



RTCA Paper No. 175-21/PMC-2175
August 11, 2021

**RTCA PROGRAM MANAGEMENT COMMITTEE
MEETING SUMMARY
June 17, 2021**

The RTCA Program Management Committee (PMC) convened virtually at 8:30 a.m. on June 17, 2021. The attendance list and action items are attached.

AGENDA ITEM 1

Welcome and Introductions

- A. PMC Chairman Dr. Chris Hegarty welcomed the group, asked attendees to introduce themselves and to note their organization of affiliation.
- B. Mr. Al Secen (RTCA Vice President, Aviation Technology and Standards) reviewed virtual meeting procedures, the anti-trust statement, proprietary policy, and membership policy.

AGENDA ITEM 2

Review / Approve

- A. The summary of the March 18, 2021 meeting was approved with corrections / additions / clarifications to items 5C, 6F, 7B, 7D, and 7E (RTCA Paper No. 101-21/PMC-2145).
- B. The following administrative Special Committee (SC) Terms of Reference (TOR) Revisions were presented and approved:
 - SC-135 – Environmental Testing – Government Authorized Representative change from retiring Member Lee Nguyen (FAA) to Rich Adler (FAA) (RTCA Paper No. 161-21/PMC-2168).
 - SC-230 – Airborne Weather Detection Systems – Government Authorized Representative change from retiring Member Lee Nguyen (FAA) to Moin Abulhosn (FAA) (RTCA Paper No. 162-21/PMC-2169).

AGENDA ITEM 3

Publication Consideration/Approval

A. DO-262F – *Minimum Operational Performance Standards for Avionics Supporting Next Generation Satellite Systems (NGSS)*, presented by SC-222, Aeronautical Mobile Satellite (Route) Services (AMS(R)S)

- Dr. Chuck LaBerge, SC-222 Chairman, presented.

This document contains minimum operational performance standards (MOPS) for avionics that provide Aeronautical Mobile Satellite (R) Services (AMS(R)S) by means of satellite communications technologies scheduled to become operational in context of the global and regional ATM and CNS modernization (e.g., ICAO/Global Air Navigation Plan, Europe/SESAR, US/NextGen). A previous release included an appendix containing normative requirements for Inmarsat equipment. This revision includes the addition of an appendix which contained normative requirements for Iridium Certus AMS(R)S equipment.

- The PMC approved the document with a couple of minor changes in a couple of reference dates and version number for DO-343. It will be published as DO-262F concurrently with EUROCAE ED-242C.

B. DO-343D – *Minimum Aviation System Performance Standard for AMS(R)S Data and Voice Communications Supporting Required Communications Performance (RCP) and Required Surveillance Performance (RSP)*, presented by SC-222, Aeronautical Mobile Satellite (Route) Services (AMS(R)S)

- Dr. Chuck LaBerge, SC-222 Chairman, presented.

This document contains Minimum Aviation System Performance Standards (MASPS) for Aeronautical Mobile Satellite (Route) Services (AMS(R)S) that provide safety communications to aircraft in airspace where 1) procedural separation is applied or 2) ATS surveillance services are provided. System-specific material as defined in Section 5 are provided as attachments to this document. Each system-specific attachment describes the system that provides AMS(R)S and contains information detailing system compliance with the requirements in the main body of this document and verification plans. A previous revision included an attachment for Inmarsat SwiftBroadband Specific Material. This revision includes the addition of an attachment containing requirements for Iridium Certus AMS(R)S equipment.

- The PMC approved the document. It will be published as DO-343D concurrently with EUROCAE ED-243C.

C. DO-230K, *Standards for Airport Security Access Control Systems*, presented by SC-224, Airport Security Access Control Systems

- Dr. Christer Wilkinson (SC-224 Co-Chairman) and Dr. Jonathan Branker (SC-224 Cybersecurity Section Lead) presented.

