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Flight Report

Aircraft :	NASA 528 (LaRC UC-12)
Operating Site(s) From / To :	KFAF (Felker) -KFAF
Flight Date :	7/22/2011
Flight Number :	HSRL R279 F/A/B (DISCOVER AQ 10A/B) And a Ferry Flight (KFAF to KPHF) prior to research
Take Off Time :	F: 1206 Z KFAF A: 1301 Z KPHF B: 1739 Z KPHF
Landing Time :	F: 1212 Z KPHF A: 1647 Z KPHF B: 2120 Z KFAF
Flight Time :	F: 0.1 A: 3.8 hours B: 3.7 hours 7.6 hours Total
Flt Request # / PI:	11B-201 SOFRS 11-090 LaRC
Purpose of Flight :	Data <input type="checkbox"/> Ferry <input type="checkbox"/> Functional Check <input type="checkbox"/> Other <input checked="" type="checkbox"/>
Aircraft Status:	Up <input checked="" type="checkbox"/> Down <input type="checkbox"/>
Sensor Payload :	DISCOVER-AQ (HSRL & ACAM)
Comments :	Discover AQ Research Flights with HSRL & ACAM. Aircraft based at KFAF due to KLF1 runway closure. (Ferry hop from FAF to PHF required for fuel).FL260, good ATC coordination. Weather was hot and hazy with some scatter lower cloud. On the afternoon flight some heavy build ups north and west of pattern. HSRL had some intermittent issue during the first flight but was able to complete the mission. Next flight tentatively scheduled for 25 July 2011.

SUBMITTED BY Mike Wusk DATE: 7/22/11

Flight Hours Summary

Flight	Date	Aircraft Flight #	Data Flight#	Duration (hr)	Running Total(hr)	Remaining Hours*
						100.00
KLFI-KLFI	6/25/11	11-066	ICF	1.7	1.7	98.3
KLFI-KLFI	7/01/11	11-070	1A	4.3	6.0	94.0
KLFI-KLFI	7/01/11	11-070	1B	3.4	9.4	90.6
KLFI-KLFI	7/2/11	11-071	2A	4.0	13.4	86.6
KLFI-KLFI	7/2/11	11-071	2B	3.6	17.0	83.0
KLFI-KLFI	7/5/11	11-072	3A	4.0	21.0	79.0
KLFI-KLFI	7/5/11	11-072	3B	3.9	24.9	75.1
KFAF-KPHF	7/10/11	11-079	4F	0.1	25.0	75.0
KPHF-KPHF	7/10/11	11-079	4A	3.9	28.9	71.1
KPHF-KFAF	7/10/11	11-079	4B	3.8	32.7	67.3
KFAF-KPHF	7/11/11	11-080	5F	0.1	32.8	67.2
KPHF-KPHF	7/11/11	11-080	5A	3.8	36.6	63.4
KPHF-KFAF	7/11/11	11-080	5B	3.9	40.5	59.5
KFAF-KPHF	7/14/11	11-081	6F	0.1	40.6	59.4
KPHF-KPHF	7/14/11	11-081	6A	4.0	44.6	55.4
KPHF-KFAF	7/14/11	11-081	6B	4.1	48.7	51.3
KFAF-KPHF	7/16/11	11-083	7F	0.2	48.9	51.1
KPHF-KFAF	7/16/11	11-083	7B	3.8	52.7	47.3
KFAF-KPHF	7/19/11	11-086	ICF-F	0.1	52.8	47.2
KPHF-KFAF	7/19/11	11-086	ICF	1.5	54.3	45.7
KFAF-KPHF	7/20/11	11-087	8F	.1	54.4	45.6
KPHF-KPHF	7/20/11	11-087	8A	3.9	58.3	41.7
KPHF-KFAF	7/20/11	11-087	8B	3.9	62.2	37.8
KFAF-KPHF	7/21/11	11-089	9F	.1	62.3	37.7
KPHF-KPHF	7/21/11	11-089	9A	3.9	66.2	33.8
KPHF-KFAF	7/21/11	11-089	9B	4.0	70.2	29.8
KFAF-KPHF	7/22/11	11-090	10F	.1	70.3	29.7
KPHF-KPHF	7/22/11	11-090	10A	3.8	74.1	25.9
KPHF-KFAF	7/22/11	11-090	10B	3.7	77.8	22.2

Flight Notes

Flight Name: R-279a

Date: 7/22/2011

Personnel: Kagey, Wusk, Rogers

Take Off Time: 9am EST, 13z

- First discover-aq flight of the day over the Baltimore/DC region. Another hot and humid day.
- 13:00z – waiting for traffic landing.
- 13:10z acam on at 11.5kft.
- 13:13z acam receiving packets.
- 13:17z been seeing a spectral purity pulse on the oscscope occasionally on the way up – a bit more than normal, but maybe I'm being paranoid.
- Between about 13:17z and 14:30z there were laser spectral purity problems leading to a loss in data. HSRL operation is nominal after this time.
- 14:38 cameras not saving data over APG.
- 15:32z cameras not saving data over APG
- 15:36z cameras saving data again.
- 16:09z cameras not saving data over APG
- 16:13z cameras saving data again.

Flight Name: R-279b

Date: 7/22/2011

Personnel: Kagey, Wusk, Rogers

Take Off Time: about 17:30 z

- Second discover-aq flight of the day over the Baltimore/DC region
- 17:49z acam turned on at 13.5kft.
- 17:52z acam receiving packets.
- 18:11z cals
- 18:38z going over some thick clouds
- 18:47z going into some thick cloud for a bit.
- 19:11z cameras not saving data over APG.
- 19:15z cameras saving data.
- 20:05z shuttered laser briefly for plane below.
- 20:08z cameras not saving data over APG.
- 20:12z cameras saving data.
- 20:35z shuttered laser briefly for traffic.
- 20:37z turning a bit early to avoid some weather.
- 20:42z cameras not saving data over APG.
- 20:46z cameras saving data.
- 20:57z cals