



RTCA Paper No. 101-22/PMC-2270
June 3, 2022

**RTCA PROGRAM MANAGEMENT COMMITTEE
MEETING SUMMARY
March 17, 2022**

The RTCA Program Management Committee (PMC) convened in a hybrid format at 8:30 a.m. on March 17, 2022, with some members present at RTCA and others participating via Webex. The attendance list and action items are attached.

AGENDA ITEM 1

Welcome and Introductions

- A. PMC Chair Dr. Chris Hegarty welcomed the group, asked attendees to introduce themselves and to note their organization of affiliation. Two proxies were announced (included in attendance list below).
- B. Mr. Al Secen (RTCA Vice President, Aviation Technology and Standards) reviewed virtual meeting procedures, the anti-trust statement, proprietary policy, and membership policy.
- C. Mr. Terry McVenes (RTCA President) gave a short presentation on a new temporary policy in response to Ukraine/Russia situation. Russian companies' memberships, as well as participation in Special Committees, have been suspended. Additionally, access from Russia to RTCA contents such as the website, document store, AerOpus, and any associated download capabilities will be blocked. This is being done in conjunction with EUROCAE.
- D. PMC Chair welcomed a new PMC member, Matthew Langridge from Gulfstream Aerospace Corporation.
- E. PMC Members took a moment of remembrance for Vaughn Maiolla, known by many through his outstanding contributions to aviation through ICAO. Condolences to his family.

AGENDA ITEM 2

Review / Approve

- A. The summary of the December 16, 2021 meeting was approved with one typo correction in section 6K (AD should be AC) (RTCA Paper No. 045-22/PMC-2241).

B. The following administrative Special Committee (SC) Terms of Reference (TOR) Revisions were presented and approved:

- SC-214 – Standards for Air Traffic Data Communication Services – Secretary change from Rochelle Perera (The Boeing Company) to Todd Kilbourne (Mosaic ATM). (RTCA Paper No. 090-22/PMC-2264)
- SC-230 – Airborne Weather Detection Systems – Secretary change from Yukun (Kenny) Ren (The Boeing Company) to Audrey Mach (Boeing Commercial Airplane Group). (RTCA Paper No. 091-22/PMC-2265)
- SC-227 – Standards of Navigation Performance – Adding Co-Chair Ellen McGaughy (Collins Aerospace). (RTCA Paper No. 092-22/PMC-2266)

AGENDA ITEM 3

Publication Consideration/Approval

A. DO-235C – *Assessment of Radio Frequency Interference Relevant to the GNSS L1 Frequency Band*, presented by SC-159, Navigation Equipment Using the Global Navigation Satellite System (GNSS)

- Dr. Sai Kalyanaraman, SC-159 WG6 Task Lead, presented.

This report updates the existing assessment of aeronautical GNSS RFI encounter scenarios and risk modeling, adds RFI effects assessment of dual-frequency, multi-constellation receivers to that of single frequency GPS L1 receivers, and includes the effects of an updated analytic statistical model of terrestrial non-aeronautical RFI sources, increased GNSS intra- and inter-system RFI, increased onboard aeronautical equipment RFI and the effects of personal electronic devices carried on-board aircraft. The findings in this document DO-235C are anticipated to be reflected in future versions of the GNSS MOPS, including ED-259A.

- The PMC approved the document. It will be published as DO-235C.

Related to the previously mentioned policy concerning Russian access, Mr. Hennig asked about SC-159's tasked deliverables. SC-159 is meeting in Plenary in a couple of weeks and will review their TOR and make any recommended changes (Action).

AGENDA ITEM 4

Integration and Coordination Committee (ICC)

A. Spectrum and Surveillance Discussion Lead (SCs 228, 147, 186, and 209)

- Clay Barber, ICC Chair, presented.

As follow-up to June and September 2021 presentations from SC-228 on potential guidance on future Advanced Air Mobility (AAM) operations, the ICC was tasked to bring SC-228 and other

SCs as needed (SC-147, SC-186, and SC-209) together for discussion on possible recommendations.

The Ad Hoc met 3 times to define a problem statement, possible next steps and possible recommendations. The group identified a need for surveillance (air-to-ground, ground-to-air, and air-to-air) and coordination between collision avoidance systems for new airborne entrants and third-party service providers. One solution may be a vehicle-to-vehicle link other than existing links. Other solutions such as constrained corridors have been proposed.

