
Purpose: This InFO clarifies when Federal Aviation Administration (FAA) authorization per OpSpec/MSpec/LOA paragraph A353, Automatic Dependent Surveillance-Broadcast (ADS-B) Operations Outside of U.S. Designated Airspace, is required.

Discussion: Countries around the world are implementing ADS-B technology to enhance or extend the surveillance capability of their air traffic control (ATC) systems. A number of these countries have published new rules that will mandate ADS-B equipage on aircraft operating in certain classes of airspace. Other countries have chosen not to mandate ADS-B equipage, but have designated specific routes and airspace to benefit those who equip voluntarily. A certain subset of these countries further requires that foreign operators obtain operational approval from their State of Registry to access ADS-B airspace. U.S. operators, seeking access to foreign ADS-B airspace where State of Registry operational approval is required, are advised to follow the guidance contained in FAA Advisory Circular (AC) 90-114 CHG 1, Automatic Dependent Surveillance-Broadcast (ADS-B) Operations, Appendix 1, and AC 20-165A, Airworthiness Approval of Automatic Dependent Surveillance - Broadcast (ADS-B) Out Systems when requesting authorization per OpSpec/MSpec/LOA A353.

The following information identifies FAA approval requirements for U.S. aircraft operators in foreign ADS-B airspace:

Australia: A353 not required. Approved ADS-B avionics will be required on, and from, December 12, 2013, for all operations at or above flight level (FL) 290. Refer to Australian Civil Aviation Safety Authority Advisory Circular (AC) 21-45(1), Airworthiness Approval of Airborne Automatic Dependent Surveillance Broadcast Equipment, for guidance on approved ADS-B equipment used in Australia.

Canada: A353 conditionally required. Authorization, per A353, is required only when an operator seeks operational benefit from ADS-B Out equipage in the airspace defined in Nav Canada Aeronautical Information Circulars (AICs) 31/11, Air Traffic Services Associated with Automatic

**Fiji: A353 not required.** As of May 1, 2010, Fiji has mandated ADS-B equipage only for Fiji registered aircraft operating in controlled airspace. For additional information regarding ADS-B operations, refer to Civil Aviation Authority of the Fiji Islands Air Navigation Regulations 1981 (Updated November 2009) and Fiji AIC 04/11, Operation of Foreign Registered Aircraft in Fiji.

**Hong Kong: A353 required.** Authorization, per A353, is required for all U.S. aircraft operators flying over performance-based navigation routes L642 or M771 at or above FL290 within the Hong Kong flight information region (FIR) on and after December 12, 2013. Additionally, A353 will be required on and after December 31, 2014 for all U.S. aircraft flying within the entire Hong Kong FIR at or above FL290. For further information regarding ADS-B operations within the Hong Kong FIR, refer to Hong Kong AIC 09/11, Automatic Dependent Surveillance Broadcast (ADS-B) Out Operations.

**Singapore: A353 required.** Authorization, per A353, is required for all U.S. aircraft operators operating on ATS routes N891, M753, L642, M771, L644, and N892 at FL290 and above within the Singapore FIR on and after December 12, 2013. For additional information regarding ADS-B operations within the Singapore FIR, refer to Civil Aviation Authority of Singapore AIC 14/10, Introduction of Automatic Dependent Surveillance Broadcast (ADS-B) Out Services within parts of the Singapore FIR.

This InFO clarifies the current regions outside U.S. airspace where FAA authorization is required to conduct ADS-B Out operations. As additional regions are implementing ADS-B, U.S. operators are advised to monitor the regions applicable to their operation for any changes related to ADS-B requirements and to comply with Title 14 of the Code of Federal Regulations (14 CFR) part 91 § 91.703 Operations of civil aircraft of U.S. registry outside of the United States.

**Recommended Action:** Directors of operations, chief pilots, fractional ownership program managers, training managers, and individual operators should familiarize themselves with the information found in this InFO.

**Contact:** Questions or comments regarding this InFO should be directed to the Future Flight Technology Branch (AFS-430) at (202) 385-4934.