



RTCA Paper No. 256-21/PMC-2203  
October 21, 2021

**RTCA PROGRAM MANAGEMENT COMMITTEE  
MEETING SUMMARY  
September 16, 2021**

The RTCA Program Management Committee (PMC) convened virtually at 8:30 a.m. on September 16, 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. Proxies were announced (included in attendance list below). Chairman Hegarty announced Jonathan Archer has moved on from General Aviation Manufacturers Association (GAMA) and Jens Hennig will represent GAMA until a replacement is designated. Additionally, Jeff Hausmann has retired from Gulfstream. Once his replacement is named, the position will be filled. The group sends thank you to Mr. Archer and Mr. Hausmann for their service to the PMC and thanked Mr. Hennig for helping to temporarily fill the GAMA position.
- 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 June 17, 2021 meeting was approved with some changes to the draft that was circulated for PMC review: definitions of a couple of acronyms; fuller inputs to agenda item 5B CTIA/RTCA Meeting; and addition of an "and" in the second paragraph of agenda item 6E (RTCA Paper No. 175-21/PMC-2175).
- B. The following administrative Special Committee (SC) Terms of Reference (TOR) Revisions were presented and approved:
  - SC-222 – Aeronautical Mobile Satellite (Route) Services (AMS(R)S) – Chairman change from retiring Dr. Chuck LaBerge (LaBerge Engineering) to Alan Schuster Bruce (Inmarsat) and Michael Hooper (Iridium). As well as Government Authorized

Representative change from Steve Van Trees (FAA) to Ravi Jain (FAA). (RTCA Paper No. 238-21/PMC-2201)

- SC-238 – Counter Unmanned Aircraft Systems – Chairman change from Dr. Ryan Wallace (Embry Riddle Aeronautical University) to Nancy Ford (Security 101) (RTCA Paper No. 239-21/PMC-2202). It was noted that both SC-238 and its EUROCAE counterpart (WG-115) lost their chairmen at the same time. Work has thus been delayed and we can expect a TOR revision with deliverable changes at a future PMC meeting.

### **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. Chris Hegarty, SC-159 Co-Chairman, presented.

This document was not completed in time for this PMC meeting. Due to the dependencies of other documents on this release (noted in SC-159 Chair Report), the group may request an out of cycle review and approval.

##### **B. DO-377A - *Minimum Aviation System Performance Standards for C2 Link Systems Supporting Operations of Unmanned Aircraft Systems in U.S. Airspace*, presented by SC-228, Minimum Performance Standards for Unmanned Aircraft System**

- John Moore and Brandon Suarez, SC-228 Co-Chairmen, presented.

This document contains the Minimum Aviation System Performance Standards (MASPS) for a C2 Link System connecting a Control Station (CS) and an Unmanned Aircraft (UA). This MASPS contains the standards which specify system characteristics, but it is design and frequency band independent. It is intended to be used by UAS operators, UAS Original Equipment Manufacturers (OEM), C2 Link Service Providers, plus the FAA. Version A updates the original document to provide full analysis for additional use cases not provided in the initial release. This document now provides system performance requirements for Ku and Ka band SATCOM based C2 Link Systems. It contains new material on service level agreements as well as a methodology and an example for how to conduct a link budget analysis.

- The PMC approved the document. It will be published as DO-377A.

### **AGENDA ITEM 4**

#### **Integration and Coordination Committee (ICC)**

##### **A. Inter-Special Committee Requirements Agreement (ISRA) Process Review**

- Rebecca Morrison, RTCA Program Director, presented.

The ISRA Process was originally defined by the ICC but has not been reviewed nor modified since mid-2013. The intended purpose is still valid, but comments from committee members indicate it is not effective and somewhat cumbersome. Appears there are more handshake agreements now being used as there is some misunderstanding on ISRA's purpose and proper processing.