After further PMC member discussion on these items (defined in presentation slides posted in AerOpus), they agreed a combined White Paper on Recommendations for AAM Surveillance and Spectrum Considerations. This paper should address the need for surveillance (A2G, G2A, A2A) and coordination between collision avoidance systems for new airborne entrants and third-party service providers. Additionally, spectrum should be considered in the context of available frequency resources and ongoing coordination with the FAA.

It was agreed that SC-228 should take the lead (in coordination with SC-186 and SC-147) on the White Paper (action to add to SC-228 TOR) with solicitation of outside experts to assist with the task.

- The presentation as well as the background material from the June and September 2021 presentations are posted on AerOpus (RTCA Paper No. 070-22/PMC-2250).

AGENDA ITEM 5

Action Item Review

A. Add ICAO Representative to PMC Invite

- Terry McVenes, RTCA President, presented.

We are still awaiting a point of contact. Andy Roy indicated an appointment was almost ready, but not finalized yet. Action still open.

B. Follow-Up on FAA input on draft Spectrum SC TOR - meeting with FAA, RTCA, SC leads, and EUROCAE to discuss deliverables for SC-242

- Robert Bouza, Federal Aviation Administration, presented

Mr. Bouza reported some FAA representatives participated in the initial SC-242 Plenary. There is still some internal discussion as well, but the FAA will be ready to contribute during the upcoming Plenary scheduled for April 20th. With that participation, this action is considered closed.

C. Reach out to Advanced Aviation Advisory Committee (AAAC) for their action on Spectrum and Surveillance Activities

- Terry McVenes, RTCA President, presented.

Mr. McVenes reported that there were no significant updates at the moment but recommended keeping the action open to continue the dialog.

D. Request Demonstration from Securborator on Document Formatting

- Tim Kesecker (VP Digital Engineering, Securborator) and Dr. Kate Ryan (Lead Engineer Decide Project, Securborator) presented.

Securborator has been working on a DoD sponsored research project which produced an application called Digital Ecosystem Supporting Intelligent Decisions (DESIDE). DESIDE provides a unique set of capabilities for viewing and sharing information between data products. RTCA has partnered with Securborator on possible inclusion of DESIDE for potential use within RTCA.

The DESIDE application allows users to access, view, and manage “knowledge” through digital threads between data products. This is done through a pre-processing of all data products to create automatic linkages between the products. Its primary functions include:

- Secure Access and User Profiles
- User-Defined Groups (public and private)
- Group-Maintained Automated Source of Truth (ASOT)
- Meta-Model based on Document Sections
- Capture and Share User Knowledge (through text, notes, audio, and/or video)

The team also provided a video demonstration of the system.

President McVenes commented that this effort is part of RTCA’s strategic focus to bring value to members and promotion of technology and innovation for new items.

PMC members agree there is potential for incorporation of the DESIRE features as a possible service to RTCA members. Two actions were agreed upon:

- Securborator will provide a means for PMC members to further review DESIRE capabilities and provide feedback to RTCA staff
- RTCA Secretariat will continue investigation of way forward on DESIRE program

This presentation closes initial action.

E. Presentation to ICAO Panel on RTCA activity (to include SC formation)

- Terry McVenes, RTCA President, presented.

This action is still being coordinated. Mr. Roy (PMC Member and Vice Chair of the ICAO Frequency Spectrum Management Panel (FSMP)) indicated the next FSMP meeting is scheduled 21-25 April and a subsequent meeting in the August/September time frame.

F. Generate List of Approved Active ISRAs

- Rebecca Morrison, RTCA Program Director, presented.

As part of the discussion at the last PMC meeting to dissolve the ISRA process, PMC members requested a listing of the outstanding ISRA's for clarification and possible closure.

