HASP2010- UND-UNF Payload #7 University of North Florida Team Monthly Status Report for May 2010

UNF Students Team

Nathan Walker, Bernadette Quijano, and Jason Saredy

UNF Faculty Advisor

Dr. Nirmal Patel

Our team did the following work during May 2010:

- (1) The testing and calibration of nanocomposite nanocrystalline sensors are going on using ozone generator, digital ozone detector and test chamber. Fabrication and testing of ITO + TiO₂ nanocomposite sensors and ITO + WO₃ nanocomposite sensors are going on. Contacts between sensors and PCB were improved. The comparison of sensitivity of nanocomposite sensors with ozone is going on. The results will be reported in the next month report.
- (2) We supplied one sensor array with PCB and flat heater to Mr. Jonathan Snarr of UND for testing with electronic circuits. Few more sensors arrays will be supplied to him during next week or so.
- (3) The fabrication of a payload body was completed. One extra payload body was also fabricated as for back up. The current mass of the payload body and sensor box is about 1.92 kg. We are going to lower the mass of the payload body by replacing 1 inch screw by ¾ inch. The picture of two set of payload body is shown in fig.1.



Fig.1 Payload body