This document contains standards and guidelines for airport security access control and integrated systems. It contains forward-thinking references to technology, processes and guidance which continue to evolve. These standards present functional requirements and performance characteristics, as well as best practices for use by designers, manufacturers, installers, service providers, operators and users of automated integrated security systems intended for operational use within the US National Airspace System (NAS) and include industry best practices and lessons learned by industry subject matter experts.

This updated document incorporates the latest technological advances with substantive changes in the biometrics, credentialing, integration, procurement, and video surveillance sections and minor changes throughout other sections of the document. In addition, two new sections were added to the document covering facilitation and cybersecurity. Advances in Biometrics technology, Artificial Intelligence (AI), neural networks, and facial recognition have been included in the biometrics section including international plans and references.

- The PMC approved the document. It will be published as DO-230K.

D. DO-304A - *Guidance Material and Considerations for Unmanned Aircraft Systems*, presented by SC-228, Minimum Performance Standards for Unmanned Aircraft System

- John Moore, SC-228 Co-Chairman, presented.

This is an update to the original DO-304 that is a Guidance Document addressing all Unmanned Aircraft Systems (UAS) and UAS operations being considered for realistic implementation in the US National Airspace System (NAS) in the foreseeable future. The Use Cases have been updated in DO-304A to include scenarios for Cargo Missions, Survey Missions, High Altitude Platform Systems, and Urban Air Mobility. The document is intended to educate the community and be used to facilitate future discussions on UAS standards. It provides the aviation community a definition of UAS, a description of the operational environment, and a top-level functional break down. It is NOT intended to be the basis for airworthiness certification and operational approval of UAS.

There was discussion on a study on 1030/1090/978 MHz spectrum. There was some NASA work (reference was asked for by PMC member (action)), but there is no active work on-going at the present time. How will AAM operations work in the future?

There was also discussion on Digital Flight Rules, such as where does SC-228 go from here; how do they fit in with NASA and GAMA Working Group; and fitting in with ATM control. The actual query to the PMC was not clear and it is recommended SC-228 comes back at next meeting with clarification on what they are really asking. (action)

- The PMC approved the document. It will be published as DO-304A.

E. DO-387 (New Document) – *Minimum Operational Performance Standards (MOPS) for Electro-Optical/Infrared (EO/IR) Sensors System for Traffic Surveillance, SC-228, Minimum Performance Standards for Unmanned Aircraft System*

- John Moore, SC-228 Co-Chairman, presented.

This document contains Minimum Operational Performance Standards (MOPS) for Electro-Optical/Infrared (EO/IR) Sensors for Traffic Surveillance. The EO/IR sensor system is a surveillance source for non-cooperative intruders for a Detect and Avoid (DAA) system used in Unmanned Aircraft Systems (UAS) transiting through Class B, C, D, E and G airspace and performing extended operations higher than 400' Above Ground Level (AGL) in Class D, E (up to Flight Level 180 (FL180)), and G airspace. It includes equipment to enable UAS operations in Terminal Areas during approach and departure in Class C, D, E and G airspace and off-airport locations. It does not apply to small UAS (sUAS) operating in low level environments (below 400') or other segmented areas. Likewise, it does not apply to operations in the Visual Flight Rules (VFR) traffic pattern of an airport or to surface operations.

- The PMC approved the document. It will be published as DO-387.

AGENDA ITEM 4

Integration and Coordination Committee (ICC)

No ICC updates reported.

AGENDA ITEM 5

Action Item Review

A. Investigate Pulling Requirements from Documents and Making Available in Separate format - Discussion

- Al Secen, RTCA Vice President, Aviation Technology and Standards, presented.

RTCA received a demonstration from Securboron. This appears to be a potentially more usable product for the current way we produce documents. The system is looking good. They hope to be able to provide a demonstration for the PMC members at the September meeting. Action still open.

One member asked if the extraction being investigated will allow for other means of extraction, say for import into other in-house programs. Good question for demonstration.

B. Ad Hoc for Spectrum Strategy Follow Up

- Terry McVenes, RTCA President, presented.

