VOYAGER
Space Flight Operations Schedule (SFOS)

Issue Date: December 7, 2016 For the Period: 12/08/16 to 12/26/16 (16-343 – 16-361)

DSN OPSCHIEF (1) 230-102

DSOT (1) 230-102

*Zsarina.Bulchand@jpl.nasa.gov
*gdyke@airmail.fltops.jpl.nasa.gov
*John.M.Grant@jpl.nasa.gov
*dmcclena@airmail.fltops.jpl.nasa.gov
*pquach@airmail.fltops.jpl.nasa.gov
*mrobles@airmail.fltops.jpl.nasa.gov
*rwilliam@airmail.fltops.jpl.nasa.gov

OTHER

* KMassey@jgld.gdscc.nasa.gov
* Belinda.Arroyo@jpl.nasa.gov
*DL-DSSN-MPSETA@dsn.nasa.gov

SCIENCE

CRS *bryant@mail630.gsfc.nasa.gov
LECP *r.decker@jhuapl.edu
UVS *holburg@argus.lpl.arizona.edu
MAG *u2mha@lepvax.gsfc.nasa.gov
PLS *vgr@space.mit.edu
PWS *wsk@space.physics.uiowa.edu
*Leonard.F.Burlaga@nasa.gov
*Donald-Gurnett@uiowa.edu

FLIGHT TEAM (14) 600-100

Dodd, S.
Hall, J.
Howard, S. (3)
Ludwig, R. (2)
Matsumoto, S.
Medina
Peralta, F.
Weeks, T.
Wong, R.
Yang, L.
Zottarelli, L.
*odivers@san.rr.com

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

*Electronic Copy Only
(16 – Dist/N: Paper Copies)
09/08/10

ISSUE DATE: 12/15/16 06:52

THURSDAY
DECEMBER 8, 2016
343-344

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: 38h 11m 4s
CCSL: A101
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

1200 RTLT 38h 11m 8s
0000 RTLT 38h 11m 14s
0924 0928 MINI-SEQUENCE CHKSUM
0954 0957 2 AHELI2 SID MRO'S
0859 EL-40
0959 CR-5T
0323 0352 TAPPOS
PWS/RH 0624 0626
TAPPOS 0636 - 0719
0624 GS-4B 0626

FDS MODE	CR-5T	EL-40	CR-5T	CR-5T
XB DATA RATE(MI)		40(30)	160(32)	160(32)

31 DSN COVERAGE

10
40
63 [D] 0800 - 1245 (60)
0635 63 [D] (60)

32 DSN COVERAGE

1005 43 [B] 1350 (40)
0100 0200 34 [DAR]
0100 0200 36 [DA] (40)

S/C 32 INITIAL CONDITIONS

RTLT: 31h 30m 0s
CCSL: B174
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25/
GYROS: OFF

1200 RTLT 31h 30m 8s
1925 COMMAND MORATORIUM
0000 RTLT 31h 30m 16s
1112 DUMMY (5 MIN BRACKETED 18:43)
0111 0119 CCSTIMB FINE

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

VGR COVERAGE	VGR	ON CALL

NOTES

[3] S/C 31=GS-4B @ 0624 XB=2.8K(41) NOT RECOVERABLE
[1] S/C 31=EL-40 @ 08:59 XB=40(30)
[2] S/C 31=CR-5T @ 09:59 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

UTC: DEC 08 | DEC 09

ISSUE DATE: 12/15/16 06:52

FRIDAY
DECEMBER 9, 2016
344-345

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: 38h 11m 14s
CCSL: A101
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

1200 RTLT 38h 11m 18s
0000 RTLT 38h 11m 22s

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

31 DSN COVERAGE

1405 — 14 [D] — 1805
10
40
63 [D] 0910
60
0630 — 63 [D]
60

32 DSN COVERAGE

0945 — 43 [D] — 1345
40
0200 — 43 [DAR] — 0530
0230 — 36 [DA] — 0430
40

S/C 32 INITIAL CONDITIONS

RTLT: 31h 30m 16s
CCSL: B174
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25/
GYROS: OFF