Advantages:

- One Special Committee (Requesting Committee (RC)) makes a solicitation of another Special Committee (Action Committee (AC)) to recognize a dependency that exists between the two committees
- The AC can make changes to the request to negotiate how the relationship should work
- Informal discussions between RC and AC are encouraged during each step of ISRA process

Potential Updates to the process:

- Provide a "close the loop" mechanism to be sure the work in the ISRA is completed and engagement is maintained between the RC and AC
- Accelerate the speed of coming to an agreement on the ISRA
- Provide details of what will be "delivered" to the RC and how we know the agreement has completed its execution

After discussion, it was decided that the ISRA process did need review and adjustment. This could be led by RTCA Staff pulling in PMC members as necessary or through tasking to the ICC. There needs to be a faster and clearer way to understand who's responsible for what. Chairman Hegarty commented that it should be a living process and suggested that the Program Directors (PDs) are most familiar with ISRA implementation issues and thus may be in the best position to adjust the process. The PMC agreed and recommended having the PDs take ownership and bring recommendations back to PMC members. There was also comment that the current form is too old and hard to use – recommended an update to this as part of the review. (action)

## **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 staff received a demonstration from Securboration yesterday. This appears to be a usable product for members. Follow-on discussions are on-going. If determined to pursue, a demonstration will be set up for PMC members. If determined not viable, RTCA will develop an organic tool. Hope to have a path forward by next PMC meeting. Action still open.

#### **B. Ad Hoc for Spectrum Strategy Follow Up**

- Terry McVenes, RTCA President, presented.

Mr. McVenes provided a summary of Ad Hoc activities.

- Activities since our last PMC Meeting:
  - Follow up with CTIA meeting on 6/11/2021 (reported at last PMC meeting)
    - Broker an NDA agreement between CTIA/AVSI – both sides agreed in principle to engage, but to date, no agreement in place
  - Met with FCC/NTIA on 7/15/2021
  - NTIA has become a member of RTCA
- Ad Hoc meeting held 8/30/2021
  - FAA expressed concern about availability of resources to support any future work
  - Industry consensus was that we needed to move forward with something
- Since August Ad Hoc Meeting:
  - Received multiple inputs from several of our industry members on the need for RTCA to move forward
  - We have provided the FAA with a draft TOR for analysis and are awaiting a response
  - Mr. McVenes is also coordinating with Mr. Christian Schleifer (EUROCAE Director General) for possible joint effort
- Conclusions:
  - Radar altimeter situation was something that caught the aviation industry unprepared
  - We can't let that happen again
  - To quote Chairman Hegarty – a little work now can help us all avoid a lot of work later
  - Important for us as an industry to identify any current and future systems that may be at risk for spectrum “challenges”
- Recommendations:
  - The course of the Ad Hoc committee has reached a conclusion
  - We should start the process of establishing a new SC for spectrum
  - Solicit letters of support from the industry
  - Fine tune the TOR that will address any guidance necessary for our existing documents plus identify future end-state guidance
  - Recognizing FAA may not have the resources to support this SC at the present time
    - The initial tasking would not necessarily require FAA input
  - As SC matures its work product, perhaps FAA will have the resources available down the road

After some discussion, PMC members agreed to press forward with solicitation of industry support letters and to refine the draft TOR for presentation at the December PMC meeting. Ms. von Groote (EUROCAE) thanked Terry for the update and outreach for coordination. The Technical Advisory Committee (TAC) has initiated similar discussions and hopefully RTCA and EUROCAE will be able to work together (agenda item 5F). Mr. Robert Bouza will follow up within FAA on TOR feedback (action).

### **C. Add ICAO Representative to PMC invite**

- Terry McVenes, RTCA President, presented.

RTCA has continued to reach out to ICAO to invite them to attend PMC meetings. We are still awaiting a point of contact. Action still open.

#### **D. Provide NASA Reference from SC-228 June 2021 discussion to PMC Members**

- Karan Hofmann, PMC Secretary, presented.

The reference was posted on AerOpus. Action closed.

#### **E. SC-228 Clarification Feedback**

- Brandon Suarez, SC-228 Co-Chairman, presented.

At the June PMC meeting, SC-228 raised the question on 1030/1090/978 MHz spectrum usage. There was some NASA work, but there is no active work on-going at the present time. How will Advanced Air Mobility (AAM) operations work in the future?

SC-228 had discussion with Doug Arbuckle (FAA) to clarify issue. Although agreement on issue, there is not a clear path forward.

