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FOR IMMEDIATE RELEASE



Aurora's Centaur flies with advanced greenhouse gas measurement system.

**Aurora Tests Airborne Greenhouse Gas Instrumentation in Preparation for Arctic Mission**

MANASSAS, VA, May 28, 2013 — Aurora Flight Sciences announced today that it has successfully integrated an advanced greenhouse gas measurement system on its Centaur Aircraft, obtained an FAA airworthiness certification for flight operations, and performed flight tests over the Chesapeake Bay.

A team comprised of Harvard University's Anderson Research Group, the National Oceanic and Atmospheric Administration (NOAA) Atmospheric Turbulence and Diffusion Division (ATDD), and Aurora developed a new airborne instrument called FOCAL and integrated it into the Centaur aircraft in preparation for deployment to Alaska later this year.

Global warming has led to thawing of permafrost in the Earth's Arctic regions. As this thawing occurs, buried organic matter and methane hydrates are converted to methane and carbon dioxide gases which permeate upwards through the soil and water and are released into the air. Methane and carbon dioxide are two of the most important greenhouse gases contributing to the warming of the planet.

Harvard and NOAA/ATDD's Flux Observations of Carbon from an Airborne Laboratory (FOCAL) instrument is capable of measuring the fluxes of methane and carbon dioxide, with sufficient precision to distinguish between the thermogenic and biogenic sources of carbon. The FOCAL instrument was developed utilizing recent breakthroughs in lasers, detector technology and ultra-sensitive spectroscopy. The Centaur aircraft permits the FOCAL instrument to measure greenhouse gas emissions over wide ranges of Arctic terrain.

Test flights over the Chesapeake Bay were conducted to calibrate the instrument prior to deployment to the permafrost region of Alaska's Northern Slope later this year. Data products from this research will be provided to the oceanic and atmospheric science communities involved in monitoring rapid environmental changes in the Arctic region. The National Science Foundation (NSF) sponsored this scientific research program.

"Global environmental change represents a major threat to both our national security and our world economy," stated John Langford, Aurora's CEO. "Aurora Flight Sciences was founded to provide UAVs to the science community for global environmental monitoring, and we are thrilled to be working with our original customer, Harvard's Anderson Research Group, on this fundamental research."

**About Aurora Flight Sciences**

Aurora Flight Sciences designs and builds aerospace vehicles for commercial and military applications. Aurora is headquartered in Manassas, VA and operates production facilities in Bridgeport, WV and Columbus, MS as well as a Research and Development Center in Cambridge, MA. To learn more about Aurora please visit our website at [www.aurora.aero](http://www.aurora.aero).

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