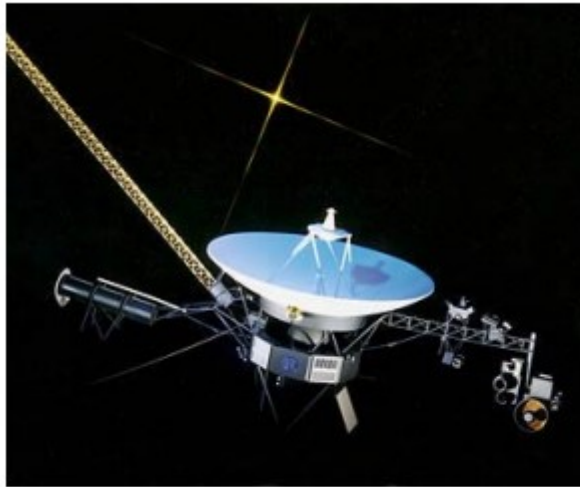


# VOYAGER

## Space Flight Operations Schedule (SFOS)

Issue Date: September 4, 2019

For the Period: 09/05/19 to 09/23/19 (19/248 – 19/266)



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

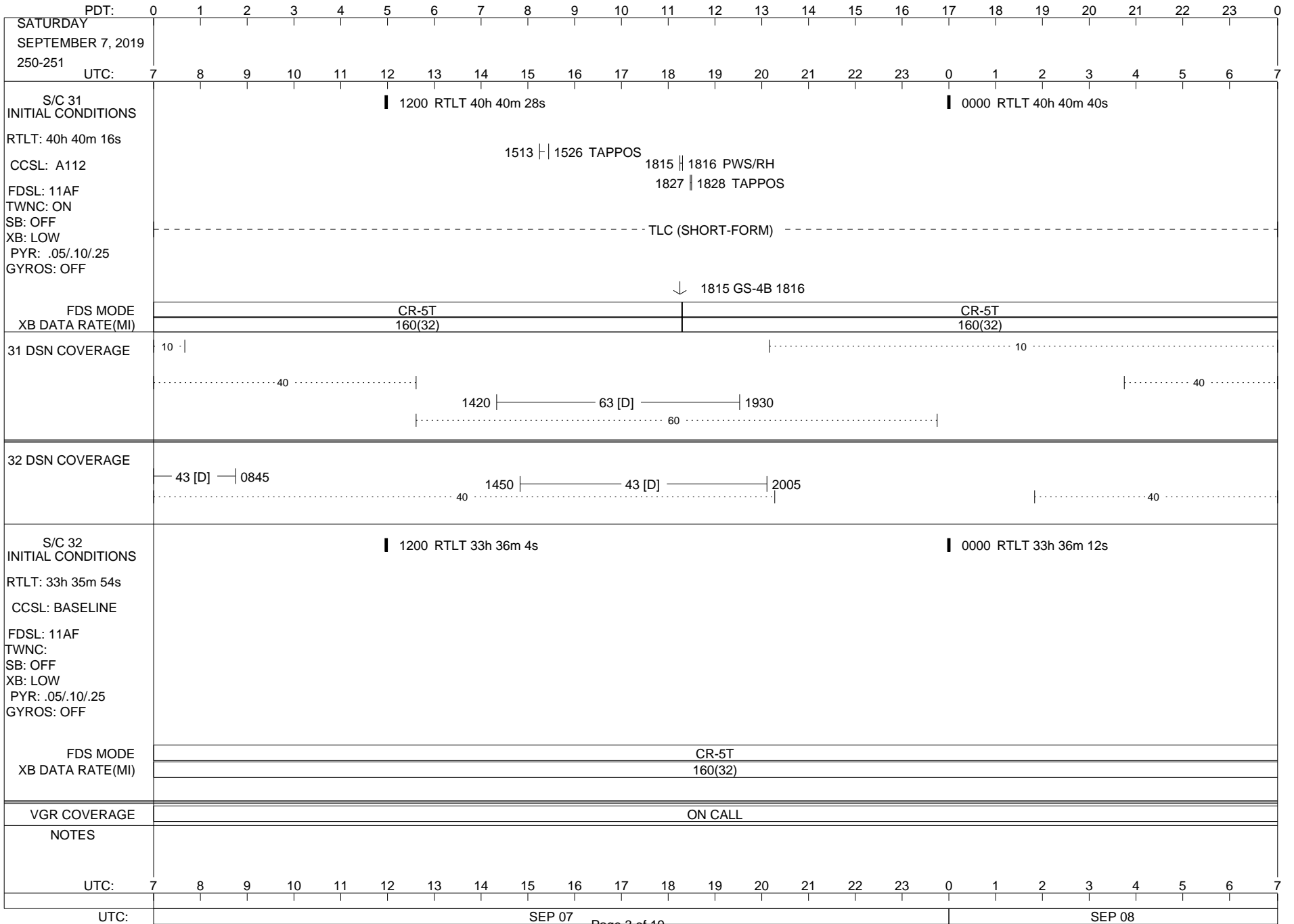
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S/C 31 INITIAL CONDITIONS RTLTL: 40h 39m 28s CCSL: A112 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 40h 39m 40s											0000 RTLTL 40h 39m 52s															
	1213   -   1239 TAPPOS											1514   1516 PWS/RH 1526     1539 TAPPOS															
												↓ 1514 GS-4B 1516															
FDS MODE	CR-5T											CR-5T															
XB DATA RATE(MI)	160(32)											160(32)															
31 DSN COVERAGE	14   0745											.....10.....															
	..10..											.....40.....															
	.....40.....											.....40.....															
	.....1500.....											63 [D] .....1900															
	.....40.....											.....60.....															
32 DSN COVERAGE	1020											43 [D] .....2020															
	.....40.....											.....40.....															
S/C 32 INITIAL CONDITIONS RTLTL: 33h 35m 14s CCSL: BASELINE FDSL: 11AF TWNC: SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 33h 35m 24s											0000 RTLTL 33h 35m 34s															
												* ↓ 1749 FPGYRO CLEANUP & MRO															
												* 1845   1849 B185 CHKSUM															
												* 1918   1925 CCSTIM FINE															
												1936   1939 CCSTIM COARSE															
	EL-40 1815 ↓											* ↓ 1946 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	[1] S/C 32=EL-40 @ 1815 XB=40(30) [2] S/C 32=CR-5T @ 1946 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	7		
UTC:	SEP 05													SEP 06													

