Minutes of Meeting
EUROCAE WG-96 RTCA SC-236 18th Joint Meeting
Standards for Wireless Avionics Intra-Communication System (WAIC) within 4200-4400 MHz

Date	***Thursday June 18, 2020, beginning at 9am EDT***
Hosted by	***RTCA and EUROCAE***
Place	***Virtual Meeting***
Contact Person	Anna Guegan anna.guegan@eurocae.net Phone: + 33 1 49 46 19 67 and Rebecca Morrison rmorrison@rtca.org +1 202-330-0654

AGENDA

Plenary Session Beginning Thursday June 18, 2020 at 9:00am on RTCA Webex

1. Welcome/Administrative Duties/EUROCAE and RTCA Policy Statements IPR / Membership Call-Out and Introductions
2. Review and Approval of the Minutes from the 17th Joint Meeting
3. Report on the status of the ICAO Job Card(s) related to WAIC
4. Review comments on Revision A of DO-378/ED-260 (WAIC MASPS)
5. Consider a motion to send Revision A of DO-378/ED-260 (WAIC MASPS) to the PMC and Council for Publication
6. Review of the TOR dates and Work Plan
7. Review of the MOPS Content and Assignments
8. Reports from the Sub-working groups
9. New Business
10. Review Plan for Next Meeting
11. Review Action Items
12. Adjourn

Minutes of Meeting

Robin Davies started the meeting at 9:13 AM EDT.

Agenda Item 1: Welcome/Administrative Duties/EUROCAE and RTCA Policy Statement IPR / Membership Call-Out and Introductions

Robin Davies (BAE Systems) welcomed the committee members. The list of attendees is provided in Appendix A. Anna Guegan read the EUROCAE and RTCA policy statements from slides shared with the group.

Agenda Item 2: Review and Approval of the Minutes from the 17th Joint Meeting

Dave Redman (AVSI) showed where minutes from the May 4-7 FRAC Comment Review are locate on the RTCA Workspace and asked all to send any comments. Alexandre Guignot (DGAC) recommended that a note be added that the group had decided to delay resolution of some of the comments pending the result of the ICAO FSMP meeting concerning the status of the WAIC SARPs. A note was added and all agreed with the contents of the notes as amended.

The draft minutes from the 17th Plenary Meeting on 13 February were then reviewed. Alexandre pointed out that a request had been previously email to add a note providing clarification of the attenuation/power values. The note was added as Attachment C to the minutes. Uwe Schwark (Airbus) also pointed out that there were some tracked changes that needed to be approved. These were also reviewed and approved. Robin Davies asked for a motion to approved the minutes. Dave Redman so moved and Kevin Hallworth (EASA) seconded. The motion was approved and the final minutes were posted to the RTCA Workspace.

Agenda Item 3: Report on the status of the ICAO Job Card(s) related to WAIC

Dave Redman gave a verbal summary of the 3 June virtual meeting of the ICAO FSMP Working Group. The meeting resulted in two primary questions asked by the FSMP Rapporteur:

1. Does WAIC emissions at 6 dBm/MHz EIRP comply with ITU-R Rec. M.2059 protection criteria during the en-route phase of flight?

2. Can the susceptibility mask for the WAIC receiver be specified with a steeper rolloff at the band edges?

The issue was kicked back to the WAIC SARPs Correspondence Group to perform the necessary studies to answer these questions and then report back to the FSMP. There were additional questions discussed in the course of the meeting, including verification of RA emissions compatibility with WAIC protection criteria in the various scenarios.

Additional topics discussed at the meeting that may impact MASPS included discussion about the right fuselage attenuation values that should be assumed in analyses and the use of measured values vs. theoretical values. It was noted that there was some support for favoring measured values where appropriate (the landing scenario in the case of WAIC).

