

September 11, 2024

92nd PLENARY MEETING

of RTCA SC-186

held jointly with EUROCAE WG-51 (89th PLENARY MEETING)

AUTOMATIC DEPENDENT SURVEILLANCE - BROADCAST (ADS-B)

**** Note: All files named in conjunction with Agenda items can be downloaded from the RTCA SC-186 Workspace at [Group - SC-186 ADS Broadcast - AerOpus \(i3cloudservices.com\)](https://group-sc-186-ads-broadcast-aeropus.i3cloudservices.com) ****

RTCA SC-186 Plenary 92 and EUROCAE WG-51 Plenary 89 Meeting Summary

1. Chairmen Welcome, Introductions, and Remarks
 - Jessie Turner convened the September 11, 2024 meeting by welcoming all in attendance. Participants were identified based on the WebEx participant list and the AerOpus website
2. RTCA and EUROCAE Policy Presentations
 - Karan Hofmann (filling in for Brandi Teel) read several standard RTCA policy statements
 - Alex Engel read several standard EUROCAE policy statements
3. Review of Meeting Agenda
 - Jessie reviewed the agenda.
4. Review/Approval of the 91st Meeting Summary
 - The meeting summary from the May 6, 2024 plenary were posted to the AerOpus website
 - Motion - Jessie requested approval of the meeting summary. Motion was seconded and approved without objections.
5. Discussion and Timeline of Change 2 to RTCA DO-260C / EUROCAE ED-102B
 - Topic Leads: Tom Pagano and Martin Gray

- Tom Pagano reviewed the development timeline for Change 2. This change is primarily focused on corrections to ADS-B report test procedures found in §2.4.8. Additional editorial changes and clarifications are also under consideration. No changes to requirements are being addressed with the Change 2 update.
- The proposed milestones/workflow are as follows, but may be amended as needed:
 - Sept. 11, 2024 – draft TOR update to add Change 2 deliverable
 - October 8, 2024 - SC-186 WG 3/ WG 51 SG 1 Telecon #1 – review Working Papers
 - October 29, 2024 - SC-186 WG 3/ WG 51 SG 1 Telecon #2 – review Working Papers
 - November 12, 2024 - SC-186/ WG 51 Plenary - Start of FRAC / OC
 - November 12, 2024 – January 3, 2025 - FRAC / OC
 - January 14, 2025 - SC-186 WG 3 / WG 51 SG 1 Telcon #3 - Resolve Comments
 - January 21, 2025 - SC-186 / WG 51 Plenary - Approve Change 2
 - January 27, 2025 - Deliver Change 2 to RTCA/EUROCAE
 - March 13, 2025 – PMC approval (plus TAC approval per TAC meeting date in March 2025)
- Discussion:
 - Todd Skoog (Garmin) asked whether document changes have been drafted. Tom Pagano indicated that draft changes are being drafted and will be distributed prior to the October 8th Meeting #1. The goal will be to send the draft out early and well before the October 8th review meeting.
 - Karan Hofmann (RTCA) asked if perhaps the close of the FRAC/OC comment period could be moved to a few days later (around Jan. 7, 2025) due to the year-end holidays. The current plan will be to request by Jan. 3, 2025, but may be updated based on stakeholders’ requests and timeline agreed to at the next plenary when FRAC/OC is opened.

6. Review and Approval of Rev. 31 to SC-186 Terms of Reference

- Jessie Turner (SC-186 Chair) reviewed proposed updates to the SC-186 Terms of Reference which included:
 - Change SC-186 Secretary from Mike Garcia to TBD.
 - Update Deliverables table to add Projected Publication Date of March 2025 for Change 2 of DO-260C. This is based on the new RTCA ToR template that was approved at the June 2024 PMC meeting.
 - Add to the SCOPE and COORDINATION section that an integrated version of DO-260C with Change 1 and Change 2 incorporated would also be developed and published. {Side Note: This item was also added to the Deliverables table at the Sept. 26, 2024 PMC meeting where the ToR Rev. 31 update was approved}.

