

**TERMS OF REFERENCE**  
**Special Committee (SC) 186**  
**Automatic Dependent Surveillance Broadcast (ADS-B)**  
Revision 31

**SC LEADERSHIP:**

<b>Position</b>	<b>Name</b>	<b>Affiliation</b>	<b>Telephone</b>	<b>email</b>	<b>Change</b>
<b>Chairman</b>	Jessie Turner	The Boeing Company	425-280-3130	<a href="mailto:Jessie.turner@boeing.com">Jessie.turner@boeing.com</a>	<b>Michael Garcia</b>
<b>Secretary</b>	TBD				
<b>GAR</b>	Matt Haskin	FAA/AIR-626C	202-267-2964	<a href="mailto:Matthew.D.Haskin@faa.gov">Matthew.D.Haskin@faa.gov</a>	

**BACKGROUND:**

There are a number of potential benefits that FAA customers (e.g., airlines and the flying public) and service providers (e.g., air traffic controllers) can realize with the use of ADS-B technology and associated applications. Several operational capabilities have been identified that could provide benefit if implemented and provided as a tool for flying public use. These benefits include enhanced safety, increased aviation efficiency and the potential to increase the capacity of all air and ground space used by the aviation industry. To satisfy the need for providing the ADS-B capabilities, SC-186 has been established to recommend industry standards for ADS-B applications that can be made available to governments, industry and other organizations. Version update releases are planned to support the phased operational implementation of ADS-B applications.

**PRODUCT DELIVERABLES:**

<b>Product</b>	<b>Description</b>	<b>FRAC Completion Due Date*</b>	<b>Projected Publication Date**</b>	<b>Change</b>
<b>Change 2 to DO-260C, 1090MHz ADS-B / TIS-B MOPS</b>	Update §2.4 Test Procedures to address errors/test efficiencies, and other errors/clarifications/editorial changes	<b>January 2025</b>	<b>March 2025</b>	<b>Change from Dec. 2024</b>
<b>DO-260C with Change 1 and Change 2</b>	Incorporate the information published as changes in Change 1 and Change 2 into a new version of DO-260C	<b>N/A</b>	<b>March 2025</b>	<b>New</b>

\*Note: Final Review and Comment (FRAC) Completion Due Date refers to the date that the committee plenary approves the document after completing the FRAC Process. SCs should submit the final document at least 45 days before the PMC meeting where it will be considered for approval.

\*\*Note: Projected Publication Date refers to the date that the item will be approved by the PMC and officially published by RTCA.

**SCOPE and COORDINATION:**

Special Committee 186 (SC-186) shall codify requirements based upon the airborne and ground user needs for an Automatic Dependent Surveillance-Broadcast (ADS-B) system. The development activities of SC-186 shall consider the relevant work of other bodies, including ICAO Panels, FAA/CAAs, EUROCAE, AEEC, SAE, and other RTCA Special Committees. The Special Committee should coordinate with these bodies, including the EUROCAE and ICAO representatives.

SC-186, working jointly with EUROCAE WG-51, shall update DO-260C (and corresponding EUROCAE document ED-102B) to address errors identified within §2.4 Equipment Test Procedures, and other errors/clarifications/editorial changes.

Along with the normal Change 2 document, SC-186 has determined that they would like RTCA to publish a version of DO-260C with Change 1 and Change 2 incorporated. SC-186 will assemble and complete the incorporated change version of DO-260C (with Change 1 and Change 2 incorporated), validate that all PMC approved changes have been incorporated, and deliver the incorporated document to the RTCA Secretariat for inclusion in the RTCA store as a separate publication from the official PMC approved Change 1 and Change 2 publications.

**ENVISIONED USE OF DELIVERABLE(S):**

MOPS published by SC-186 are intended to be used by the FAA and other civil aviation authorities (CAAs) as an acceptable means of certifying ADS-B equipment for civil aircraft. Additional documents from SC-186 may form the basis of advisory material for certification authorities and may inform the operational approval process and safety risk management directives for the FAA and other CAAs.

Specifically, the deliverable above is intended for the following purpose:

TSO-C166c requires applicants to meet DO-260C, including Change 1. Change 2 of DO-260C will facilitate deviation requests for TSO-C166c applicants.

**SPECIFIC GUIDANCE:**

The committee should:

1. Harmonize operational concepts and perform high-level safety, performance and interoperability performance analysis for well-defined aircraft surveillance (AS) and ground surveillance (GS) applications brought to the committees from key stakeholders, other user groups, and sponsor programs, such as FAA/SBS and Eurocontrol/CASCADE.

The efforts will be based on previous work done within RTCA and in Europe. The work products of these efforts will be documents addressing the entire set of applications that include the following:

- Operational Services and Environment Definition (OSED),
  - Safety and Performance Requirements,
  - Interoperability Requirements.
2. Working jointly with EUROCAE WG-51, update and maintain, as required, Minimum Operational Performance Standards (MOPS) for an ADS-B system operating on 1090 MHz frequency (RTCA DO-260[]). DO-260B is a basis for the U.S. ADS-B Out rule (14 CFR 91.225 and 14 CFR 91.227), so any subsequent versions of DO-260[] must be compatible with the broadcast requirements in DO-260B.

3. Update and maintain, as required, Universal Access Transceiver (UAT) ADS-B MOPS (RTCA DO-282[]). DO-282B is a basis for the U.S. ADS-B Out rule (14 CFR 91.225 and 14 CFR 91.227), so any subsequent versions of DO-282[] must be compatible with the broadcast requirements in DO-282B.
4. Update and maintain jointly with EUROCAE WG-51, MOPS for Aircraft Surveillance Application (ASA) System (RTCA DO-317[]). *Note that SC-186 is not authorized to make any changes to DO-185[] (TCAS MOPS), DO-385[] (ACAS-X<sub>A/O</sub> MOPS), or DO-386[] (ACAS X<sub>U</sub> MOPS). Any changes that are determined to be required to DO-185[], DO-385[], or DO-386[] shall be coordinated through the RTCA Program Management Committee.*
5. Develop and maintain, jointly with EUROCAE WG-51, SPR and MOPS for Flight-deck Interval Management (FIM). These MOPS will provide all system-level requirements for the FIM application, including display requirements and algorithm performance and be tightly aligned with the ASA System platform as specified in DO-317[].
6. Coordinate with SC-147 and EUROCAE WG-75 for all issues pertaining to the use of ADS-B as a surveillance source with the ACAS X system.
7. Coordinate with SC-214 and EUROCAE WG-78 to ensure that CPDLC messages and functions meet the needs of ASA System applications and Air Traffic Data Communications services.
8. Coordinate with SC-227 to ensure proper requirement allocation, as needed, to support navigation system integration with ASA System applications, such as FIM.
9. Coordinate closely with other government and industry groups, as appropriate, e.g., EUROCAE, ICAO, as well as with other RTCA special committees and working groups including, for example, SC-159, SC-206, SC-217, and SC-228.

#### **TERMINATION:**

When the scope of this Terms of Reference is complete, the committee will recommend to the PMC that the committee Sunset, go into Active Monitoring Mode, or spend a period of time in Hiatus. Any change/extension of a committee's work program requires prior PMC approval.