

June 20, 2018 Payload 3 Daily Flight Report



Date: 2018-06-20 Flight Campaign ID: 2018_P3C1 Airport, FBO ID, City: Asheville Regional Airport (KAVL) - Fletcher, NC

Domain: 00, 07 Sites Flown: ORNL (Oak Ridge National Laboratory), TRAIN (Training) Days left in Domain: 3

Report Author: Mitch Haynes Flight Crew: Mitch Haynes, Heather Rogers, Cameron Chapman Ground/GPS: None Pilots: Dylan Malfatti, Gina Moore Additional Personnel: GPS Instruments: 09 - FBO_KAVL, C-TN16, TDOT-TN1A

Flight Hours: 01:49 Hours until maintenance: 95.80

Summary

Attempted collect of Great Smokies but was skunked by clouds upon arrival. Flight's primary purpose then shifted from mission to training flight, completing 3 lines in between clouds at Oak Ridge as part of Heather's Riegl training regiment.

Concerns

- Database crashed several times during flight
- GRSM_P1 Flight Plan .rpp file failed to load in RiAcquire, and appeared to be corrupted. Was resolved by loaded a new version of the flight plan onto the Cam-PC from Dropbox.

Comments

Data from today's training flight will not be extracted

Pictures Low clouds over the Smokies



Daily Coverage

D07 ORNL	Line	SpecG	SpecY	SpecR	NIS	Lidar	Camera	Cumulative
	26				\checkmark	\checkmark	\checkmark	NLC
	27				\checkmark	\checkmark	\checkmark	NLC
	28				\checkmark	\checkmark	\checkmark	NLC
Flown:	3							

Cumulative Domain Coverage

GRSM_P1

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	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106														

Flown: 15% (16/106) Green: 0% (0/106) Yellow: 11% (12/106)

Red: 4% (4/106)

GRSM_P2

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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												

Flown: 0% (0/68) Green: 0% (0/68) Yellow: 0% (0/68)

Red: 0% (0/68)

MLBS

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						

Flown: 100% (34/34) Green: 0% (0/34) Yellow: 0% (0/34) Red: 100% (34/34)

ORNL

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

Flown: 100% (61/61) Green: 25% (15/61) Yellow: 61% (37/61) Red: 23% (14/61)

Weather Forecast

Pembroke, VA (MLE	BS)	
Thu 6/21	Fri 6/22	Sat 6/23
80° 66° F	<mark>80° 65</mark> ° F	<mark>83° 64</mark> ° F
1111	1111	
PM Thunderstorms	Thunderstorms	Showers
🥑 0.28 in	🥑 0.55 in	0.07 in
Cloud Cover (%		Precip. (%)
Gatlinburg, TN (GRS		Set 6/00
Thu 6/21	Fri 6/22	Sat 6/23
<mark>81° 67</mark> ° F	85° 66° F	87° 66° F
1111	111	
PM	Thunderstorms	Partly Cloudy
Thunderstorms	🤵 0.26 in	🤵 0.09 in
	L'ANT	
Cloud Cover (%	b) Chance of F	Precip. (%)

Flight Collection Plan for 21 June 2018

Flyority 1: Collection Area: Mountain Lake Biological Station (MLBS) **If Green Conditions** Flight Plan Name: D07_MLBS_R1_P1_v6_Q780 On-station Time: 1340 UTC / 0940 L Flyority 2: Collection Area: Great Smoky Mountains National Park – Priority 1 Flight Box (GRSM_P1) Flight Plan Name: D07_GRSM_R2_P1_v2_Q780

On-station Time: 1350 UTC / 0950 L

Flyority 3:

Collection Area: Great Smoky Mountains National Park – Priority 2 Flight Box (GRSM_P2) Flight Plan Name: D07_GRSM_R2_P2_v2_east_Q780 / D07_GRSM_R2_P2_v2_west_Q780 On-station Time: 1350 UTC / 0950 L

Flyority 4:

Collection Area: Oak Ridge National Laboratory (ORNL)

Flight Plan Name: D07_ORNL_C1_P1_v10_east_Q780 / D07_ORNL_C1_P1_v10_west_Q780 On-station Time: 1400 UTC / 1000 L

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

On-Going Issues

Fault: Database	Ticket: INC0013090	Open Date : 4/2/2018
Database crash during flight. So	ometimes to both operators simultaneo	usly, but also to both NIS and Lidar
operator individually. This has	been a re-occuring issue, but is only bei	ng added now.
20180404 Database no longer of	crashes when minimizing and maximizin	g.
20180410 Database experience	ed same network connection issues and	crashed several times during both
flights. Lidar Crystal Computer	VNC was open on the DCC for training p	urposes.
20180418 Database crashed in-	-flight, 2 times on NIS DCC computer ar	d 3 times on Lidar Crystal computer.
20180419 Database crashed or	h Lidar Crystal computer once on the gro	ound during system startup and once
in-flight on the NIS DCC compu	ter. Andrew is investigating whether thi	s is due to a networking issue.
20180423 Database crashed or	n Lidar Crystal computer 4 times in-flight	t
2018042413 Database crashed	once on Lidar Crystal computer in-flight	t
2018042716 Database crashed	2 times in-flight, simultaneously on the	e Lidar Crystal and NIS DCC computers
2018042813 Database crashed	once in-flight, simultaneously on the Li	dar Crystal and NIS DCC computers
2018042913 Database crashed	on Lidar Crystal computer 3 times in-flig	ght
2018042918 Database crashed	on Lidar Crystal 2 times and once on NI	S DCC in-flight, at different times.
2018043014 Database crashed	on Lidar Crystal once and NIS DCC 4 tim	es in-flight, at different times. Also
crashed 3 times on both compu	uters simultaneously.	
2018051212 Teldat power cabl	e was replaced recently, however, data	abase crashed 2 in-flight on Lidar
Cyrstal computer		
2018062013 Database crashed	several times during training flight.	