- Upon discussion regarding the Change 2 schedule, it was also agreed that the Change 2 FRAC Completion date in the Deliverables table should be updated from Dec. 2024 to Jan. 2025.
 - Motion – Jessie requested approval of TOR changes. Motion was seconded and approved without objections
7. Review and Approval of WG51 Work Programme and WG51 SG1 Task Sheet
- Topic Lead: Johan Matensson (Eurocontrol, EUROCAE WG-51 Chair)
 - Johan reviewed the WG-51 Work Programme Summary which identifies a ED-102B Integrated Change 2 document with a target publication of Q1 2025.
 - Johan also reviewed the WG-51 Task Sheet for the Integrated Change 2 “Minimum Operational Performance Standards (MOPS) for 1090 MHz Extended Squitter Automatic Dependent Surveillance - Broadcast (ADS-B) and Traffic Information Services-Broadcast (TIS-B)”. TAC approval is planned for Sept. 18, 2024.
8. Information on GNSS RF Interference (RFI) Detection and Status Downlink
- Topic Lead: Gary Berz (Eurocontrol)
 - Gary gave a presentation regarding GNSS RFI (Jamming and Spoofing) and efforts going on within the aviation industry and specifically within RTCA SC-159 / EUROCAE WG-62 (GNSS).
 - Dual Frequency Multi Constellation (DFMC) GNSS Receiver MOPS (GPS & Galileo) DO-401/ED-259A is published and includes RFI Status function (2 bits for L1 & L5)
 - Includes RF Detection Standard using RF (Carrier to Noise Ratio) Observables
 - An update (validation version) to the Dual Frequency Multi-Constellation (DFMC) MOPS (DO-401A/ED-259B) is expected for release in 2025.
 - DFMC GNSS MOPS provides RFI Status Output
 - ADS-B is seen as a natural candidate for downlinking RFI status due to common interest in GNSS. However, RFI Status function didn’t make it into the ADS-B MOPS V3. There is currently no timeline for ADS-B MOPS V4.
 - Seeking advice from SC186 / WG51 on possible path of GNSS RFI Status into ADS-B message downlink.
 - Following Gary’s presentation, there was some brief discussion about this topic. Some comments by SC-186 members:
 - Randy Jacobson – Is ADS-B the correct link to carry this? Has CPDLC or other links been considered?
 - Mike Garcia – Not trusting ADS-B is also an issue. How long do we want to wait? Robustness to the aircraft’s GNSS needs to be considered.

- Since the meeting was running over in time, Gary and the committee agreed that further discussion is needed. This topic will be on the agenda for the next plenary meeting.

9. Other Business

- Jessie reported that Mike Garcia (Aireon) is stepping away from the SC-186 Secretary role. Jessie thanked Mike for his support as Secretary over the last several years. Mike will continue to participate in SC-186. Jessie requested a volunteer for the Secretary role. Anyone interested, please contact Jessie.
- Alex Engel indicated that the ASTERIX Maintenance Group is actively working updates and requested that SC-186/WG-51 members get involved if you can.

10. Review Action Items

- Open Actions:
 - Johan to discuss the MOPS/airspace rule deviation process with EASA - This item was previously completed - Closed
- Actions Closed Since Previous Plenary: None

11. Schedule Next Plenary Meeting

- Next Plenary (SC-186 #93/WG-51 #90) - Virtual plenary meeting is scheduled for Tuesday November 12, 2024 10:00AM – 12:00PM ET / 4:00PM – 6:00PM CET. The agenda will include:
 - Opening of the Final Review & Comment (FRAC) / Open Consultation (OC) for Change 2 to RTCA DO-260C / EUROCAE ED-102B
 - Continued discussion on GNSS RFI detection & status downlink

12. Adjourn Plenary

- Jessie thanked everyone for their participation and adjourned the meeting.

List of Attendees

First Name	Last Name
Jorge	Alvarez
Miles	Bellman
Jason	Berger
Jean-Baptiste	Berthier
Gary	Berz
Bill	Carson
Nico	de Gelder
Nick	Demidovich
Matt	Edwards
Alex	Engel

First Name	Last Name
Jack	Field
Mike	Garcia
Wes	Googe
Martin	Gray
Doug	Guetter
Paul	Harrison
Matt	Haskin
Mohamed	Hassanain
Karan	Hofmann
Randy	Jacobson
Eric	Jauny
José	Manuel
Eltzafan	Mark
Johan	Martensson
Ray	Mei
Tom	Pagano
William	Penhallegon
Brenda	Perez
Bogdan	Petricel
Bob	Pomrink
Stacey	Rowlan
José Manuel	Rubio
Peter	Sciotto
Jen	Scott
Taji	Shafaat
Todd	Skoog
Ralph	Smith
Rocky	Stone
Brian	Townsend
Jessie	Turner
Peter	Vaiana
Jesse	Walters
Lesley	Weitz
Kevin	Wilson