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### **Aurora Flight Sciences Wins US Air Force Contract on Vision-Based Micro Air Vehicle (MAV) Guidance**

Cambridge, MA, October 23, 2008 - Aurora Flight Sciences announced today that the company has been selected for a U.S. Air Force SBIR Phase II award in support of vision-based micro air vehicle (MAV) guidance.

Aurora will be developing an integrated system for guidance of MAVs through cluttered environments using vision and sonar. The system is called the 'Panoramic Avoidance and Navigation using OPTics Integrated with Sonar' (PANOPTIS) system. The goal for PANOPTIS is to provide a coherent, lightweight solution for MAVs that enables true urban or 'swallow-like' flight.

In Phase I Aurora has shown that the PANOPTIS components and algorithms are suitable for low size, weight, and power situations; Aurora has also demonstrated robustness to sensor inaccuracies and environmental factors. Operational standards will include aerial surveillance support of ground operations, special operations forces, Marine expeditionary teams, and other military units that currently use small unmanned air vehicles (UAVs). In any situation where small UAVs are currently deployed, a MAV outfitted with PANOPTIS would yield greatly enhanced capability for gathering information in tight quarters, surviving during communication outages and/or when the warfighter loses vehicle situational awareness. "It combines the latest techniques in wide-field optic flow, bat-inspired echolocation and behavioral/automaton-based navigation and maneuvering," stated Dr. Jim Paduano, Aurora's Principal Investigator.

The contract is in collaboration with the University of Maryland and supported by Professors Sean Humbert and Tim Horiuchi, who specialize in using optical flow and echolocation to provide obstacle avoidance.

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

Aurora Flight Sciences designs and builds robotic aircraft and other advanced aerospace vehicles for scientific and military applications. Aurora is headquartered in Manassas, VA and operates production plants in Clarksburg, WV and Columbus, MS and a Research and Development Center in Cambridge, MA. To view recent press releases and more about Aurora please visit our web site at [www.aurora.aero](http://www.aurora.aero).

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