



## **AeroVironment's Global Observer Stratospheric Unmanned Aircraft System Completes Initial Flight Testing**

### ***Demonstration Program Proceeding Toward Hydrogen-Fueled Flight Test Phase***

WASHINGTON, at AUSA, Oct 25, 2010 (BUSINESS WIRE) -- [AeroVironment, Inc.](#) (AV) (NASDAQ:AVAV) today announced that the first aircraft developed under the [Global Observer](#) (TM) Joint Capability Technology Demonstration (JCTD) program has successfully completed initial flight testing consisting of multiple low-altitude flights at Edwards Air Force Base (EAFB) in California. This initial flight test phase of the demonstration program employed batteries to power the hybrid-electric aircraft and to approximate full aircraft weight and center of gravity for flight control, performance and responsiveness evaluation.

The program team has installed and is currently ground testing the aircraft's innovative, hydrogen-fueled generator and liquid hydrogen fuel tanks which will power it through stratospheric, extreme endurance flights during the joint operational utility assessment phase of the program.

"These successful flights validated Global Observer's airworthiness, and represent critical milestones as the team proceeds toward demonstrating stratospheric, extreme endurance operations," said Tim Conner, AV's president and chief executive officer. "The liquid-hydrogen fueled flight test series will be historic for AV and the JCTD team as Global Observer moves closer to demonstrating mission-readiness and supporting our troops whenever and wherever needed."

The initial test flights took place during the months of August and September and have succeeded in achieving the primary objectives of the low altitude flight test program. The primary objectives for initial flight testing were to test guidance, manual and autonomous controls, navigation, structural performance, thrust levels and handling in various winds and turbulence conditions.

AV also has successfully operated Global Observer's hydrogen-fueled generator for more than 1,500 hours in a specialized environmental chamber, including an uninterrupted 7-day mission cycle. The chamber subjects the generator to the range of temperatures, pressures and air densities that the aircraft will experience during the climb, loiter and descent stages of high altitude missions. Successful wing load tests performed in August validated the Global Observer wing at its load limit.

AV is developing the Global Observer unmanned aircraft system (UAS) to be the first to provide robust, cost-effective and persistent communications and surveillance over any location. Six U.S. government agencies have provided funding for the JCTD program.

Global Observer is designed to address an urgent national security need for a persistent stratospheric platform and to offer a means to satisfy numerous high value civil and commercial applications. The system is intended to provide mission capabilities that include robust observation over areas with little or no existing coverage, persistent communications relay, the ability to relocate the system as required by theater commanders, dedicated communications support to other UAS and tactical on-station weather monitoring and data support. Because of its extreme endurance the Global Observer system can be based out-of-theater, reducing costs, supply chain requirements and potential risk to operational personnel.

### **About Global Observer**

With 20 years of experience developing stratospheric, long-endurance unmanned aircraft systems (UAS), AV is developing Global Observer to operate as a "stratospheric geosynchronous satellite system" with regional coverage and minimal signal delay. Two Global Observer aircraft, each flying for up to a week at a time, will alternate coverage over any area on the earth, providing a seamless, persistent platform for high value missions such as communications relay, remote sensing, long-term surveillance and border patrol. Offering greater flexibility than a satellite and significantly longer duration than conventional manned and unmanned aircraft, Global Observer is designed to provide critical new capabilities in a reliable and more affordable manner, all while consuming no fossil fuels and emitting no carbon emissions.

Each aircraft in a Global Observer system is designed to fly at an altitude of between 55,000 and 65,000 feet for 5 to 7 days. In addition to flying above weather and above other conventional airplanes, operation in this altitude range means that sensor

payloads on the aircraft will be able to view a circular area on the surface of the earth up to 600 miles in diameter, equivalent to more than 280,000 square miles of coverage. Equipped with payloads that are readily available today, two Global Observer aircraft would alternate coverage over any location on the globe, making this the first solution to provide customers with practical, seamless coverage, wherever and whenever required.

### **About AeroVironment, Inc. (AV)**

AV is a technology company that designs, develops, produces and supports an advanced portfolio of Unmanned Aircraft Systems (UAS) and efficient electric energy systems. Agencies of the U.S. Department of Defense and allied military services use the company's battery-powered, [hand-launched UAS](#) to provide situational awareness to tactical operating units through real-time, airborne reconnaissance, surveillance and target acquisition. AV's electric transportation solutions include [electric vehicle \(EV\) home charging, public charging and fast charging systems](#) for consumers, automakers, utilities and government agencies, [power cycling and test systems](#) for EV developers and [industrial electric vehicle charging systems](#) for commercial fleets. More information about AV is available at [www.avinc.com](http://www.avinc.com).

### **Safe Harbor Statement**

Certain statements in this press release may constitute "forward-looking statements" as that term is defined in the Private Securities Litigation Reform Act of 1995. These statements are made on the basis of current expectations, forecasts and assumptions that involve risks and uncertainties, including, but not limited to, economic, competitive, governmental and technological factors outside of our control, that may cause our business, strategy or actual results to differ materially from those expressed or implied. Factors that could cause actual results to differ materially from the forward-looking statements include, but are not limited to, our ability to perform under existing contracts and obtain additional contracts; changes in the regulatory environment; the activities of competitors; failure of the markets in which we operate to grow; failure to expand into new markets; failure to develop new products or integrate new technology with current products; and general economic and business conditions in the United States and elsewhere in the world. For a further list and description of such risks and uncertainties, see the reports we file with the Securities and Exchange Commission. We do not intend, and undertake no obligation, to update any forward-looking statements, whether as a result of new information, future events or otherwise.

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