1200 RTLT 31h 30m 24s
0000 RTLT 31h 30m 32s
COMMAND MORATORIUM
0210 — 0435 MINI-MAG DEMO
0225 GYROS BC ON
0225 BAY 1 HTR OFF
0226 GYRO INIT
0235 GYRO FAULT TEST
0325 AAI
0329 — 0402 1 REV MAGROL
0405 RAI
0412 GYROS OFF
0419 BAY 1 HTR ON
0210 **0435**

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 @ 0228 XB=40(30)
[2] S/C 32=CR-5T @ 0435 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

UTC: DEC 09 | DEC 10

ISSUE DATE: 12/15/16 06:52

SATURDAY
DECEMBER 10, 2016
345-346

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: 38h 11m 22s
CCSL: A101
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

1200 RTLT 38h 11m 26s

0000 RTLT 38h 11m 32s

TAPPOS 0623 – 0706

FDS MODE: CR-5T

XB DATA RATE(MI): 160(32)

31 DSN COVERAGE

1405 – 14 [D] – 1620
10
40
63 [D] – 1030
60
0630 – 63 [D]
60

32 DSN COVERAGE

1205 – 43 [D] – 1345
40
0245 – 35 [D] – 0645
40

S/C 32 INITIAL CONDITIONS

RTLT: 31h 30m 32s
CCSL: B174
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25/
GYROS: OFF

1200 RTLT 31h 30m 40s

COMMAND MORATORIUM – 1855

0000 RTLT 31h 30m 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: DEC 10 | DEC 11

ISSUE DATE: 12/15/16 06:52

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
DECEMBER 11, 2016
346-347

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: 38h 11m 32s
CCSL: A101
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

1200 RTLT 38h 11m 36s
0000 RTLT 38h 11m 40s
0924 0926 PWS/RH
0936 1033 TAPPOS
0924 GS-4B 0926

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

31 DSN COVERAGE

10
40
63 [D] 1135
60
0625 63 [D]
60

32 DSN COVERAGE

0935 43 [D] 1340
40
40

S/C 32 INITIAL CONDITIONS

RTLT: 31h 30m 48s
CCSL: B174
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25/
GYROS: OFF

1200 RTLT 31h 30m 56s
0000 RTLT 31h 31m 4s

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

VGR COVERAGE: ON CALL

NOTES

[1] S/C 31=GS-4B @ 0924 XB=2.8K(41) NOT RECOVERABLE

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 11 | DEC 12

ISSUE DATE: 12/15/16 06:52

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
DECEMBER 12, 2016
347-348

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: 38h 11m 40s

CCSL: A101

FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

1200 RTLT 38h 11m 44s

0000 RTLT 38h 11m 48s

FDS MODE: CR-5T

XB DATA RATE(MI): 160(32)

31 DSN COVERAGE

10

40

63 [D] 1110

60

60

32 DSN COVERAGE

40

0915 43 [D] 1315

40

0105 43 [D] 0505

S/C 32
INITIAL CONDITIONS

RTLT: 31h 31m 4s

CCSL: B174

FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25/
GYROS: OFF

1200 RTLT 31h 31m 12s

0000 RTLT 31h 31m 18s

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: DEC 12 | DEC 13

ISSUE DATE: 12/15/16 06:52

TUESDAY
DECEMBER 13, 2016
348-349

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: 38h 11m 48s
CCSL: A101
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

- 1200 RTLT 38h 11m 52s
- 0000 RTLT 38h 11m 56s
- 1538 – 1822 THERMAL TEST
- 1552 BAY 1 HTR OFF
- 1554 GYROS BC ON
- 1604 PYR DB = .05/.05/.05
- 1804 GYROS OFF
- 1806 BAY 1 HTR ON
- 1810 PYR DB = .05/.10/.25
- 2348 PWS/RH
- 1538
- 1822
- 2348 GS-4B 2348