Mr. McVenes provided a brief summary of Ad Hoc activities since the March PMC meeting.

Interaction with other organizations:

- NTIA Engagement – joining as full members of RTCA
- AIA RadAlt Industry Coalition
 - o Two Prong Approach – technical and advocacy
 - o RTCA no longer participating
- MITRE Engenuity
 - o UAS as a critical enterprise of 5G vertical
 - Health, Energy, Public Safety, and Smart Cities
 - o Radar Altimetry Test Bed

Potential New Special Committee on Spectrum

- Ad Hoc scheduled to meet jointly with FCC and NTIA for input
 - o Note: originally scheduled for July 1st, but delayed until July 15th

Joint Interagency-FiveG Radar Altimeter Interference (JI-FRAI) Quick Reaction Test Initiative

- DOD invited RTCA participation on March 24th
- Joint DOD, DOT, and DHS initiative with participation from aviation and telecommunications industry and others
- Bench Testing should begin by August 2021
- Flight Campaign to take place February – May 2022
- Final report to be published June 2022

CTIA/RTCA Meeting – June 11, 2021

- Overview on Aviation/Wireless Perspectives
 - o Transparency in the data
 - o Trust
- Technical Discussion – Altimeter performance, altimeter height accuracies, manufacturers tolerances/margins, WCLS/ground interference
- Follow-up meeting in July

RTCA Board of Directors Discussion/Direction

- *“Get closer to the telecommunication industry”*
- *“We need to stay ahead of the technology knowledge gap”*
- *“RF spectrum management essential to future business cases”*

Currently no direct activity on EUROCAE side – more “wait and see” climate per Ms. Anna von Groote. And although much of the Ad Hoc focus has been US, PMC members would like to make more global. Mr. McVenes agreed to have a joint meeting with some TAC members. (action)

C. Inputs for ISRA Process Review

- Karan Hofmann, PMC Secretary, presented.

PMC Members were offered an opportunity to provide comments/inputs to possibly change the ISRA Process. No comments were received. Action closed.

D. Provide ICAO ANC briefing to PMC Members

- Karan Hofmann, PMC Secretary, presented.

The presentation was posted on AerOpus. Action closed.

E. Participation on Spectrum Ad Hoc

- Terry McVenes, RTCA President, presented.

PMC Members were offered an opportunity to volunteer to become involved with the Spectrum Ad Hoc. Mr. Jessie Turner (The Boeing Company) and Mr. Ed Hahn (ALPA) requested to be added to the roster. During this meeting, Mr. Hette Hoekema (EASA) and Mr. Jonathan Archer (GAMA) also requested to be added to the roster. Action closed.

F. Inputs on new FAA/DOD Spectrum Testing

- Terry McVenes, RTCA President, presented as part of item 5B.

At the March PMC meeting, Ms. Di Reimold reported the FAA had signed an agreement with DOD to do joint testing at the FAA Test Center. The RTCA paper focused on civil aviation, but the interference can also affect DOD aircraft. Before the end of that meeting, Mr. Ed Wright (USAF) provided a short summary of this Joint Interagency – FiveG Radar Altimeter Interference (JI-FRAI) activity (related to agenda item 5G). As further follow up, RTCA was invited and has become an observer to the JI-FRAI. Action closed.

G. Provide Summary of DOD 5G Testing

- Karan Hofmann, PMC Secretary, presented.

As part of the discussion about 5G Testing at the March PMC meeting, Mr. Ed Wright gave a short summary of the JI-FRAI activities from Mr. Al Burke (the DOD Lead) involved with the JI-FRAI. He provided those words for inclusion in the meeting summary. Action closed.

H. Discussion for SC-240/WG-119 TORs

- Anna von Groote, EUROCAE Director Technical Programme, presented.

A meeting was held April 14th to convey scope items back to SC/WG for further discussion. Members (including Mr. Hette Hoekema who had originally brought up comments) appreciate concern expressed / reviewed by SC/WG and the FAA. Action closed.

