:21

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

SATURDAY  
OCTOBER 12, 2019  
285-286  
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: 40h 53m 40s  
CCSL: A112  
FDSL: 11AF  
TWNC: ON  
SB: OFF  
XB: LOW  
PYR: .05/.10/.25  
GYROS: OFF

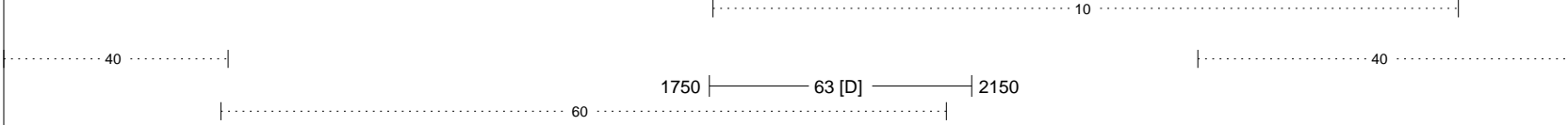
1200 RTLTL 40h 53m 50s

0000 RTLTL 40h 54m 2s

FDS MODE  
XB DATA RATE(MI)

CR-5T  
160(32)

31 DSN COVERAGE



32 DSN COVERAGE



S/C 32  
INITIAL CONDITIONS  
RTLTL: 33h 48m 26s  
CCSL: B185  
FDSL: 11AF  
TWNC: ON  
SB: OFF  
XB: LOW  
PYR: .05/.10/.25  
GYROS: OFF

1200 RTLTL 33h 48m 38s

0000 RTLTL 33h 48m 48s

FDS MODE  
XB DATA RATE(MI)

CR-5T  
160(32)

VGR COVERAGE

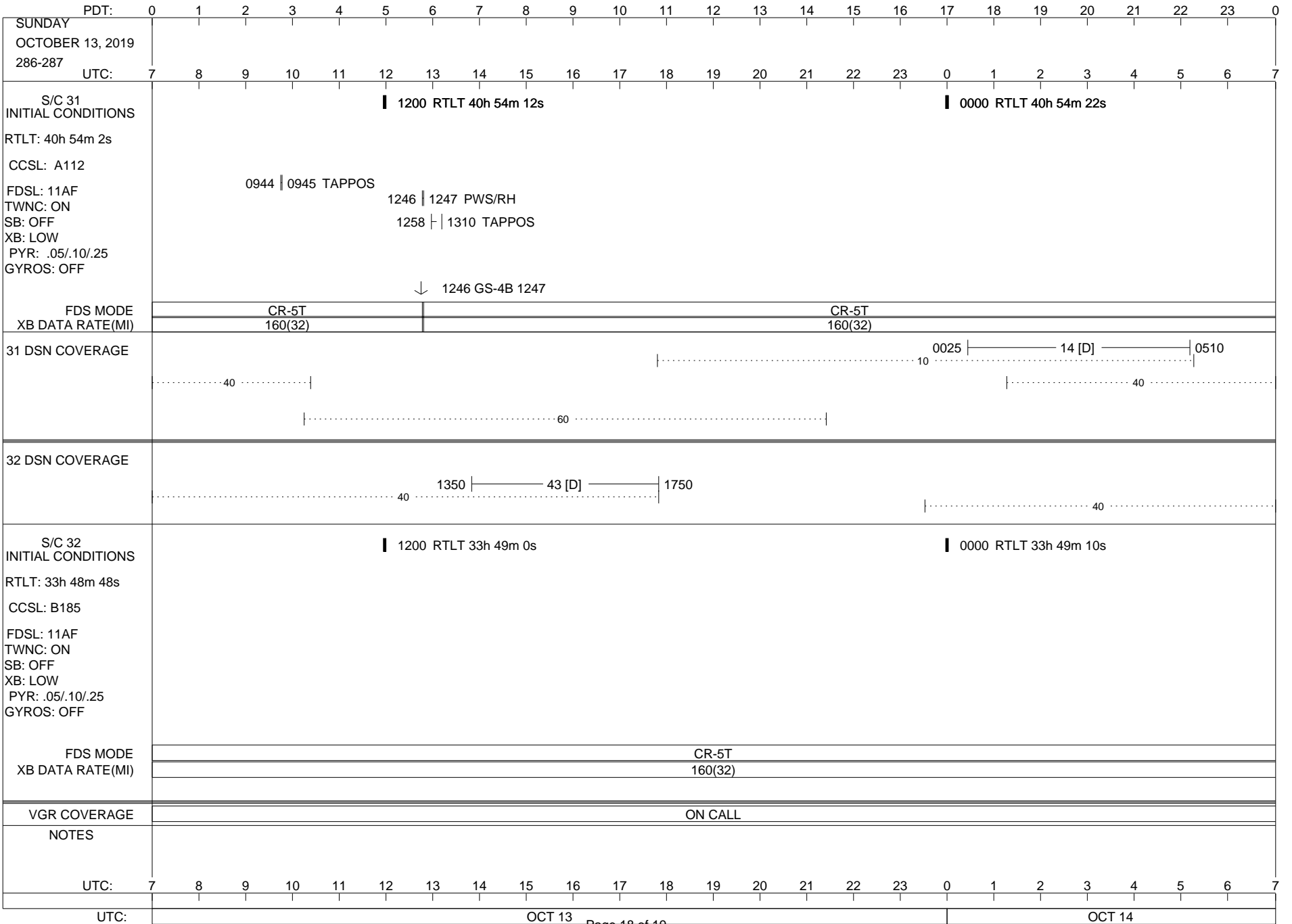
ON CALL

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: OCT 12 Page 17 of 19 OCT 13

ISSUE DATE: 09/30/19 12:21



ISSUE DATE: 09/30/19 12:21

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	
MONDAY OCTOBER 14, 2019 287-288	
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: 40h 54m 22s CCSL: A112 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	<p>1200 RTLT 40h 54m 34s</p> <p>0000 RTLT 40h 54m 44s</p>
FDS MODE XB DATA RATE(MI)	CR-5T 160(32)
31 DSN COVERAGE	<p>..... 40 .....</p> <p>..... 60 .....</p>
32 DSN COVERAGE	<p>1210  ----- 36 [DA] -----  1615</p> <p>1210  ----- 35 [DAR] -----  1615</p> <p>..... 40 .....</p>
S/C 32 INITIAL CONDITIONS RTLT: 33h 49m 10s CCSL: B185 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	<p>1200 RTLT 33h 49m 22s</p>
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:	OCT 14   Page 19 of 19   OCT 15