RTCA Paper No. 019-21/SC186-383 EUROCAE No. 325-20/WG51-199

November 10, 2020

SEVENTY-NINTH MEETING of RTCA SC-186 AND SEVENTY-SEVENTH MEETING of EUROCAE WG-51

AUTOMATIC DEPENDENT SURVEILLANCE - BROADCAST (ADS-B)

DATE: November 10, 2020

TIME: 11:00 a.m. – 12:00 p.m. (EST)

PLACE: Virtual

The attendees included:

SC-186 Co-Chairmen

Rocky Stone United Airlines, Inc.

Jessie Turner Boeing

SC-186 Government Authorized Representative

Matt Haskin FAA

EUROCAE WG-51, SG-3

Bogdan Petricel Chair Nico de Gelder Secretary

EUROCAE WG-51, SG-1

Jorg Steinleitner Chair

Members Present on the WebEx (Names as entered via the WebEx application)

Al Secen (RTCA) Todd Skoog (Garmin) Stuart Bowman
Jorg Steinleitner Usmaan Javed Jens Hennig

Rakesh Nayak tim steiner Steve Darr Sam Masri (Honeywell) n demidovich Larry Kenney Ken Jones Doug Willey (ALPA) **Edward Johnson** Lesley Weitz Stuart Searight Bill Penhallegon Gregg Nesemeier FAA AIR-Bob Gaul Alex Rodriguez 6B2 Mike Jackson (Honeywell) Ian Macoomb Tom Zarick Eltzafan Mark (FAA) Ed Hahn / ALPA Matt Haskin Frank Grooters Miles Bellman Ray Mei Rob Strain **Rocky Stone** Doug Arbuckle Aaron Dutle Scott McGrew Alexander Engel Wes Googe (AA) Jen Scott Casey Ohringer Tom Pagano Bill de Groh (APA) Martin Gray Nico de Gelder **Bogdan Petricel** Jessie Turner Sumedh Puranik Stuart MCKAY **Greg Comstock** Brenda CTR Perez Eric JAUNY (DSNA)

H. Peter Stassen

bill carson

Kevin Sivits - Audio
Hannes Griebel

** Note: All files named in conjunction with Agenda items can be downloaded from the RTCA SC-186 Workspace at http://workspace.rtca.org/kws **

- 1. Chairman's Introductory Remarks (Rocky Stone).
 - Rocky convened the meeting by welcoming all in attendance. Participants were identified based on the WebEx participant list.
 - Al Secen (RTCA SC-186 Program Director) and Alex Engel (EUROCAE WG-51
 Technical Program Manager) read several standard policy statements (reference "02_
 RTCA_EUROCAE Welcome, Virtual Mtg KickOff Slides.pdf").
- 2. Review of Meeting Agenda (Rocky Stone).
 - Rocky reviewed the agenda and noted that it is posted to the RTCA Workspace.
 - Under "Other Business", a new proposed Inter-Special Committee Requirements Agreement (ISRA) from SC-206 was added to the agenda.
- 3. Review/Approval of the SC-186 78th Plenary/EUROCAE WG-51 76th Plenary Meeting Summary
 - The meeting summary from the September 15, 2020 plenary was posted to RTCA Workspace. Jessie Turner moved to approve, Al Secen seconded.
- 4. WG-3/SG-1 Status on 1090ES ADS-B Out MOPS DO-260C/ED-102B (Tom Pagano)

- This plenary was scheduled on this date in case of any unresolved FRAC/OC comments prior to submitting the document to RTCA and EUROCAE.
- All comments have been resolved and Tim Steiner has updated the document.
- The updated document will be sent to RTCA and EUROCAE by the Nov. 13th due date.
- Alex Engel will need a few days to prepare the EUROCAE ED-102B document.
- Compliments from EUROCAE and RTCA to the WG-3/SG-1 leadership and members for working on the documents to get them ready for publication.

5. WG-4/SG-3 - Status on FIM MOPS DO-361A/ED-236A Change 1 (Greg Comstock)

- Greg provided WG-4/SG-3 Status (reference "FIM Change 1 Pre-PMC Check-up Plenary 11102020_final.pdf").
- Stuart Bowman has done significant work to prepare the test vectors and test descriptions.
- Status is similar to DO-260C. Everything has been integrated into the document.
- Team is conducting a final review to make sure changes and document links are correct.
- Submission to RTCA and EUROCAE by the Nov. 13th due date.