I. Inputs on R&D Topics/Possible Actions

- Terry McVenes, RTCA President, presented.

PMC Members were offered an opportunity to provide inputs on potential R&D topics or possible actions for RTCA. Although no specific inputs were received, there was discussion at the Board of Directors meeting for possible follow-up there. Action closed.

J. Add ICAO Representative to PMC invite

- Terry McVenes, RTCA President, presented.

RTCA has reached out to ICAO to invite them to attend PMC meetings. Although we received an initial response, we are still awaiting a point of contact. Action still open.

K. Participation in FAS Way Forward Group

- Terry McVenes, RTCA President, presented.

PMC Members were offered an opportunity to volunteer to become involved with the FAS Way Forward Group. Dr. Chris Hegarty (The MITRE Corporation) and Mr. Clay Barber (Garmin) requested to be added to the group. Action closed.

AGENDA ITEM 6

Discussion.

A. SC-214 – Standards for Air Traffic Data Communication Services – Revised TOR

- Claire Robinson, SC-214 Chairman, presented.

SC-214 completed four documents in March 2016 for Baseline 2 ATS Data Communications standards (revision A) with EUROCAE WG-78. Based on validation exercises conducted since then, these documents need to be further revised. WG-78 will re-activate as a joint group with SC-214 to update these standards by the end of 2023.

This TOR revision also requested a new document Verification Test Standard, updates to the Equipment Classes supporting VDL Mode 2, updates to listed input/reference documents, and changes SC-214 Secretary to Ms. Rochelle Perera (Boeing) to allow Dr. Dongsong Zeng (The MITRE Corporation) to concentrate on VDL Mode 2 working group secretary duties.

- The proposed revised TOR was approved (RTCA Paper No. 163-21/PMC-2170).

B. SC-222 – Aeronautical Mobile Satellite (Route) Services (AMS(R)S) – Revised TOR

- Dr. Chuck LaBerge, SC-222 Chairman, presented.

Dr. LaBerge reported there are still two on-going items and one new potential TOR item:

- SATCOM Performance Class A below enroute airspace (noted this is well behind schedule at ICAO)

- Wait and see is appropriate recommendation
- ISRA with SC-228 is open and will be discussed at next SC-222 Plenary in July
 - Expect Inmarsat will have some inputs/thoughts
- New issue emerging during the SC-222 / SC-159 discussion that have never been addressed
 - What internal monitoring/integrity requirements need to be applied to an equipment function necessary for protection of an external system?
 - Not typically a MOPS question, just covered in performance, but may not be sufficient in this case

Based on these issues, recommending continuation of SC-222 as a normal working committee. TOR changes will be discussed at upcoming Plenary with recommendations for action presented at the September PMC meeting.

Leadership changes – new GAR Mr. Ravi Jain (FAA) with a big thank you to Mr. Steve Van Trees for filling the role since September 2018. And Dr. LaBerge is retiring as Chairman of SC-222, so a new Chairman will be needed as of July 1st. These changes will also be reflected in the September presentation.

C. SC-224 – Airport Security Access Control Systems – Revised TOR

- Dr. Christer Wilkinson, SC-224 Co-Chairman, presented.

With submission of agenda item 3C, SC-224 are looking ahead to the next two releases of the DO-230 document. For DO-230L, they recommended Facilitation and Cybersecurity Sections further refinement from initial “K” introduction; as well as PACS Section update and Appendices review. And for DO-230M would include Perimeter Section (include UAV/UAS perimeter surveillance) and Communications Section updates.

There was a comment from one PMC member that this TOR’s “Termination” section did not follow the TOR Template. SC-224 is kind of a one-off/one of a kind committee – and since this was a special situation with their status the group asked to leave as is. The member concurred.

- The proposed revised TOR was approved (RTCA Paper No. 164-21/PMC-2171).

D. SC-237 – Helicopter Terrain Awareness Warning System – Revised TOR

- Michael Deer, SC-237 Chairman, presented.

