

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

UNF Students Team

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Our team did the following work during April 2010:

- (1) White PVC sheets (1/8" x 24" x 48", 2 nos.) for making the walls of the payload and aluminum square corner angles (1/16 inch x 1 inch – 3feet, 6 nos.) for making the frame structure of the payload were purchased. This PVC sheet has excellent corrosion resistance and weather resistance. The working temp is 33°F to 160°F and the forming temperatures of 245°F. Sheet has good electrical and thermal insulator and has a self-extinguishing per UL Test 94. The design and fabrication of the payload body is going on.
- (2) New series of sensor arrays (Fig.1) were fabricated under different growth conditions such as thickness of film, substrate temperature, deposition rate and composite materials. Another series of sensor arrays will be fabricated in the next month.

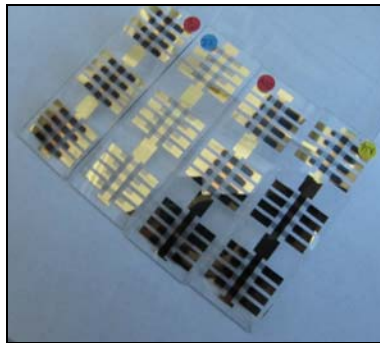


Fig. 1 Sensor arrays

- (3) The testing and calibration of sensors are still going on using ozone generator, digital ozone detector and test chamber. The comparison of response of sensors with ozone will be reported in the next month.
- (4) We are waiting for the delivery of the flexible low voltage heater from the Omega Company. We will supply one heater to Jonathan Snarr of UND for the designing and fabrication of the PID temperature controller as soon as we get the delivery of the heater.
- (5) Nathan and Bernadette are occupied with their final examinations of the spring semester since last week. They will be back on work from the next week.
- (6) The critical design review work is going on and will be completed in the middle of the next month.