- Talking points from last PMC meeting
  - Future AAM operations face two transponder-related challenges
  - While these challenges have been recognized by the FAA and other global regulators, a solution is not being actively worked
    - Proposals discussed by SC-228 include leveraging UAT protocols on a different frequency (e.g., repurposed DME channel)
    - Study can be informed by UAM-specific OSED beyond CONOPS developed in DO-304A Appendix F.5
    - Study can be informed by xTM (e.g., UTM) architecture and standards
  - Future V2x surveillance can support ACAS sXu and ACAS Xr

After much discussion on possible way forward (creation of Ad Hoc directly under PMC or use of ICC as lead), it was decided the ICC was really the appropriate place to bring SC-228 and other SCs as needed (possibly SC-147, SC-186, and SC-209) together for recommendations (action). It was also recommended to reach out to the Drone Advisory Committee (DAC) for any action they may be pursuing (action).

Also from the June PMC meeting, there was discussion on Digital Flight Rules. SC-228 identified a gap in DO-304A – with an emerging concept of a new set of flight rules for enabling new operations and to enhance existing operations to provide safe and unfettered access to all participating vehicle operators under all visibility conditions without incurring the limitations in operational flexibility inherent in IFR.

SC-228 was requesting RTCA to consider taking a leadership role in the development of standards for the Digital Flight Rules concept. With this emerging concept, regardless of rulemaking, updates to existing standards (such as communication, navigation, surveillance (CNS); detect and

avoid; terrain avoidance; and weather radar) will be needed, as well as creation of new standards (such as digital information, autonomy, and air-ground integration). Action closed.

## **F. Ad Hoc Meeting with TAC Members**

Discussion part of agenda item 5B. Action closed.

## **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-343D Errata – *Minimum Aviation System Performance Standard for AMS(R)S Data and Voice Communications Supporting Required Communications Performance (RCP) and Required Surveillance Performance (RSP)*
- SC-186 – Automatic Dependent Surveillance Broadcast (ADS-B) – Revised TOR (RTCA Paper No. 213-21/PMC-2190)
- SC-209 – Minimum Operational Performance Standards for ATCRBS/Mode S Transponder – Revised TOR (RTCA Paper No. 214-21/PMC-2191)

#### **B. SC-234 – Portable Electronic Devices (PEDs) – Reactivation with Revised TOR**

- Jamie Lutkus (SC-234 Proposed Chairman) and Brian Verna (SC-234 GAR) presented.

The expansion in spectrum of WiFi 6E (up to 7.125 GHz) is driving the reactivation. Although these changes are expected to have little to no impact on existing PED tolerance demonstrations, the group recommended clarification of interference path loss demonstration on aircraft in the previously published joint documents DO-363 / ED-130A and DO-307A / ED-239. This is expected to be a short timeline with publication expected by summer 2022. This will be a joint effort with EUROCAE WG-99 (NOTE: TAC approval received September 21<sup>st</sup> and awaiting Council approval.) One PMC member pointed out the envisioned use did not list the AC. Mr. Verna verified this would be the case.

- The proposed activity and revised TOR (with envisioned use included) were approved (RTCA Paper No. 234-21/PMC-2198).

#### **C. SC-236 – Standards for Wireless Avionics Intra-Communication System (WAIC) within 4200-4400 MHz – Revised TOR**

This item was covered later under agenda item 6F.

#### **D. SC-FAS – Forum for Aeronautical Software (FAS) – SC Activation and TOR Approval**

- Al Secen (RTCA Vice President, Aviation Technology and Standards) and Anna von Groote (EUROCAE Director Technical Programme) presented.

Mr. Secen and Ms. von Groote updated the PMC members on the future of the FAS. The scope and TOR are currently under development. This includes deliverables, WG/SC structure, and relationship with WG-117/SC-240.

- Progress:
  - Initial meeting with FAS leadership, WG-117/SC-240 leadership, TAC/PMC representatives held 26 May 2021
  - Discussion with FAS Executive Committee 25 August 2021
  - Next meeting to be held 27 September 2021
  - TOR to be submitted to TAC/PMC for discussion at next meeting (Jan 2022 for TAC and Dec 2021 for PMC)

PMC members asked about inclusion of software experts from the FAA and EASA in these groups and in the transition discussion. Response was that both organizations participate in both the FAS and the SC/WG activities. In fact, the upcoming meeting on 27 September will include chairmen from both groups and representatives from FAA and EASA.

#### **E. FAA Actions Taken on Previously Published Documents – Update**

- Robert Bouza (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. 203-21/PMC-2185).