The group requested development of a new MOPS for Onshore HTAWS. This comes from EASA Rule Making Task RMT.0708 recommendation “Prevention of controlled flight into terrain with helicopters and helicopter terrain awareness and warning systems.”

- The proposed revised TOR was approved (RTCA Paper No. 165-21/PMC-2172).

E. FAA Actions Taken on Previously Published Documents – Update

- Robert Bouza (FAA) and Michelle Swearingen (FAA) 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. 146-21/PMC-2163).

Ms. Swearingen asked if the presentation could include only current documents being worked. PMC Members agreed and confirmed they appreciated the information its formatting.

Publication dates of TSOs and ACs are seeing some decrease in release times, but some have higher priority than others.

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

- Rebecca Morrison, RTCA Program Director, presented overall information.

Reports were received from SC-241, SC-240, SC-239, SC-235, SC-230, SC-227, SC-223, SC-213, SC-206 and SC-186.

SC-237 – Presented today on revised TOR (agenda item 6D).

SC-228 – Presented today on completion of two documents (one new and one revised) (agenda items 3D and 3E) and discussion on previously published document issue (agenda item 7C).

SC-224 – Presented today on completion of revised document (agenda item 3C) and revised TOR (agenda item 6C).

SC-222 – Presented today on completion of two revised documents (agenda items 3A and 3B) and discussion on TOR revision (agenda item 6B).

SC-216 – Presented today on completion of deliverable (agenda item 7A).

SC-214 – Presented today on revised TOR (agenda item 6A).

SC-147 – Presented today on revised TOR (agenda item 7B).

SC-159 was delinquent in providing a Chair Report. Chairman Hegarty reported that DO-235C is expected to enter FRAC soon so as to still be presented at the September PMC meeting. Also, there are some concerns about the joint effort on ED-259A/DO-YYY in meeting the expected completion date. EASA is very anxious to get this document published so any delays are of concern.

The complete matrix and individual committee reports are posted on AerOpus (RTCA Paper No. 147-21/PMC-2164). ISRA spreadsheet is posted on AerOpus.

G. European/EUROCAE Coordination – Status Update.

- Rebecca Morrison, RTCA Program Director, presented.

The listing of recently published EUROCAE documents and next TAC meetings notices are posted on AerOpus (RTCA Paper No. 148-21/PMC-2165).

AGENDA ITEM 7

Other Business.

A. SC-216 – Aeronautical Information Systems Security – Aeronautical Information System Security Glossary Document Presentation

- Dr. Dave Pierce, SC-216 Chairman, presented.

The group completed TOR deliverable for an equivalent to EUROCAE ER-013 – a glossary of terms of all security documents developed by the group jointly with WG-72. This information is pulled from all DO/ED documents that have completed FRAC/OC. This is strictly a quick reference guide that complements these documents and thus is not being published as a DO. It will be available on the RTCA public website free of charge.

- The PMC approved for release (RTCA Paper No. 120-21/PMC-2151).

B. SC-147 – Aircraft Collision Avoidance Systems – Revised TOR

- Stuart Searight, SC-147 Co-Chairman, presented.

The group suggested bringing ACAS Xr MOPS into the committee’s Work Plan for September 2025 completion. Also, this TOR added DO-385/ED-256 Change 2 document as requested by EASA, cleaned up the rest of the TOR to maintain currency with current deliverables, published standards, and relationships with SC-228, SC-186, and EUROCAE (in Scope, Envisioned Use of Deliverables, and Specific Guidance Sections). Additionally, the Government Authorized Representative changed from Sheila Mariano (FAA) to Matthew Haskin (FAA).

- The proposed TOR was approved (RTCA Paper No. 166-21/PMC-2173).

C. DO-365B Error in Appendix H - Discussion

- John Moore, SC-228 Co-Chairman, presented.

During last autumn’s document development of DO-365B, 30 pages of Appendix H were inadvertently deleted. This was not discovered until just before this PMC meeting. Appendix H was not updated between version A and version B, and so did not garner much attention during

the FRAC that occurred in October 2020. It was also noted that there may be other problems with the already published DO-365B.

