Payload 1 Daily Flight Report

Date: 2024-08-03
Flight Campaign ID: P1C1
Airport, FBO ID, City: Alpena County Regional Airport (KAPL) - Alpena, MI; Watertown International Airport (KART) - Hounsfield, NY; Nashua Airport at Boire Field (KASH) – Nashua, NH
Aircraft: N615AR

Domain: 01 (Northeast)
Sites Flown: Transit (KAPL -> KART -> KASH)
Days left in Domain: 35

Report Author: Mitch
Lidar Operators: Mitch
Flight Hours: 02:28:00, 01:44:00
Spectrometer Operators: Hours until maintenance: 67.53
Pilots: Jeff, Will
Ground Crew: Cameron

Summary
The crew completed the final legs of our long transit, skirting around a large low-pressure system and getting into Nashua just before potential for late afternoon thunderstorms started building. Totals for the transit from Fairbanks to Nashua include seven flights, over 20 hours of flying, eight airports, two international customs, and over 3500 miles covered. Pumping and cooling of the system has been commenced, with the payload expected to be ready for flights by either Monday or Tuesday.

Concerns
During initial payload startup, the Lantronix failed to successfully boot up. After several restart attempts, the old Lantronix was taken out and the spare Lantronix installed, which immediate fixed the problem. Shout out to Andrew and Brenden for suggesting we hold onto the spare Lantronix for the rest of the flight after the troubleshooting in Fairbanks. Having it on hand likely saved us days.

Comments
None

Pictures: Clouds and haze above downtown Watertown, NY, taken after our single fuel stop of the day.
Above: A view of downtown Alpena, MI and Thunder Bay shortly after takeoff. If you zoom in incredibly closely, you can see several of the historic shipwrecks that Thunder Bay is known for, visible just under the water. Actually you probably can’t see them in this photo, but you could see them in person flying above.

Cumulative Domain Coverage

D01|BART (Bartlett Experimental Forest)

| 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 |

- Flown: 0% (0/35)
- Green: 0% (0/35)
- Yellow: 0% (0/35)
- Red: 0% (0/35)

D01|HARV_P1 (Harvard Forest Priority 1)

| 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 |

- Flown: 0% (0/28)
- Green: 0% (0/28)
- Yellow: 0% (0/28)
- Red: 0% (0/28)

D01|HARV_P2 (Harvard Forest Priority 2)

| 31 | 32 | 33 | 34 | 35 | 36 | 37 |

- Flown: 0% (0/7)
- Green: 0% (0/7)
D01 | HOPB (Hop Brook)

Flown: 0% (0/9)
Green: 0% (0/9)
Yellow: 0% (0/9)
Red: 0% (0/9)

D01 | N01A (D01 Nominal Runway)

Flown: 0% (0/2)
Green: 0% (0/2)
Yellow: 0% (0/2)
Red: 0% (0/2)

Weather Forecast

Petersham, MA (HARV)

<table>
<thead>
<tr>
<th></th>
<th>Sun 8/4</th>
<th>Mon 8/5</th>
<th>Tue 8/6</th>
<th>Wed 8/7</th>
<th>Thu 8/8</th>
<th>Fri 8/9</th>
<th>Sat 8/10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scattered</td>
<td>80°</td>
<td>65°F</td>
<td>86°</td>
<td>64°F</td>
<td>75°</td>
<td>57°F</td>
<td>75°</td>
</tr>
<tr>
<td>Thunderstorms</td>
<td>0.19 in</td>
<td></td>
<td>0.21 in</td>
<td></td>
<td>0.57 in</td>
<td></td>
<td>0.37 in</td>
</tr>
</tbody>
</table>

Bartlett, NH (BART)

<table>
<thead>
<tr>
<th></th>
<th>Sun 8/4</th>
<th>Mon 8/5</th>
<th>Tue 8/6</th>
<th>Wed 8/7</th>
<th>Thu 8/8</th>
<th>Fri 8/9</th>
<th>Sat 8/10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scattered</td>
<td>83°</td>
<td>68°F</td>
<td>82°</td>
<td>61°F</td>
<td>74°</td>
<td>56°F</td>
<td>74°</td>
</tr>
<tr>
<td>Thunderstorms</td>
<td>0.18 in</td>
<td></td>
<td>0.31 in</td>
<td></td>
<td>0.16 in</td>
<td></td>
<td>0.01 in</td>
</tr>
</tbody>
</table>
Flight Collection Plan for 04 August 2024

Continue pumping and cooling process. No flights planned.

Crew: Cam, Mitch

Flight Collection Plan for 05 August 2024

Flyority 1:
Collection Area: Harvard Forest – Priority 1 (HARV_P1)
Flight Plan Name: D01_HARV_C1_P1__P2_v4_PRM.xml
On-station Time: 1340 UTC / 0940 L

Flyority 2:
Collection Area: Bartlett Experimental Forest (BART)
Flight Plan Name: D01_BART_R1_P1_v2_PRM.xml
On-station Time: 1340 UTC / 0940 L

Flyority 3:
Collection Area: Hop Brook (HOPB)
Flight Plan Name: D01_HOPB_A1_P1_v2_PRM.xml
On-station Time: 1340 UTC / 0940 L

Flyority 4:
Collection Area: Harvard Forest – Priority 2 (HARV_P2)
Flight Plan Name: D01_HARV_C1_P1__P2_v4_PRM.xml
On-station Time: 1340 UTC / 0940 L

Flyority 5:
Collection Area: Nominal Runway – D01
Flight Plan Name: D01_N01A_Nominal_Runway_Test_v2_PRM.xml
On-station Time: NA