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## Atmospheric Research at UNH Lauded by Senator Gregg; Midpoint of Large-scale Air Quality Study Marked

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PORTSMOUTH, N.H. – Scientists and dignitaries involved in the largest air quality-climate study ever conducted today marked its midway point and announced the successful maiden flight of a balloon mission that has ushered in a new era of atmospheric research.

The multifaceted study, known as the International Consortium for Atmospheric Research on Transport and Transformation or ICARTT, began July 1 and will run through mid-August. Seacoast New Hampshire is serving as the center of operations for the research in large part because of the University of New Hampshire's Atmospheric Investigation, Regional Modeling, Analysis, and Prediction (AIRMAP) program, which U.S. Senator Judd Gregg (R-NH) has been instrumental in funding.

Scientists from UNH also developed a state-of-the-art, miniature ozone-measuring instrument that flew on a 12-foot "Smart Balloon" from Orient, New York, to Lincoln, Maine, at 1,500 feet on July 15. The flight marked the first time a small balloon has carried an air quality instrument for an extended mission at low altitude.

Said President of the University of New Hampshire Ann Weaver Hart, "This is truly a landmark event and promises to change forever the way we study air pollution in the atmosphere we breathe. We are no longer tied to ground-based instruments and expensive airplane missions."

The ozone instrument developed at UNH weighs only five ounces and cost \$1,000 to build. The balloon is one of many mobile and ground-based platforms being deployed for this summer's multifaceted, international study.

At a press briefing in the shadow of the National Oceanic and Atmospheric Administration's (NOAA) Research Vessel Ronald H. Brown, Sen. Gregg (R-N.H) said, "This gathering here today is a true demonstration of how the University of New Hampshire has established itself as a leader in the fields of atmospheric science. The fact that this study is being done right here in New Hampshire is a testament to the outstanding researchers and scientists and their dedication to studying the world around us and finding ways to improve our quality of life."

"The university and I have worked together for a number of years on air quality studies, and to see the magnitude and scope of this project today, on both a national and international level, is

both amazing and exciting. I couldn't think of a better place for that to happen, and the work done here will highlight the need for us to address this nationwide problem of air pollution," Gregg said.

In his capacity as chairman of the Senate Appropriations Subcommittee, Sen. Gregg secured \$5.75 million for the New England portion of the project (the New England Air Quality Study) and \$9 million for efforts to improve air quality forecasting. NOAA is scheduled to begin trial forecasting for New England this September.

"It is through the foresight of Senator Gregg that this large-scale, multi-agency air quality research is being done here in the seacoast of New Hampshire," Hart said. "The senator took the initiative to fund the New England Air Quality Study each year, starting in 2001, at a level that ensured a major study. That, in turn was enough to encourage others to join in what then became the biggest air quality study ever."

The air campaign involves six countries, a dozen airplanes, the 274-foot R/V Brown, balloons, satellites, and a network of state-of-the-art ground-based observing stations. The study is led by NOAA's Aeronomy Laboratory in conjunction with AIRMAP - a cooperative NOAA/UNH atmospheric observation network. NASA, the Department of Energy, and a host of other institutions from around the country are also involved in this summer's project, as well as scientists from Britain, France, Germany, and Canada.

"Data from this summer's experiment, combined with insights from work done in 2002 are providing new perspectives on long-standing questions," said retired Navy Vice Adm. Conrad C. Lautenbacher, Ph.D., under secretary of commerce for oceans and atmosphere and NOAA administrator.

"By pulling out all the stops and collecting data on the ground, in the air, and at sea, we will have some good information on which to help guide our decisions in the future," Lautenbacher said. Added Berrien Moore III, director of UNH's Institute for the Study of Earth, Oceans, and Space (EOS), "We are honored to be working so closely with NOAA on this ambitious and complex field campaign. And we are ever grateful to Senator Gregg for his commitment to getting the science needed to understand the dynamics of our region's variable air quality and, ultimately, protecting the air we breathe."