An "Active" ISRA is one that is still being negotiated between the committees. There are three such items:

- SC-159 requesting to SC-227
- SC-228 requesting to SC-222
- SC-186 requesting to SC-214

The list of Completed ISRAs where the work is still in process by the Action Committee:

- SC-228 requesting to SC-223 –Identifies support for IPS in UAS Standards
- SC-228 requesting to SC-135 –Update to DO-380 to include Direct Lightning and Earthquake categories. On hold waiting for more support to SC-135
- SC-206 requesting to SC-186 –Include the ADS-B Wx Message in standards. 1090 MHz standards are done and has them. UAT frequency standards in FRAC now and will complete FRAC this year.

PMC Members were satisfied with the SC activities and agree this action is closed.

- The presentation is posted on AerOpus (RTCA Paper No. 083-22/PMC-2260).

G. Add ISRA Activity to SC-214 TOR

- Karan Hofmann, PMC Secretary, presented.

Appropriate wording was included to the SC-214 TOR Rev16 (RTCA Paper No. 008-22/PMC-2233). Action closed.

H. Regroup between RTCA and EUROCAE Secretariats on Way Forward for SC-240/WG-117

- Rebecca Morrison (RTCA Program Director) and Burak Ata (WG-117 Chair and SC-240 Acting Chair) presented.

The Secretariats discussed with SC-240/WG-117 leadership on possible ways forward. The group presented proposed changes to their current TOR. There are still some "holes", but some work needs to progress. Specifically of note:

- SC currently does not have a Chair
- SC is currently behind schedule to deliver both of its tasked documents
- First Document (Software Considerations in Lower Risk Application, Equipment Certifications and Approvals)
 - o Requested current update to make date TBD
 - o Plan to update in June 2022 with appointment of new Chair
- Second Document (Integration of COTS, Open Source and Service History into Software)
 - o Requested to split into two releases to expedite schedule
 - o First delivery October 2022 with December 2022 publication
 - Covers Level C and Level D in DO-178C/ED-12C COTS & OSS
 - Covers AL3, AL4, and AL5 in DO-278A/ED-109A COTS & OSS
 - o Second delivery October 2023 with December 2023 publication
 - Remaining levels not covered in first release
 - Incorporate Service History
 - Address Lower Risk Document

After much discussion expressing frustrations and many views on way forward, the PMC conditionally approved the TOR with caveat for the group to return to the June PMC meeting with more refinement. Action still open.

- The proposed revised TOR was conditionally approved (RTCA Paper No. 093-22/PMC-2267).

AGENDA ITEM 6

Discussion.

A. Out of Cycle Actions since last PMC Meeting – Presentation Summary

- Karan Hofmann, PMC Secretary, presented.

As a reminder and for formal documentation, the following items were reviewed and approved by electronic ballot since the last PMC meeting:

- DO-260C Change 1 – *1090 MHz ADS-B Out MOPS* from SC-186, Automatic Dependent Surveillance Broadcast (ADS-B) – approved January 24, 2022
- DO-181F Change 1 – *Transponder MOPS* from SC-209, Minimum Operational Performance Standards for ATCRBS/Mode S Transponder – approved January 24, 2022
- SC-237 – Helicopter Terrain Awareness Warning System (HTAWS) – Revised TOR – approved February 18, 2022

B. SC-206 – Aeronautical Information and Meteorological Data Link Services – Revised TOR

- Eldridge Frazier, SC-206 Government Authorized Representative, presented.

The group requested to work jointly with EUROCAE WG-76 on their White Paper with recommendations to the PMC for any additional turbulence activities since the publication of DO-370 (*Guidelines for In Situ Eddy Dissipation Rate (EDR) Algorithm Performance*). The final deliverable will also be provided to the EUROCAE TAC. The group also adjusted wording referencing any ISRA activity.

- The proposed revised TOR was approved (RTCA Paper No. 094-22/PMC-2268).

C. SC-223 – Internet Protocol Suite (IPS) and AeroMACS – Revised TOR

- Aloke Roy, SC-223 Chair, presented.

The group requested a title change to DO-379 for their next release to match the title of technically equivalent joint document EUROCAE ED-262, which although developed together and published at the same time had a different title.

- The proposed revised TOR was approved (RTCA Paper No. 095-11/PMC-2269)

D. SC-228 – Minimum Performance Standards for Unmanned Aircraft Systems – Revised TOR

- Dr. Fabrice Kunzi and Don Walker (SC-228 Task Leads) presented.