The PMC members recommended SC-228 review these inconsistencies and determine appropriate action to correct the problem and then present at the September PMC meeting. Potential solutions could be make the corrections in Revision C expected next year or to process a Change 1 to DO-365B through FRAC.

D. Possible Combined Surveillance Committee Activity - Discussion

- Doug Arbuckle, FAA PMC Member, presented.

Mr. Arbuckle wanted to give PMC members a heads up that SC-209 and SC-186 TORs are in the process of being updated to include revisions to DO-181 and DO-260 (by respective committees). This would fall under the Combined Surveillance Committee umbrella and include EUROCAE WG-49 and WG-51. They may request an out-of-cycle approval for these TORs due to the urgent need for revisions of these documents.

E. Congratulations in Order!

PMC members extend congratulations to the Brandon Suarez family for the arrival of their new daughter.

And a special thank you to Dr. Chuck LaBerge as he retires from role of SC-222 Chairman for his many years of contributions to the aviation community and support to RTCA. Can't thank you enough!

Well wishes to all!

AGENDA ITEM 8

Schedule for Committee Deliverables and Next Meeting Date

Documents expected for the September 16, 2021 meeting:

- SC-159, Navigation Equipment Using the Global Navigation Satellite System (GNSS)
 - DO-235C – *Assessment of Radio Frequency Interference Relevant to the GNSS L1 Frequency Band*
- SC-228, Minimum Performance Standards for Unmanned Aircraft System
 - DO-377A - *Minimum Aviation System Performance Standards for C2 Link Systems Supporting Operations of Unmanned Aircraft Systems in U.S. Airspace*

The dates for the next four PMC meetings were confirmed: Thursday September 16, 2021; Thursday, December 16, 2021; Thursday, March 17, 2022; and Thursday, June 16, 2022.

It was also decided to tentatively plan a face-to-face gathering for the September meeting, complying with Washington, DC, guidance and with members' comfort and ability to attend. [Note: this tentative plan was subsequently reversed due to the reintroduction of mask requirements within DC and rapid increase in COVID cases; the September meeting is now planned to be virtual].

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, Chairman

RTCA Program Management Committee

**Program Management Committee – June 17, 2021
ATTENDANCE LIST**

PMC MEMBERS:

Christopher	Hegarty	The MITRE Corporation Chairman
Doug	Arbuckle	Federal Aviation Administration
Jonathan	Archer	General Aviation Manufacturers Association
Rita	Estrada-Cavallini	Federal Aviation Administration
Ed	Hahn	Air Line Pilots Association
Jeff	Hausmann	Gulfstream
Hette	Hoekema	EASA
Steve	Horvath	Garmin (designated representative for Clay Barber)
Robert	Ireland	Airlines for America
Donald	Kauffman	Honeywell International, Inc.
Terry	Kirk	Aviation Information Sharing and Analysis Center
James	McClay	Aircraft Owners and Pilots Association
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

OTHER ATTENDEES:

Robert	Bouza	Federal Aviation Administration
Ruy	Brandao	Honeywell International, Inc.
Jonathan	Branker	Federal Aviation Administration
Jim	Daum	Federal Aviation Administration
Michael	Deer	Bell Helicopter
Jens	Hennig	General Aviation Manufacturers Association
Karan	Hofmann	RTCA, Inc.
Mike	Hooper	Iridium
Yasuo	Ishihara	Honeywell International, Inc.
Chuck	LaBerge	LaBerge Engineering
John	Moore	Collins Aerospace
Rebecca	Morrison	RTCA, Inc.
Thomas	Mustach	Federal Aviation Administration
Dave	Pierce	General Electric Aviation
Claire	Robinson	Universal Avionics Systems Corp.