ISSUE DATE: 09/11/19 08:23

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S/C 31 INITIAL CONDITIONS RTLT: 40h 39m 52s CCSL: A112 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF		1200 RTLT 40h 40m 4s												0000 RTLT 40h 40m 16s															
FDS MODE XB DATA RATE(MI)														CR-5T 160(32)															
31 DSN COVERAGE																													
32 DSN COVERAGE																													
S/C 32 INITIAL CONDITIONS RTLT: 33h 35m 34s CCSL: BASELINE FDSL: 11AF TWNC: SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF		1200 RTLT 33h 35m 44s												0000 RTLT 33h 35m 54s															
FDS MODE XB DATA RATE(MI)														CR-5T 160(32)															
VGR COVERAGE		ON CALL												VGR				ON CALL											
NOTES		[1] B185 BACKUP U/L SUPPORT																											
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			
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ISSUE DATE: 09/11/19 08:23



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SUNDAY SEPTEMBER 8, 2019 251-252	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 40m 40s CCSL: A112 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	<p>1200 RTLTL 40h 40m 50s</p> <p>0000 RTLTL 40h 41m 2s</p> <p>1627 START A112D MINI-SEQUENCE</p> <p>1646 BAY 1 HTR OFF</p> <p>1650 X/B HI POWER</p> <p>1710 PYR=.05/.05/.05 DB</p> <p>1714  ---  1747 SSB ASCAL</p> <p>1747 PYR=.05/.10/.25</p> <p>1757 X/B LOW POWER</p> <p>1801 BAY 1 HTR ON</p> <p>1827 END SSB ASCAL MINI-SEQUENCE</p> <p>A112D CHKSUM 1500 *    1504</p> <p>TLC (SHORT-FORM) -----  D/L   1643</p> <p>EL-40 1654 ↓ ↓ 1750 CR-5T</p>																											
FDS MODE XB DATA RATE(MI)	CR-5T						EL-40						CR-5T															
	160(32)						40(30)						160(32)															
31 DSN COVERAGE	<p>10  -----  10</p> <p>40  -----  40</p> <p>1420  -----63 [D]-----  1820</p> <p>60  ----- </p>																											
32 DSN COVERAGE	<p>1330  -----43 [D]-----  1935</p> <p>40  -----  40</p>																											
S/C 32 INITIAL CONDITIONS RTLTL: 33h 36m 12s CCSL: BASELINE FDSL: 11AF TWNC: SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	<p>1200 RTLTL 33h 36m 22s</p> <p>0000 RTLTL 33h 36m 34s</p>																											
FDS MODE XB DATA RATE(MI)	CR-5T																											
	160(32)																											
VGR COVERAGE	ON CALL									VGR									ON CALL									
NOTES	<p>[1] S/C 31=EL-40 @ 1654 XB=40(30)</p> <p>[2] S/C 31=CR-5T @ 1750 XB=160(32)</p>																											
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 08														SEP 09													