FDS MODE	CR-5T	EL-40	CR-5T	CR-5T
XB DATA RATE(MI)	160(32)	40(30)	160(32)	160(32)

31 DSN COVERAGE

- 1445 – 14 [D] – 2000
- 10
- 40
- 0615 - 0745 – 63 [D]
- 54 [DA] 0800
- 55 [DAR] 0800
- 60
- 60

32 DSN COVERAGE

- 40
- 1935 – 43 [o] – 2210
- 40

S/C 32 INITIAL CONDITIONS

RTLT: 31h 31m 18s
CCSL: B174
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25/
GYROS: OFF

- 1200 RTLT 31h 31m 26s
- 0000 RTLT 31h 31m 34s
- 0144 – 0327 PLSCAL
- 0144 – 0447 MAGCAL
- 0144 – 0504 PESCAL

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

VGR COVERAGE	ON CALL	VGR	ON CALL

NOTES

[1] S/C 31=EL-40 @ 1538 XB=40(30)
[2] S/C 31=CR-5T @ 1822 XB=160(32)
[3] S/C 31=GS-4B @ 2348 XB=2.8K(41) NOT RECOVERABLE

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 13 | DEC 14

ISSUE DATE: 12/15/16 06:52

WEDNESDAY
DECEMBER 14, 2016
349-350

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: 38h 11m 56s
CCSL: A101
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

- 1200 RTLT 38h 12m 0s
- 0000 RTLT 38h 12m 4s
- 1431 – 2114 FULMRO
- 1445 – 1628 AACS
- U/L 1530 – TLC (LONG-FORM)
- 1629 – 1841 FDS
- 1730 DUMMY (07:42)
- 1841 – 1957 CCSA
- 1957 – 2113 CCSB
- 1431 ↓ ↓ 2114

FDS MODE	CR-5T	EL-40	CR-5T
XB DATA RATE(MI)	160(32)	40(30)	160(32)

31 DSN COVERAGE

- 1400 – 14 [T] – 0000
- 10
- 40
- 54 [DA] – 0800 - 1045
- 55 [DAR] – 0800 - 1045
- 60
- 0610 - 0745 – 63 [D]
- 60

32 DSN COVERAGE

- 0410 – 43 [o]
- 40
- 40

S/C 32 INITIAL CONDITIONS

RTLT: 31h 31m 34s
CCSL: B174
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25/
GYROS: OFF

- 1200 RTLT 31h 31m 42s
- 0000 RTLT 31h 31m 48s

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

VGR COVERAGE	ON CALL	VGR	ON CALL

NOTES

[1] S/C 31=EL-40 @ 1959 XB=40(30)
[2] S/C 31=CR-5T @ 2114 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

UTC: DEC 14 | DEC 15

ISSUE DATE: 12/15/16 06:52

THURSDAY
DECEMBER 15, 2016
350-351

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: 38h 12m 4s
CCSL: A101
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

1200 RTLT 38h 12m 8s
0000 RTLT 38h 12m 12s
TLC (LONG-FORM)
D/L 0710
0259 0410 TAPPOS
PWS/RH 0601 0602
0613 - 0737 TAPPOS
0601 GS-4B 0602

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

31 DSN COVERAGE

1520 25 [DAR] 1925
1520 26 [DA] 1925
10
40
0610 63 [D]
60
60

32 DSN COVERAGE

43 [o] 1325
40
2330 43 [D] 0030
40

S/C 32 INITIAL CONDITIONS

RTLT: 31h 31m 48s
CCSL: B174
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25/
GYROS: OFF

1200 RTLT 31h 31m 56s
0000 RTLT 31h 32m 4s

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

VGR COVERAGE: ON CALL

NOTES

[1] S/C 31=GS-4B @ 0601 XB=2.8K(41) NOT RECOVERABLE

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 15 | DEC 16

ISSUE DATE: 12/15/16 06:52

FRIDAY
DECEMBER 16, 2016
351-352

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: 38h 12m 12s
CCSL: A101
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

