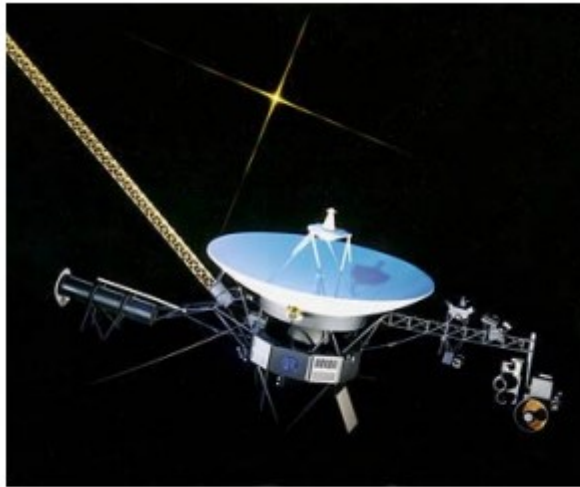


VOYAGER

Space Flight Operations Schedule (SFOS)

Issue Date: February 12, 2020

For the Period: 02/13/20 to 03/02/20 (20/044 – 20/061)



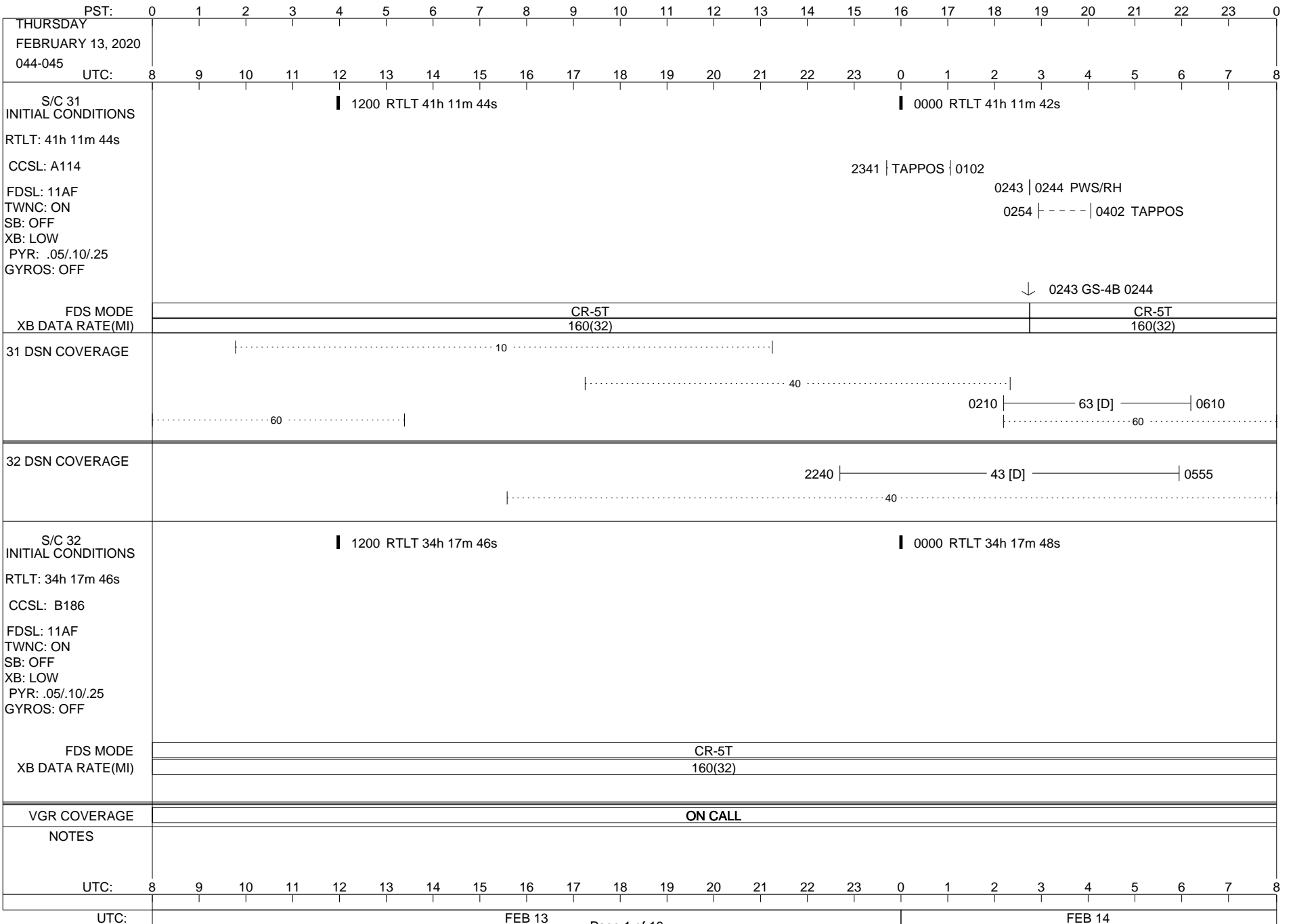
Posted at <https://voyager.jpl.nasa.gov/mission/status/>

LEGEND:

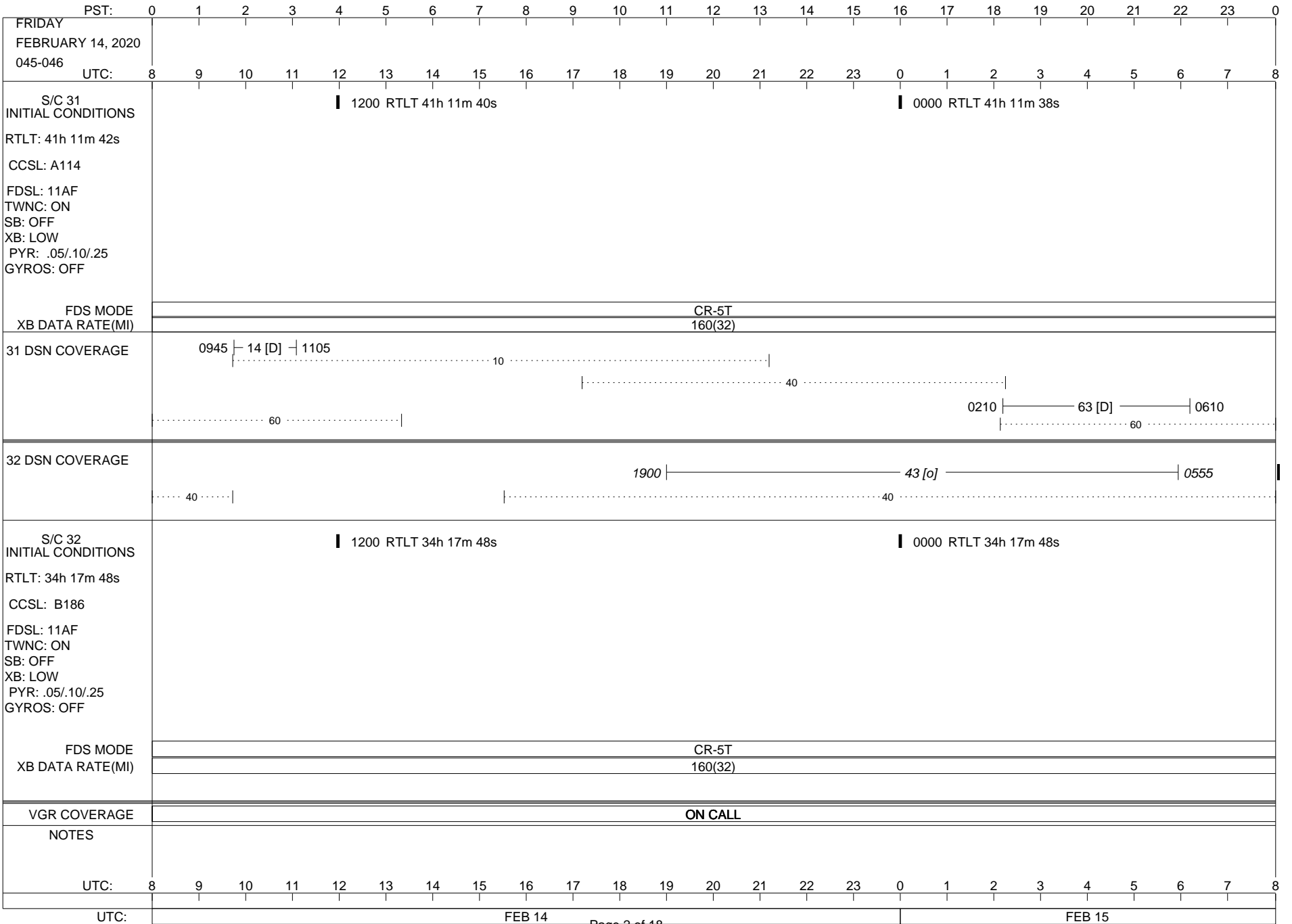
- ∇ = R/T Command (Last chance or Contingency)
- ▼ = R/T Command (Scheduled)
- * = Result of R/T Command
- n = (where n = 1,2,3 ..) Special Note, see bottom of page
- A = Arrayed station
- B = BLF
- D = Downlink only pass
- H = High Power Transmitter
- R = Array Reference Antenna
- T = TLC Uplink
- U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

