

Combined ASIOACG/10 and INSPIRE/6 Meeting, 2015

Madagascar, 17th to 19th November 2015

Agenda Item 5: Communication/Navigation/Surveillance

Global Tracking Initiative – Airservices Australia

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SUMMARY

Airservices has collaborated with Qantas, Virgin Australia and satellite service provider Inmarsat to leverage of existing functionality to improve tracking in oceanic areas.

1. BACKGROUND

- 1.1 Following the loss of MAS370 in March 2014, ICAO convened a Special Meeting on Global Flight Tracking of Aircraft. The meeting concluded that ‘global tracking of airline flights will be pursued as a matter of priority to provide early notice of and response to abnormal flight behaviour’.
- 1.2 Airservices has partnered with Qantas, Virgin and satellite communications company Inmarsat, to introduce a Global Tracking Initiative utilising existing functionality.

2. DISCUSSION

- 2.1 Commenced as a trial, the Global Tracking initiative enhances monitoring by increasing the frequency of ADS-C periodic reporting rates in non-surveillance airspace. The default reporting rate in these areas was 30 minutes with the option of increasing the frequency of these reports.
- 2.2 On 30 January, the initiative agreed to reduce this reporting rate from 30 minutes to 10 minutes. This stage involved about 60 aircraft operating flights in the oceanic sectors to the east of Australia.
- 2.3 On 30 April 2015, the initiative was expanded to all ADS-C equipped aircraft in the Brisbane Flight Information Region together with Solomon Islands and Nauru’s FIR. Coincident with this, the reporting interval was adjusted to 14 minutes. The change was for two prime reasons:
 - The first reason is due to the ICAO recommendation of a 15 minute tracking standard.
 - The second reason is due to alignment with the application of the 30/30 (RNP4) separation standard.

- 2.4 On 28 May 2015, the initiative was expanded to the Melbourne FIR and it is now applied across all Australian administered airspace.
- 2.5 Coordination with agencies in the region is underway to align the implementation of the initiative. Discussion have been had with Indonesia, Malaysia, United States, Fiji, New Zealand and South Africa.
- 2.6 Global Tracking now considered “normal business” within Australian Administered Airspace and is applied to all FANS-1/A aircraft.
 - About 65% of flight to/from Australia are FANS-1/A equipped
 - Global Tracking covers 92% of passenger hours flown oceanic in/out of Australia
- 2.7 Use of ADS-C for Global Tracking is implemented in the ATC automation system and hence does not impose a workload on the Air Traffic Controller
- 2.8 Airservices and Inmarsat have independently monitored the ADS-C communications load and concluded there is negligible increase in data communications volume
 - Joint Airservices-Inmarsat Report delivered to the Director General ICAO and published on the ICAO web site:
<http://www.icao.int/safety/globaltracking/Documents/ICAO%20Global%20Flight%20Tracking%20-%20Regional%20evaluation%20using%20ADS-C.pdf>
 - Airlines (Virgin Australia specifically) acknowledge using ADS-C for Global Tracking has had negligible impact on their ADS-C data comms costs

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to note the contents of this paper.
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