ISSUE DATE: 09/11/19 08:23

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TUESDAY																												
SEPTEMBER 10, 2019																												
253-254																												
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		1200 RTLT 40h 41m 38s												0000 RTLT 40h 41m 50s														
RTLT: 40h 41m 26s																												
CCSL: A112																												
FDSL: 11AF																												
TWNC: ON																												
SB: OFF																												
XB: LOW																												
PYR: .05/.10/.25																												
GYROS: OFF																												
FDS MODE		CR-5T												CR-5T														
XB DATA RATE(MI)		160(32)												160(32)														
31 DSN COVERAGE																												
32 DSN COVERAGE																												
S/C 32 INITIAL CONDITIONS		1200 RTLT 33h 37m 4s												0000 RTLT 33h 37m 14s														
RTLT: 33h 36m 54s		▼ 0712 DUMMY (5 MIN BRACKETED 16:50)																										
CCSL: B185		0743 - 0759 SHUNT POWER TEST																										
FDSL: 11AF		↓ 1036 PYR=.05/.05/.05																										
TWNC:		1040   -   1113 SSB ASCAL																										
SB: OFF		↓ 1113 PYR=.05/.10/.25																										
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)																		
VGR COVERAGE		VGR				ON CALL				VGR																		
NOTES		<p>[1] S/C 31=EL-40 @ 1014 XB=40(30)</p> <p>[2] S/C 32=CR-5T @ 1116 XB=160(32)</p>																										
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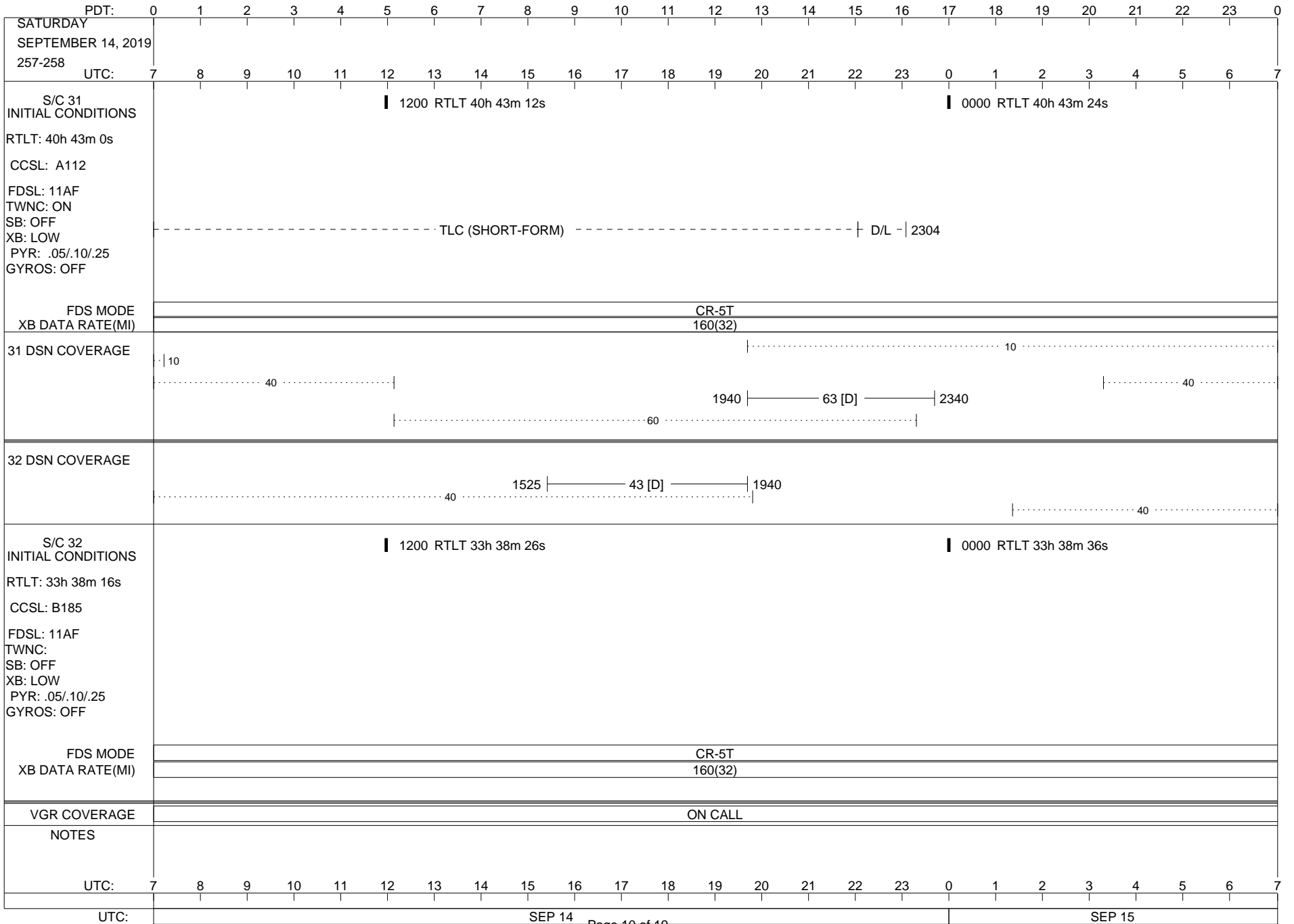
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THURSDAY SEPTEMBER 12, 2019 255-256																														
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S/C 31 INITIAL CONDITIONS RTLTL: 40h 42m 14s CCSL: A112 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 40h 42m 26s												0000 RTLT 40h 42m 38s																	
FDS MODE	CR-5T												CR-5T																	
XB DATA RATE(MI)	160(32)												160(32)																	