02/27/19

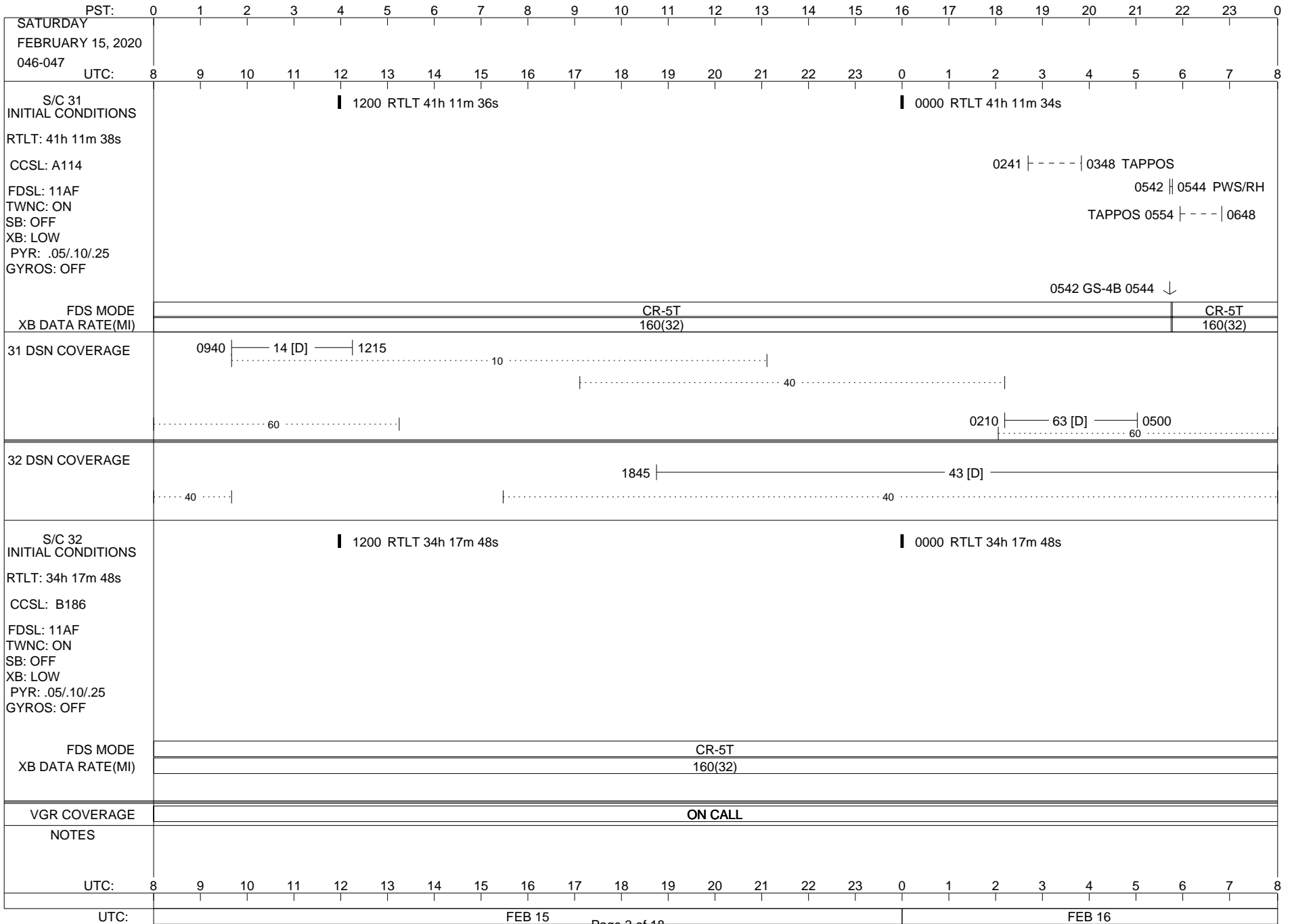
ISSUE DATE: 02/18/20 14:01



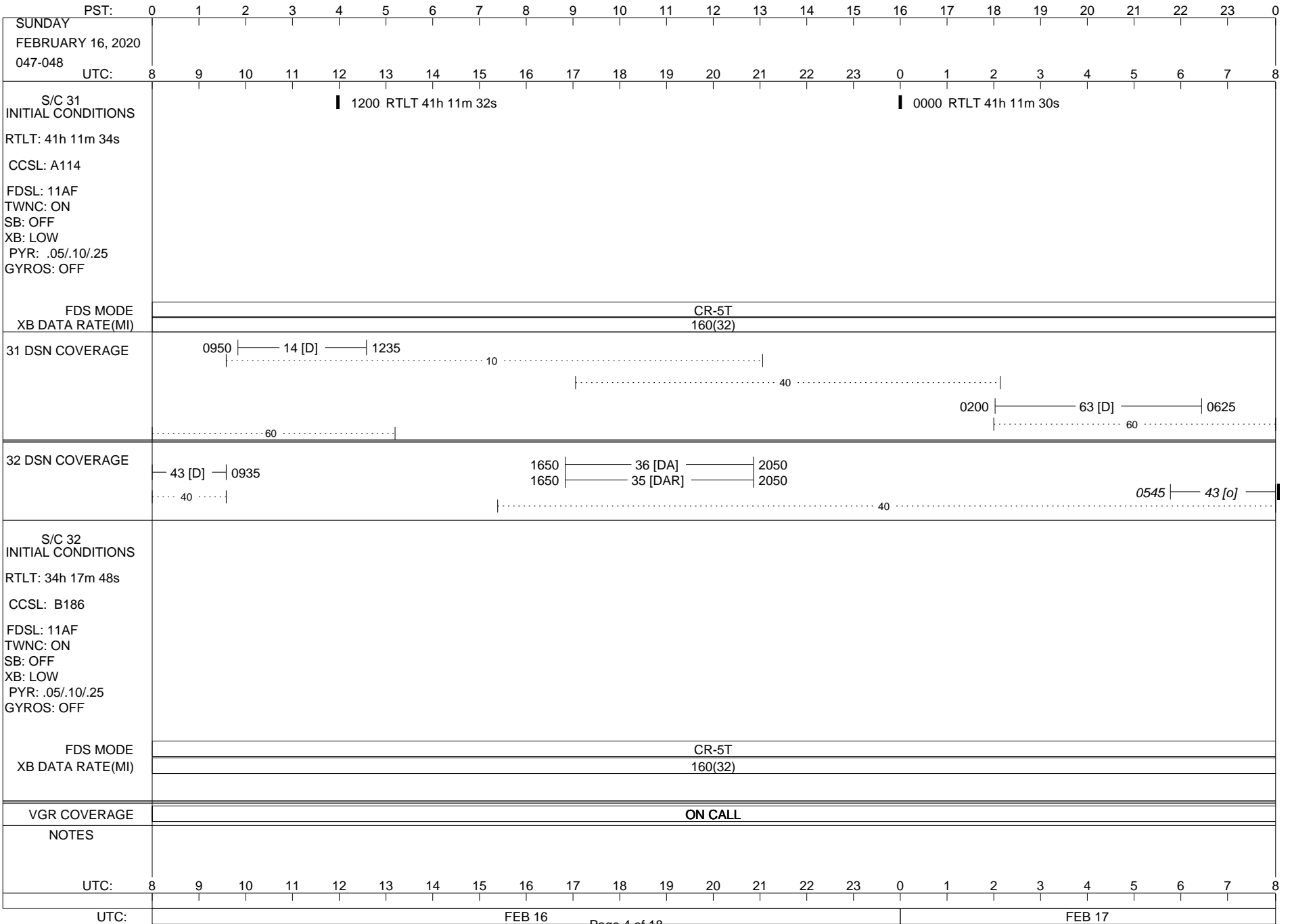
ISSUE DATE: 02/18/20 14:01



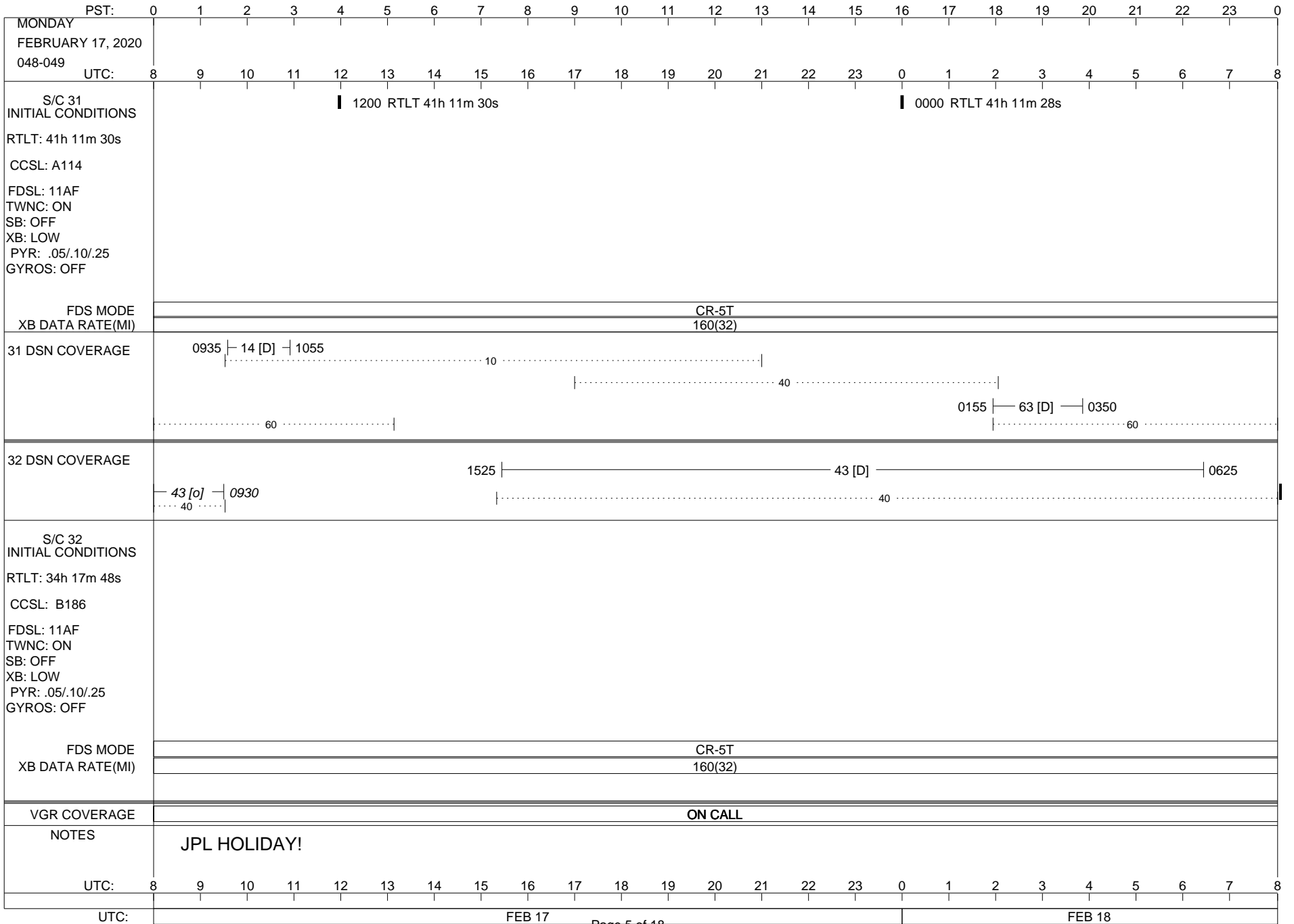
ISSUE DATE: 02/18/20 14:01



ISSUE DATE: 02/18/20 14:01



ISSUE DATE: 02/18/20 14:01



ISSUE DATE: 02/18/20 14:01

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 FEBRUARY 18, 2020 049-050		
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: 41h 11m 28s CCSL: A114 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 41h 11m 26s 0000 RTLT 41h 11m 24s 2005 2006 PWS/RH 2005 GS-4B 2006 ▼ 0250 DUMMY (20:01) U/L 0320 - - - TLC (SHORT-FORM) - - -	
	FDS MODE XB DATA RATE(MI)	CR-5T 160(32)
	CR-5T 160(32)	CR-5T 160(32)
	31 DSN COVERAGE	0930 14 [T] 1205 10 40 60 0155 63 [T] 0450 60
32 DSN COVERAGE	1550 43 [D] 2040 40 40 0355 35 [DA] 0530 0355 36 [DAR] 0530 0600 43 [H1]	
S/C 32 INITIAL CONDITIONS RTLT: 34h 17m 48s CCSL: B186 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	0000 RTLT 34h 17m 50s CRS CMD WORD 10 UPD (17:12) 0654 ▼ SSB UPD (17:28) 0710 ▼	
	FDS MODE XB DATA RATE(MI)	CR-5T 160(32)
	CR-5T 160(32)	CR-5T 160(32)
	VGR COVERAGE	VGR ON CALL VGR
NOTES	[1] DSS-43 HP DRV OFF <= 0800	
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: FEB 18 FEB 19		

