



ICAO

*International Civil Aviation Organization***Seventh Meeting of the Surveillance Implementation
Coordination Group (SURICG/7)**

Video Teleconference, 24 – 27 May 2022

Agenda Item 7: Report on surveillance ground system and avionics performance monitoring and improvement in compliance

**PERFORMANCE-BASED OPERATIONS AVIATION RULEMAKING COMMITTEE
(PARC) ACTION TEAM (AT) EXEMPTION 12555 REPORT**

(Presented by United States/Federal Aviation Administration)

SUMMARY

This paper summarizes a report by the Performance-based Operations Aviation Rulemaking Committee (PARC) to the FAA that contains an assessment of how well operators (exemption holders) will be able to achieve planned position source upgrades prior to the expiration of Exemption No. 12555. The original paper was presented at SURICG/6, and is resubmitted here to announce publication of revised FAA policy for operators of certain GPS-equipped aircraft.

1. INTRODUCTION

1.1 In 2015, the FAA published Grant of Exemption No. 12555 and made it available to any operator who notified the FAA of their intent to comply with the conditions and limitations specified in the Grant. The purpose of the exemption was to permit exempted operators to continue using Global Positioning System (GPS) position sources that may not always meet the integrity and accuracy requirements of 14 CFR 91.227. Exemption 12555 is a one-time, time limited exemption that expires after December 31, 2024.

1.2 One of the conditions of the Exemptions is that each operator must create, maintain, and update a GPS position source equipage plan for aircraft equipped for Automatic Dependent Surveillance – Broadcast (ADS-B) Out to meet the requirements of § 91.227(c) by December 31, 2024.

1.3 In September 2020, the FAA tasked the Performance-based operations Aviation Rulemaking Committee (PARC) to provide an assessment of how well operators holding Exemption No. 12555 would be able to achieve planned upgrades prior to the expiration of the Exemption, particularly in light of present economic uncertainties.

1.4 The FAA requested that the PARC establish an Action Team composed of relevant air carrier and manufacturer stakeholders. This paper summarizes the contents of the Action Team's Report.

2. DISCUSSION

2.1 The Report included assessments of the following:

- Identification of barriers and appropriate mitigations to air carrier Exemption 12555 equipage plans.
- Descriptions of equipment availability relative to achievement of operator equipage plans by December 31, 2024.
- The current state of the industry and any changes affecting applicable GNSS equipage; aggregated and de-identified operator report(s) detailing equipage plan revisions due to changes in operations, fleet composition, and positioning source needs; and manufacturer reports on the availability of equipment to support revised operator equipage plans.
- The operational risk(s) associated with aircraft ADS-B position source equipment that fails to meet the performance requirements of §§ 91.227(c)(1)(i) and (iii) after Exemption 12555 expires.

2.2 In the Report, the Action Team made the following recommendations:

- New aircraft delivered after December 31, 2024 must have ADS-B position sources that are fully compliant with §§ 91.227(c)(1)(i) and (iii) and therefore would not be required to perform a preflight service availability prediction.
- Remove the requirement for aircraft equipped with SA-Aware GPS receivers to use an acceptable preflight service availability prediction tool (e.g., Service Availability Prediction Tool (SAPT)). If at a later date the FAA determined that GPS satellite availability is insufficient, or air traffic control services require a higher level of accuracy and/or integrity, this requirement could be imposed once again.
- The Exemption 12555 expiration deadline should be extended by 2-years for SA-On GPS receivers installed on aircraft already covered by the current exemption, allowing for continued operation with use of an acceptable preflight service availability prediction tool.
- FAA should work towards providing promised benefits to operators that have already made significant investments to meet ADS-B Out rule requirements. Additionally, any extension of Exemption 12555 should not inhibit the delivery of proposed capability improvements.

2.3 The PARC Action Team submitted their Report to the FAA in May 2021. The FAA assembled an agency team to review and evaluate the Report. The FAA team has proposed recommended actions, three of which are still under consideration by FAA executives.

2.4 On May 10, 2022, in response to the second recommendation made by the PARC Action Team in their report, the FAA published a Notice in the Federal Register, available at <https://www.federalregister.gov/d/2022-09936>. This notice announces revisions to the FAA's policy on performance requirements for aircraft with Automatic Dependent Surveillance-Broadcast (ADS-B) Out

equipment using the Selective Availability (SA)-Aware GPS receivers in ADS-B rule airspace. The FAA no longer expects operators of aircraft with this equipment to perform a preflight availability prediction before operating in ADS-B rule airspace. This policy does not cancel or change any conditions or limitations of Exemption No. 12555. Holders of Exemption 12555 must continue to meet the conditions and limitations associated with the exemption, and should revise applicable equipage plans to reflect any changes affected by this policy.

2.5 Aircraft equipped with SA-On GPS receivers should continue performing preflight availability predictions and can use the guidance contained in Advisory Circular (AC) 90-114(), *ADS-B Operations*, when conducting preflight actions for operations planned within airspace described in 14 CFR 91.225.

2.6 Current holders of Exemption 12555 who wish to withdraw their exemption request must notify the FAA following a process that will be provided separately.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

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