• Software changed: June 19, 2019

• PWB S/N: 409

• R1 removed

• Jumper SJ1 set for battery power

• Flight name\mode messages

• PRE\_MSG "1038\_PRE"

• TRK\_MSG "1038\_TRK"

• TRK\_GPS "1038\_GPS"

• PING\_ID 38

• Timing parameters for the flight

• PreFlight Time = 2 hours (120 minutes), APRS XMIT every 10 minutes

• PREFLIGHT\_APRS\_TX\_PERIOD 10

• MAX\_PREFLIGHT\_PACKETS 12

• 10\*12 = 120

• GPS search time: 2 minutes

• Flight Time = 2 hours

• FLIGHT\_TIME 120

• GPS search time: 2 minutes

• Hibernate\Sleep time

• Launch: March 29, 2023, Julian Day: 88

• Wake up: November 16, 2023, Julian Day: 320

• Number of days to hibernate 320 – 88 = 232

• HIBERNATE\_PERIOD 232

• GPS search time: 5 minutes

• Track mode

• Update GPS position every 24 hours

• TRACK\_GPS\_PERIOD 24

• Send APRS GPS position every 10 minutes when in Track mode

• TRACK\_APRS\_TX\_PERIOD 10

• Send pings every 15 seconds when in Track mode

• TRACK\_PING\_TX\_PERIOD 15

• Three Audio pings 75 msec at 700 Hz per minute

• One encoded data ping per minute

• GPS search time: 3 minutes

**Changes from FLT\_1036**

• None

Initial Power up Test

• Five Flashes

• First three messages after power up:

10:10:31, PRE\_\_FLT, 000/001, 0000.00N, 00000.00E

10:21:00, 1037\_PRE, 000/002, 7750.86S, 16639.94E

10:31:01, 1037\_PRE, 000/003, 7750.86S, 16639.94E

• GPS position is correct

• Crary Lab: 77° 50.86’ (77.847°), 166° 39.96’ (166.666°)

13 June 2019

• Initial Battery Voltage = 3.658V

• Super Capacitor Charge Voltage = 3.696V

• Battery voltage after initial power on test = 3.568V