31 DSN COVERAGE	0720 14 10												0315 14 [T]																	
32 DSN COVERAGE	1435 43 [D] 1935												40																	
S/C 32 INITIAL CONDITIONS RTLTL: 33h 37m 34s CCSL: B185 FDSL: 11AF TWNC: SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 33h 37m 44s												0000 RTLT 33h 37m 54s																	
FDS MODE	CR-5T												CR-5T																	
XB DATA RATE(MI)	160(32)												160(32)																	
VGR COVERAGE	VGR						VGR						ON CALL						VGR						ON CALL					
NOTES	<p>----- COMMAND MORATORIUM -----</p> <p>↓ 1447 BAY 1 HTR OFF</p> <p>↓ 1447 GYROS AC ON</p> <p>1447  ---  1547 GYRO CONDITIONING</p> <p>↓ 1547 GYROS OFF</p> <p>↓ 1555 BAY 1 HTR ON</p> <p>↓ 1450 EL-40 1450</p>																													
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					
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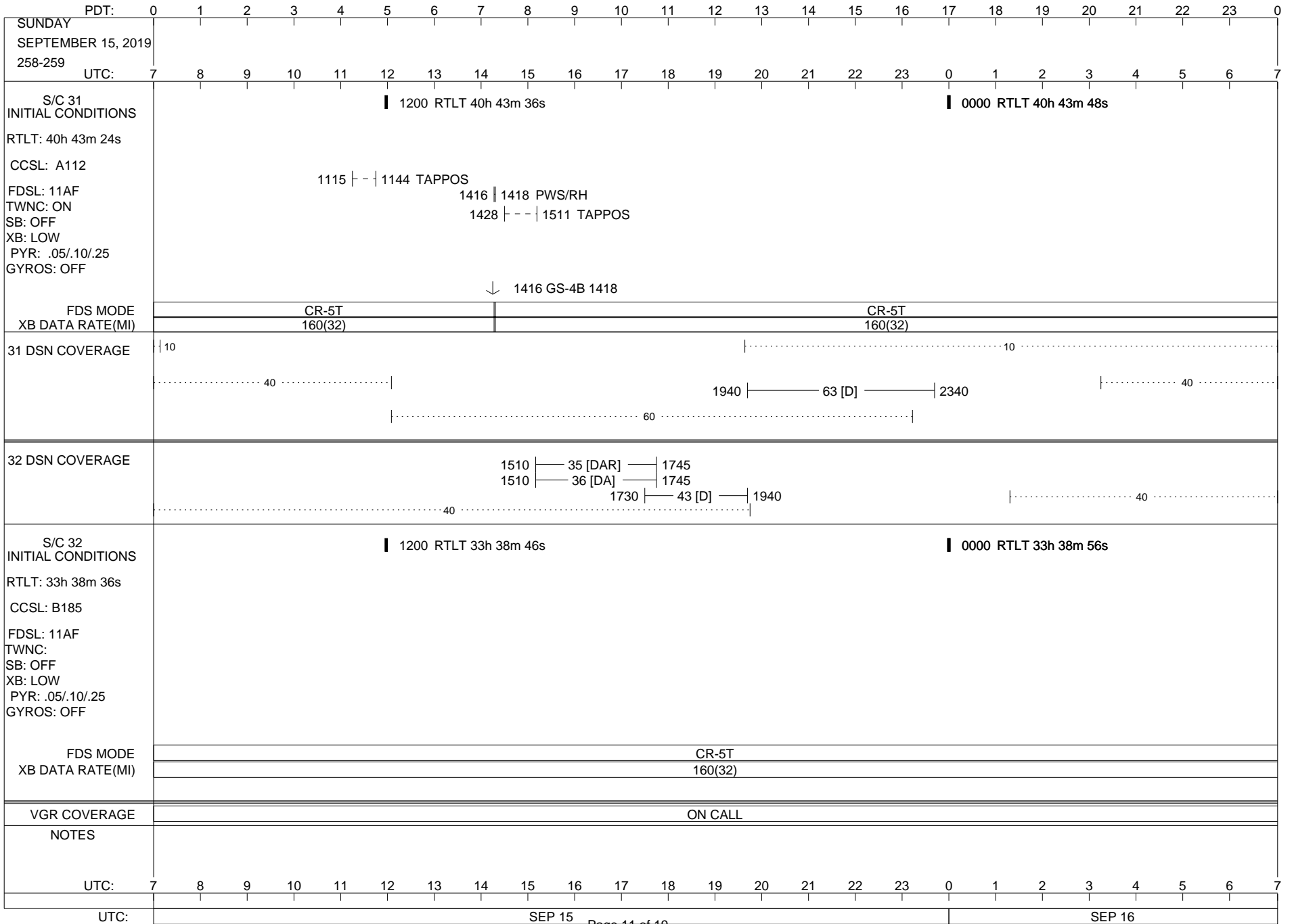
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FRIDAY SEPTEMBER 13, 2019 256-257																													
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S/C 31 INITIAL CONDITIONS RTLTL: 40h 42m 38s CCSL: A112 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF		1200 RTLT 40h 42m 50s														0000 RTLT 40h 43m 0s													
FDS MODE XB DATA RATE(MI)		CR-5T 160(32)														CR-5T 160(32)													
31 DSN COVERAGE		0715 14 [T] 10 40														2230 14 [D] 0230 10 40													
32 DSN COVERAGE		0820 36 [DA] 1220 0820 43 [DAR] 1220														1715 1820 34 [DA] 1715 1820 35 [DAR] 40													
S/C 32 INITIAL CONDITIONS RTLTL: 33h 37m 54s CCSL: B185 FDSL: 11AF TWNC: SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF		1200 RTLT 33h 38m 4s														0000 RTLT 33h 38m 16s													
FDS MODE XB DATA RATE(MI)		CR-5T 160(32)														CR-5T 160(32)													
VGR COVERAGE		ON CALL							VGR							ON CALL													
NOTES		[1] S/C 32 - D/L AGC VARIATIONS EXPECTED DURING MAGROL (1018-1052)																											
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 13														SEP 14													

