



ICAO

*International Civil Aviation Organization***Eighth Meeting of the Surveillance Implementation
Coordination Group (SURICG/8)***Bangkok, Thailand, 6 – 9 June 2023*

- Agenda Item 8 Update on surveillance activities and explore potential cooperation opportunity
a) States/Administrations

REVISIONS TO FAA ADVISORY CIRCULAR (AC) 90-114, ADS-B OPERATIONS

(Presented by United States/Federal Aviation Administration)

SUMMARY

This paper provides a summary of new and revised guidance included in FAA Advisory Circular (AC) 90-114B Change 1, *ADS-B Operations*, published on December 15, 2022.

1. INTRODUCTION

1.1 The requirements for ADS-B in the U.S. are contained in two regulations: Title 14 of the U.S. Code of Federal Regulations §§ 91.225 and 91.227. Section 91.225 describes the required equipment and airspace; Section 91.227 describes the performance and required broadcast elements. The regulations were published in May 2010 with the date for compliance after January 1, 2020. FAA publishes Advisory Circular (AC) 90-114, *Automatic Dependent Surveillance-Broadcast Operations* to provide guidance to operators on how to comply with those regulations. The AC is revised as needed to account for changes in policy and procedures.

1.2 AC 90-114B was recently revised and published as AC 90-114B Change 1. The revisions include policy decisions, clarified guidance and new procedures. The following paragraphs contain only summaries of the most significant revisions and new guidance. For a complete understanding of new and revised policy, refer to [AC 90-114B CHG 1 \(faa.gov\)](#), *Automatic Dependent Surveillance-Broadcast Operations* which was published on December 15, 2022.

2. DISCUSSION

2.1 No Services Aircraft List (NSAL). The information in this section is not new policy, but is included in order to understand the new process described in section 2.3. In 2017, the FAA

published a notice (82 FR 60302) to the Federal Register announcing changes to ADS-B services including the Traffic Information Service-Broadcast (TIS-B) (refer to Docket Number FAA-2017-1194, Change to Automatic Dependent Surveillance Broadcast Services, at <https://www.federalregister.gov>). These changes included implementation of a filter within the FAA ADS-B ground system to prevent processing of data transmitted by certain NPE aircraft. Application of the filter is enabled by restricting use of the 24-bit ICAO aircraft address transmitted from NPE aircraft and managed through a list referred to as the No Services Aircraft List (NSAL). NPE aircraft on the NSAL cannot receive ATC services using ADS-B data (but can receive ATC services using radar) and are not provided with TIS-B/ADS-R client services. Owner/operators of aircraft on the NSAL must seek authorization from ATC to operate in the airspace specified by § 91.225 as if their ADS-B system was inoperative.

2.2 NPE Notification. Prior to listing NPE aircraft on the NSAL, the FAA will provide written notification of relevant ADS-B equipment issues to the owner/operator at the address associated with the aircraft's registry in an effort to coordinate NPE corrective action. In cases where the FAA makes notification of NPE to an owner/operator via an individual FAA Letter of Finding (LOF), the owner/operator has 45 days from the date of the LOF to respond to the FAA to establish a plan of corrective action for the NPE. All NPE aircraft are subject to being placed on the NSAL if contact is not established with the FAA to communicate a plan for corrective action within the 45-day period.

2.3 Fleet ATAT. The FAA has implemented a new process to provide an automated report indicating potential NPE aircraft for specific operators. The report is called the Fleet Report Avionics Trend Analysis Tool (ATAT). In cases where the FAA notifies an operator of NPE (or potential NPE) with this report, the operator should coordinate with their FAA oversight office and the FAA Flight Standards Aircraft Maintenance Division to discuss the identified potential NPE in the report. This coordination should occur in a timely manner as much as practical. The 45-day period that is associated with the individual LOF (referenced in section 2.2) sent to an aircraft owner operator does not apply to those receiving the automated Fleet Report ATAT.

2.4 Pre-flight requirements. In May 2022, the FAA published a notice ([87 FR 27928](#)) to the Federal Register announcing changes to the FAA's policy on pre-flight availability prediction requirements for aircraft with Selective Availability (SA)-Aware receiver position source for their ADS-B Out. The FAA has observed that the demonstrated performance of SA-Aware GPS receivers has been equivalent to, or better than, a single radar since the FAA began monitoring ADS-B performance in 2015.

2.4.1 Therefore, under this revised policy, it is not necessary for operators of aircraft equipped with the following receivers to conduct a pre-flight availability prediction: SBAS (TSO-C145 or TSO-C146), SA-Aware (TSO-C196), TSO-C129a receivers that are SA-Aware, or ABAS that include SA-Aware GPS receivers.

2.4.2 This revised policy does not change any conditions or limitations of Exemption 12555. However, current Exemption 12555 holders with SA-Aware equipped aircraft may choose to re-evaluate their continued need for the exemption. Operators who wish to terminate their Exemption 12555, can find the specific steps detailed at: https://www.faa.gov/air_traffic/technology/equipadsb/research/exemption.

2.5 Appendix F. Interval Management. AC 90-114B Change 1 includes an entirely new appendix that describes Interval Management (IM) and provides guidance to operators seeking FAA authorization to conduct IM operations. The appendix includes the following: a description of IM ground and airborne components, IM-specific terminology, IM clearance types and acceptable formats, depictions of operational examples of the IM clearance types, suggested training topics and documentation the operator should submit to obtain operational approval to conduct IM.

3. **CONCLUSION**

3.1 The meeting is invited to:

- a) note the information contained in this paper; and
- b) discuss any relevant matters as appropriate.