Highlights of discussion include:

- FAA is recommending three documents be removed from tracking list awaiting next revision of documents being published:
  - DO-373 awaiting DO-373A
  - DO-260C awaiting DO-260C Change 1
  - DO-181F awaiting DO-181F Change 1
- DO-220A Change 1 related AC is on hold pending release of DO-220B (which is expected to be delayed)
- The acronym AGC is designation for the FAA General Council Office
- DO-370 was on hold awaiting workshop held in August 2021 – no inputs/conclusions at this time
- Reference DO-380, FAA Policy Statement of July 13, 2021, states ground systems, referred to in the policy as ‘Associated Elements’ (AE), will not be subject to certification. Thus, this document will not be referenced.

- Note: this policy statement (AIR600-21-AIR-600-PM01) is available at: <https://drs.faa.gov/browse/excelExternalWindow/115a6df8-5440-438c-ac3b-f31c6797409a?modalOpened=true>.

## **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-240, SC-239, SC-236, SC-235, SC-230, SC-224, SC-223, SC-222, SC-216, SC-214, SC-206 and SC-159.

SC-239 – Presented today on an Errata (agenda item 7F). Additionally, SC-239 brought up the matter of a meeting with FCC, FAA, NTIA, and some industry members to provide further clarification on some of the data used for the SC-239 report on *Assessment of C-Band Mobile Telecommunications Interference Impact on Low Range Radar Altimeter Operations*. During this meeting, FCC asked attendees to file an ex parte on the material discussed. The information was reviewed at recent SC-239 Plenary (draft summary provided for PMC members to review). Although the request has not formally come to RTCA, with PMC approval the information could be provided as part of the Errata filing on subject paper. Following discussion, the PMC members recommended this course of action. (action)

SC-236 – Although SC-236 had a Plenary last week, they were unable to complete recommended TOR agreement. Also, EUROCAE WG-96 currently does not have a chairman and since this is a joint effort would like to fully coordinate timelines. Expect to be able to present revised TOR at December PMC meeting.

SC-228 – Presented today on completion of a revised document (agenda items 3B), two Errata (agenda items 7A and 7B) and revised TOR (agenda item 7E).

SC-227 – Presented today on revised TOR (agenda item 7C).

SC-222 – Presented today on an Errata (agenda item 7D).

SC-159 – Discussed status of document (agenda item 3A).

The complete matrix, individual committee reports, and the SC-239/WG-119 September Plenary Draft Summary are posted on AerOpus (RTCA Paper Nos. 204-21/PMC-2186 and 232-21/PMC-2196). ISRA spreadsheet is also 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. 205-21/PMC-2187). It was noted all joint activities are aligned between the PMC and the TAC.



## **AGENDA ITEM 7**

### **Other Business.**

#### **A. DO-362 Errata 2 - *Command and Control (C2) Data Link Minimum Operational Performance Standards (MOPS) – Presentation***

- Al Secen, RTCA Vice President, Aviation Technology and Standards and SC-228 Program Director, presented.

A non-member reported Table E-1 was missing from DO-362. Although the table was removed from later version of the document, DO-362 is still available through the RTCA store and is still being used. Thus, the group recommends this Errata to return the table to the document.

- The PMC approved release of DO-362 Errata 2.

#### **B. DO-365B Errata - *Minimum Operational Performance Standards (MOPS) for Detect and Avoid (DAA) Systems***

- Al Secen, RTCA Vice President, Aviation Technology and Standards and SC-228 Program Director, presented.

As noted at the last PMC meeting, during development of DO-365B, 30 pages of Appendix H were inadvertently deleted. This was not discovered until just before that June meeting. SC-228 members reviewed the entirety of the document and recommend an Errata be released to restore Appendix H in DO-365B from the DO-365A version. They also determined one line in Section 1 needed clarification. This Errata meets these two objectives.

- The PMC approved release of DO-365B Errata.

#### **C. SC-227 – Standards of Navigation Performance – Revised TOR**

- Mike Cramer, SC-227 Chairman, presented.

Although SC-227 has been working jointly with WG-85 on their MASPS (DO-236D/ED-75E), the MOPS (DO-283()) was only an RTCA product. For the next revision, both groups would like to combine efforts to also make this a joint document. Ms. von Groote verified the TAC is standing by to approve for WG-85 based on today's PMC decision.

- The proposed revised TOR was approved (RTCA Paper No. 236-21/PMC-2199).