6. WG-5 – Universal Access Transceiver (UAT) Work Plan (Rocky Stone/Rob Strain)

- Currently, there will be a single WG-5 chairman, since a second person/company has not stepped forward to co-chair.
- One UAT manufacturer has pledged to contribute to the MOPS update work.
- Rob wanted to make sure that the FAA is okay with him as the sole chair. He voiced concern about participation from individuals/companies to get the work done.
- Rocky there are enough changes in DO-260C that he expects that there will be rich discussions around reflecting those updates in DO-282C.
- Rob need to discuss new administrative processes guide with Al Secen and Rocky Stone, and requested access to committee guidance documentation (Action: Al Secen).
- Alex Engel clarified that DO-282C is an RTCA document only.
- Doug Arbuckle & Matt Haskin confirmed that the FAA supports the update to DO-282 to align it with DO-260C.
- Next step: Rob, Rocky, and Al Secen (and others as needed) to meet to discuss working group logistics.

7. SC-186 Terms of Reference (TOR) – draft Rev. 25 (Jessie Turner)

- Jessie provided a draft TOR Rev. 25 for review (reference "SC-186 TOR Rev 25 (redline).doc").
- It's been almost a year since an update of the TOR has been released. Since that time, we have published a number of deliverables. The primary changes to the TOR is the deletion of the already published (or soon to be published in December) deliverables:
 - DO-317C
 - DO-328B
 - DO-361A, Change 1 (anticipate adoption at December PMC meeting)
 - DO-260C (anticipate adoption at December PMC meeting)

The remaining deliverable is the UAT MOPS revision (DO-282C).

- Jessie estimated completion of DO-282C in March 2022. Is the committee comfortable with this date? Is the FAA comfortable with this date?
- Doug Arbuckle from an FAA perspective, we would prefer publication earlier to support changes [due to DO-260C and DO-282C] in the FAA ground systems at the same time.
- Jessie noted that the due date reflects the FRAC closure date. Therefore, the document likely wouldn't go to the PMC until June 2022. We could move the date sooner to support approval at the March 2022 PMC.
- Rob Strain suggested that we can revisit the DO-282C due date after meeting with Al and Rocky and assessing the anticipated committee support to get the work done.
- Jessie kept the description of the committee itself intact in the Background information.
- Al Secen confirmed the committee should get documents to RTCA at least 45 days prior to the PMC meeting
- Jessie retained all of the content in the Specific Guidance section of the TOR with only minor changes.
 - Matt Haskin recommended updating #6 to coordinate with SC-147 on ACAS X (rather than ACAS X_A). This change was included in the TOR revision.
- Alex Engel asked to make it clear that the UAT MOPS (DO-282C) is an RTCA document only. Jessie noted that #2, 4, and 5 reference the relationship with WG-51 to develop DO-260C, DO-317C, and DO-361A, while #3 only references RTCA for DO-282C.
- Jessie made a motion to approve the revised TOR and send it to the RTCA PMC for approval, and Lesley Weitz seconded.
- After the last deliverable (DO-282C) is completed, the RTCA SC-186 committee will go into an "Active Monitoring" status and will meet on a periodic basis to discuss whether any documents should be updated. SC-186 will remain in "Active Monitoring" status for a year, and will then provide a status report to the RTCA PMC on whether further work is required. Alex Engel indicated that, from the EUROCAE WG-51 perspective, there is a sub-group (SG-4) working on a technical specification update for Multilateration ground systems. WG-51 will be ready to resume joint RTCA activities if needed.

8. Other Business.

- New proposed Inter-Special Committee Requirements Agreement (ISRA) from SC-206 (Steve Darr)
 - Steve provided a draft SC-206-SC-186 ISRA for review (reference "ISRA SC-206 to SC-186 AbO in DO-282C [SC-186 approved 2020-11-10].docx").
 - SC-206 supported the requirements for broadcast of ADS-B Weather (ADS-B Wx) messages in DO-260C (covered by an ISRA).
 - SC-206 would like to see the same ADS-B Wx updates carried over to the UAT MOPS (DO-282C). As such, they would like that work reflected by an ISRA between SC-206 and SC-186.
 - If this plenary approves the ISRA, then SC-206 will approve it at their December plenary (December 11, 2020).

- The committee discussed the use of the term "crosslink" in the rationale for requirements. Steve removed the term.
- Rob Strain, chair of WG-5, provided a motion to approve the ISRA, Steve Darr seconded the motion.

9. Review Action Items/Work Programs.

- Action: Al Secen to provide committee guidance documentation to Rob Strain (WG-5 Chair).
- Action: Rob Strain, Al Secen, and SC-186 leadership to meet to review logistics and plan for WG-5 activities.

10. Date/Time and Place of Next Meeting

- Rocky recommended that we schedule a plenary meeting in approximately six months to review the status of WG-5 activities. The next SC-186 plenary meeting (Plenary #80) is scheduled for May 11, 2021 at 11:00am EDT. Note that this is an RTCA-only meeting and will not be joint with EUROCAE WG-51.
- A meeting will be scheduled earlier in the unlikely event that something comes up with the document approvals at the December PMC meeting.
- Alex Engel announced that this may be his last joint WG-51 / SC-186 plenary. He expressed regret that we are not able to meet again in person.

11. Adjourn Plenary

• Rocky thanked everyone for their participation and adjourned the meeting.