

# PERFORMANCE-BASED GADSS TO ADDRESS TRACKING ISSUE

 The dominant topic of the 2<sup>nd</sup> ICAO High-Level Safety Conference (HLSC) in February was global flight tracking. The conference adopted both near-term and long-range approaches to the issue: a new 15-minute tracking standard and development of a comprehensive, performance-based Global Aeronautical Distress and Safety System (GADSS).

Following the disappearance of Malaysia Airlines flight MH370 on 8 March 2014, a special multidisciplinary meeting regarding global flight tracking was held at ICAO Headquarters in May 2014. The meeting participants concluded that global tracking of airline flights should be pursued as a matter of priority to provide early

“ICAO, with the support of the United States and the international community, has responded quickly to the challenge of global flight tracking. Standards that would normally take years of deliberation have instead been developed in months.”

– Michael Lawson,  
U.S. Representative to ICAO  
on the Council

notice of, and response to, abnormal flight behaviour. It also concluded that a draft concept of operations (CONOPS) on flight tracking be developed with a clear definition of the objectives of flight tracking, ensuring that information is provided in a timely fashion to the right people to support search and rescue, recovery and accident investigation activities, and it should also include the roles and responsibilities of all stakeholders.

To develop the CONOPS as the guiding document for the efforts, the President of the ICAO Air Navigation Commission (ANC) and Director of the Air Navigation Bureau (ANB) established an ad hoc working group (AHWG). Separately, to identify potential solutions for routine flight tracking using existing technologies, the Aircraft Tracking Task Force (ATTF) was established, led by the International Air Transport Association (IATA).

The unprecedented loss of MH370 focused “intense scrutiny on the ability of our network to better track our aircraft on a truly real-time, global basis,” said ICAO Council President Dr. Olumuyiwa Benard Aliu. He added that, while this capability may not prevent accidents from occurring, technologies do currently exist, and are in operational use, to track aircraft positions when operating outside of radar coverage. “Given that global flight tracking can provide valuable information that can be used to manage safety contingencies and, when necessary, support search and rescue efforts, it must be a priority for us.”

The conference’s recommendations included:

- Urging industry to start implementing global tracking on a voluntary basis through the use of available technologies
- Continue developing performance-based provisions for normal aircraft tracking, providing industry with viable options
- A global aircraft tracking implementation initiative in a multinational context designed to demonstrate best use of equipment in use today and integrate the outcome into guidance material
- Regional search-and-rescue (SAR) training exercises related to abnormal flight behaviour
- Finalize and use the GADSS for the implementation of normal, abnormal, and distress flight tracking, SAR activities and retrieval of cockpit voice recorder (CVR) and flight data recorder (FDR) data.

ICAO will incorporate comments received from the States and offer a Standard for a 15-minute aircraft tracking over oceanic airspace for adoption by the ICAO Council this fall. ■