

## DC-8 05/01/12

Aircraft: [DC-8 - AFRC](#) (See full schedule)

Flight Number: 120301

Payload Configuration: DC3

Nav Data Collected: No

Total Flight Time: 1.1 hours

Submitted by: Frank Cutler on 05/21/12

### Flight Segments:

<b>From:</b>	KPMD	<b>To:</b>	KPMD
<b>Start:</b>	05/01/12 21:00 Z	<b>Finish:</b>	05/01/12 22:06 Z
<b>Flight Time:</b>	1.1 hours		
<b>Log Number:</b>	<a href="#">128004</a>	<b>PI:</b>	Mary Barth
<b>Funding Source:</b>	Jassim Al-Saadi - NASA - SMD - ESD Tropospheric Chemistry Program		
<b>Purpose of Flight:</b>	Other		
<b>Comments:</b>	Instruments: AOP, PALMS, LARGE, HDSP2, DASH SP, ISAF, HRAMS, TDLIF, GTCIMS, CITCIMS, PTRMS, DIAL, NOyO3, DACOM, DLH, COLAS, SAGA, AVOCET, ATHOS, DFGAS, MMS, SPEC (CPI, 2DS, HVPS, FDCP – sensor heads removed), WAS, SSFR, BBR, RPI, CAFS Initial shakedown flight to assess instruments and probe installations for airworthiness. Flight cut short when PT RMS & NOyO3 probes started vibrating at about 275 kts and 23,000 ft. Post flight modal analysis concluded that the probes were not in flutter mode (1st bending mode natural frequency just under 100Hz and torsion between 800-1000Hz so no mode coupling). Determined to be aerodynamic vortex shedding issue due to portions of probe length being in fuselage boundary layer and other portions out in free stream. Vortex generators being installed on probes to attempt alleviation of this problem.		

### Flight Hour Summary:

	<b>128004</b>
<b>Flight Hours Approved in SOFRS</b>	150
<b>Total Used</b>	139
<b>Total Remaining</b>	11

### 128004 Flight Reports

Date	Flt #	Purpose of Flight	Duration	Running Total	Hours Remaining	Miles Flown
<a href="#">05/01/12</a>	120301	Other	1.1	1.1	148.9	
<a href="#">05/03/12</a>	120302	Other	1.7	2.8	147.2	
<a href="#">05/04/12</a>	120303	Science	4.4	7.2	142.8	
<a href="#">05/08/12</a>	120304	Transit	3.9	11.1	138.9	
<a href="#">05/11/12</a>	120305	Science	3.2	14.3	135.7	
<a href="#">05/12/12</a>	120306	Other	1	15.3	134.7	
<a href="#">05/14/12</a>	120307	Science	5.5	20.8	129.2	
<a href="#">05/18/12 - 05/19/12</a>	120308	Science	5.5	26.3	123.7	
<a href="#">05/19/12 - 05/20/12</a>	120309	Science	5.2	31.5	118.5	
<a href="#">05/21/12</a>	120310	Science	7.2	38.7	111.3	
<a href="#">05/25/12 - 05/26/12</a>	120311	Science	6.1	44.8	105.2	
<a href="#">05/26/12 - 05/27/12</a>	120312	Science	7.3	52.1	97.9	
<a href="#">05/27/12</a>	120313	Check	0.7	52.8	97.2	
<a href="#">05/29/12 - 05/30/12</a>	120314	Science	5.2	58	92	

<a href="#">05/30/12 - 05/31/12</a>	120315	Science	8.7	66.7	83.3
<a href="#">06/01/12 - 06/02/12</a>	120316	Science	7	73.7	76.3
<a href="#">06/02/12</a>	120317	Science	5.5	79.2	70.8
<a href="#">06/05/12 - 06/06/12</a>	120318	Science	5.6	84.8	65.2
<a href="#">06/06/12 - 06/07/12</a>	120319	Science	6.1	90.9	59.1
<a href="#">06/07/12 - 06/08/12</a>	120320	Science	6	96.9	53.1
<a href="#">06/11/12 - 06/12/12</a>	120321	Science	8.2	105.1	44.9
<a href="#">06/15/12 - 06/16/12</a>	120322	Science	7.9	113	37
<a href="#">06/16/12 - 06/17/12</a>	120323	Science	5.4	118.4	31.6
<a href="#">06/17/12 - 06/18/12</a>	120324	Science	4.5	122.9	27.1
<a href="#">06/21/12</a>	120325	Science	6.5	129.4	20.6
<a href="#">06/22/12 - 06/23/12</a>	120326	Science	7	136.4	13.6
<a href="#">06/29/12</a>	120327	Ferry	2.6	139	11

*Flight Reports began being entered into this system as of 2012 flights. If there were flights flown under an earlier log number the flight reports are not available online.*

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Page Editor: Katja Drdla

NASA Official: Marilyn Vasques

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