



FOR IMMEDIATE RELEASE

**Release No:** APR-230  
**Contact:** Patricia Woodside  
Director, Public Relations  
(703) 396-6304  
[pwoodside@aurora.aero](mailto:pwoodside@aurora.aero)

### **Aurora Flight Sciences wins NASA contract for Charged Particle Spectrometer for Manned Space Vehicles**

Cambridge, MA, March 18, 2009 - Aurora Flight Sciences announced today that the company has been awarded a NASA Small Business Innovative Research (SBIR) Phase I contract to develop a compact charged particle spectrometer for use in manned space vehicles. The proposed instrument, leveraging innovative angle-detecting inclined sensor (ADIS) technology, will be capable of identifying and quantifying charged particles, hazardous to astronauts on extended spaceflights. The type and rate of particles such as protons and heavy ions can be measured, providing an accurate indication of the radiation dosage encountered by the crew.

The program is in collaboration with the Space Science Center (SSC) at the University of New Hampshire (UNH). In Phase I, Aurora and UNH will evaluate techniques for modifying an existing ADIS instrument, designed for use on robotic missions, to meet the stringent mass, volume and safety requirements of a manned environment such as NASA's Crew Exploration Vehicle (CEV). "Our goal is a compact, real-time device for measuring radiation hazards for humans in space, that meets the limited size, weight and power availability of the CEV or other space vehicles," stated Mr. John Merk, Aurora's Principal Investigator for the program. The successful completion of Phase I will facilitate prototyping of a non-flight evaluation unit in Phase II, and a spaceflight-qualified version in successive program phases.

Aurora has flown over 30 payloads on manned spacecraft, including the SPHERES experiment currently operating on the International Space Station. UNH-SSC has a long heritage of fabricating and delivering spaceflight instrumentation, most recently for the CLUSTER (1999), STEREO (2006) and IBEX (2007) missions, with instruments under development for GOES-R and the MMS missions.

#### **About Aurora Flight Sciences**

Aurora Flight Sciences develops and provides robotic aircraft and other advanced aerospace vehicles for scientific and military applications. Aurora is headquartered in Manassas, VA and operates production plants in Bridgeport, WV and Columbus, MS and a Research and Development Center in Cambridge, MA. Please visit our web site at [www.aurora.aero](http://www.aurora.aero).

#####