



## Global Observer, AeroVironment's Extreme Endurance Unmanned Aircraft System, Achieves Historic First Hydrogen-Powered Flight

**Key Milestone Achieved for System Designed to Provide Persistent Communications and Surveillance at 20% of the Cost of Existing Solutions**

MONROVIA, Calif.--(BUSINESS WIRE)-- [AeroVironment, Inc.](#) (AV) (NASDAQ:AVAV) today announced that the [Global Observer](#)™ unmanned aircraft system has successfully completed its historic first flight powered by the aircraft's hydrogen fueled propulsion system at Edwards Air Force Base (EAFB) in California. This milestone marks the beginning of high altitude, long endurance flight testing for the demonstration and operational utility phase of the Joint Capability Technology Demonstration (JCTD) program.



Global Observer, AeroVironment's Extreme Endurance Unmanned Aircraft System, Achieves Historic First Hydrogen-Powered Flight (Photo: Business Wire)

"Global Observer has moved quickly from development and testing toward demonstrating mission-ready, affordable persistence," said Tim Conner, AV chairman and chief executive officer. "Similar to a satellite, Global Observer is the first system designed to provide a 24/7/365 unblinking eye and continuous communications link over any location on the earth's surface for as long as needed. The joint AV and U.S. government team developed Global Observer to meet today's urgent requirements for persistence and to enable the development of much more cost-effective solutions for the future. The speed with which we have achieved this milestone reflects the benefits of an effective government-industry partnership."

Because of its extreme endurance and range, Global Observer can be based out-of-theater, which will further reduce operating costs and local air traffic congestion while significantly reducing risk to operational personnel. AV plans to make Global Observer systems available for procurement and for operation as a turnkey service to provide communications and remote imaging in a manner similar to satellite services, but at a much lower cost.

The hydrogen-powered flight lasted for four hours and reached an altitude of 5,000 feet above sea level over the United States Air Force Flight Test Center at EAFB. This first flight follows the successful battery-powered flight test phase of the demonstration program that took place during the months of August and September.

The flight test team will now systematically expand the altitude and duration of test flights to validate the aircraft's high-altitude, long endurance performance. These flights will include the Air Force's Joint Aerial Layer Network (JALN) Tactical Communications Suite (TCS) payload. The JALN TCS provides persistent, IP-based aerial communications infrastructure that extends communications from a Global Observer aircraft positioned at 65,000 feet above sea level over a wide area. The joint operational utility of the Global Observer system will also be assessed during this flight test series for future U.S. Government, civil, and military uses.

### 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.

In addition to flying above weather and above other conventional airplanes, operation at 55,000 to 65,000 altitude enables sensor payloads on the aircraft to view a significantly larger area on the surface of the earth than conventional, lower flying

aircraft. Equipped with payloads that are readily available today, a two Global Observer system would provide persistent satellite-like coverage over any location on the globe at a fraction of the cost of satellites.

AV received the contract for developing and demonstrating Global Observer as a JCTD program in September 2007. Six U.S. government agencies have provided more than \$140 million in funding for the program.

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

AV is a technology solutions provider that designs, develops, produces and supports an advanced portfolio of [Unmanned Aircraft Systems](#) (UAS) and electric transportation solutions. Agencies of the U.S. Department of Defense and allied military services use the company's battery-powered, [hand-launched unmanned aircraft systems](#) extensively to provide situational awareness to tactical operating units through real-time, airborne reconnaissance, surveillance and communication. Switchblade is a small UAS designed to provide a rapid, lethal, pinpoint precision strike capability with minimal collateral damage. AV's electric transportation solutions include a comprehensive suite of [electric vehicle \(EV\) charging systems and installation services](#) 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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