ISSUE DATE: 09/11/19 08:23



ISSUE DATE: 09/11/19 08:23



ISSUE DATE: 09/11/19 08:23

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	
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S/C 31 INITIAL CONDITIONS RTLT: 40h 43m 48s CCSL: A112 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	10												0300 - 0700   14 [D]													
	40												10													
	60												40													
32 DSN COVERAGE													1440   43 [D]   1840													
	40												40													
S/C 32 INITIAL CONDITIONS RTLT: 33h 38m 56s CCSL: B185 FDSL: 11AF TWNC: 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:	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 16													SEP 17												

ISSUE DATE: 09/11/19 08:23

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SEPTEMBER 17, 2019																												
260-261																												
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S/C 31 INITIAL CONDITIONS		1200 RTLT 40h 44m 24s												0000 RTLT 40h 44m 36s														
RTLT: 40h 44m 12s																												
CCSL: A112																												
FDSL: 11AF																												
TWNC: ON																												
SB: OFF																												
XB: LOW																												
PYR: .05/.10/.25																												
GYROS: OFF																												
FDS MODE														CR-5T												CR-5T		
XB DATA RATE(MI)														160(32)												160(32)		
31 DSN COVERAGE		0700 14 [D] 10												0135 - 0655   14 [D]														
		.....40.....												.....10.....														
		.....60.....												.....40.....														
32 DSN COVERAGE		1240   43 [D]   1640												.....40.....														
S/C 32 INITIAL CONDITIONS		1200 RTLT 33h 39m 28s												0000 RTLT 33h 39m 38s														
RTLT: 33h 39m 18s																												
CCSL: B185																												
FDSL: 11AF																												
TWNC:																												
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																												
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UTC:		SEP 17												Page 13 of 19						SEP 18								

