

CR-AVE Flight Summary  
25 January 2006  
*All times given in CST*

**General Information**

**Flight date** – 25 January 2006

**Flight description** – Flight 5 CR-AVE Remote Payload Data Flight (8<sup>th</sup> flight)

**Flight duration** - 4.7 hours

**Crew** – Rick Hull, Dom Del Rosso

**Instruments flown (21):** 2DS, ACAM, ALIAS, CAFS, CAPS, CO<sub>2</sub>, CoSSIR, CPI, CPL, CRS, CSI, Frostpoint, ICOS, JLH, MMS, Ozone, PALMS, PANTHER, PT, Scanning-HIS, WAS

**Flight Log**

<b>Engine Start</b>	11:40 am	<b>Takeoff</b>	12:22 pm	<b>Approach</b>	
<b>Data Rec On</b>	12:10 pm	<b>Begin Descent</b>	4:25 pm	<b>Landing</b>	5:00 pm

**Gear extensions/retractions**

<b>Gear Up</b>	12:22 pm					
<b>Gear Down</b>	4:50 pm					

**Weather Observations**

Climb-Out:

- Generally clear over the field to altitude on climb-out.
- Low cloud cover continuous to broken over land mass enroute to altitude.
- Generally clear over water, with lightly scattered cirrus in direct path until southern end.
- Cloud cover built along the western edge of track in southern area, and eventually filled in near islands.
- Apparent high cirrus on southern end of track after about one hour of flight.

Cruise:

- Rapid unrestricted climb to 53 kft
- 1:07 pm – Level at 55 kft for MMS maneuvers
- 1:38 pm – Navigation correction
- Inadvertently entered satellite path at 56 kft for the first 6 minutes
- Inbound cruise with 300 ft/min flight profile between 53 and 58.5 kft
- Descent over MROC unrestricted to 25 kft. Contrails visible. Clear directly below.

## **Flight Profile**

- 1:07 pm – 55 kft – MMS maneuvers
- 1:29 pm – 55 kft – two photos east/west – no significant cloud cover previous to this time
- 1:38 pm – 55 kft – navigation delta to correct waypoint 3 at FIR1
- 2:02 pm – 56 kft – waypoint 3
- 2:08 pm – 57 kft
- 2:12 pm – 57 kft – two photos southwest (islands), one photo east
- 2:21 pm – 57 kft – waypoint 4
- 2:30 pm – 57 kft – waypoint 5, photo east
- 2:35 pm – CAPS failed three times; tried to reset without success. WAS 2 failed; no action taken.
- 2:42 pm – 53 kft
- 2:50 pm – CAPS fail light; reset without any action
- 2:52 pm – 58.5 kft
- 2:55 pm – CAPS fail light; no action taken
- 2:58 pm – two photos east/west
- 3:00 pm – 53.0 kft
- 3:07 pm – 58 kft
- 3:17 pm – 53 kft
- 3:35 pm – 60.5 kft
- 3:45 pm – 61.4 kft
- 4:25 pm – 61 kft – over MROC, began descent, four photos

## **Instrument Notes**

- Climb past 5 kft at 12:22 pm
- Climb past 18 kft at 12:25 pm
- CAPS display read 'RATIO + -1.IND'
- CAPS failed and could not be reset