The group requested to add two deliverables – a change to DO-387 to update a sample tracker as a result of additional analysis since initial publication and a separate DAA OSED because of the size of the projected appendix (needs to be standalone document).

Prior to this meeting, comments were received and need further clarification. Additionally, with the added AAM related White Paper (agenda item 4A), the PMC felt further work was needed to complete this TOR revision and agreed to an out-of-cycle ballot to not hold progress on the deliverables. (Action)

E. SC-239 – Low Range Radar Altimeter – Revised TOR Discussion

- Seth Frick and Jean Luc Robin, SC-239 Co-Chairs, presented.

Mr. Frick and Mr. Robin made the following points concerning the current status of activities for SC-239:

- Mid 2021, the committee determined that NO Radar Altimeter (RadAlt) design would be able to sustain FCC 5G US Report and Order rules
- In October 2021, decision made to focus the full energy of the committee on this critical item and to pause the other items of the DO-155A MOPS
- Temporal solutions were found together by the FAA, the FCC, the Telecom industry, and the aviation industry to cope temporarily with this situation.

- In parallel with the 2 current KEY recurrent forums (i.e., the FAA AMOC Task Force and the Telco/Aviation discussions), it was suggested that the committee determine simultaneously a long-term viable way forward

The group suggested a possible solution would be to develop a technical interim document everyone “can live with” (such as an appendix of the DO) to address the short-term situation with release by the end of 2022. Then adjust the final DO-155A schedule to address long-term RadAlt requirements for completion soon thereafter.

After much discussion, PMC members agreed an Ad Hoc was needed to address the situation and come up with realistic goals and timeline for SC-239 activities. (Action)

- The presentation is posted on AerOpus (RTCA Paper No. 076-22/PMC-2255).

F. SC-242 – Spectrum Evaluation – TOR Approval

- Ed Hahn (SC-242 Chair) and Clay Barber (SC-242 Secretary) presented.

Mr. Hahn and Mr. Barber reported the group held their kick-off meeting on March 10th with EUROCAE WG-124. There were 45 people in attendance, but unfortunately no telecom representatives. Besides the normal first meeting presentations on policies, SC/WG operations discussion, and election of the WG Chair, there was lengthy and lively discussion on Terms of Reference (TOR) Content. They agreed to form a Tiger Team within the SC/WG to work out the details and present proposal at their next Plenary on April 20th. The joint leadership also agreed to develop a proposed work plan and subgroup structure. Once the TOR is ready, the group will ask for an out-of-cycle electronic ballot approval from the PMC members.

- The presentation is posted on AerOpus (RTCA Paper No. 074-22/PMC-2253).

G. SC-FAS – Forum for Aeronautical Software – SC Activation and TOR Approval

- Rebecca Morrison (RTCA Program Director) presented.

Ms. Morrison indicated moving forward with FAS activity is being coordinated with SC-240 TOR updates. Hopefully a presentation will be available for the June PMC meeting.

H. FAA Actions Taken on Previously Published Documents – Update

- Robert Bouza, Federal Aviation Administration, presented.

FAA Published Documents that reference published RTCA Documents, FAA Pending Documents for RTCA Documents Published, and FAA plans for RTCA Documents pending PMC approval were reviewed. Original document is posted in AerOpus (RTCA Paper No. 081-22/PMC-2258).

Mr. Bouza reported the following items:

- Will remove Lithium Battery documents (DO-311A and DO-227A) from the report as the FAA decided not to evoke in AC's
 - o This topic will be covered through issue paper process vs. AC's
 - o In the future, FAA will look at installation of these batteries and possible future use of DO's
 - o Mr. Turner expressed support for the FAA decision on non-rechargeable batteries (as a revision to the document is now underway) but was concerned about withdrawing the rechargeable battery AC (which would force the use of issue papers, which is undesirable). Mr. Bouza indicated that nothing was locked down
- Will remove DO-304A from the report as the FAA (AIR-600 and AUS-300) are supporting R&D task. Standard will not be referenced in FAA policy/guidance.
- DO-366A related TSO was on hold, but now expect by December 2022.
- Will remove DO-235C from the report as the document is an input to the avionics antenna MOPS and receiver MOPS.

