

June 27, 2018 Payload 3 Daily Flight Report



Hours until maintenance: 82.35

Date: 2018-06-27

Flight Campaign ID: 2018_P3C1

Airport, FBO ID, City: Bozeman Yellowstone International Airport (KBZN) - Belgrade, MT

Domain: 00, 12

Sites Flown: YELL (Yellowstone Northern Range), TRAIN (Training)

Days left in Domain: 9

Report Author: Heather Rogers

Flight Crew: Heather Rogers, Cameron Chapman, Mitch Haynes Flight Hours: 02:08

Ground/GPS: Mitch Haynes

Pilots: Mike Francis, Dylan Malfatti

Additional Personnel:

GPS Instruments: 05 - FBO_KBZN, U-MAWY, U-P720

Summary

6 lines of lidar and camera data collected under clear sky conditions.

Concerns

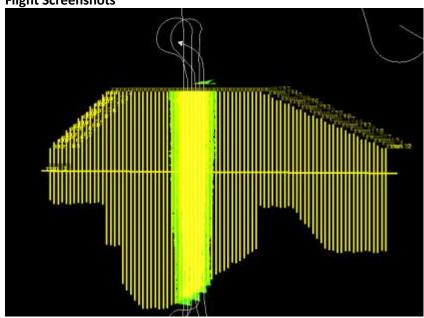
SnapSHOT failed to acquire GPS signal. A full lidar system power cycle resolved the issue.

The NIS is not functioning nominally. After a 2 day transit where the system was shut off, the NIS -3 FPA display is once again displaying as 4 grey-shaded boxes. The system for the NIS was shut down and re-booted without results. Following this, the entire system was shut down and restarted.

Comments

The battery for the FBO GPS 05 was changed today.

Flight Screenshots



Pictures



Flying over Yellowstone National Park.

Daily Coverage

D12 YELL	Line	SpecG	SpecY	SpecR	NIS	Lidar	Camera	Cumulative
	47				X	✓	✓	LC
	48				X	✓	✓	LC
	49				X	✓	✓	LC
	50				×	✓	✓	LC
	51				X	✓	✓	LC
	52				X	✓	✓	LC
Flown:	6							

Cumulative Domain Coverage

YELL

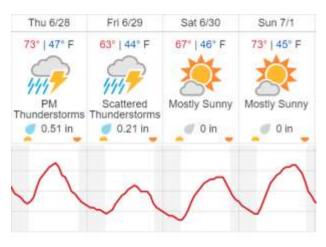
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80

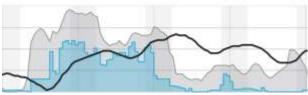
81 82 83 84 85

Flown: 0% (0/85) Green: 0% (0/85) Yellow: 0% (0/85) Red: 0% (0/85)

Weather Forecast

Bozeman, MT





Flight Collection Plan for 28 June 2018

Flyority 1 (Flight Priority 1):

Collection Area: Yellowstone Northern Range (YELL) Flight Plan Name: D12_YELL_C1_P1_v2_Q780

On-Station Time: 15:50 UTC / 0950 L:

Crew: Heather Rogers (Lidar), Cameron Chapman (Lidar Trainer), Mitch Haynes (NIS)

On-Going Issues

Fault: Spectrometer Open Date: 5/22/2018

NIS-3 FPA Display is showing up as 4 solid gray boxes. Trouble-shooting was performed by cycling power to both NIS and entire system with no results. Additional trouble-shooting was performed on 5/22/18 with support from Ian and direction from JPL to identify problem. It was indicated that the FPIE may not be starting up properly and the following items were tested: 1) All LEDs are green and illuminate when FPIE PSU is powered on., 2) There are 2 clicks (one when initally powered on and one 2 seconds after power applied) heard from FPIE box when FPIE PSU powered down for at least 10 sec., 3) FPIE PSU fan was heard inside power box.

20180627 After a 2 day transit where the system was shut off, the NIS -3 FPA display is once again displaying as 4 grey-shaded boxes. The system for the NIS was shut down and re-booted without resulting in nominal functionality. Following this, the entire system was shut down and restarted.