0440 | 0441 PWS/RH

0440 GS-4B 0441 ↓

PLSCAL 0607 | ---  
MAGCAL 0607 | ---  
PESCAL 0607 | ---

ISSUE DATE: 09/11/19 08:23

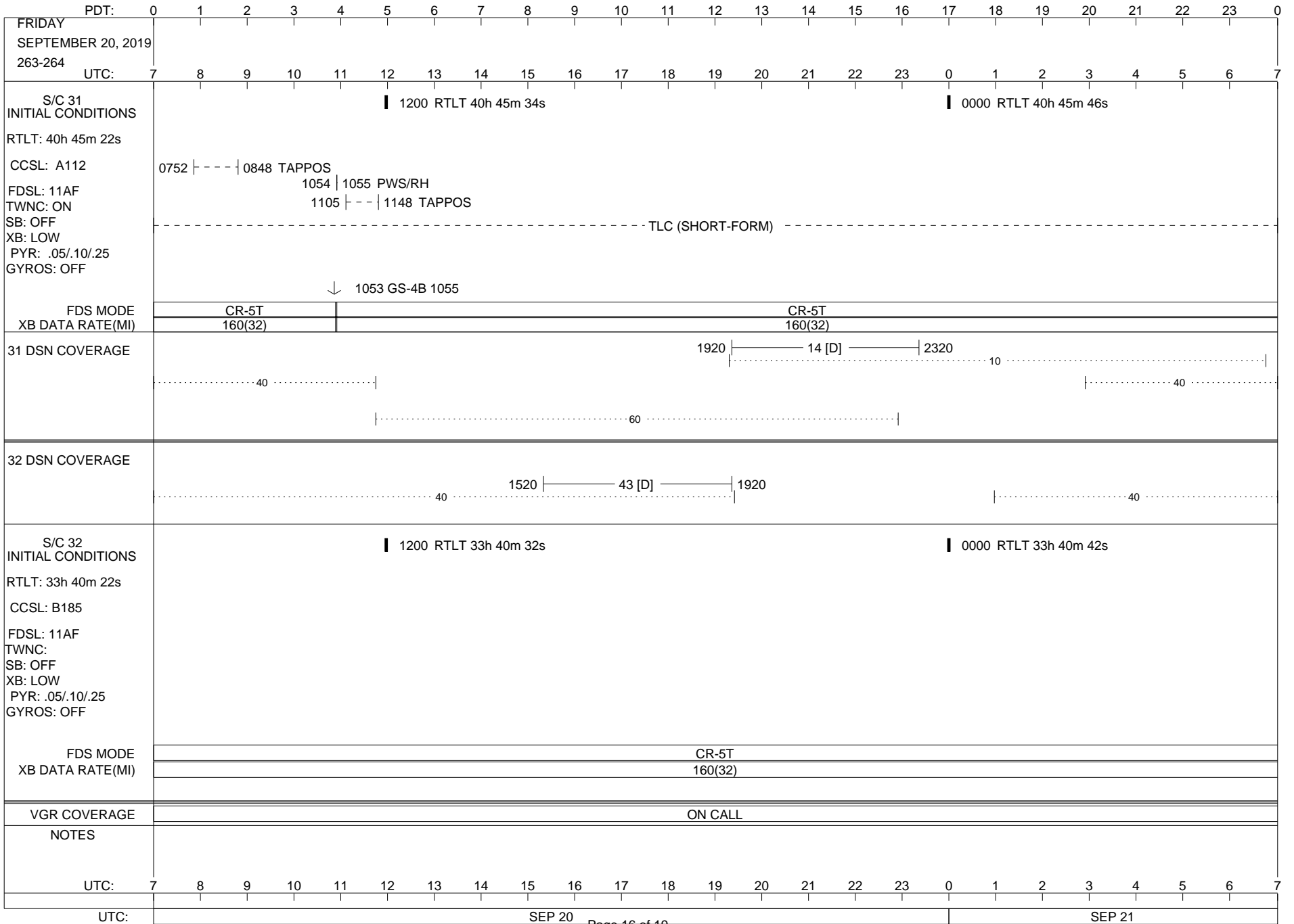
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S/C 31 INITIAL CONDITIONS RTLT: 40h 44m 36s CCSL: A112 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 40h 44m 48s												0000 RTLT 40h 44m 58s												
FDS MODE	CR-5T																								
XB DATA RATE(MI)	160(32)																								
31 DSN COVERAGE	..... 40 .....												..... 10 .....												
	..... 40 .....												..... 40 .....												
	..... 60 .....												..... 63 [D] .....												
	..... 1955 .....												..... 2325 .....												
32 DSN COVERAGE	..... 40 .....												..... 40 .....												
	..... 1500 .....												..... 1930 .....												
S/C 32 INITIAL CONDITIONS RTLT: 33h 39m 38s CCSL: B185 FDSL: 11AF TWNC: SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 33h 39m 50s												0000 RTLT 33h 40m 0s												
	--- 0749 PLSCAL												1543   PLSCAL -  1725												
	- - MAGCAL - - 0909												1543   - - - - MAGCAL - - - -  1845												
	--- PESCAL - - - 0927												1543   - - - - PESCAL - - - -  1903												
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
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ISSUE DATE: 09/11/19 08:23

