Payload 3 Daily Flight Report

Date: 2021-08-04
Flight Campaign ID: P3C1
Airport, FBO ID, City: Fairbanks International Airport (PAFA) - Fairbanks, AK
Aircraft: N615AR

Domain: 19 (Taiga)
Sites Flown: BONA (Caribou Creek and Poker Flats Watershed)
Days left in Domain: 13

Report Author: Michael Wussow
Lidar Operators: Michael Wussow
Spectrometer Operators: Cameron Chapman
Pilots: Stephen Brawders, Vince Maarschalkerweerd
GPS Instruments: 06 - BONA, C-FAI1, UAF-PFR2

Flight Hours: 03:47, 01:04
Hours until maintenance: 82.6

Summary
Clear-ish skies graced us with their presence today in the Fairbanks area, although there was wildfire smoke and some small cumulus clouds present at times throughout the day. The crew decided to take advantage of the weather and completed the BONA survey box with mixed green and yellow conditions from today’s 32 lines. The very recently extinguished Haystack fire area (927 acres) was covered as it sits in the eastern portion of the BONA survey box.

Concerns
QA is not working properly and a ServiceNow ticket has been opened. Also, MarsRover crashed once during today’s second flight.

Comments
If skies are not clear tomorrow, Mike and Cam will collect lidar ground validation points at BONA.

Daily Coverage

Estimated Cloud Cover Key

| Green: 0-10% | Yellow: 11-50% | Red: >50% |

D19|BONA

<p>| Line # | 1 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 |
|-------|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Lidar | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Spectrometer | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Camera | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
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Total number of lines flown: 32

Flight Screenshots

![Flight Screenshots Image]

Pictures

![Pictures Image]

Skies were clear although there was some smoke haze.
The 927 acre Haystack Fire scar. BONA Tower and Caribou Creek Aquatic site located downstream at approximately the yellow star.

### Cumulative Domain Coverage

**D19|BONA (Caribou Creek and Poker Flats Watershed)**

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Flown: 100% (46/46)
Green: 28% (13/46)
Yellow: 46% (21/46)
Red: 26% (12/46)

**D19|DEJU (Delta Junction)**

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Flown: 100% (21/21)
Green: 0% (0/21)
Yellow: 52% (11/21)
Red: 48% (10/21)

**D19|HEAL (Healy)**

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Flown: 100% (33/33)
Green: 100% (33/33)
Yellow: 0% (0/33)
Red: 0% (0/33)
Weather Forecast
Fairbanks, AK (PAFA, BONA)

Delta Junction, AK (DEJU)

Flight Collection Plan for 5 August 2021

Flyority 1
Collection Area: Caribou Creek – Poker Flats Watershed (BONA)
Flight Plan Name: D19_BONA_C1_P1_v1_Q780
On-station Time: 1920 UTC / 1120 L
*Only if green conditions exist

Flyority 2
Collection Area: Delta Junction (DEJU) – Priority Flight Box 1 & 2*
Flight Plan Name: D19_DEJU_R1_P1_v5_Q780, D19_DEJU_R1_P2_v5_Q780
On-station Time: 1900 UTC / 1100 L
*Only if green conditions exist

Crew: Mike (NIS) Cam (Lidar)