#### **D. DO-262F Errata - *Minimum Operational Performance Standards for Avionics Supporting Next Generation Satellite Systems (NGSS)***

- Ravi Jain, SC-222 GAR, presented.

Following Final Review and Comment of DO-262F, it was noted there was an inconsistency on the table specifying the possible combinations of the AES with the diplexer and the transceiver with respect to the previous DO-262E. This Errata adds “or DFL” in sections E.2.2.1.1.4 and E.2.2.1.1.6 in DO-262F to correct these text inconsistencies between the two versions of DO-262.

During PMC pre-meeting examination, Garmin provided some administrative inputs that were reviewed by SC-222 leadership. Leadership agreed with the recommendations.

- The PMC approved release of DO-262F Errata with the edits recommended by Garmin.

#### **E. SC-228 – Minimum Performance Standards for Unmanned Aircraft System – Revised TOR**

- John Moore and Brandon Suarez, SC-228 Co-Chairmen, presented.

The group requested to defer a year delivery of DO-362A to allow for the FCC to propose service rules that permit Air/Ground links in the 5030-5091 MHz (C-Band) which currently is not allowed for other than through Special Temporary Authorizations. They also requested new scope to create a MOPS for use of the UHF spectrum band used for C2 Links used in type certified UAS. And finally, the group has a new Secretary, Katie Edwards from The Boeing Company.

There was some discussion on the leverage and approach proposed for the new document as compared with DO-262A (SC-222 document). Admittedly, the older document with this structure is harder to manage and formatting is outside of the current RTCA Style and Drafting Guides. SC-228 leadership had discussed with SC-222 leadership and acknowledges limitations associated with this approach.

- The proposed revised TOR was approved (RTCA Paper No. 237-21/PMC-2200).

#### **F. SC-239 White Paper Errata – *Assessment of C-Band Mobile Telecommunications Interference Impact on Low Range Radar Altimeter Operations***

- Seth Frick, SC-239 Co-Chairman, presented.

It was discovered that a longitude shown in Table 8-2 of the White Paper was incorrect for one of the base stations used in the analysis. After checking the analysis, it was determined the number was only a transcript error and was not incorrect in the analysis.

With approval, notice will be sent to all who asked for a copy of the paper, a notice will be put on site, constant contact message and press releases will be sent and an Ex Parte will be filed with FCC (action).

- The PMC endorsed the Errata release and notification procedures.

## G. SC-231 Related Topic - Discussion

- Jens Hennig, GAMA PMC Representative, presented.

The SC-231 White Paper: *Recommended Solutions to Address TAWS Manual Inhibition CFIT Cases Raised by NTSB Safety Recommendations A-17-035 and A-18-015 and GAJSC CFIT WG SE-54* (RTCA Paper No. 129-20/PMC-2018) was approved for submission to the FAA at the June 2020 PMC meeting. GAMA was looking for input on any follow-on actions. Members discussed possibly working with SC-231 members and/or PMC members and/or GAMA Ad Hoc for questions to the FAA. Mr. Hetta Hoekema (EASA PMC Representative) recommended working with GA community if more committee work is needed – but there are possibly bigger issues, so we need to be cautious. Mr. McVenes offered help from RTCA. Mr. Hennig thanked all and commented we should work together.

## H. FCC Filing Notice RM-11798 - Discussion

- Al Secen, RTCA Vice President, Aviation Technology and Standards and SC-228 Program Director, presented.

On September 10<sup>th</sup>, the FCC filed a notice in the Federal Register asking industry to comment on an AIA paper from 2018. They specifically were asking about certain applicability of RTCA DO-362 to the proposal from AIA. Not all of the questions asked by the FCC were appropriate for RTCA to comment on (including questions that were considered by SC-228 to be dealing with Market Share and Market Potential). SC-228 will provide answers to the remaining questions that were technical in nature. An electronic ballot will be sent out for PMC members' review. Submission to the FCC is due by COB October 12.

## AGENDA ITEM 8

### Schedule for Committee Deliverables and Next Meeting Date

Documents expected for the December 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* (possible out of cycle approval)
- SC-216, Aeronautical Systems Security
  - New Document (DO-391) - *Aeronautical Information System Security Framework Guidance*
- SC-241, Cockpit and Cabin Cleaning Committee
  - DO-388A – *Guidance Document on Aircraft Cleaning and Disinfection*

The dates for the next four PMC meetings were confirmed: Thursday, December 16, 2021; Thursday, March 17, 2022; Thursday, June 23, 2022 (**NOTE**: Changed from previously announced date of June 16, 2022); and Thursday, September 15, 2022.