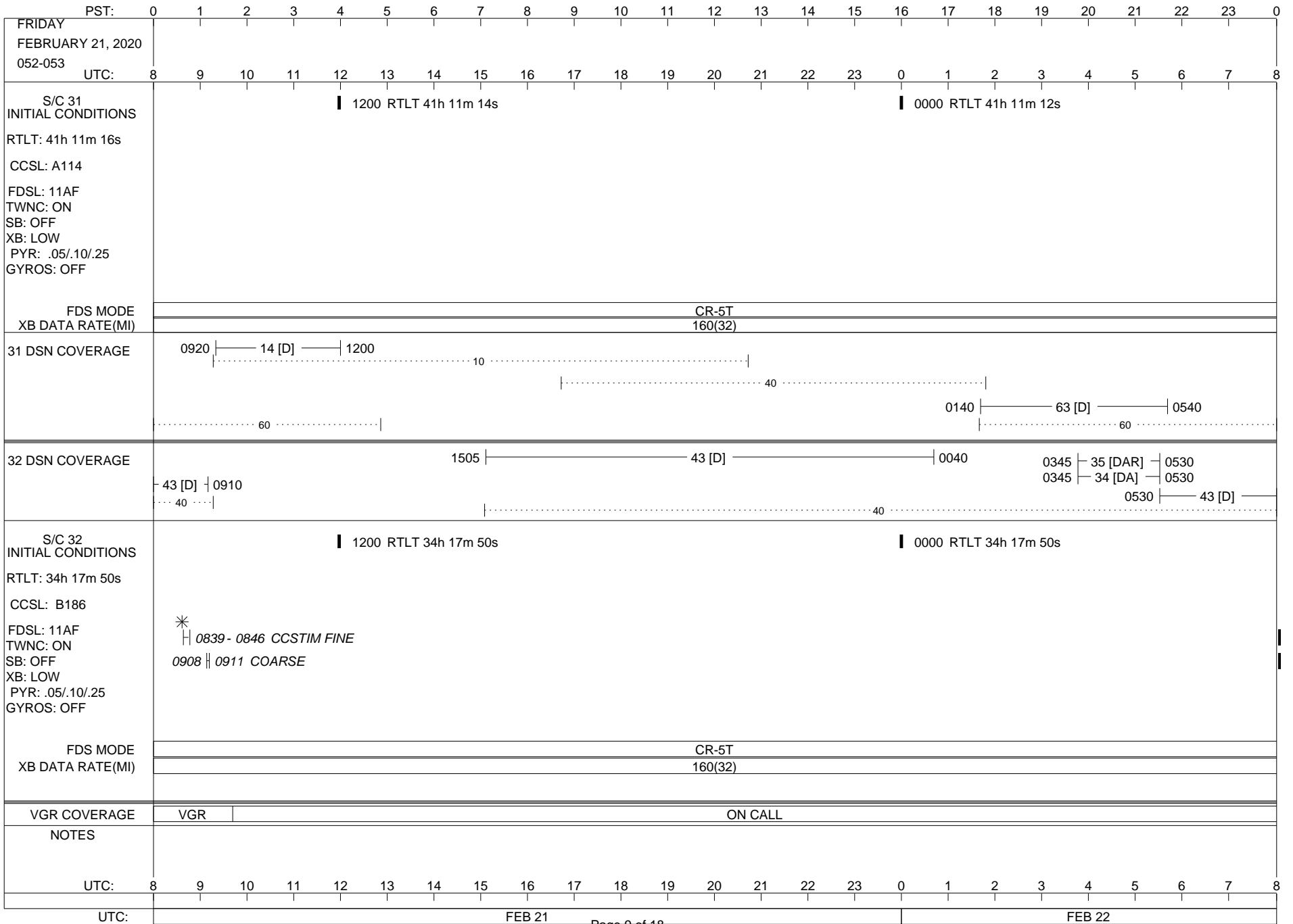
ISSUE DATE: 02/18/20 14:01

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WEDNESDAY FEBRUARY 19, 2020 050-051																												
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: 41h 11m 24s CCSL: A114 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 41h 11m 22s												0000 RTLT 41h 11m 20s															
FDS MODE XB DATA RATE(MI)													CR-5T 160(32)															
31 DSN COVERAGE																												
32 DSN COVERAGE																												
S/C 32 INITIAL CONDITIONS RTLT: 34h 17m 50s CCSL: B186 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 34h 17m 50s												0000 RTLT 34h 17m 50s															
FDS MODE XB DATA RATE(MI)													CR-5T 160(32)															
VGR COVERAGE	ON CALL												VGR						ON CALL									
NOTES	[2] DSS-43 HP DRV ON >= 16:35																											
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:	FEB 19														FEB 20													

ISSUE DATE: 02/18/20 14:01

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 FEBRUARY 20, 2020 051-052																														
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: 41h 11m 20s CCSL: A114 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 41h 11m 18s												0000 RTLTL 41h 11m 16s																	
FDS MODE	CR-5T												CR-5T																	
XB DATA RATE(MI)	160(32)												160(32)																	
31 DSN COVERAGE	0920 ----- 14 [D] ----- 1230 10 40 60 0145 ----- 63 [D] ----- 0435 60																													
32 DSN COVERAGE	43 [H2] 0920 40 1510 ----- 43 [D] ----- 0040 40 0535 ----- 43 [D] -----																													
S/C 32 INITIAL CONDITIONS RTLTL: 34h 17m 50s CCSL: B186 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLTL 34h 17m 50s												0000 RTLTL 34h 17m 50s																	
FDS MODE	CR-5T												CR-5T																	
XB DATA RATE(MI)	160(32)												160(32)																	
VGR COVERAGE	ON CALL												VGR						ON CALL						VGR					
NOTES	* ↓ 1712 CRS CMD WORD 10 UPD * ↓ 1728 SSB UPD CCS CLOCK RESET 0619 ↓ *																													
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:	FEB 20												Page 8 of 18						FEB 21											

