Payload 1 Daily Flight Report

Date: 2021-01-27
Flight Campaign ID: P1C1
Airport, FBO ID, City: Boulder Municipal Airport (KBDU) - Boulder, CO
Aircraft: N615AR

Domain: 00 (Training & Calibration)
Sites Flown: None
Days left in Domain: 18

Report Author: Mitch Haynes
Lidar Operators: n/a
Spectrometer Operators: n/a
Pilots: Justin Eddington, Will Mathews
Adt'l Flight Crew: Mitch Haynes, Ivana Vu, Matt Devoe
Flight Hours: 00:00
Hours until maintenance: 83.60
GPS Instruments: n/a
Ground Crew: Ian Crockerr, Andrew Bigoney, Chris Fauble

Summary
The Twin Otter arrived in Boulder from Grand Junction this afternoon after a delayed start due to IFR conditions over the front range. Installation crew went right to work installing Payload 1 and were able to finish by mid-afternoon without any complications. System is now in the pumping and cooling phase, with first flights of the new lidar system anticipated Friday.

Concerns
Cabin monitor display not functioning properly.

Comments
Big thanks to all whose efforts contributed to this new lidar system campaign.

Pictures
Cumulative Domain Coverage

D00|B10F (Complete Greeley Boresight Geocalibration - 1500m, 1000m, 550m)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |

- Flown: 0% (0/20)
- Green: 0% (0/20)
- Yellow: 0% (0/20)
- Red: 0% (0/20)

D00|BLKF (Black Forest Waveform Range Test - Galaxy)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |

- Flown: 0% (0/21)
- Green: 0% (0/21)
- Yellow: 0% (0/21)
- Red: 0% (0/21)

D00|H10D (NEON Headquarters Lidar Validation - Galaxy)

| 1 | 2 | 3 | 4 |

- Flown: 0% (0/4)
- Green: 0% (0/4)
- Yellow: 0% (0/4)
- Red: 0% (0/4)

D00|N10F (Nominal Runway at KBDU - Galaxy)
Flown: 0% (0/35)
Green: 0% (0/35)
Yellow: 0% (0/35)
Red: 0% (0/35)

**D00|V10F (Boulder City Nominal - Galaxy)**

| Flown: 0% (0/29) |
| Green: 0% (0/29) |
| Yellow: 0% (0/29) |
| Red: 0% (0/29) |

**Weather Forecast**

<table>
<thead>
<tr>
<th>Thu 1/28</th>
<th>Fri 1/29</th>
<th>Sat 1/30</th>
<th>Sun 1/31</th>
<th>Mon 2/1</th>
<th>Tue 2/2</th>
<th>Wed 2/3</th>
</tr>
</thead>
<tbody>
<tr>
<td>50°</td>
<td>31°F</td>
<td>Partly Cloudy</td>
<td>55°</td>
<td>34°F</td>
<td>Partly Cloudy</td>
<td>47°</td>
</tr>
</tbody>
</table>

source: wunderground.com

**Flight Collection Plan for 28 January 2021**
Continue Pumping and Cooling

**Flight Collection Plan for 29 January 2021**
Flyority 1
Collection Area: [Functional Checkout Flight] -- Nominal Runway Survey
Flight Plan Name: D10_N10F_Nominal_Rnwy_v9_PRM.xml
On-Station Time: Daylight – No solar angle restrictions.
Additional Considerations: Runway should not be wet or snow covered.

Flyority 2
Collection Area: Boresight Calibration – Greeley, CO
Flight Plan Name: D10_B10F_Boresight_Geocal_v8_PRM.xml
On-station Time: 0930 – 1500 Local / 1630 – 2200 UTC
Additional Considerations: No recent snowfall, clear roofs required.

Flyority 3
Collection Area: Wiggle Timing Test
Flight Plan Name: D10_W10D_Wiggle_Test_v5_PRM.xml
On-station Time: 1007 – 1500 Local / 1707 – 2200 UTC
Additional Considerations: None

Flyority 4
Collection Area: NEON HQ Lidar Validation
Flight Plan Name: D10_H10D_HQ_LIDAR_validation_v1_PRM.xml
On-station Time: Daylight – No solar angle restrictions.
Additional Considerations: Snow on ground okay.

Flyority 5
Collection Area: Long-duration Flight - Boulder City Nominal Flight Plan
Flight Plan Name: D10_V10F_Boulder_City_v6_PRM.xml
On-station Time: Daylight – No solar angle restrictions.
Additional Considerations: Snow on ground okay.

Flyority 5
Collection Area: Black Forest Waveform Range Test Flight
Flight Plan Name: D10_BLKF_Black_Forest_v3_PRM.xml
On-station Time: Daylight – No solar angle restrictions.
Additional Considerations: Snow on ground / trees okay.

Flight Crew: Ivana, Matt, Mitch