**June 15, 2016 - Kessler**

UTC = local time + 5 hrs

Flights conducted 15-20 yards away from the Washington Mesonet Tower

Front

Back

Windsonde 733

Windsonde 739

Windsonde 737

Windsonde 738

All Windsondes located under the rotors and shielded by small PVC pipes (not in contact). See pictures below.

Flight 1

Battery Number: 1

Windsondes: 733 & 737 & 738

Start Battery: 12.4 V

Start Direction: 260° W

Ascent Start: 19:24:40 UTC

Started Hover 10 m: 19:24:44

Started 2nd position: 19:26:44

Started 3rd position: 19:28:43

Started 4th position: 19:30:45

Started 5th position: 19:32:42

Started 6th position: 19:34:44

Started 7th position: 19:36:44

Return to original position: 19:38:44

Max Height: 10m

Landed: 19:40:07 UTC

End Battery: 10.5 V

Remarks: The flight plan was to go up to a height of 10 meters and rotate to 0-degrees North. We then held our position for two minutes, after which we rotated 45-degrees to the right and held for another two minutes. We did this for the entire 360-degree circle. We came down with the emergency failsafe mode. Before landing, the Iris+ took off when the controller was switched to manual control. The Iris+ landed when the auto landing option was activated.

Flight 2

Battery Number: 2

Voltage on Plug In: 12.4

Windsondes: 739 & 737 & 738

Start Battery: 12.3 V

Start Direction: 260° W

Ascent Start: 19:54:40 UTC

Started Hover 10 m: 19:54:52

Started 2nd position: 19:56:54

Started 3rd position: 19:58:54

Started 4th position: 20:00:55

Started 5th position: 20:02:55

Started 6th position: 20:04:55

Started 7th position: 20:06:59

Return to original position: 20:08:55

Max Height: 10m

Coming Down: 20:10:50UTC

Landed: 20:11:24 UTC

End Battery: 10.5 V

Remarks: The flight plan was to go up to a height of 10 meters and rotate to 0-degrees North. We then held our position for two minutes, after which we rotated 45-degrees to the right and held for another two minutes. We did this for the entire 360-degree circle. We came down with the emergency failsafe mode. The Iris+ launched upwards upon entering Failsafe mode. Neither of the auto land features were able to land the Iris+. The Iris+ crashed after a rapid decent and the front left leg was broken. We will examine the flight data to figure out why neither of the automatic landing options (RTL and RTD) and manual throttle up did not work.

For next time: Fix the Failsafe mode and auto land features.















