

**A153 Application Checklist**  
***ADS-B Out Operations Outside of U.S. Designated Airspace***  
(Updated September 2014)

**Purpose:**

This checklist consolidates the required items associated with an approval to conduct ADS-B Out operations outside the US. This checklist is intended to aid AFS personnel in determining the acceptability of submitted A153 proposals.

**Principal Inspectors:**

1. Operators with A353 issued are not required to replace it with A153; however, an existing A353 may be re-issued as A153 if requested by the operator without further documentation. New applicants must be issued A153.
2. Provide applicants with a copy of this checklist during the initial meeting and advise them to complete the checklist Parts 1 & 2 (reference pgs 5 & 6) and include it as part of their application.
3. When the application and checklist are received, verify the operator's information annotated in Parts 1 & 2 (pgs 5 & 6) of the application is accurate.
4. Issue OpSpec/MSpec/LOA A153 when all documentation is verified as correct.
5. Inspectors must log the initial date of the application and final date of approval on the AFS-408 NextGen SharePoint site.

**Applicants:**

1. Review *A153 Reference Material* (as applicable) (pg. 2)
2. Review *A153 Applicability Clarification* (pgs. 3 & 4)
3. Complete Parts 1 & 2 of the required *A153 Operator Application Checklist* (pgs. 5 & 6).
4. Include supporting documents per the checklist requirements.
5. Forward application to the Principal Inspector.

## **A153 Reference Material**

### **FAA Material:**

- ☐ FAA Order 8900.1 (FSIMS), Vol. 3, Chapter 18, Section 3, “Part A Operations Specifications” OPSPEC/MSPEC/LOA A153
- ☐ AC 20-165A, “Airworthiness Approval of ADS-B Out Systems,” as amended. This document is located on the FAA Regulatory and Guidance Library website: <http://rgl.faa.gov/>
- ☐ AC 90-114 CHG 1 “Automatic Dependent Surveillance-Broadcast (ADS-B) Operations,” as amended, Appendix 1. This document is located on the FAA Regulatory and Guidance Library website: <http://rgl.faa.gov/>

### **Asia-Pacific Specific Material:**

- ☐ Hong Kong Aeronautical Information Circular 09/11 “ADS-B OUT Operations,” as amended.
- ☐ India AIRAC AIP Supplement 18/2014 “Automatic Dependent Surveillance – Broadcast Out Based ATS Surveillance Services,” as amended.
- ☐ Indonesia AIRAC AIP Supplement 10/14, “Automatic Dependent Surveillance – Broadcast Implementation in Indonesia for Situation Awareness,” as amended.
- ☐ Seychelles Aeronautical Information Circular 02/2014 “Mandatory Carriage of GNSS Navigation Equipment, ADS-B and Mode S Transponder in Seychelles Airspace,” as amended.
- ☐ Singapore Aeronautical Information Circular 14/10 “Introduction to ADS-B OUT Service within Parts of the Singapore FIR,” as amended.
- ☐ Republic of China (Taipei) Aeronautical Information Circular 02/12 “Introduction of ADS-B Out Service within Taipei FIR,” as amended.
- ☐ Viet Nam Aeronautical Information Circular 03/13 “Implementation of AFDS-B within Ho Chi Minh FIR,” as amended.

### **Australian Specific Material:**

- ☐ Australian Civil Aviation Safety Authority (CASA) Advisory Circular (AC) 21-45(1) “Airworthiness Approval of Airborne Automatic Dependent Surveillance Broadcast Equipment.”

### **Canadian Specific Material:**

- ☐ NavCanada Aeronautical Information Circular 31/11 “Air Traffic Service Associated with ADS-B OUT Surveillance,” as amended.
- ☐ NavCanada Aeronautical Information Circular 29/13 “ADS-B Service in the Gander Oceanic Control Area,” as amended.

**Europe:**

- ☐ Commission Implementing Regulation (EU) No 1207/2011 “Laying Down Requirements for the Performance and the Interoperability of Surveillance for the Single European Sky.”
- ☐ CS-ACNS “Certification Specifications and Acceptable Means of Compliance for Airborne Communications, Navigation and Surveillance.”
- ☐ AMC 20-24 “Certification Considerations for the Enhance ATS in Non-Radar Areas using ADS-B Surveillance (ADS-B-NRA) Application via 1090 MHZ Extended Squitter.”

## A153 Applicability Clarification

**The following information identifies if A153 is required for U.S. aircraft operators in foreign ADS-B airspace:**

**Australia:** ***A153 not required.*** Approved ADS-B avionics are required 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:** ***A153 conditionally required.*** Authorization, per A153, is required only when an operator seeks operational benefit from ADS-B Out equipage in the airspace defined in NavCanada Aeronautical Information Circulars (AICs) 31/11, *Air Traffic Services Associated with Automatic Dependent Surveillance–Broadcast Out Surveillance*, and 29/13, *Automatic Dependent Surveillance–Broadcast Service in the Gander Oceanic Control Area*.

**China (Mainland (Sanya FIR)):** ***A153 required.*** Authorization, per A153, is required for all U.S. registered aircraft flying over routes L642 or M771 at or above FL290 within the Sanya FIR.

**Europe:** ***A153 not required.*** Regulation (EU) no. 1207/2011 provides surveillance requirements within the European air traffic management network (EATMN) along with the upcoming implementation dates. However, an amendment to the current regulation has been endorsed which proposes a change to the original implementation dates. In addition to the regulation, EASA has recently published Certification Specifications and Acceptable Means of Compliance for Airborne Communications, Navigation and Surveillance (CS-ACNS) which address compliance with equipage requirements for surveillance systems.