ISSUE DATE: 02/18/20 14:01



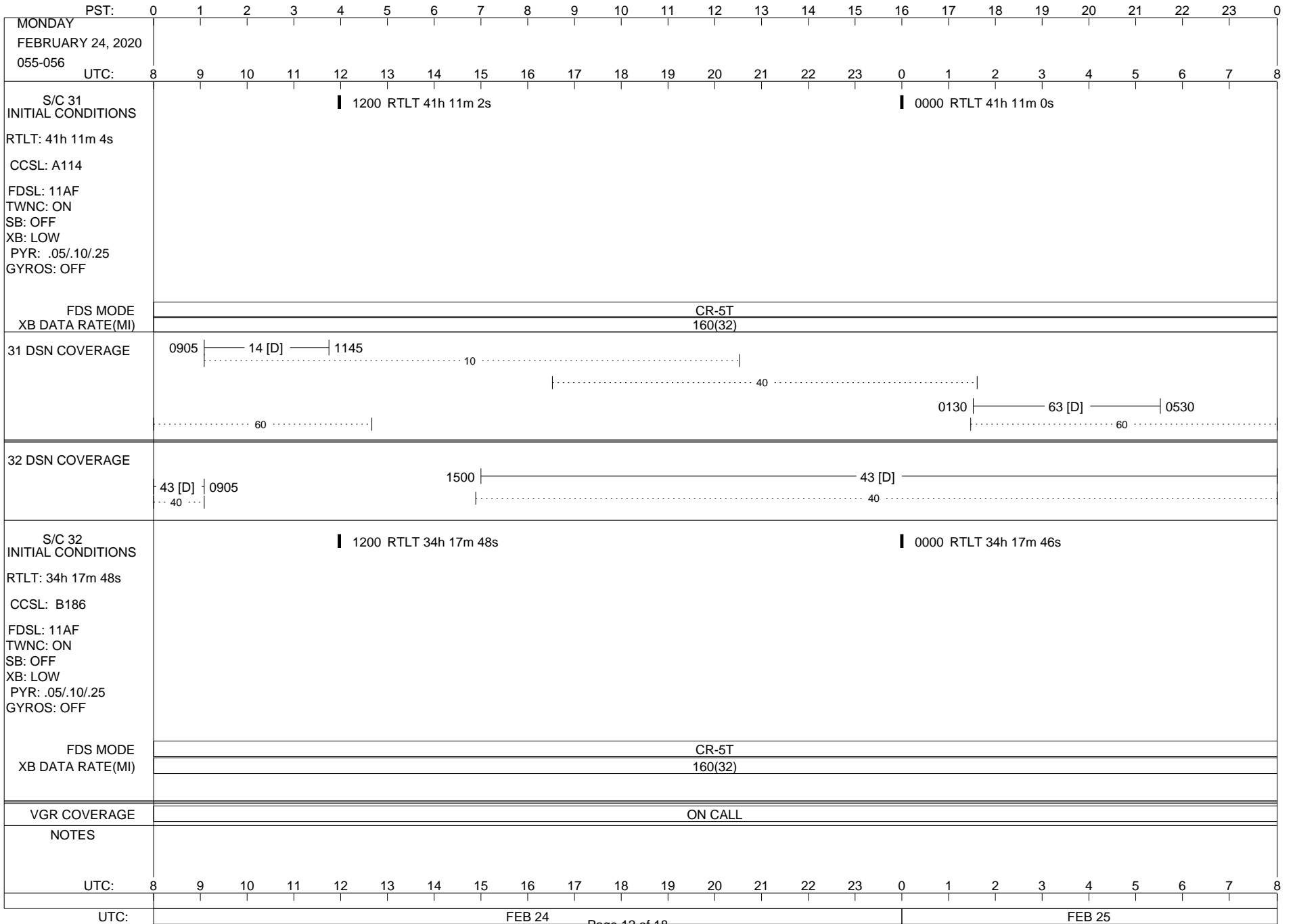
ISSUE DATE: 02/18/20 14:01

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SATURDAY FEBRUARY 22, 2020 053-054																									
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: 41h 11m 12s CCSL: A114 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	█ 1200 RTLTL 41h 11m 10s												█ 0000 RTLTL 41h 11m 8s												
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												160(32)												
31 DSN COVERAGE	0915 ----- 14 [D] ----- 1140 ----- 10 ----- ----- 40 ----- ----- 60 ----- 0135 ----- 63 [D] ----- 0430 ----- 60 -----																								
32 DSN COVERAGE	43 [D] 0910 ----- 40 ----- 2200 ----- 43 [D] -----																								
S/C 32 INITIAL CONDITIONS RTLTL: 34h 17m 50s CCSL: B186 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	█ 1200 RTLTL 34h 17m 48s												█ 0000 RTLTL 34h 17m 48s												
FDS MODE	CR-5T												CR-5T												
XB DATA RATE(MI)	160(32)												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:	FEB 22												FEB 23												