1200 RTLT 38h 12m 16s

0000 RTLT 38h 12m 20s

FDS MODE: CR-5T

XB DATA RATE(MI): 160(32)

31 DSN COVERAGE

1630 — 15 [DAR] — 2030
1630 — 24 [DA] — 2030
10
40
0835 63 [D]
60
60

32 DSN COVERAGE

0220 — 34 [o] — 0405
0920 — 43 [D] — 1320
40
40

S/C 32 INITIAL CONDITIONS

RTLT: 31h 32m 4s
CCSL: B174
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25/
GYROS: OFF

1200 RTLT 31h 32m 12s

0000 RTLT 31h 32m 18s

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: DEC 16 | DEC 17

ISSUE DATE: 12/15/16 06:52

SATURDAY
DECEMBER 17, 2016
352-353

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: 38h 12m 20s
CCSL: A101
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

- 1200 RTLT 38h 12m 24s
- 0000 RTLT 38h 12m 26s
- 1600 – 1700 USG COMMAND TEST
- 1630 DUMMY (06:42)
- 0559 - 0724 TAPPOS

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

31 DSN COVERAGE

- 10
- 40
- 1255 – 63 [1] – 1725 (60)
- 0600 – 63 [D] (60)

32 DSN COVERAGE

- 0855 – 43 [D] – 1315 (40)
- 0655 – 43 [D] (40)

S/C 32 INITIAL CONDITIONS

RTLT: 31h 32m 18s
CCSL: B174
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25/
GYROS: OFF

- 1200 RTLT 31h 32m 26s
- 0000 RTLT 31h 32m 32s

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

VGR COVERAGE: ON CALL | VGR | ON CALL

NOTES

[1] DSS-63 UPLINK SIGNAL GENERATOR COMMMAND TEST

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 17 | DEC 18

ISSUE DATE: 12/15/16 06:52

SUNDAY
DECEMBER 18, 2016
353-354

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: 38h 12m 26s
CCSL: A101
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

1200 RTLT 38h 12m 30s
0000 RTLT 38h 12m 34s
0901 0902 PWS/RH
0913 TAPPOS 1051
2135 2207 SHUNT POWER TEST
0901 GS-4B 0902

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

31 DSN COVERAGE

1855 14 [D] 0045
10
40
63 [D] 1055
60
0555 63 [D]
60

32 DSN COVERAGE

43 [D] 1315
40
1945 34 [DAo] 2325
1945 35 [DAR] 2325
40

S/C 32 INITIAL CONDITIONS

RTLT: 31h 32m 32s
CCSL: B174
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25/
GYROS: OFF

1200 RTLT 31h 32m 40s
0000 RTLT 31h 32m 46s

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

VGR COVERAGE: ON CALL

NOTES

[1] S/C 31=GS-4B @ 0901 XB=2.8K(41) NOT RECOVERABLE

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 18 | DEC 19

ISSUE DATE: 12/15/16 06:52

MONDAY
DECEMBER 19, 2016
354-355

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: 38h 12m 34s
CCSL: A101
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

1200 RTLT 38h 12m 36s

0000 RTLT 38h 12m 40s

FDS MODE: CR-5T

XB DATA RATE(MI): 160(32)

31 DSN COVERAGE

1505 — 15 [DAR] — 1905
1505 — 26 [DA] — 1905
10
40
0810 63 [D]
60
0600 — 63 [D]
60

32 DSN COVERAGE

43 [D] — 0810 - 1310
40
0000 — 35 [DA] — 0615
0000 — 36 [DAR] — 0345
40

S/C 32 INITIAL CONDITIONS

RTLT: 31h 32m 46s
CCSL: B174
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25/
GYROS: OFF