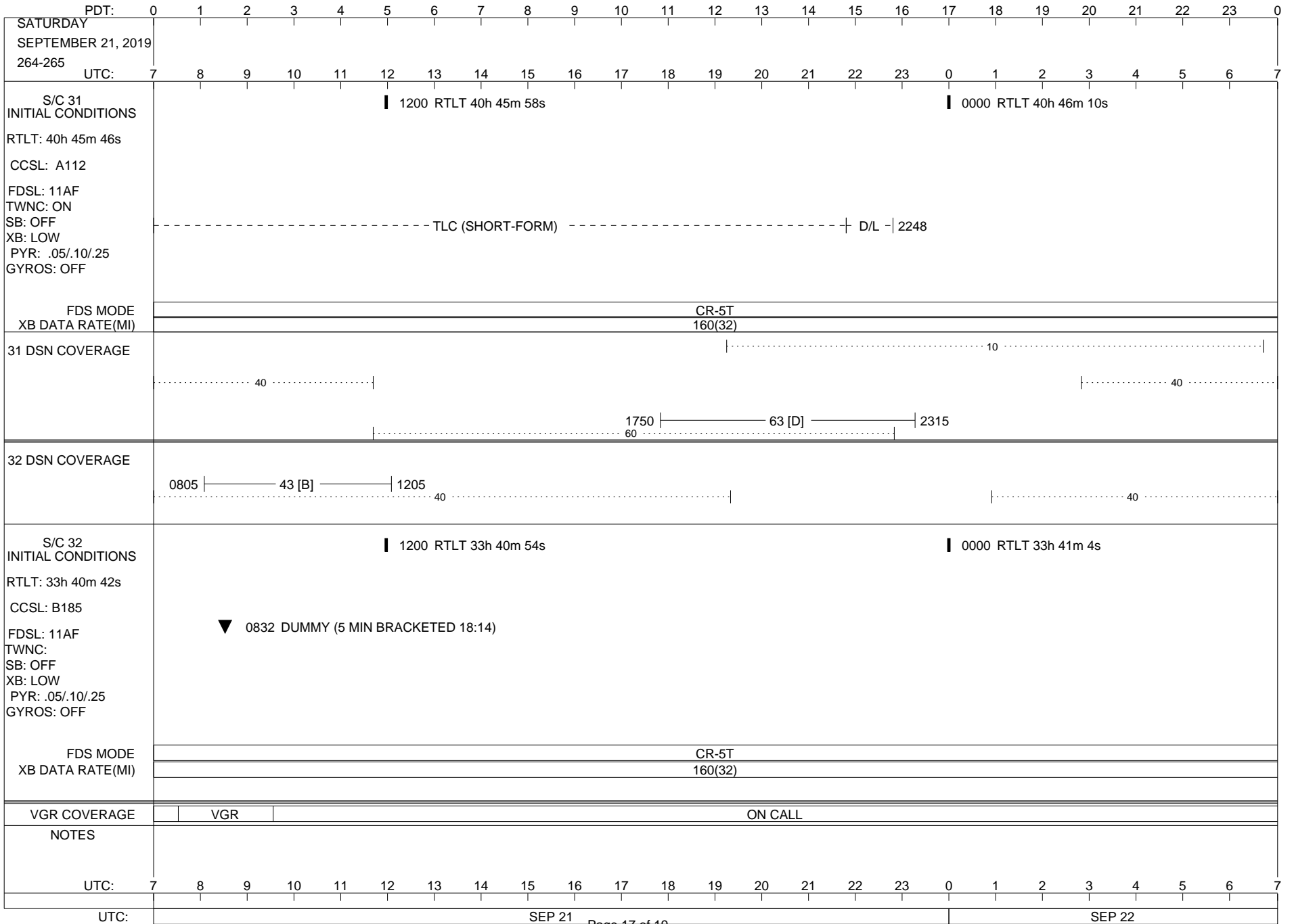
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SEPTEMBER 19, 2019																												
262-263																												
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S/C 31 INITIAL CONDITIONS		1200 RTLT 40h 45m 10s												0000 RTLT 40h 45m 22s														
RTLT: 40h 44m 58s																												
CCSL: A112																												
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>0345 - 0645   14 [T]</p> <p>2140   63 [D]   2320</p>																										
32 DSN COVERAGE		<p>1525   43 [D]   1925</p>																										
S/C 32 INITIAL CONDITIONS		1200 RTLT 33h 40m 10s												0000 RTLT 33h 40m 22s														
RTLT: 33h 40m 0s																												
CCSL: B185																												
FDSL: 11AF																												
TWNC:																												
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																												
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		