It was also decided to plan on a virtual meeting for the December meeting. Should Washington, DC, guidance change and with members' comfort and ability to attend satisfied, this meeting may become face to face.

**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 – September 16, 2021  
ATTENDANCE LIST**

**PMC MEMBERS:**

Christopher	Hegarty	The MITRE Corporation Chairman (also proxy for Heidi Williams, National Business Aviation Association)
Doug	Arbuckle	Federal Aviation Administration
Clay	Barber	Garmin Ltd.
Jens	Hennig	General Aviation Manufacturers Association
Hette	Hoekema	European Aviation Safety Agency
Robert	Ireland	Airlines for America
Donald	Kauffman	Honeywell International, Inc.
Randy	Kenagy	Air Line Pilots Association (proxy for Ed Hahn)
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.
Barry	Smith	Federal Aviation Administration (proxy for Rita Estrada-Cavallini)
Jessie	Turner	The Boeing Company
Edward	Wright	U.S. Air Force

**OTHER ATTENDEES:**

Rich	Adler	Federal Aviation Administration
Robert	Bouza	Federal Aviation Administration
Mike	Cramer	The MITRE Corporation
James	Davis	Federal Aviation Administration
Seth	Frick	Honeywell International
Tara	Halt	Federal Aviation Administration
Karan	Hofmann	RTCA, Inc.
Ravi	Jain	Federal Aviation Administration
Sai	Kalyanaraman	Collins Aerospace
Robert	Kebel	Airbus
Jamie	Lutkus	Astronics Corporation
John	Moore	Collins Aerospace
Rebecca	Morrison	RTCA, Inc.
Paul	Siegmund	Federal Aviation Administration
Brandon	Suarez	General Atomics

James	Sutherland	Federal Aviation Administration
Steve	Van Trees	Federal Aviation Administration
Brian	Verna	Federal Aviation Administration
Anna	von Groote	EUROCAE
Jim	Williams	Aura Network Systems

**PMC ACTION ITEM TABLE**

<b>TRACKING NUMBER</b> (Meeting Date and agenda item from which original action resulted)	<b>ACTION</b>	<b>ACTION ASSIGNED TO</b>	<b>DUE DATE</b>	<b>STATUS</b>
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 demo soon 09/16/2021 – Demo for RTCA staff – hope to share with PMC soon	Al Secen	Dec 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 09/16/2021 – Expect to have SC TOR for next meeting	Terry McVenes, Di Remold, Clay Barber, Chris Hegarty, Andy Roy, Anna Guégan	Dec 2021	Open
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	Terry McVenes & Karan Hofmann	Dec 2021	Open
06/17/2021 Agenda Item 3D	06/17/2021 – Provide NASA Reference to PMC members	John Moore	Sep 2021	Closed

06/17/2021 Agenda Item 3D	06/17/2021 – SC-228 back to PMC with clarification of Ask for follow on activity 09/16/2021 – Presentation completed.	SC-228 Leadership	Sep 2021	Closed
06/17/2021 Agenda Item 5B	06/17/2021 – Ad Hoc meeting with TAC members	Terry McVenes	Sep 2021	Closed
09/16/2021 Agenda Item 4A	09/16/2021 – Review/Adjust ISRA Process (to include form)	Al Secen	Dec 2021	Open
09/16/2021 Agenda Item 5B	09/16/2021 – Follow up on FAA input on draft Spectrum SC TOR	Robert Bouza	Oct 2021	Open
09/16/2021 Agenda Item 5E	09/16/2021 – ICC guide SC’s 228, 147, 186, and 209 SMEs for spectrum & surveillance discussion	ICC (Clay Barber)	Dec 2021	Open
09/16/2021 Agenda Item 5E	09/16/2021 – Reach out to DAC for their action on spectrum & surveillance activities	Terry McVenes	Dec 2021	Open
09/16/2021 Agenda Items 6F&7F	09/16/2021 – File Ex Parte with FCC on SC-239 Paper Errata and input on data clarification	RTCA Staff	Oct 2021	Open