Stu	Searight	Federal Aviation Administration
Luke	Sienkiewicz	Iridium
Paul	Siegmund	Federal Aviation Administration
Michelle	Swearingen	Federal Aviation Administration
Steve	Van Trees	Federal Aviation Administration
Anna	von Groote	EUROCAE
Christer	Wilkinson	AECOM System Solutions
Dongsong	Zeng	The MITRE Corporation

PMC ACTION ITEM TABLE

TRACKING NUMBER (Meeting Date and agenda item from which original action resulted)	ACTION	ACTION ASSIGNED TO	DUE DATE	STATUS
06/21/2018 Agenda Item 8C	06/21/2018 – Investigate feasibility of providing redlined versions of completed documents 09/20/2018 – Update provided, but further questions 12/13/2018 – Redirect to pulling reqs from documents and making available separate format 03/21/2019 – More structure format needed for requirements in MOPS and MASPS – prototype forthcoming 12/19/2019 – Research project has reached phase 2 funding – work continues 03/26/2020 – some delays with COVID-19 03/18/2021 – Research took different direction – determining if still possible to provide solution needed 06/17/2021 – Hope to have	Al Secen	Sep 2021	Open
06/11/2020 Agenda Item 4A	06/11/2020 – Ad Hoc for Spectrum Strategy Follow Up 09/10/202 – Keep group active until SC-239 Report is submitted to the FCC 12/17/2020 – Discuss means to monitor situation - either an Ad Hoc or new RTCA SC 03/18/2021 – Discussions on-going 06/17/2021 – Update provided for ongoing activities	Terry McVenes, Di Remold, Clay Barber, Chris Hegarty, Andy Roy, Anna Guégan	Sep 2021	Open
03/18/2021 Agenda Item 4B	03/18/2021 – Inputs for ISRA Process as part of review 06/17/2021 – no inputs received	PMC Members	June 2021	Closed
03/18/2021 Agenda Item 5C	03/18/2021 – Provide ICAO ANC briefing to PMC Members 06/17/2021 – Action completed	RTCA Staff	April 2021	Closed
03/18/2021 Agenda Item 5C	03/18/2021 – Reach out to Pres McVenes if interested in participating in Spectrum Strategy Ad Hoc 06/17/2021 – Four members added to the group	PMC Members	June 2021	Closed

03/18/2021 Agenda Item 5C	03/18/2021 – Provide inputs to Andy Roy on new FAA/DOD Spectrum Testing 06/17/2021 – Info was provided through AF	Di Reimold	June 2021	Closed
03/18/2021 Agenda Item 5C	03/18/2021 – Provide summary of DOD 5G Testing 06/17/2021 – Action completed	Ed Wright	June 2021	Closed
03/18/2021 Agenda 6F	03/18/2021 – Setup Call to discuss SC-240/WG-117 TORs 06/17/2021 – Meeting held and consideration ongoing	Rebecca Morrison / Anna von Groote	June 2021	Closed
03/18/2021 Agenda Item 7C	03/18/2021 - Reach out to Pres McVenes if have comments on R&D topics/possible actions 06/17/2021 – No comments; possible further action through BOD and Advisory Board	PMC Members	June 2021	Closed
03/18/2021 Agenda Item 7D	03/18/2021 – Add ICAO representative to PMC invite 06/17/2021 – Initial contact made, still coordinating	Terry McVenes & Karan Hofmann	June 2021	Open
03/18/2021 Agenda Item 7F	03/18/2021 - Reach out to Pres McVenes if interested in participating in FAS Way Forward Gp 06/17/2021 – Two additional members added	PMC Members	June 2021	Closed
06/17/2021 Agenda Item 3D	06/17/2021 – Provide NASA Reference to PMC members	John Moore	Sep 2021	Open
06/17/2021 Agenda Item 3D	06/17/2021 – SC-228 back to PMC with clarification of Ask for follow on activity	SC-228 Leadership	Sep 2021	Open
06/17/2021 Agenda Item 5B	06/17/2021 – Ad Hoc meeting with TAC members	Terry McVenes	Sep 2021	Open