

Memorandum

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To:

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From: David W. Hempe, Manager, Aircraft Engineering Division, AIR-100 Carol Giles, Manager, Aircraft Maintenance Division, AFS-300

Prepared by:

Chip Bulger, AIR-130 and Chris Parfitt, AFS-360

Subject:

Approval for ADS-B Out Systems

The purpose of this memorandum is to explain the FAA's policy regarding required approvals and non-interference installations of ADS-B Out systems.

What is the policy on approvals for ADS-B Out systems?

Until further notice, ADS-B Out equipment meeting the requirements of TSO-C166b or TSO-C154c shall only be installed when approved, using the type certificate (TC), amended TC (ATC) or supplemental type certificate (STC) process. This policy includes all ADS-B transmission equipment designed to the RTCA DO-260B and DO-282B standard. Installation of ADS-B systems may not be approved as a major alteration with "approved data," thus field approvals are not appropriate. It is expected that Organization Designation Authorization (ODA) Organization Management Teams (OMTs) will have significant involvement in ADS-B system STC, TC, and ATC projects until the ODA holder has demonstrated sufficient experience.

Why aren't we allowing other approvals at this time?

The FAA agrees that other approvals, including field approvals, will be integral tools in equipping many of the aircraft that will need to meet the new ADS-B Out rule mandate. However, because both the final rule and Advisory Circular (AC) 20-165 for installation guidance have recently been issued, the FAA feels that TC, ATC, or STC design approval is more appropriate to ensure consistent performance. It is expected that as both the FAA and industry gain experience on these initial installations, that the FAA will allow other approvals, including field approvals.

What is the policy on non-interference installations for ADS-B Out systems?

All transponders or ADS-B transmitters with RTCA DO-260B or DO-282B ADS-B functionality shall receive installation approval and demonstrate it meets its ADS-B intended function. Do not allow the installation of a transponder or ADS-B transmitter with DO-260B or DO-282B ADS-B Out functionality on a non-interference basis. This policy applies to all ADS-B Out systems utilizing the DO-260B or DO-282B standard, not just TSO-C166b or TSO-C154c equipment.

Why aren't we allowing non-interference installations?

The latest revisions of the ADS-B Out standards (RTCA DO-260B and RTCA DO-282B) will be used to support air traffic control surveillance and numerous ADS-B air-to-air applications. Thus, it is imperative that ADS-B Out equipment operating in accordance with the latest standards receive installation approval for its intended function.

How long will these policies be in effect?

The policy requiring STC, ATC, or TC approvals will be in effect until further notice. AIR-130 and AFS-360 will periodically review this policy to determine if other approvals, including field approvals, are appropriate. The policy prohibiting non-interference installations of ADS-B Out equipment is permanent.

What installation and airworthiness guidance is available for ADS-B Out systems?

Installation approval for TSO-C166b and TSO-C154c ADS-B equipment should be in accordance with AC 20-165. It is also permissible to install ADS-B Out equipment in accordance with the criteria for ADS-B Out in foreign non-radar airspace (e.g., Approved Means of Compliance (AMC) 20-24).

Who should I contact for questions about this policy memorandum?

Please contact Mr. Chris Parfitt (AFS-360), 202-385-6398, Chris.Parfitt@faa.gov, or Mr. Chip Bulger (AIR-130), (202) 385-4882, Chip.Bulger@faa.gov.

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