1200 RTLT 31h 32m 54s

0000 RTLT 31h 33m 0s

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: DEC 19 | DEC 20

ISSUE DATE: 12/15/16 06:52

TUESDAY
DECEMBER 20, 2016
355-356

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: 38h 12m 40s

CCSL: A101

FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

1200 RTLT 38h 12m 44s

0000 RTLT 38h 12m 46s

U/L 1630 — TLC (LONG=FORM)

1830 DUMMY (08:43)

2324 2325 PWS/RH

2324 GS-4B 2325

FDS MODE: CR-5T | CR-5T

XB DATA RATE(MI): 160(32) | 160(32)

31 DSN COVERAGE

1535 — 14 [T] — 1935

10

40

63 [D] — 1120

60

0550 - 0745 — 63 [D]

60

32 DSN COVERAGE

0000 — 36 [D] — 0100

0100 — 35 [D]

40

40

S/C 32
INITIAL CONDITIONS

RTLT: 31h 33m 0s

CCSL: B174

FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25/
GYROS: OFF

1200 RTLT 31h 33m 8s

0000 RTLT 31h 33m 14s

0023 — FULMRO — 0706

0038 — AACS — 0221

0222 — FDS — 0434

0434 — CCSA — 0550

0550 — CCSB — 0656

0023 0706

FDS MODE: CR-5T | EL-40

XB DATA RATE(MI): 160(32) | 40(30)

VGR COVERAGE: ON CALL | VGR | ON CALL | VGR

NOTES

[1] S/C 31=GS-4B @ 2324 XB=2.8K(41) NOT RECOVERABLE

[2] S/C 32=EL-40 @ 0551 XB=40(30)

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 20 | DEC 21

ISSUE DATE: 12/15/16 06:52

WEDNESDAY
DECEMBER 21, 2016
356-357

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: 38h 12m 46s

CCSL: A101

FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

1200 RTLT 38h 12m 50s

0000 RTLT 38h 12m 52s

TLC (LONG=FORM)

D/L

FDS MODE: CR-5T

XB DATA RATE(MI): 160(32)

31 DSN COVERAGE

1320 — 14 [D] — 1720

10

40

0545 — 63 [D]

60

60

32 DSN COVERAGE

0805 35 [D]

0915 — 43 [B] — 1300

40

0405 — 43 [D]

40

S/C 32
INITIAL CONDITIONS

RTLT: 31h 33m 14s

CCSL: B174

FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25/
GYROS: OFF

1200 RTLT 31h 33m 22s

0000 RTLT 31h 33m 28s

1125 — 1157 SHUNT POWER TEST

1227 DUMMY (5 MIN BRACKETED 19:51)

FDS MODE: CR-5T

XB DATA RATE(MI): 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

UTC: DEC 21 | DEC 22

ISSUE DATE: 12/15/16 06:52

THURSDAY
DECEMBER 22, 2016
357-358

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: 38h 12m 52s
CCSL: A101
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

1200 RTLT 38h 12m 56s
0000 RTLT 38h 12m 58s
0811 D/L
0235 TAPPOS 0428
0538 0539 PWS/RH
0549 - 0727 TAPPOS
0537 GS-4B 0539

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

31 DSN COVERAGE

1455 25 [DAR] 1945
1455 26 [DA] 1945
10
40
63 [D] 1020
60
0540 63 [D]
60

32 DSN COVERAGE

43 [D] 1255
40
1915 43 [o] 2150
40

S/C 32 INITIAL CONDITIONS

RTLT: 31h 33m 28s
CCSL: B174
FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25/
GYROS: OFF

1200 RTLT 31h 33m 34s
0000 RTLT 31h 33m 40s

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

VGR COVERAGE: ON CALL

NOTES

[1] S/C 31=GS-4B @ 0537 XB=2.8K(41) NOT RECOVERABLE

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: DEC 22 | DEC 23

ISSUE DATE: 12/15/16 06:52

FRIDAY
DECEMBER 23, 2016
358-359

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: 38h 12m 58s

CCSL: A101

FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

1200 RTLT 38h 13m 2s

0000 RTLT 38h 13m 4s

FDS MODE: CR-5T

XB DATA RATE(MI): 160(32)