Ultimately, the FSMP did not provide a clear decision (yet) that is useful guidance for resolving the remaining non-concurs in the MASPS FRAC review. The actions from the meeting were to continue working the issues through the WAIC SARPS Correspondence Group (CG). The suggested next steps include:

- CG work on answers to the outstanding questions and submit proposal to FSMP at least 2 weeks before the virtual FSMP meeting scheduled for 17-26 August.

- It was also noted that a decision on arranging a formal Panel meeting will likely happen in July given the lead time necessary to schedule such a meeting.

- The ICAO FSMP Secretary committed to expediting the SARPS if a consensus version cannot be achieved before the August Panel meeting.

Dave Redman pointed out that the goal of the CG is to have all input resolved by the end of the August FSMP WG virtual meeting, but there were proposals to delay completion of the SARPs to ensure that it meets protection criteria and provides sufficient capacity to allow WAIC to be practically implemented in aircraft.

Agenda Item 4: Review comments on Revision A of DO-378/ED-260 (WAIC MASPS)

The remaining unresolved comments in the FRAC Review Spreadsheet were reviewed.

45146 (High): Anna Guegan will send the text suggested by Steve Rines at the FRAC Comment Review, as incorporated in the spreadsheet and in the Day 4 minutes, to the reviewer (Mike Airety) for approval.

45104, 45105, 45106, 45108, 45109, 45110 (Editorial): These comments were provided by Robin Davis and all related to the same issue. All were satisfactorily resolved.

45035 (Editorial): Uwe Schwark updated the draft SAPRS to incorporate the recommended correction to resolve this comment.

45157 (High): The meeting agreed that additional information was needed from ICAO before this comment could be resolved. The following text was added to the "Resolution" column in the spreadsheet:

"200618 - need additional guidance from FSMP to resolve this.

Also, RTCA PMC has an action to clarify the use of the terms above. EUROCAE will also participate in that discussion to ensure consistency between RTCA/EUROCAE - anticipate this will occur within the next month or so..."

45142, 45143, 45161, 45162, 45126 (Non-Concur): These comments were all related to questions about the WAIC emitted power limits. As such, the meeting again agreed that additional information was needed from ICAO before they could be resolved. The following text was added to the "Resolution" column for each comment in the spreadsheet:

"200618 - need additional guidance from FSMP to resolve this.

<u>Agenda Item 5: Consider a motion to send Revision A of DO-378/ED-260 (WAIC MASPS) to the PMC and Council for Publication</u>

The Committee was not able to resolve all comments in the FRAC Comment Review due the dependence on anticipated guidance from ICAO.

The meeting agreed to forward revised MASPS to PMC after resolution of the open comments once the ICAO FSMP defines final requirements in a consensus SARPS.

A question was raised concerning the procedure for resolving the remaining non-concurs. The process is per RTCA/EUROCAE practice:

- A proposal for resolving non-concur will be derived from the requirements in the ICAO SARPS.

- SC-236/WG-96 will consider the proposals and each reviewer that raised one of the unresolved comments can agree or disagree with the proposal for resolving their comment.

- A consensus MASPS will be generated from the fully resolved list of comments.

<u>Agenda Item 6: Review of the TOR dates and Work Plan</u>

The meeting reviewed the following upcoming dates that are pertinent to closing FRAC and completing the MASPS Rev A:

- EUROCAE TAC meeting - 26-27 AUGUST

- RTCA PMC meeting - 10 SEPTEMBER

- ICAO FSMP Virtual Meeting – 17-26 AUGUST (Original F2F – virtual probably revised). Panel Meeting was scheduled for 27-28 August, but probably not going to occur in virtual format.

- 3 August is ~deadline for submitting papers to FSMP

- 1 August is deadline for RTCA PMC meeting input

Rebecca Morrison (RTCA) noted that it might be possible to publish MASPS revision between scheduled PMC meetings by ballot, but the Committee would need to make a strong case.

- Next submittal deadline is 10 November for materials to be considered at the RTCA PMC meeting scheduled for 17 December 20.

