RTCA PROGRAM MANAGEMENT COMMITTEE
MEETING SUMMARY
June 11, 2020

The RTCA Program Management Committee (PMC) convened virtually at 8:30 a.m. on June 11, 2020. 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. Proxy was announced (included in attendance list below). Chairman Hegarty announced that Rune Duke has accepted a position at the Federal Aviation Administration and thus no longer serving on the PMC as the AOPA representative. His replacement has yet to be named.

B. 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 26, 2020 meeting was approved with a minor admin change (RTCA Paper No. 102-20/PMC-2011).

B. The following administrative Special Committee (SC) Terms of Reference (TOR) Revision was presented:

- SC-159 – Navigation Equipment Using the Global Navigation Satellite System (GNSS) – New Secretary Captain Wes Googe (American Airlines) – Approved to also include update of DO-229 reference with approval of agenda item 3B (RTCA Paper No. 168-20/PMC-2035)

AGENDA ITEM 3
Publication Consideration/Approval

A. DO-380 (New Document) – *Environmental Conditions and Test Procedures for Ground Based Equipment***, prepared by SC-135, Environmental Testing**

- Brad Green and Kyle McMullen, SC-135 Co-Chairmen, presented.

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This document defines a series of minimum standard environmental test conditions (categories) and applicable test procedures for ground based equipment. In this document ground based equipment includes stationary ground, mobile/portable ground, or sea-based equipment. The purpose of these tests is to provide a laboratory means of determining the performance characteristics of ground based equipment in environmental conditions representative of those which may be encountered in ground based operation of the equipment.

- The PMC approved the document. It will be published as DO-380.

B. DO-229F - *Minimum Operational Performance Standards for Global Positioning System/Satellite-Based Augmentation System Airborne Equipment*, **prepared by SC-159, Navigation Equipment Using the Global Navigation Satellite System (GNSS)**

- Kevin Bean, Task Lead, presented.

This document contains Minimum Operational Performance Standards (MOPS) for airborne navigation equipment (2D and 3D) using the Global Positioning System (GPS) augmented by Satellite-Based Augmentation Systems (SBAS); which, in the U.S. is the Wide Area Augmentation System (WAAS). DO-229 only provides standards for single frequency airborne navigation equipment. A separate document will be created in the future to address standards for dual frequency equipment.

This new version has been produced to introduce requirements tags. This version is intended to facilitate the development of future dual frequency, multi-constellation (DFMC) MOPS requirements by introducing requirements tags (i.e., numbers) such that it is easier to reference and compare the single frequency (L1) GPS and SBAS requirements in this MOPS with the future DFMC requirements. Requirements in Appendix R were not tagged because a new MOPS for GNSS-aided inertial navigation systems is expected to soon be approved by RTCA that will supersede them. Some changes to sentences in DO-229E with regard to the word "shall" were made. Editorial updates to accommodate the tagging and some clarifications of requirements were introduced. Finally, two notes (Section 2.1.1.6 and 2.1.2.3) were updated to reflect additional guidance resulting from recent operational experience.

- The PMC approved the document. It will be published as DO-229F.

C. DO-204B Change 1 – *Minimum Operational Performance Standard for Aircraft Emergency Locator Transmitters 406 MHz*, **prepared by SC-229 406 MHz Emergency Locator Transmitters (ELTs)**

- Thomas Pack, SC-229 Chairman, presented.

After the publication of RTCA DO-204B, thirteen change requests were submitted to address errata, changes, and/or revisions to the documents. The scope for this change was limited to clarifying the text to make sure existing requirements are clear and consistent.

- The PMC approved the document. It will be published as DO-204B Change 1 concurrently with EUROCAE ED-62B Change 1 (approved by the EUROCAE Council June 10th).

D. FS-2 (New Document) – *Feasibility Study Airborne LIDAR for Clear Air Turbulence Detection***, presented by SC-230, Airborne Weather Detection Systems**

- Venkata Sishtla, Co-Task Lead, presented.