31 DSN COVERAGE

1310 — 14 [D] — 1710
10

40

0815 63 [D]
60

0535 — 63 [D]
60

32 DSN COVERAGE

0855 — 43 [D] — 1255
40

1925 — 34 [DA] — 2230
1925 — 36 [DAR] — 2230
40

0155 — 34 [o] — 0555

S/C 32
INITIAL CONDITIONS

RTLT: 31h 33m 40s

CCSL: B174

FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25/
GYROS: OFF

1200 RTLT 31h 33m 48s

0000 RTLT 31h 33m 54s

FDS MODE: CR-5T

XB DATA RATE(MI): 160(32)

VGR COVERAGE: 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: DEC 23 | DEC 24

ISSUE DATE: 12/15/16 06:52

SATURDAY
DECEMBER 24, 2016
359-360

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: 38h 13m 4s

CCSL: A101

FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

1200 RTLT 38h 13m 8s

0000 RTLT 38h 13m 10s

0535 - 0714 TAPPOS

FDS MODE: CR-5T

XB DATA RATE(MI): 160(32)

31 DSN COVERAGE

1310 — 14 [D] — 1710

10

40

63 [D] — 0935

60

0535 — 63 [D]

60

32 DSN COVERAGE

1000 — 43 [D] — 1250

40

40

0615 — 43 [D]

S/C 32
INITIAL CONDITIONS

RTLT: 31h 33m 54s

CCSL: B174

FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25/
GYROS: OFF

1200 RTLT 31h 34m 0s

0000 RTLT 31h 34m 6s

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: DEC 24 | DEC 25

ISSUE DATE: 12/15/16 06:52

SUNDAY
DECEMBER 25, 2016
360-361

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: 38h 13m 10s

CCSL: A101

FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

1200 RTLT 38h 13m 12s

0000 RTLT 38h 13m 16s

0838 - 0839 PWS/RH

0849 TAPPOS 1014

0837 GS-4B 0839

FDS MODE: CR-5T

XB DATA RATE(MI): 160(32)

31 DSN COVERAGE

1630 14 [D] 0020
10

40

0830 63 [D]
60

0530 63 [D]
60

32 DSN COVERAGE

43 [D] 1245
40

1850 43 [D]
40

S/C 32
INITIAL CONDITIONS

RTLT: 31h 34m 6s

CCSL: B174

FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25/
GYROS: OFF

1200 RTLT 31h 34m 12s

0000 RTLT 31h 34m 20s

FDS MODE: CR-5T

XB DATA RATE(MI): 160(32)

VGR COVERAGE: ON CALL

NOTES

[1] S/C 31=GS-4B @ 0837 XB=2.8K(41) NOT RECOVERABLE
[2] S/C 31=GS-4B @ 0837 XB=2.8K(41) NOT RECOVERABLE

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 25 | DEC 26

ISSUE DATE: 12/15/16 06:52

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
DECEMBER 26, 2016
361-362

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: 38h 13m 16s

CCSL: A101

FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25
GYROS: OFF

1200 RTLT 38h 13m 18s

FDS MODE: CR-5T

XB DATA RATE(MI): 160(32)

31 DSN COVERAGE

1435 — 25 [DAR] — 1805
1435 — 26 [DA] — 1805

63 [D] — 1150
60

32 DSN COVERAGE

0850 43 [D]
40

1845 — 43 — 2245

S/C 32
INITIAL CONDITIONS

RTLT: 31h 34m 20s

CCSL: B174

FDSL: 11AF
TWNC: ON
SB: OFF
XB: LOW
PYR: .05/.10/.25/
GYROS: OFF

1200 RTLT 31h 34m 26s

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: DEC 26 | DEC 27