**Republic of China (Taipei):** ***A153 required.*** Authorization, per A153, is required for all U.S. registered aircraft flying over routes B576 or B591 at or above FL290 within the Taipei FIR. For additional information regarding ADS-B operations within the Taipei FIR, refer to Republic of China Civil Aeronautics Administration AIC 02/12, *Introduction of ADS-B Out Service within Taipei FIR*.

**Fiji:** ***A153 not required.*** 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:** ***A153 required.*** Authorization, per A153, is required for all U.S. registered aircraft flying over performance-based navigation routes L642 or M771 at or above FL290 within the Hong Kong flight information region (FIR). Additionally, on and after December 31, 2014, A153 will be required for all U.S. aircraft flying within the entire Hong Kong FIR at or above FL290. For additional 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*.

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**India: A153 will be required.** The ADS-B Out implementation in India will provide redundancy for available radar surveillance. The provision of ATS surveillance services using ADS-B Out information, in terminal and en route airspace, to eligible aircraft, on an opportunity basis, is envisaged to continue until India considers mandating the carriage of ADS-B Out equipment on a date TBD. For additional information regarding ADS-B operations, refer to India AIRAC AIP Supplement 18/2014, *Automatic Dependent Surveillance – Broadcast (ADS-B) Out Based ATS Surveillance Services*.

**Indonesia: A153 will be required.** Implementation of ADS-B in Indonesia, for situational awareness by ATC, will be effective on 18 September 2014 at 1900 UTC until 25 June 2015. Indonesian regulatory changes establish mandatory aircraft fitment of ADS-B avionics equipment for the operation of any aircraft in Indonesian airspace at or above FL290 after the compliance date of 25 June 2015. Until that date, carriage of ADS-B equipment remains voluntary. For additional information regarding ADS-B operations, refer to Republic of Indonesia AIRAC AIP Supplement 10/14, *Automatic Dependent Surveillance – Broadcast (ADS-B) Implementation in Indonesia for Situation Awareness*.

**Singapore: A153 required.** Authorization, per A153, is required for all U.S. registered aircraft operating on ATS routes N891, M753, L642, M771, L644, and N892 at FL290 and above within the Singapore FIR. 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*.

**Seychelles: A153 not required.** ADS-B will be required for aircraft operating in all “controlled airspace.” For additional information regarding ADS-B operations, refer to Republic of Seychelles AIC 02/2014 *Mandatory Carriage of GNSS Navigation Equipment, ADS-B and Mode S Transponder in Seychelles Airspace*.

**Viet Nam: A153 required.** Authorization, per A153, is required for all U.S. registered aircraft flying over ATS routes L625, M771, N892, L642, M765, M768, N500 and L628 at or above FL290 within the Ho Chi Minh FIR. For additional information regarding ADS-B operations within the Ho Chi Minh FIR, refer to Civil Aviation Authority of Viet Nam AIC 03/13, *Implementation of ADS-B within Ho Chi Minh FIR*.

**Note:** 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 CFR § 91.703 Operations of civil aircraft of U.S. registry outside of the United States.

# A153 Operator Application Checklist

## Part 1: General Operator Information

Date of Application: \_\_\_\_\_

Company Name: \_\_\_\_\_

Type Operating Certificate: Part 91\_\_\_\_ Part 91K\_\_\_\_ Part 121\_\_\_\_ Part 125\_\_\_\_ Part 125M\_\_\_\_ Part 135\_\_\_\_

POC/Responsible Person:

Applicant POC	E-mail Address	Telephone Number

Aircraft Proposed for A153 Authorization:

Make/Model/Series (M/M/S)	Registration Number	Serial Number

ADS-B Out Equipment:

List manufacturer's make, model, and part number of ADS-B transmitter and positioning source(s).

Equipment is compliant to which of the following standards:

Equipment complies with CFR 91.227 <input type="checkbox"/>	Equipment complies with AC 20-165 <input type="checkbox"/>	Equipment complies with EASA AMC 20-24 <input type="checkbox"/>
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Area(s) of Operation where operator initially intends to commence A153 operations (use "Authorized Areas" as referenced in B050\*):

Authorized Areas of En Route Operation (Not required for part 91 operations)		

Comments:

General operator comments specific to A153 application package

## A153 Operator Application Checklist

### Part 2: Operator Exhibits/Documents Submissions

Exhibit or Document	Exhibit/Document Title	Operator Indication of Inclusion	Operator Comments
<b>A</b>	<b>Operator Letter Requesting A153 Authorization</b>		
<b>B</b>	<b>AFM, AFMS, or POH ADS-B Content:</b> AFM/AFMS/POH/FOM (as applicable) must contain a statement the installed ADS-B system complies with either 14 CFR § 91.227, AC 20-165 (current edition), or EASA AMC 20-24 requirements.		
<b>C</b>	<b>Aircraft Maintenance Records:</b> * Airplane's maintenance record, logbook, or Computerized Maintenance Program (CMP) verifies ADS-B installation, on applicable aircraft, was accomplished per Supplemental Type Certificate (STC) or other FAA-approved means.		
<b>D</b>	<b>Copy of OpSpec B050:**</b> Annotate all the authorized areas where A153 will be used.		
<b>E</b>	<b>Part 91 Operator Statement:</b> Part 91 operators provide a statement that the operator's pilot have knowledge of current air traffic ADS-B directives for the intended areas of operation and will comply with §91.703.		
<b>F</b>	<b>Provide a Completed Copy of OpSpec/MSpec/LOA A153</b>		

\*N/A for new aircraft certified with ADS-B Out.

**\*\*Not required for Part 91 operations.** For part 91 operators, the PI will enter the area(s) of intended operations in the "Conditions and Limitations" drop down box located in "Table 1" of the LOA template.

**Name of POI, PMI, or PAI who conducted and approved this A153 application** \_\_\_\_\_ **Date** \_\_\_\_\_