Mr. Kauffman asked for feedback on the AGC backlog. Mr. Bouza indicated he had no specific information other than that AGC was hiring more lawyers.

Chair Hegarty asked a question on the planned release date of 6 months after AGC approval and if it included time for public comment. Mr. Bouza said that AGC would like to review before public comment and then there would be 1 month for public comment.

Mr. Hennig commented the appreciation of internal changes for 2023 to reduce delays and an FAA answer on whether further delay reductions might be possible would be helpful. Ms. Reimold indicated they are trying to make progress and that this feedback was good to take back internally to indicate industry concerns.

Mr. Turner asked about the transponder TSO and commented that the FAA should review process of legal review of AC's if not resolved by more lawyers – what is the risk?

Chair Hegarty thanked the FAA for putting the list together and providing inputs on content.

I. Special Committees - Chair's Reports, Active Inter-Special Committee Requirements Agreements (ISRA) – Review

- Rebecca Morrison, RTCA Program Director, presented.

Reports were received from SC-237, SC-235, SC-234, SC-230, SC-227, SC-224, SC-222, SC-217, SC-216, SC-214, SC-209, SC-206, and SC-186.

SC-242 – Presented today on TOR status (agenda item 6F)

SC-240 – Presented today on revised TOR (agenda item 5H).

SC-239 – Presented today on TOR status (agenda item 6E).

SC-237 – Out of Cycle revised TOR approval activity (agenda item 6A).

SC-228 – Presented today on revised TOR (agenda item 6D).

SC-223 – Presented today on revised TOR (agenda item 6C).

SC-109 – Out of Cycle document approval activity (agenda item 6A).

SC-206 – Presented today on revised TOR (agenda item 6B).

SC-186 – Out of Cycle document approval activity (agenda item 6A).

SC-159 – Presented today on a document (agenda item 3A).

- The individual committee reports are posted on AerOpus (RTCA Paper No. 071-22/PMC-2251).

J. International Coordination – Status Update

- Rebecca Morrison, RTCA Program Director, presented.

Besides the report on non-joint documents, President McVenes extended congratulations from all to Anna von Groote on her new position as EUROCAE Director General. He commented that the transition from Christian Schleifer-Heingaertner to Anna has gone very smoothly. The two leaders are continuing once-a-month calls to keep communication open.

- The EUROCAE update is posted on AerOpus (RTCA Paper No. 082-22/PMC-2259).

AGENDA ITEM 7

Other Business.

A. NASA AAM/UAM Data Presentation

- Davis L. Hackenberg, HQ 300, NASA, presented.

Mr. Hackenberg provided an overview of NASA's AAM portfolio and cross pollination with RTCA SC-147 and SC-228.

NASA is seeking efficiency and long-term strategic alignment with ASTM, RTCA, and SAE to share AAM simulation, modeling, and flight data.

- Projects in the NASA R&D portfolio provide leadership by developing/sharing insight into novel concepts and generating/sharing data with relevant AAM Ecosystem partners including FAA, IFAR/ICAO, SDOs, and industry
- The NASA concepts and data shared with these entities can be leveraged to develop standards, guidance, and MOC's that industry can use to scale operations to meet AAM standards

- Alignment between RTCA SC-147, SC-228, and others such as SC-231 (TAWS) and SC-237 (HTAWS) with NASA 2030 AAM (UML-4) goals are important to the long-term success of the industry in developing safe procedures and certifiable vehicles for AAM operations

Chair Hegarty commented that we view RTCA's relationship with NASA as very important – always looking at areas needing standards.

President McVenes said we are trying to redefine NASA relationship with RTCA, and this is a good connection. R&D is important as it is needed to look ahead for standard definitions and development.

There was further discussion on what the next steps should be – maybe look at new area (like digital flight rules). We need to share ideas, get experts together and come up with ideas. NASA in on the RTCA Advisory Board and active on one of the subcommittees. The idea of looking/connecting with SC-240 was also brought up – possibly an AAM presentation? Mr. Hackenberg indicated that his folks want to contribute as much as possible, but that it was hard for his staff to cover all the committees that might benefit from NASA research.

- The presentation is posted on AerOpus (RTCA Paper No. 077-22/PMC-2256).

B. RTCA Award Nominations – Consideration / Approval of Nominations

- Karan Hofmann, PMC Secretary, presented.

