

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

Revision 34

SC LEADERSHIP:

Position	Name	Affiliation	Telephone	email	Change
Co-chairs	Doug Arbuckle	Regulus Group	757-604-6624	darbuckle@regulus-group.com	
	Lesley Weitz	MITRE	703-927-3143	lweitz@mitre.org	
Government Authorized Representative	Matt Haskin	FAA/AIR-626C	202-267-2964	Matthew.D.Haskin@faa.gov	
Secretary	Brenda Perez	Regulus Group	609-485-4806	bperez@regulus-group.com	<i>New Secretary</i>

BACKGROUND:

There are many benefits that have been realized, and additional benefits that could be realized in the future, with the use of ADS-B technology and associated applications. 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. SC-186 was established to develop 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:

Product	Description	FRAC/RAC Completion Due Date*	FRAC or RAC	Projected Publication Date**	Change
Internal Report: Scope of Airborne Surveillance Applications (ASA) Standards Updates	Establish the scope for the work to be done, including surface alerting functionality and ADS-B Traffic Alerting System (ATAS) application for rotorcraft.	October 2026	RAC	December 2026	Change to December

*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 work with EUROCAE WG-51 to 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.

The Internal Report on the Scope of ASA Standards Updates should consider a potential addition of an application for surface alerting functionality, an update to ATAS to support implementation on rotorcraft, updates/corrections that have been identified since the publishing of DO-317C, and any other additional work deemed necessary by the committee.

ENVISIONED USE OF DELIVERABLE(S):

The Internal Report on the Scope of ASA Standards Updates will be used to define possible next steps for the committee regarding updates to the ASA MOPS, or the creation of a new MOPS for surface alerting functionality, either of which would require another TOR update. The report will look at the technology as a whole and identify other adjacent technologies that may be impacted.

The report may include recommendations that may be allocated to other RTCA special committees to be addressed as suggested changes to the work of other special committees as appropriate. 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.

SPECIFIC GUIDANCE:

The committee should:

- 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 and Eurocontrol.
- 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 referenced by 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.
- Update and maintain, as required, Universal Access Transceiver (UAT) ADS-B MOPS (RTCA DO-282[]). DO-282B is referenced by 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.
- Update and maintain, as required, MOPS for Aircraft Surveillance Application (ASA) System (RTCA DO-317[]).
- Update and maintain, as required, MOPS for Flight-deck Interval Management (FIM) (RTCA DO-361[]).
- Coordinate with SC-209 for all issues involving ADS-B systems operating on 1090 MHz frequency (RTCA DO-260[]), since such ADS-B systems are typically implemented within Mode S transponders.
- Coordinate with SC-147 and EUROCAE WG-75 for all issues pertaining to the use of ADS-B as a surveillance source with ACAS X variants.
- 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.

- Coordinate with SC-227 to ensure proper requirement allocation, as needed, to support navigation system integration with ASA System applications, such as FIM.
- Coordinate with SC-228 to ensure proper requirement allocation, as needed, to support surface alerting and hazard applications.
- 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, and SC-217.

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.