

FSN-GN-2018-02 Revision: 0 18 Jul 2018

Flight Safety Notification General

Flight Safety Notifications (FSNs) are not mandatory in nature, but provide means such as guidance, methods, procedures and practices acceptable to the Authority for complying with regulations and other requirements in a systematic manner. These are not necessarily the only means of compliance. FSNs may also contain explanations of regulations, other guidance material, best practices or information useful to the aviation community. Unless incorporated into a regulation by reference, FSNs are not regulatory and do not create or change a regulatory requirement. A change of a regulatory requirement may come in the form of a Directive. A Flight Safety Notification is not a Directive.

<u>Automatic Dependent Surveillance - Broadcast (ADS-B)</u> <u>Out</u>

Introduction

Automatic Dependent Surveillance - Broadcast (ADS-B) Out is a precise satellite-based surveillance system which uses GPS technology to determine an aircraft's location and airspeed. The aircraft broadcasts this information along with the other data including; barometric altitude, geometric altitude and the ICAO assigned, 24 bit, unique aircraft code/address. This data is received by properly equipped aircraft and a network of ground stations that relay this information to air traffic control.

The FAA has mandated that all aircraft operating in most of their controlled airspace are to be equipped with ADS-B Out systems by January 1, 2020; the specific requirements for which can be found in Federal Aviation Administration (FAA), Code of Federal Regulations, Title 14, Part 91.225 and Part 91.227.

Further to this requirement there is a five year limited exemption, Exemption 12555, which operators can apply for. More details about Exemption 12555 can be found below.

Both domestic and foreign operators must comply with these requirements in order to maintain access to the affected airspace. The FAA will not extend the effective date of this rule, as implementation of ADS-B Out is a critical foundational element of the United States (U.S.) NextGen programme and is also a part of the International Civil Aviation Organization (ICAO) Global Air Navigation Plan (GANP).

As this is not yet a requirement for Jamaican operations, operators are encouraged to consider fitting the ADS-B Out to benefit from the enhanced situational awareness and enhanced coverage on Jamaica's modern automation and surveillance infrastructure.

References

Code of Federal Regulations, Title 14, Part 91.225

Code of Federal Regulations, Title 14, Part 91.227

Exemption 12555

Information for Operators - InFO 16003

Fact Sheet: Exemption No. 12555

Applicability

All aircraft entering into most controlled airspace within the United States.

Background

Several States and regions have implemented ADS-B within their own airspace. The U.S. mandate and the European Union (E.U.) mandate define requirements to support current and planned ADS-B applications in the relatively congested, "radar airspace" of the U.S. and Europe. There are several differences in the performance requirements in the U.S. and European ADS-B mandates, which are consistent with the current difference in surveillance requirements between United States and Europe.

Several States have implemented ADS-B for ATC separation services, such as Canada, Australia and many other countries in the ICAO Asia-Pacific region. These States are primarily using ADS-B Out to provide surveillance services in mostly low-density airspace for ATC separation or as support for existing secondary surveillance radar service in new locations at low cost using existing avionics installations rather than aiming at a generational paradigm shift. These States will likely transition to more demanding ADS-B requirements over time as their fleets and airspace requirements change.

Exemption

The FAA has granted an exemption, Exemption 12555, with a strict, limited timeframe in which operators must be equipped with the new navigation receivers. This exemption does not exempt the requirements for ADS-B Out equipment to be installed and operational on aircraft

flying in ADS-B rule airspace starting January 1, 2020. It also imposes certain conditions, limitations and additional pre-flight responsibilities on the operators. This exemption will be available to operators who will not be installing the required GPS receivers to meet the January 1, 2020 date. The FAA granted this exemption because the kind of GPS navigation receivers suitable for transport category aircraft that meet the ADS-B Out Rule requirements will not be available for purchase or installation in sufficient quantities until closer to 2020. Further information can be found within the FAA Information to Operators, InFO 16003 and Fact Sheet: Exemption No. 12555.

Action

Operators who fly within the controlled airspace of the U.S. should install the ADS-B Out as soon as possible to capture the benefits of ADS-B and to avoid service disruptions once the mandate becomes effective. Those operators who intend to comply with the conditions and limitations of Exemption 12555 must do so by August 1, 2018.

Approved by:

Date: (July 18, 2018)

Gary Carr

Director, Flight Safety (Acting) for Director-General of Civil Aviation

Jamaica Civil Aviation Authority