

Flight Summary MACPEX 23 Apr 2011

General Information

Flight date- 23 Apr 2011

Flight duration - 5.3 hours

Crew – Bill Rieke, John Bain

Instruments flown: 2DS, ALIAS, CIMS, CLH, CPI, DLH, FCAS, FCDP, FISH, HARHAL, HARWV, HVPS, JLH, MMS, NMASS, O3, O3LITE, PALMS, SID3, SP2, ULH, VIPS

Flight Log

Engine Start	12:49pm	Takeoff	13:02pm	Approach	17:40 pm
Data Rec On	12:52pm	Begin Descent	17:24 pm	Landing	18:10 pm

Gear extension/retractions

Gear Up	13:02pm					
Gear Down	18:05pm					

Weather Observations

After takeoff penetrated the cumulus layer at 3000 – 4500 ft. During the racetrack patterns we were in continuous clouds at times very thick and also very thin. Even during the thinnest clouds the SID3 was showing particles on the display. When climbed out on the way to the balloon site we exited the cloud layer at FL400 at 16:45pm.

At FL527 at 17:15pm we encountered clear air light turbulence for almost two minutes.

In the spiral descent we passed through a thin cirrus layer at approximately FL420 at 17:37pm.

In the approach penetrated the low cumulus layer from 3600ft – 3000ft at 17:59pm. Then again at 2500ft at 18:03pm.

Flight Profile

Enroute to the Arm site we call and were re-directed to two points about 30nmi east of DFW where we flew a racetrack with a 30nmi offset to the SE. We flew two laps on this track at FL380 then were directed to move the race track South. After two laps on the more southern track we were directed to move the track East 40nmi. After one lap on this track at FL360 we performed the MMS Maneuvers at FL360 then started a climb to the Balloon site at 16:45pm.

Started the spiral descent at 17:24pm over the balloon point at FL570 down to FL400. Then RTB at 15:48.

Instrument Notes

- Palms cloud ON at 13:53pm, OFF at 16:47pm.
- HARWV fail at 13:08PM recovered first try, Fail light again at 14:38pm recovered first try.
- SID3 lost remote terminal two times. 14:00pm and 14:35pm. Recovery required cycling the SID3 power switch.
- HARWV fail light on descent – no action.