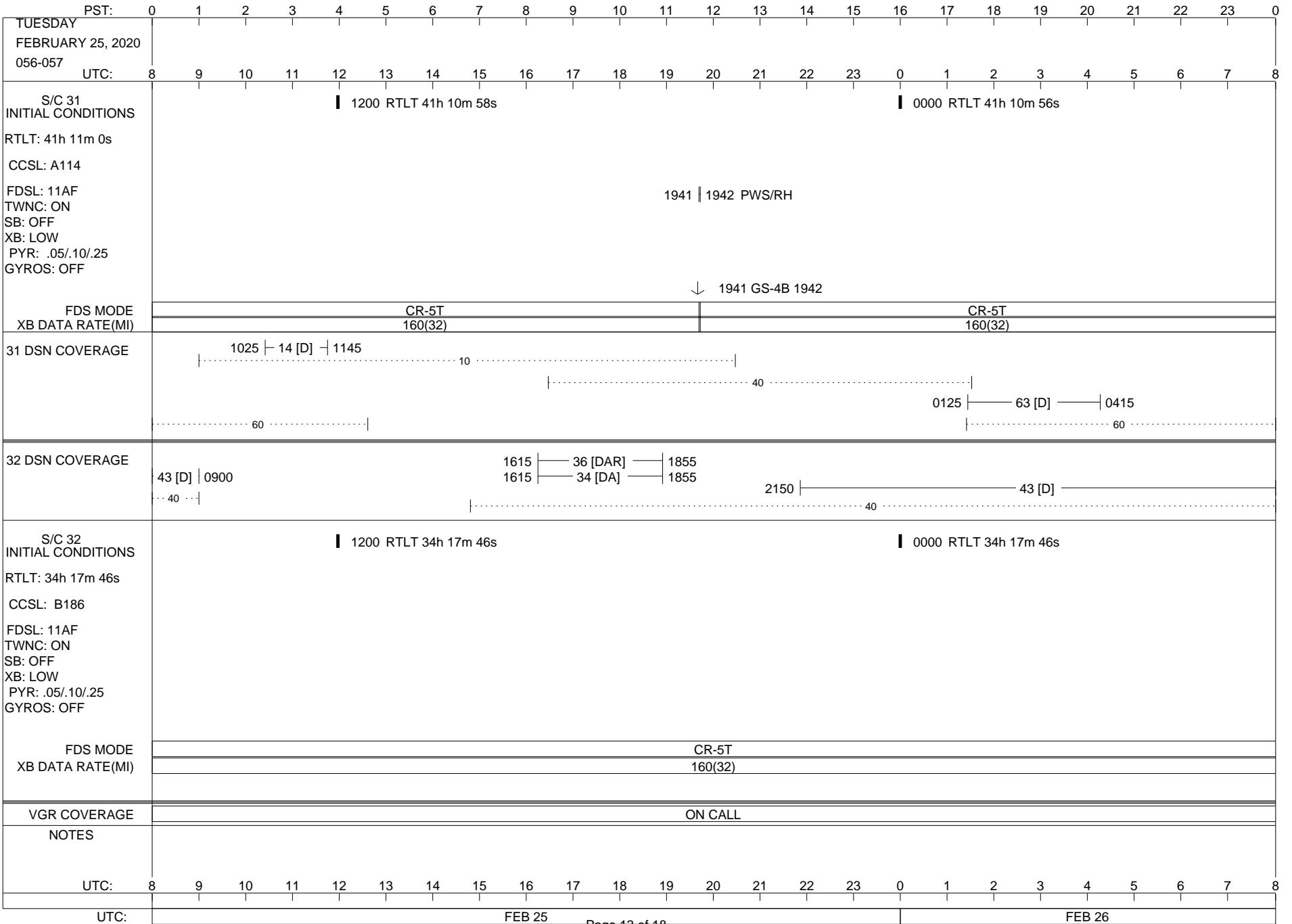
ISSUE DATE: 02/18/20 14:01

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 FEBRUARY 23, 2020 054-055	
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: 41h 11m 8s CCSL: A114 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 41h 11m 6s 0000 RTLT 41h 11m 4s
FDS MODE	CR-5T
XB DATA RATE(MI)	160(32)
31 DSN COVERAGE	0910 ----- 14 [D] ----- 1150 10 40 60 0135 ----- 63 [D] ----- 0535 60
32 DSN COVERAGE	43 [D] 0910 40 1450 ----- 43 [D] ----- 2040 40 0530 ----- 43 [D] -----
S/C 32 INITIAL CONDITIONS RTLT: 34h 17m 48s CCSL: B186 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	1200 RTLT 34h 17m 48s 0000 RTLT 34h 17m 48s
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:	FEB 23 Page 11 of 18 FEB 24

ISSUE DATE: 02/18/20 14:01



ISSUE DATE: 02/18/20 14:01



ISSUE DATE: 02/18/20 14:01

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
FEBRUARY 26, 2020
057-058
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: 41h 10m 56s
CCSL: A114
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

1200 RTLTL 41h 10m 54s

0000 RTLTL 41h 10m 52s

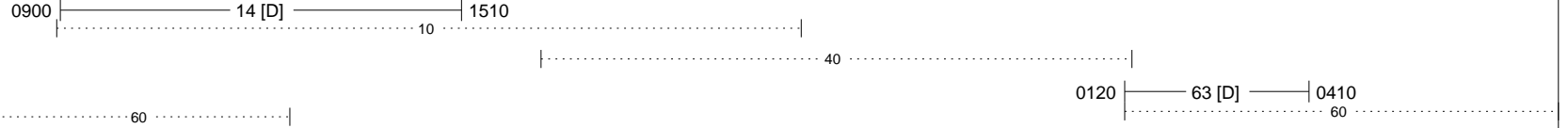
1132 |---- MAGCAL ----| 1435

1132 |---- PESCAL ----| 1452

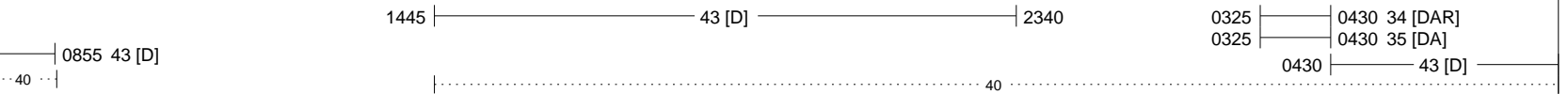
FDS MODE
XB DATA RATE(MI)

CR-5T
160(32)

31 DSN COVERAGE



32 DSN COVERAGE



S/C 32
INITIAL CONDITIONS
RTLTL: 34h 17m 46s
CCSL: B186
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

1200 RTLTL 34h 17m 46s

0000 RTLTL 34h 17m 44s

FDS MODE
XB DATA RATE(MI)

CR-5T
160(32)

VGR COVERAGE

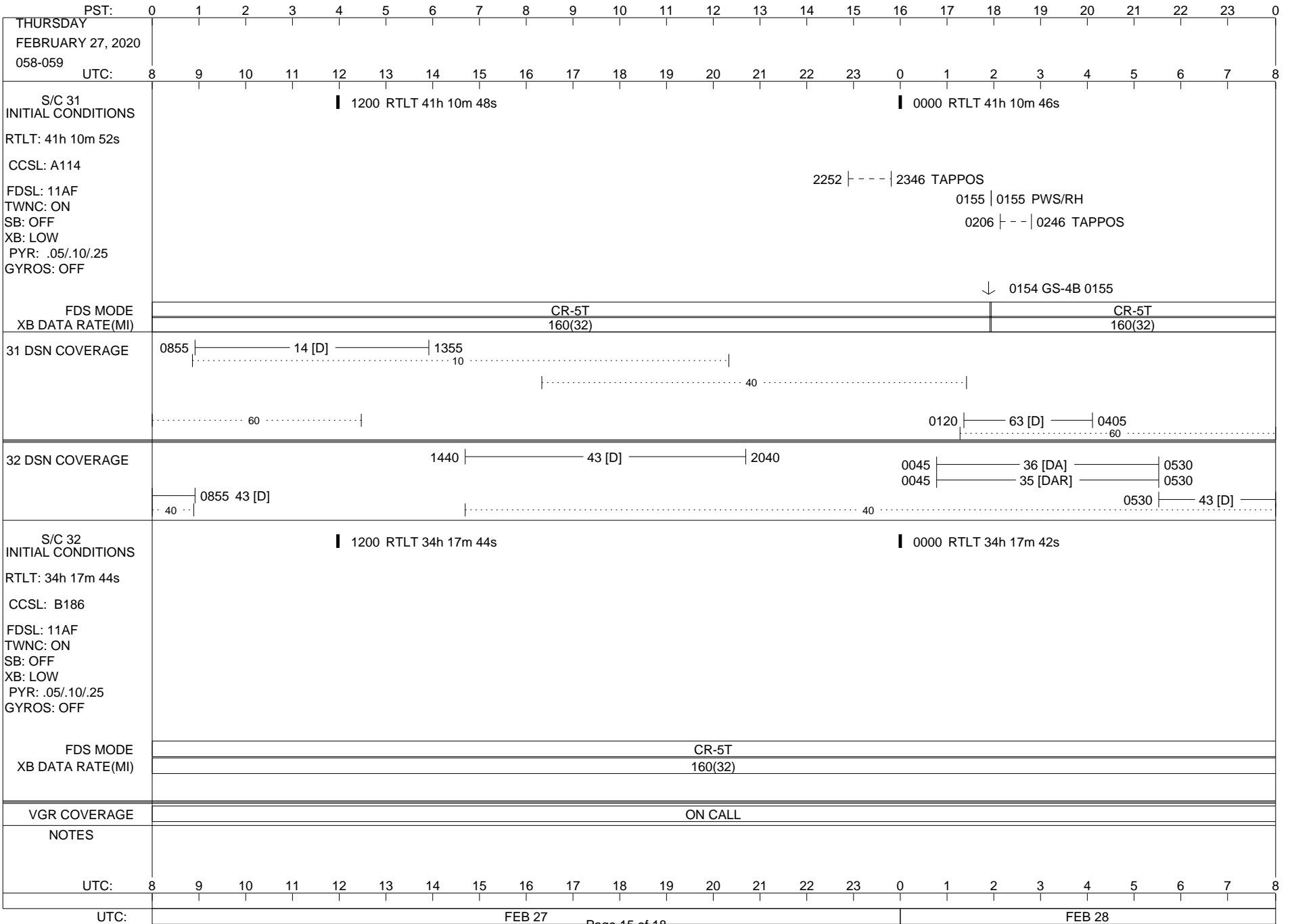
ON CALL

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: FEB 26 Page 14 of 18 FEB 27

