

## **Hurricane Awareness In Full Swing**

On May 6, 2009 the NOAA WP-3D Orion Hurricane Hunter aircraft visited the Raleigh Durham International Airport as part of the 2009 Hurricane Awareness Tour. The aircraft was greeted in the morning by hundreds of school children and media anxious to get onboard to get a first hand feel of the hurricane piercing plane. Throughout the morning schools from both Wake and Durham counties sent nearly 700 students to the event which featured a presentation on hurricane forecasting and safety, tours of a Civil Air Patrol reconnaissance aircraft, the NOAA P3 Orion Hurricane Hunter and a specialized airport fire truck used for crash response. In addition to these displays NWS personnel showcased a vandergraph lightning making machine, a tornado machine along with a variety of meteorological instruments. By the end of the day nearly 2500 people visited the event touring the NOAA P3 Orion Hurricane Hunter.

The all day event included officials from the Raleigh-Durham International Airport, Civil Air Patrol, American Red Cross and North Carolina Emergency Management. The success of the Raleigh portion of the 2009 Hurricane Awareness Tour would not have been a success if not for the involvement and dedication of these businesses and agencies. It was noted by the aircraft crew that Raleigh was one of the best tour stops they had ever seen based on the turnout and enthusiasm of everyone who came out to be part of the event.

### **NOAA P3 Orion Background**

Two of the world's premier research aircraft, the renowned NOAA WP-3D Orion's, participate in a wide variety of national and international meteorological, oceanographic and environmental research programs in addition to their widely known use in hurricane research and reconnaissance. Data collected during hurricanes by these airborne meteorological platforms are fed into numerical computer models to provide better forecasts of how intense a hurricane will be, and when and where it will make landfall. These data fulfill two important purposes: to help forecasters make accurate predictions during a hurricane; and to help NOAA researchers achieve a better understanding of storm processes.

Slicing through the eye wall of a hurricane, buffeted by howling winds, blinding rain, violent updrafts and downdrafts before entering the relative calm of the storm's eye, NOAA's two Lockheed WP-3D Orion turboprop aircraft probe the very nature of the storm, repeating the grueling experience a number of times during the course of a 9-10 hour mission. In support of scientists from NOAA's Office of Oceanic and Atmospheric Research, Hurricane Research Division, crew members deploy instruments called GPS (Global Positioning System) dropwindsondes as the WP-3D Orion aircraft penetrates the hurricane. These devices continuously radio back measurements of pressure, humidity, temperature and wind as they fall toward the sea, providing a detailed look at the structure of the hurricane and its intensity.

### **Websites of Interest:**

**NOAA WP-3D Orion:** [http://www.aoc.noaa.gov/aircraft\\_lockheed.htm](http://www.aoc.noaa.gov/aircraft_lockheed.htm)

**NOAA Aircraft Operations:** <http://www.aoc.noaa.gov/>

**National Hurricane Center:** <http://www.nhc.noaa.gov/>

**Pictures from the Raleigh stop of the 2009 Hurricane Awareness Tour**



Elementary school students touring the NOAA Hurricane Hunter.



Elementary school students touring displays at the Hurricane Hunter event.



Students touring the NOAA Hurricane Hunter aircraft and RDU fire truck.



Student viewing the Civil Air Patrol aircraft on display.



Students viewing the Raleigh Durham International Airport special crash fire truck