The PMC approved all nominations for Outstanding Leader Awards and Significant Contributor Awards. Actual presentations will be scheduled during the next few months. Congratulations to all recipients!

Mr. Ed Hahn recommended special recognition for SC-239 for support to industry as a whole outside of the normal awards. President McVenes indicated there are no constraints, possibly a Presidential Award could be considered.

- List is posted on AerOpus (RTCA Paper No. 078-22/PMC-2257).

C. FAA Return to Office Projections/Plan

- Robert Bouza, FAA Representative, presented.

Mr. Bouza provided an overview on the current plan for DOT return to office. It will be a 3-week phased approach starting April 11th. Certification offices are returning towards the end of the period. There are still restrictions on travel – mostly due to budget constraints and review of infection rates (for destinations). No masks will be required in DOT buildings in DC.

D. RTCA Internal Metrics Discussion

- Terry McVenes, RTCA President, presented.

Mr. McVenes indicated he started a Strategic Plan when he became president in 2018. The next step is to determine the definition of success. Towards this objective, RTCA has identified key performance indicators (KPIs) to measure success. These KPIs are:

- Membership – Growth/Retention
- Training – Courses/Training Events
- Document Sales – Growth/Publication Time
- Automation System – IT Reliability
- Communication – Website/Social Media Posts
- Marketing – Events/Advertising Campaigns
- Joint MOUs – Content Reviews/Coordination meetings
- Financial Performance
- New Special Committees (Net Growth)
- Catalog Document Review (100%)
- Progress Against TOR Targets (>90%)

President McVenes then discussed a basic framework (still work in progress) to assess effectiveness of RTCA special committees. These included:

- Goals
- Key characteristics of effective SCs
- Key characteristics of an effective assessment framework
- Defining criteria with respect to evolving/emerging and enabling categories

PMC members asked if they would be able to get feedback or evaluate the data. As well as how would the metrics be measured. Mr. McVenes said the implementation is still being worked – to possibly include self-assessment by SC leadership, understanding that RTCA committees rely on member volunteers – there is a fine line between holding feet to the fire while not discouraging participation.

There was discussion on the relationship between RTCA and other standards development organizations (SDOs). The FAA is working with other SDOs and is trying to ensure no duplication of effort. Part of this effort includes FAA hosting quarterly meetings with RTCA, SAE, and ASTM. RTCA's relationship with EUROCAE is longer and stronger than with other SDOs. It was pointed out that since RTCA changed from being a Federal Advisory Committee, it didn't impact the standards that are needed or the quality of the standards. With new entrants, there is a need for standards to be developed more quickly.

- Presentation is posted on AerOpus (RTCA Paper No. 085-22/PMC-2262).

E. RTCA Advisory Board – Program Advisory Committee Discussion

- Terry McVenes, RTCA President, presented.

Mr. McVenes provided an overview of the RTCA Board of Directors and the RTCA Advisory Board activities. This included refocus of the Advisory Board to:

- Propose and Oversee New Program Development
- Monitor and Assess Existing Programs
- Align Collaboration with Government and Industry R&D Activities
- Facilitate Discussions on Program Priorities

To work these areas, four sub-committees were formed under the Advisory Board made up of board members. These include:

- Nomination/Governance Committee
 - Membership Committee
 - Program Advisory Committee
 - Corporate Responsibility & Sustainability Committee
- Presentation is posted on AerOpus (RTCA Paper No. 085-22/PMC-2262).

F. Use of Inclusive Language

- Chris Hegarty, PMC Chair, presented.

Dr. Hegarty pointed out that other SDO's were making changes in published items to language to be more inclusive. Mr. McVenes said RTCA had no specific policy but can consider this in current document development and going forward. However, changes/revisions would not be possible for all published documents. Mr. Secen mentioned an example of language adjustment made in recently published TCAS document.

