

## **ATO Leads International Meeting on Satellite Surveillance**

Satellite-based surveillance is a technology whose time has come, and the United States is not the only country on the brink of that revolution, said Vincent Capezzuto, head of the FAA's Surveillance and Broadcast program office charged with deploying Automatic Dependent Surveillance-Broadcast in the United States.

Capezzuto's office recently sponsored the first meeting of countries in the forefront of implementing ADS-B to help make sure the Next Generation satellite-based surveillance system is interoperable between them.

Program managers from Airservices Australia, EUROCONTROL, NAV CANADA, gathered in July at the John A. Volpe Center in Cambridge, Mass., to discuss how each country is moving forward with satellite surveillance.

Representing EUROCONTROL, Alex Wandels, discussed its CASCADE program, including the ADS-B Pioneer Project under which 11 airlines have agreed to obtain airworthiness approval for ADS-B air traffic services. Wandels said they have deployed ground stations in France, Italy, the United Kingdom, Germany, Greece and other member states. These ground stations are being used to collect data to analyze the quality of current ADS-B equipage. EUROCONTROL has determined that ADS-B avionics equipage will begin in 2008 on a voluntary basis, and are planning it to be complete by 2015, Wandels said.

Greg Dunstone of Airservices Australia said his country has implemented ADS-B primarily for high altitudes as part of its Upper Airspace Program, but will also deploy it for use in other airspace throughout the country. Australia already has 10 operational ground stations but expects this to grow to approximately 48 ground stations next year. Already 380 ADS-B-equipped aircraft, mainly airliners, have been approved to receive ADS-B separation services. Dunstone said Australia was examining a plan to mandate avionics equipage for many aircraft starting in 2012 and subsequently plan to decommission en route radars.

Jeff Cochrane of NAV CANADA talked about plans for implementing ADS-B primarily in the Hudson Bay area where there is no radar coverage. NAV CANADA has awarded a contract for the ground stations which are being deploying on the shores of Hudson Bay. The surveillance data will be integrated into Air Traffic Control Centers. To encourage avionics equipage and make the best use of the system's capabilities, NAV CANADA will manage a section of this airspace for exclusive use by ADS-B equipped aircraft. Cochrane said NAV CANADA is working to define a minimum set of ADS-B avionics that will be required to operate in this airspace.

The FAA's Capezzuto gave an overview of the United States' plan, including the award of a service contract in August to deploy ADS-B ground stations nationally, and a proposed rule in September that will mandate ADS-B avionics for operations in busy airspace and congested areas around major airports. Capezzuto also noted that the FAA

recently approved ADS-B for separation services in Alaska based on studies showing that ADS-B typically has at least 10 times better accuracy than the current radar data being used to safely separate aircraft.

At the meeting's conclusion, the participants found that their ADS-B programs shared many similarities and challenges. The participants agreed to encourage manufacturers to deliver ADS-B equipment that will meet global customers' needs and support both current and future applications.

The next meeting will be hosted by Eurocontrol in November.

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