



UNITE - UAV National Industry Team

By Rose Karolenko, President

On the Move

In 2002, the six major companies in the United States involved in the development of high altitude long endurance (HALE) unmanned aircraft systems established a non-profit 501c(6) industry alliance to ensure that HALE unmanned aircraft systems (UAS) would be allowed access to the UA National Air Space (NAS). These six companies (AeroVironment, Aurora Flight Sciences, Boeing, General Atomics Aeronautical Systems, Lockheed Martin, and Northrop Grumman) formed an entity called the UAV National Industry Team (UNITE) and proceeded to raise the awareness of the issues involved with integrating UAS into the NAS. Discussions between UNITE and NASA leadership led to the funding of a NASA program called Access 5 to establish criteria for the integration of HALE UAS into the NAS and to start to develop any necessary technologies required to do so. The Access 5 program made significant progress and was hailed as a model of government and industry cooperation. Despite the cancellation of the program in 2005, due to changing NASA priorities, the efforts to integrate UAS into the NAS have continued and, in fact, have accelerated. The Federal Aviation Administration (FAA) has formed a new office to deal with the numerous issues involved with safely integrating UAS into the NAS. They have also chartered the RTCA to develop various documents to be used by manufacturers/operators in the development and operations of UAS, specifically overall guidance material for UAS, as well as specific standards for UAS command/control and the detect, sense, and avoid subsystems. In addition, the Aerospace Industries Association (AIA) has also established a UAS subcommittee to address the same issues for which the six UNITE companies originally created UNITE to address.

Early in 2007, the companies of UNITE decided to disband and focus available resources on supporting RTCA SC-203 committee for UAS standards development and the AIA UAS subcommittee for obtaining support from the FAA and Congress to address the critical needs of the UAS Industry in the U.S. At the time, this was considered a prudent course of action because:

- The original objective of UNITE seemed to have been accomplished as the FAA, RTCA, and AIA appeared to be focused on ensuring timely UAS access to the NAS;
- With this approach more resources are available to support general UAS issues by leveraging involvement from more companies and focusing more resources to solve the problems of today and tomorrow.

Since then, RTCA and AIA resource constraints, priorities, and organizational mandates have led UNITE to realize that our decision to disband was premature. Additional UAS industry resources and focus are needed to help accomplish the detailed work required to develop the supporting analysis and documentation necessary to accomplish some very specific and limited near term objectives as detailed below:

- Accelerated approval to use UASs for disaster relief and other non-military U.S. government applications;
- Accelerated definition of and approval to use small UAS for a variety of public and civil applications;

- Accelerated approval for the UAS industry to use company test ranges for UAS development;
- Accelerated development and adoption of an improved and streamlined Certificate of Authorization (COA) and Experimental Certificate (EC) request and approval process.

These near term objectives were of such high priority for integrating UAS into the NAS, over the near term, that the current UNITE Management Council (MC) and Board of Directors (BOD) determined that UNITE should not disband, but refocus until these efforts are complete and adopted by the FAA. In addition, because these efforts are of significant interest to many other companies in the US that are developing or supporting the development of UAS or subsystems, the UNITE MC and BOD have agreed that membership of UNITE should be expanded but limited to US companies or entities that:

- Are providing UAS to government customers;
- Have US government customers that are requesting or have received COAs from the FAA for their UAS;
- Have or are processing applications for ECs for their UAS;
- Are providing subsystems for any of the UAS described above.
- Are providing services to the UAS industry (engineering, consulting, etc)

However, because the integration of UAS into airspace is an international issue, UNITE is also initiating relationships with similar UAS industry organizations outside of the US and have been contacted by international companies to do so. This will allow industry to address the common problems collectively and use resources most effectively. Over the next year we hope to develop these relationships so that the international UAS industry is effective in it's efforts to ensure timely integration of UASs into airspace worldwide.

The current membership of UNITE consists of:

- AAI Corporation (Textron Systems);
- AeroVironment;
- The Boeing Company;
- DRA - Defence Research Associates;
- General Atomics Aero-nautical Systems;
- Northrop Grumman;
- Rockwell Collins.

For more information on UNITE see:
www.uniteaero.com.

