

## NOAA Field Research Division Awarded 2007 NOAA Bronze Medal

The NOAA Field Research Division (FRD) in Idaho Falls was selected for the 2007 NOAA Bronze Medal Award. This award is given within NOAA to individuals or organizations that have excelled in research or operational support throughout the year. FRD was selected “for preeminent research on atmospheric observation technologies which has resulted in addressing issues of important national significance, including homeland security, hurricanes and air quality.”

FRD has recently assisted the U.S. Department of Homeland Security in understanding atmospheric dispersion of chemical, biological, and nuclear agents in densely populated urban areas. They have recently participated in Operation Pentagon Shield and several other Homeland Security atmospheric tracer studies conducted in Salt Lake City, Oklahoma City, and Midtown Manhattan. These studies will help emergency personnel respond correctly in the event of terrorist attack.

Other scientists at FRD study hurricanes. Special high-wind meteorological probes developed at FRD were placed in the path of the eye of the hurricanes as they came onshore. These probes measured both wind speed and wind gusts (turbulence) that together cause the damage to buildings during a hurricane. The results will help engineers determine the design requirements for buildings to be able to withstand hurricane force winds.

The NOAA Smart Balloon, yet another device that was developed at FRD, has been instrumental in the success of numerous air quality studies. The NOAA Smart Balloon is an unmanned, autonomous 10-ft diameter balloon that contains miniaturized lightweight sensors that continuously monitor and report air quality and weather conditions. In one recent study, the Smart Balloon was able to measure the ozone as it crossed the entire Atlantic Ocean from Long Island, New York to the African Coast of Morocco. The data from the Smart Balloon are now being incorporated in air quality and climate change models.

FRD continues to maintain a network of 34 weather stations across Southeast Idaho in partnership with the U.S. Department of Energy. Data collected from this network helps FRD meteorologists create weather forecasts and support emergency operations at the Idaho National Laboratory.

The Bronze Medal is the second distinguished award received by FRD scientists in the last few months. Randy Johnson received a U.S. Department of Commerce Silver Medal Award for his work on the Smart Balloon last November. The Silver Medal is the Dept. of Commerce second highest award possible.

FRD began operations at the Idaho National Laboratory (originally known as the National Reactor Testing Station) in 1948 as a Weather Bureau Research Station. The initial objective was to describe the meteorology and climatology of the NRTS. The focus was on protecting the

health and safety of site workers and nearby residents. It has since evolved into an internationally known and recognized research group.