AGENDA ITEM 8

Schedule for Committee Deliverables and Next Meeting Date

Documents expected for the June 23, 2022, meeting:

- SC-186, Automatic Dependent Surveillance Broadcast (ADS-B)
 - DO-282C - *Minimum Operational Performance Standards for Universal Access Transceiver (UAT) Automatic Dependent Surveillance - Broadcast*
- SC-216, Aeronautical Information Systems Security
 - DO-392 – *Guidance on Security Event Management*
 - DO-393 – *Process Standard for Security Certification and Declaration of ATM ANS Ground Systems*
- SC-217, Aeronautical Databases
 - DO-394 – *Considerations for Aeronautical Data Alternation*
- SC-223, Internet Protocol Suite (IPS) and Aeronautical Mobile Airport Communications System (AeroMACS)
 - DO-346A – *AeroMACS MOPS*

- SC-227, Standards of Navigation Performance
 - DO-236D – *Minimum Aviation System Performance Standards: Required Navigation Performance for Area Navigation*

- SC-234, Portable Electronic Devices (PEDs)
 - DO-307B – *Aircraft Design and Certification for Portable Electronic Device (PED) Tolerance*
 - DO-363A – *Guidance for the Development of Portable Electronic Devices (PED) Tolerance for Civil Aircraft*

- SC-236, Standards for Wireless Avionics Intra-Communication (WAIC) system within 4200-4400 MHz
 - DO-378A - *MASPS for Coexistence of Wireless Avionics Intra-Communication Systems within 4 200-4 400 MHz*
NOTE: Added post meeting

- SC-237, Helicopter Terrain Awareness Warning System (HTAWS)
 - DO-376 Change 1 – *Minimum Operational Performance Standard (MOPS) for Offshore Helicopter Terrain Awareness & Warning System (HTAWS)*

The dates for the next four PMC meetings were confirmed: Thursday, June 23, 2022; Thursday, September 15, 2022; Thursday, December 15, 2022; and Thursday, March 16, 2023.

AGENDA ITEM 9

New Action Item Summary

See PMC Action Item Table.

/Signed/

Karan Hofmann, Secretary
RTCA Program Management Committee

CERTIFIED to be a true and accurate report of the meeting.

/Signed/

Christopher Hegarty, Chair
RTCA Program Management Committee

**Program Management Committee – March 17, 2022
ATTENDANCE LIST**

PMC MEMBERS:

Christopher	Hegarty	The MITRE Corporation Chair (proxy for Robert Ireland (A4A))
Doug	Arbuckle	Federal Aviation Administration
Clay	Barber	Garmin Ltd.
Rita	Estrada-Cavallini	Federal Aviation Administration
Ed	Hahn	Air Line Pilots Association
Jens	Hennig	General Aviation Manufacturers Association
Hette	Hoekema	European Aviation Safety Agency
Karan	Hofmann	RTCA, Inc. Secretary
Donald	Kauffman	Honeywell International, Inc.
Terrance	Kirk	Aviation Information Sharing and Analysis Center
Matt	Langridge	Gulfstream
James	McClay	Aircraft Owners and Pilots Association
Mike	McDowell	Collins Aerospace (proxy for Nazeif Habboub)
Terry	McVenes	RTCA, Inc.
Di	Reimold	Federal Aviation Administration Government Authorized Representative
Andrew	Roy	Aviation Spectrum Resources, Inc.
Al	Secen	RTCA, Inc.
Jessie	Turner	The Boeing Company
Heidi	Williams	National Business Aviation Association
Ed	Wright	U.S. Air Force

OTHER ATTENDEES:

Burak	Ata	Volocopter
Robert	Bouza	Federal Aviation Administration
Joe	Bracken	AvMet
Lexie	Brown	National Aeronautics and Space Administration
Gilbert	Ceballos	Federal Aviation Administration
Eldridge	Frazier	Federal Aviation Administration
Seth	Frick	Honeywell International
Jose	Fuentes	Federal Aviation Administration
Charisse	Green	Federal Aviation Administration
Davis	Hackenberg	National Aeronautics and Space Administration
Chuck	Johnson	Giugas, LLC

