

Unmanned Aircraft Systems Extend Their Reach

Unmanned aircraft systems have shown their value in the militaries of many nations, and have been proven in years of combat.

That value is also coming closer to being demonstrated in civil and commercial applications in the skies above countries around the world. Industry and government are working closely together to demonstrate that unmanned aircraft can safely inhabit the same skies as manned aircraft.

In December, the European Defence Agency (EDA) and the European Space Agency (ESA) announced they have signed an agreement on a demonstration project for an unmanned aircraft-related mission. The project aims to show the benefits of space for UAS-related services, and to show how UAS can safely be inserted into non-regulated airspace. In the United States, contractor Rockwell Collins is working with NASA on a project also aimed at boosting communications to allow safe flight.

There is progress on the regulatory front as well -- the Federal Aviation Administration plans to release a new rule for public comment this spring that would allow small UAS to fly in non-segregated airspace.

The potential uses of unmanned aircraft for civil and commercial markets are many and varied. In Japan, unmanned helicopters spray pesticides and fertilizers on crops, allowing for more precise use of chemicals. Police around the world have shown the utility of UAS for surveillance and search and rescue, and the ongoing disaster monitoring in Japan has demonstrated that small unmanned aircraft can literally go where people can't.

Before such uses become widespread, however, the issue of airspace integration must be solved. The EDA-ESA agreement aims to show that satellite communications can support safe airspace deconfliction. Other efforts, such as the United Kingdom industry consortium known as ASTRAEA (Autonomous Systems Technology Related Airborne Evaluation & Assessment) are investigating a variety of technologies and procedures to allow this to happen.

AUVSI is also working with a variety of stakeholders, including government agencies, industry and other associations to try to build consensus on the need for UAS integration globally.

AUVSI is the world's largest non-profit membership association representing the unmanned systems and robotics communities. For more information on AUVSI's advocacy initiatives, please visit

www.auvsi.org.