- The next meeting of the EUROCAE TAC after the August meeting is not scheduled, but will likely be at the end of December or early January 2021. It was noted that a meeting of the TAC is not necessary for the release of a document, but is for a change in the ToR.

The meeting also discussed the impact of delays on the ToR. Rebecca noted that Steve Rines will need to update the RTCA PMC on status/impact of the delays on dates in the ToR to provide an explanation of why the original dates will not be met. Similarly, Robin Davies will need to update the EUROCAE TAC.

<u>Agenda Item 7: Review of the MOPS Content and Assignments</u>

<u>Agenda Item 8: Reports from the Sub-working groups</u>

Steve Rines reported that the work of the committee with regards to completing the MOPS is drifting due to the issues completing the MASPS. He noted that WG3 had completed their inputs on WAIC security requirements. This work resulted in flowing some requirements to the ARINC CSMIM Committee. Steve will continue to liaise with that committee. He also mentioned that dataload security requirements will be defined in the MOPS, but that means of compliance will likely end up in an ARINC standard.

Steve also pointed out that the committee needs to start on sections 3 (installation) & 4. This will involve transitioning WG1 to work on own-ship coexistence requirements. WG2/3/4 will need some of these coexistence requirements to make progress on system-level verification testing. It was also noted that the own-ship requirements will depend on the inter-aircraft requirements in the SARPs as well and that additional work will be delayed until these external coexistence requirements are settled.

<u>Agenda Item 9: New Business</u>

Rebecca Morrison related that the Committee should anticipate receiving questions from SC-223/WG-108 Internet Protocol Suite (IPS) and AeroMACS. They want to know if there are any requirements in the WAIC MOPS that they need to start considering. They also want to promote IPS for use in wireless comms. Rebecca took an action to put discussion of these questions on the agenda for the next meeting.

<u>Agenda Item 10: Review Plan for Next Meeting</u>

Due to the dependence of progress on the ICAO proceedings, the meeting agreed that regular meetings of sub-working groups would be suspended until after the August 2020 ICAO FSMP meeting. However, it was further that the 21 July committee as a whole touch base meeting would be held in order to provide a status update. This meeting will be posted on the RTCA workspace calendar.

The committee further agreed to plan for a virtual plenary 2-3 September 2020. Rebecca Morrison put this on the RCTA workspace calendar and send out an invitation.

<u>Agenda Item 11: Review Action Items</u>

1. Post all minutes and spreadsheets to the RTCA Workspace – Redman (ASAP)
2. Send comment 45146 resolution proposal to reviewer. – Guegan (31 August)
3. PDF and post the updated MASPS draft. – Schwark + Morrison (31 August)
4. Brief WAIC MASPS status to PMC/TAC. – Rines/Davies (per schedule)
5. Schedule next committee meetings. – Morrison (ASAP)

<u>Agenda Item 12: Adjourn</u>

The meeting adjourned at 12:00 PM EDT.

Respectfully submitted by David Redman, Secretary SC-236.

Appendix A: Attendance List

Rich Adler	FAA
Sanjay Bajekal	Collins Aerospace
Aristides Cintra	Embraer
Jeffrey Cyr	Collins Aerospace
Robin Davies	BAE Systems
John Flores	FAA
Shunichi Futatsumori	ENRI
Marshall Gladding	Boeing
Anna Guegan	EUROCAE
Alexandre GUIGNOT	DGAC
Kevin Hallworth	EASA
Violet Hao	Aviage Systems
Ernest Hill	COMAC America
Bowen Jiang	COMAC America
Ivan Martin	Thales
Steffen Mersch	Lufthansa Technik
Rebecca Morrison	RTCA
David Redman	AVSI
Steven Rines	Ingenui
Shohreh Safarian	FAA
Uwe Schwark	Airbus
Mohammed Waheed	Aviage Systems
Mingwei Wang	COMAC America
Jermaine Zheng	163.com – affiliation unknown – assumed to be Member of the Public.