Sai	Kalyanaraman	Collins Aerospace
Tim	Kesecker	Securborator
Lee	Krause	Securborator
Fabrice	Kunzi	General Atomics
Bob	Lee	GXA Consulting
Rebecca	Morrison	RTCA, Inc.
Brent	Phillips	Federal Aviation Administration
Jean-Luc	Robin	Airbus
Aloke	Roy	Honeywell International Inc.
Kate	Ryan	Securborator
Nicholas	Shrout	Aviation Spectrum Resources, Inc.
Paul	Siegmund	Federal Aviation Administration
Brandon	Suarez	General Atomics
Michelle	Swearingen	Federal Aviation Administration
Alain	Vallee	EUROCAE
Steve	Van Trees	Federal Aviation Administration
Lowell	Vizenor	Securborator
Jim	Williams	Aura Network Systems

PMC ACTION ITEM TABLE

TRACKING NUMBER (Meeting Date and agenda item from which original action resulted)	ACTION	ACTION ASSIGNED TO	DUE DATE	STATUS
03/18/2021 Agenda Item 7D	03/18/2021 – Add ICAO representative to PMC invite 06/17/2021 – Initial contact made, still coordinating 09/16/2021 – Still awaiting input 12/16/2021 – Still awaiting input 03/17/2022 – Reported closer to getting a name	Terry McVenes & Karan Hofmann	Jun 2022	Open
09/16/2021 Agenda Item 5B	09/16/2021 – Follow up on FAA input on draft Spectrum SC TOR 12/16/2021 – Added meeting with FAA, RTCA, SC leads, & EUROCAE to discuss docs for SC-242 03/17/2022 – FAA still working internally, but will participate in upcoming SC-242 Plenary with inputs	Robert Bouza	Mar 2022	Closed
09/16/2021 Agenda Item 5E	09/16/2021 – ICC guide SC’s 228, 147, 186, and 209 SMEs for spectrum & surveillance discussion 12/16/2021 – Still scheduling meeting 03/17/2022 – Recommendations presented, and action tasked	ICC (Clay Barber)	Mar 2022	Closed
09/16/2021 Agenda Item 5E	09/16/2021 – Reach out to DAC for their action on spectrum & surveillance activities 12/16/2021 – Contact with new AAAC Chair – more to follow 03/17/2022 – Still being coordinated	Terry McVenes	Jun 2022	Open
12/16/2021 Agenda Item 5A	12/16/2021 – Request demo from Securboration on document formatting at next PMC meeting 03/17/2022 – Presentation provided	RTCA Staff	Mar 2022	Closed
12/16/2021 Agenda Item 5B	12/16/2021 – Presentation to ICAO Spectrum Panel on activity, SC formation, etc. 03/17/2022 – Being coordinated	Terry McVenes and SC-242 Leadership	Sep 2022	Open
12/16/2021 Agenda Item 5D	12/16/2021 – Generate list of approved active ISRAs 03/17/2022 – List provided and discussed	Rebecca Morrison	Mar 2022	Closed
12/16/2021 Agenda Item 6E	12/16/2021 – Add ISRA activity to SC-214 TOR 03/17/2022 – SC-214 TOR adjusted	Karan Hofmann	Jan 2022	Closed

12/16/2021 Agenda Item 6I	12/16/2021 – Regroup between Secretariats on way forward on SC-240/WG-117 03/17/2022 – Conditional approval of revised TOR – more work needed	RTCA and EUROCAE Staffs & SC-240 Leadership	Jun 2022	Open
03/17/2022 Agenda Item 3A	03/17/2022 – SC-159 Review TOR for tasks/references to Russian related work and make appropriate recommended revisions	SC-159	Jun 2022	Open
03/17/2022 Agenda Item 4A & 6D	03/17/2022 – Further refinement of SC-228 TOR Rev 14 (to include AAM White Paper)	SC-228 Leadership	Apr 2022	Open
03/17/2022 Agenda Item 5D	03/17/2022 – Provide means for PMC members to further review DESIRE application and provide feedback to RTCA staff	Securboratorion	Jun 2022	Open
03/17/2022 Agenda Item 5D	03/17/2022 – Investigate way forward on DESIRE program within RTCA	RTCA Staff	Sep 2022	Open
03/17/2022 Agenda Item 6D	03/17/2022 - Conduct electronic OOC ballot on SC-228 Rev 14 TOR	Karan Hofmann	Apr 2022	Open
03/17/2022 Agenda Item 6E	03/17/2022 – Ad Hoc to address SC-239 TOR – realistic goals and timeline	Terry McVenes & Di Reimold Lead	Apr 2022	Open