

Flight Report: DISCOVER-AQ Aborted Science Flight and ECF

From: KEFD To: KEFD

Start: 09/18/13 13:53 Z Finish: 09/18/13 14:56 Z

Start: 09/18/13 17:27 Z Finish: 09/18/13 18:30 Z

Flight Times: 1.1 hours each

Log Number: 13P201 PI: James Crawford

Funding Source: Hal Maring - NASA - SMD Radiation Science Program

Official report logged at:

https://airbornescience.nasa.gov/flight_reports/P-3_Orion_09_18_13

https://airbornescience.nasa.gov/flight_reports/P-3_Orion_09_18_13_0

Flight	Date	Duration	Cumulative Hours	DISCOVER-AQ Hours remaining
<i>Total Allocated</i>				100
ECF	8/27/13	2.3	2.3	97.7
PCF	8/28/13	2.1	4.4	95.6
Transit	9/2/13	3.9	8.3	91.7
Science Flight - 1	9/4/13	8.0	16.3	83.7
Science Flight - 2	9/6/13	7.9	24.2	75.8
Science Flight - 3	9/11/13	8.2	32.4	67.6
Science Flight - 4	9/12/13	8.0	40.4	59.6
Science Flight - 5	9/13/13	7.9	48.3	51.7
Science Flight - 6	9/14/13	8.0	56.3	43.7
Aborted Flight	9/18/13	1.1	57.4	42.6
ECF	9/18/13	1.1	58.5	41.5

Comments: This was intended to be the seventh science flight for DISCOVER-AQ. Shortly after takeoff, a noise was identified due to a vibration of the LARGE aerosol probe. The P-3B had to proceed over the Gulf of Mexico after the missed approach at Galveston to dump enough fuel to return to land at Ellington Field. An inspection of the probe revealed that the tip of the probe was loose. After tightening the probe tip, the cause of the vibration and corrective actions were discussed with the Air Safety Review Board at NASA Wallops. The P-3B was returned to flight status after an ECF determined that the probe adjustments had corrected the problem.