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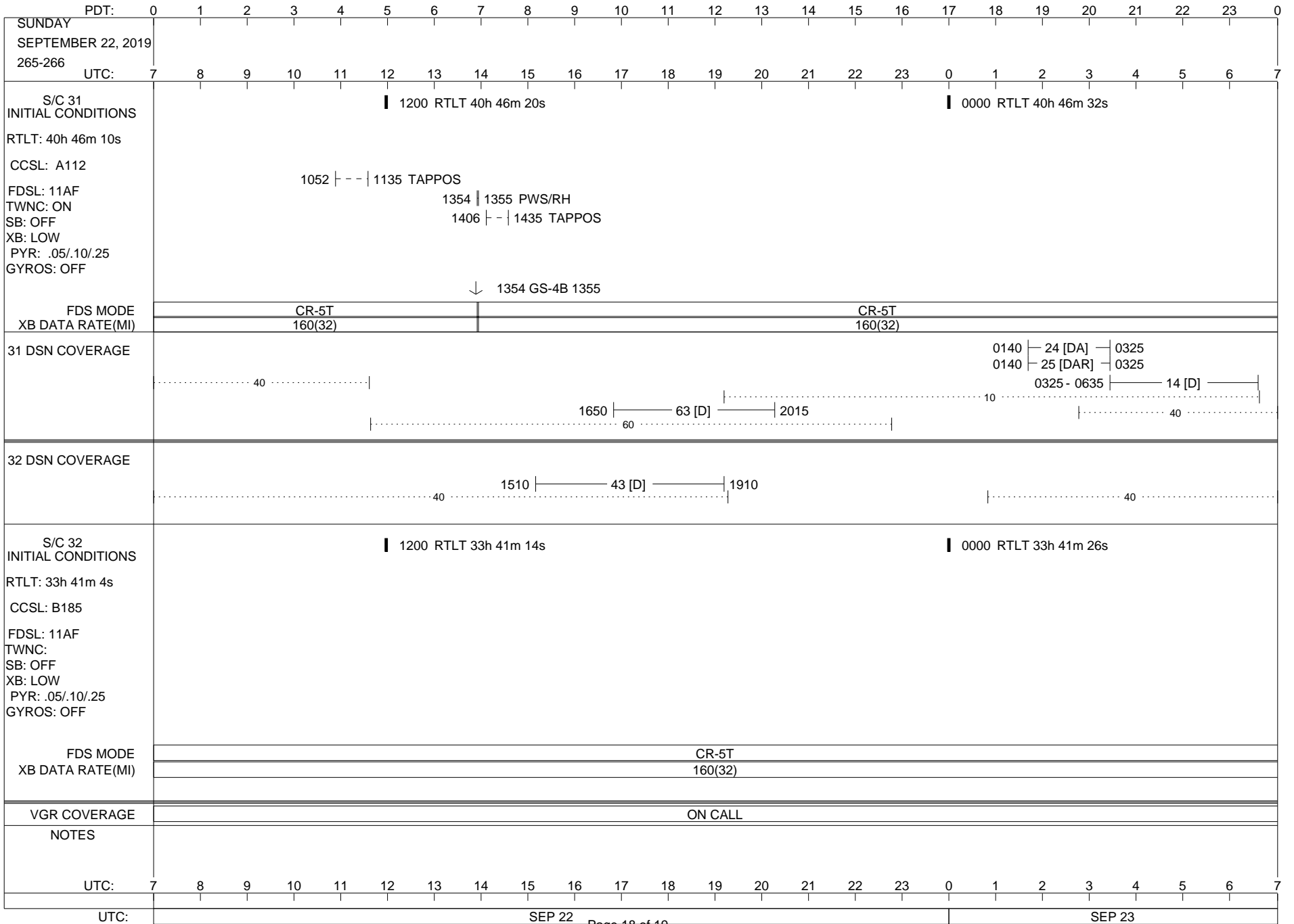
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ISSUE DATE: 09/11/19 08:23

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 23, 2019 266-267																											
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 46m 32s CCSL: A112 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 40h 46m 44s																										
FDS MODE														CR-5T													
XB DATA RATE(MI)														160(32)													
31 DSN COVERAGE	<p>.....40..... .....60..... </p>																										
32 DSN COVERAGE	<p>.....40..... 1405 -----43 [D] -----1850 </p>																										
S/C 32 INITIAL CONDITIONS RTLT: 33h 41m 26s CCSL: B185 FDSL: 11AF TWNC: SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 33h 41m 36s																										
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:	SEP 23													SEP 24													