**October 29, 2016 – EPIC**

Flight 1 - coptersonde

Battery 7

Tether On

Remarks: This was a test flight. The flight plan was to fly up to 20 meters manually and come back down while tethered.

Flight 2 - coptersonde

Battery 7

Tether On

Landed: 11:32 CT

Tether Off

Take Off: 11:33 CT

Rotated 20° at 20 m

Beginning Descent: 11:34 CT

Landed: 11:35 CT

End Battery: 23.8 V

Remarks: The flight plan was to fly to 20 meters, hover for a minute, ascend to 120 meters, then land. The plan will be executed two times with a 3 meters per second ascent rate.

Flight 3 - coptersonde

Battery 6

Take Off: 12:23 CT

Reached 20 m: 12:24 CT

Rotated 360°

Reached 120 m: 12:25 CT

Tilt From Wind: 20°

Beginning Descent: 12:31 CT

Reached 20 m: 12:32 CT

Rotated and Ascended

Reached 120 m: 12:33 CT

Landed: 12:34 CT

Remarks: The flight plan was to fly to 20 meters, hover for a minute, ascend to 120 meters, return to 20 meters, ascend again to 120 meters, and then land. The plan will be executed with a 3 meters per second ascent rate.

Flight 4 - coptersonde

Battery 5

Take Off: 12:58 CT

Reached 20 m: 12:59 CT

Rotated 360° and Ascended

Reached 20 m, Rotated, and Ascended: 13:01 CT (2nd Ascent)

Reached 20 m, Rotated, and Ascended: 13:02 CT (3rd Ascent)

Reached 20 m, Rotated, and Ascended: 13:04 CT (4th Ascent)

Reached 20 m, Rotated, and Ascended: 13:05 CT (5th Ascent)

Reached 20 m, Rotated, and Ascended: 13:06 CT (6th Ascent)

Reached 20 m, Rotated, and Ascended: 13:08 CT (7th Ascent)

Landed: 13:09 CT

End Battery: 22.92 V

Remarks: The flight plan was to fly to 20 meters, hover for a minute, ascend to 120 meters, return to 20 meters, and execute the plan again. The plan will be executed seven times with a 3 meters per second ascent rate.

Flight 5 - coptersonde

Battery 5

Take Off: 13:30 CT

Reached 20 m, Rotated, and Ascended: 13:31 CT (1st Ascent)

Reached 120 m and Rotated: 13:31 CT

Reached 20 m, Rotated, and Ascended: 13:32 CT (2nd Ascent)

Reached 120 m: 13:32 CT

Reached 20 m, Rotated, and Ascended: 13:33 CT (3rd Ascent)

Reached 20 m, Rotated, and Ascended: 13:34 CT (4th Ascent)

Reached 20 m, Rotated, and Ascended: 13:35 CT (5th Ascent)

Reached 20 m, Rotated, and Ascended: 13:36 CT (6th Ascent)

Battery: 21.7 V

Reached 20 m, Rotated, and Ascended: 13:37 CT (7th Ascent)

Reached 20 m, Rotated, and Ascended: 13:39 CT (8th Ascent)

Reached 20 m, Rotated, and Ascended: 13:40 CT (9th Ascent)

Reached 20 m, Rotated, and Ascended: 13:41 CT (10th Ascent)

RTL: 13:41 CT

Landed: 13:42 CT

Fails to Disarm

Battery Disconnected: 13:42 CT

Remarks: The flight plan was to fly to 20 meters, hover for a minute, ascend to 120 meters, return to 20 meters, and execute the plan again. The plan will be executed eleven times with a 5 meters per second ascent rate and 3 meters per second descent rate. After starting the tenth ascent, it was decided the battery was too low to make another ascent, so Return to Land (RTL) was initiated. However, after landing, the coptersonde failed to disarm until the battery was disconnected. After this flight, it seems as though nine ascents with a minute hover at 20 meters to be the maximum with that ascent/descent rate and current conditions.

Flight 6 - coptersonde

Battery 3

Take Off: 15:44 CT

Reached 20 m, Rotated, and Ascended: 15:45 CT (1st Ascent)

Weather Balloon Released

Reached 20 m, Rotated, and Ascended: 15:46 CT (2nd Ascent)

Reached 20 m, Rotated, and Ascended: 15:47 CT (3rd Ascent)

Reached 20 m, Rotated, and Ascended: 15:48 CT (4th Ascent)

Reached 20 m, Rotated, and Ascended: 15:49 CT (5th Ascent)

Battery: 22 V

Reached 20 m, Rotated, and Ascended: 15:50 CT (6th Ascent)

Reached 20 m, Rotated, and Ascended: 15:52 CT (7th Ascent)

Reached 20 m, Rotated, and Ascended: 15:53 CT (8th Ascent)

Reached 20 m, Rotated, and Ascended: 15:54 CT (9th Ascent)

RTL: 15:55 CT

Landed: 15:55 CT

Remarks: The flight plan was to fly to 20 meters, hover for a minute, ascend to 120 meters, return to 20 meters, and execute the plan again. The plan will be executed nine times with a 5 meters per second ascent rate and 3 meters per second descent rate.