



# press release

---

February 28, 2011 – FOR IMMEDIATE RELEASE

## **Ultra Electronics Provides Communications Payload on Global Observer Liquid Hydrogen-Powered Unmanned Aircraft System**

Austin, Texas, – Ultra Electronics Advanced Tactical Systems (ATS) announced today that its military communications payload, the Joint Aerial Layered Network Tactical Communications System (JALN TCS), has successfully flown on the first-of-its kind, liquid hydrogen-powered Global Observer™ unmanned aircraft system (UAS) at Edwards Air Force Base in California.

The JALN TCS, which flew onboard the high-altitude, long-endurance (HALE) UAS, offers significant advantages to military, government and commercial markets:

- Provides line of sight (LOS) communications coverage for an area over 600 miles in diameter when carried by the Global Observer to 65,000 feet
- Bridges communications between different types of radios, even Voice over Internet Protocol (VoIP) telephones
- Allows forward deployed troops with handheld radios to communicate with command centers thousands of miles away
- Provides secure, anti-jam tactical data link network communications
- Manages and relays surveillance video

[AeroVironment](#) (NASDAQ:AVAV) developed the Global Observer, a hybrid-electric UAS that runs on liquid hydrogen, as an affordable high altitude persistent platform for communications and reconnaissance. It has a wingspan of 175 feet and can stay aloft in the 55,000 to 65,000 feet altitude range for 5 to 7 days. A system of two Global Observer aircraft alternating orbits over a designated area would provide a flexible “unblinking eye” for as long as necessary.

“This first successful UAS flight for TCS is the result of more than three years of development work in cooperation with the U.S. Air Force and a number of demonstrations at a variety of military exercises using manned aircraft,” said John McAlonan, ATS president. “We are focused on delivering affordable interoperability solutions to the military and with this entry into the UAS market we are delivering a first-in-class capability to the warfighter.”

ATS' market niche in the defense industry is to translate the myriad of data formats between different military systems that would otherwise be unable to communicate. "ATS accepted a challenge from the U.S. Air Force to develop a system 1/10th the size of the current system and to make it capable of operating for long periods of time in extreme environments," McAlonan said. "We have accomplished that feat and are now positioned for growth in the rapidly expanding UAS market with a totally new product line for military, homeland security and commercial customers."

ATS is currently at work on a newly awarded contract for the newest generation of the TCS payload called the Tactical Airborne Command, Control, Communications and Intelligence (C3I) Pod (TACPOD™). "TACPOD provides the TCS communications payload in a standard aircraft pod that can be flown on manned and unmanned aircraft. As a standalone system, TACPOD does not affect the safety-critical components of the aircraft, which minimizes the integration cost and significantly reduces the time required to get a payload flying," said Jeff Harlan, TCS product line manager at ATS. "TACPOD provides a persistent communication capability to most combat environments."

### **About Ultra Electronics Advanced Tactical Systems**

Ultra Electronics Advanced Tactical Systems designs, develops, delivers and supports real-time tactical command and control systems. ATS has delivered systems to all branches of the U.S. Armed Forces and many Allied and Coalition partners. ATS products and services are used on aircraft, ships, submarines, vehicles, air operations centers and in other key locations throughout the world. ATS systems and personnel have supported every major conflict since the company's founding in 1987. Formerly Advanced Programming Concepts, Ultra Electronics Advanced Tactical Systems, Inc. became part of the Ultra Electronics group of companies in 1999.

For more information, visit Ultra's website at [www.ultra-ats.com](http://www.ultra-ats.com) and [www.ultra-electronics.com](http://www.ultra-electronics.com) or contact Jeff Harlan, TCS product line manager at: 512-327-6795, x 477 and [jeff.harlan@ultra-ats.com](mailto:jeff.harlan@ultra-ats.com).

**Trademarks used in this document:** *Global Observer* is a trademark of AeroVironment. *TACPOD* is a trademark of Ultra Electronics Advanced Tactical Systems. Ultra Electronics Advanced Tactical Systems disclaims any proprietary interest in any trademark other than its own.