ISSUE DATE: 02/18/20 14:01



ISSUE DATE: 02/18/20 14:01

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

FRIDAY
FEBRUARY 28, 2020
059-060

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: 41h 10m 46s
CCSL: A114
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

1200 RTLT 41h 10m 44s

0000 RTLT 41h 10m 42s

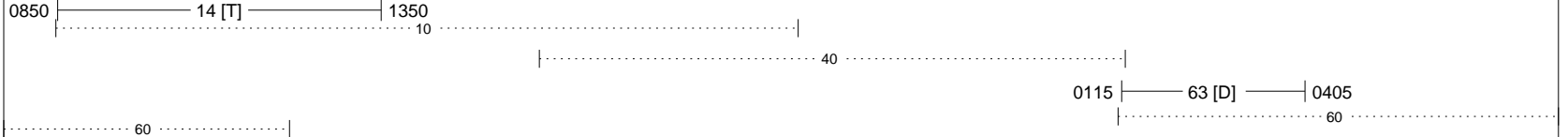
▼ 0920 DUMMY (02:31)

U/L 0945 | - | - - - - - TLC (SHORT-FORM) - - - - -

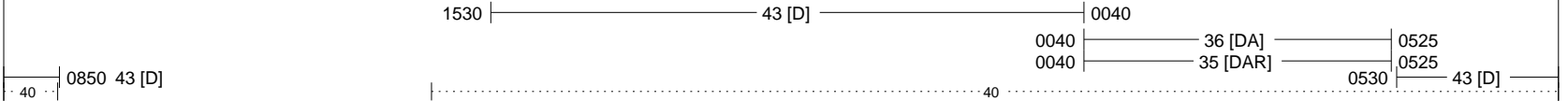
FDS MODE
XB DATA RATE(MI)

CR-5T
160(32)

31 DSN COVERAGE



32 DSN COVERAGE



S/C 32
INITIAL CONDITIONS
RTLT: 34h 17m 42s
CCSL: B186
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

1200 RTLT 34h 17m 42s

0000 RTLT 34h 17m 42s

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: FEB 28 Page 16 of 18 FEB 29

ISSUE DATE: 02/18/20 14:01

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
FEBRUARY 29, 2020
060-061

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: 41h 10m 42s
CCSL: A114
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

1200 RTLTL 41h 10m 40s

0000 RTLTL 41h 10m 38s

TLC (SHORT-FORM)

D/L -| 0424

0152 | - - | 0232 TAPPOS

0454 | 0455 PWS/RH

0506 | - | 0532 TAPPOS

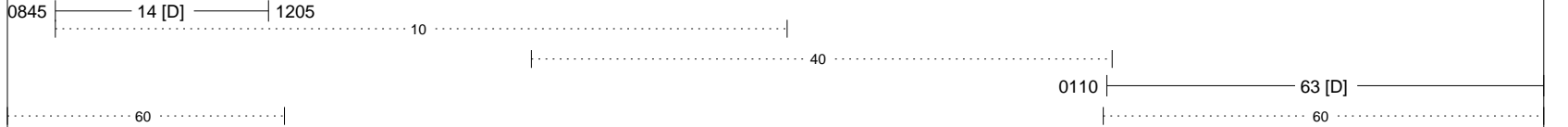
↓ 0454 GS-4B 0455

FDS MODE
XB DATA RATE(MI)

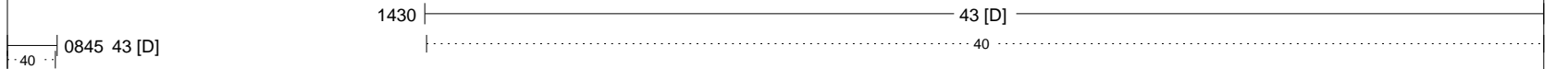
CR-5T
160(32)

CR-5T
160(32)

31 DSN COVERAGE



32 DSN COVERAGE



S/C 32
INITIAL CONDITIONS
RTLTL: 34h 17m 42s
CCSL: B186
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

1200 RTLTL 34h 17m 40s

0000 RTLTL 34h 17m 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: FEB 29 Page 17 of 18 MAR 01

ISSUE DATE: 02/18/20 14:01

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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S/C 31 INITIAL CONDITIONS RTLT: 41h 10m 38s CCSL: A114 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	█ 1200 RTLT 41h 10m 36s																								
FDS MODE XB DATA RATE(MI)													CR-5T 160(32)												
31 DSN COVERAGE	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>14 [D] 0840 - 1110</p> <p>63 [D] 0910</p> </div> <div style="width: 10%; text-align: center;">10</div> <div style="width: 45%;"> <p>60</p> </div> </div>																								
32 DSN COVERAGE	<div style="display: flex; justify-content: space-between;"> <div style="width: 25%;">0840 43 [D]</div> <div style="width: 25%; text-align: center;">1430</div> <div style="width: 25%;">43 [D]</div> <div style="width: 25%; text-align: right;">2030</div> </div> <p>40</p>																								
S/C 32 INITIAL CONDITIONS RTLT: 34h 17m 40s CCSL: B186 FDSL: 11AF TWNC: ON SB: OFF XB: LOW PYR: .05/.10/.25 GYROS: OFF	█ 1200 RTLT 34h 17m 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:	MAR 01												MAR 02												