This report details a study performed to assess the maturity and the feasibility of using an airborne Light Detection and Ranging (LIDAR) system for detection of clear air turbulence (CAT). The study's intended function was to consider situational display of regions ahead of the aircraft that presented potential hazards to the aircraft due to CAT. Its goals were:

• To determine realistic goals for an airborne LIDAR system when used for clear air turbulence detection.

• To determine aircraft manufacturer needs for an airborne LIDAR clear air detection function.

• To determine the feasibility that LIDAR systems can meet aircraft manufacturer needs.

There was some discussion about possible follow-on activity for LIDAR inclusion in another document. PMC members mentioned that any other activity would require at least two industry supporters/endorsers.

- The PMC approved the document. It will be published as AFS-2.

E. 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,* **presented by SC-231 TAWS**

- Yasuo Ishihara and Rick Ridenour, SC-231 Co-Chairmen, presented.

This paper summarizes the recommendations from Special Committee 231 (SC-231), Terrain Awareness and Warning Systems (TAWS), to the Program Management Committee (PMC) regarding NTSB Safety Recommendations A-17-035 and A-18-015 and recommendations from the General Aviation Joint Steering Committee Controlled Flight Into Terrain Working Group (GAJSC CFIT WG).

SC-231 held several meetings to review the NTSB and GAJSC data and came up with potential means to address the recommendations The most promising ideas were then presented at a plenary

meeting in Anchorage, AK, which allowed several representatives from the Alaskan aviation community to provide feedback on the various proposals.

The solution that seemed the most promising is development of a Situational Awareness Tool based on NASA's Ground Collision Avoidance System. The fact that a product could be developed in a relatively short period, that there would be no regulatory work to be done, and that use of the product would be on a voluntary basis were all aspects that made this option very desirable.

Several additional solutions were rated almost as highly by the Alaskan operators. Among those solutions, those that were also rated the most promising by the committee were re-enabling alerts at power up, allowing Class C TAWS for Class B Operations, ensuring that the terrain display remained active even when the inhibition function was selected, and defining a height based inhibition function that still provided last moment alerts.

The PMC approved forwarding this paper to the FAA requesting office.

- The document is posted on Workspace (under PMC) or available upon request (RTCA Paper No. 129-20/PMC-2018).

F. New Document – *Minimum Aviation System Performance Standards (MASPS) for the Interoperability of Airborne Collision Avoidance Systems (CAS),* **presented by SC-147 Aircraft Collision Avoidance Systems**

This document's delivery changed. See agenda item 6A.

G. DO-374 Change 1 – *Safety, Performance and Interoperability Requirements Document Defining Takeoff Minima by Use of Enhanced Flight Vision Systems***, presented by SC-213 Enhanced Flight Vision Systems/Synthetic Vision Systems**

The work on this joint document is not complete and may be presented at September 2020 PMC meeting.

H. DO-378A – *Minimum Aviation System Performance Standard (MASPS) for Coexistence of Wireless Avionics Intra-Communication Systems within 4200-4400 M***Hz, presented by SC-236 Standards for Wireless Avionics Intra-Communication System (WAIC) within 4200-4400 MHz**

The work on this joint document is not complete and is expected to be presented by December 2020 PMC meeting.

I. DO-317C - *Minimum Operational Performance Standards (MOPS) for Aircraft Surveillance Applications (ASA) System***, prepared by SC-186, Automatic Dependent Surveillance Broadcast (ADS-B)**

- Brenda Perez, Task Lead, presented.

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This document contains Minimum Operational Performance Standards (MOPS) for the Aircraft Surveillance Applications (ASA) System. These standards specify system characteristics that should be useful to designers, manufacturers, installers and users of the equipment.

These MOPS for the ASA System contain requirements for processing, control and display of traffic and ownship information for use by the flight crew in performing airborne applications.

Compliance with these standards is recommended as one means of assuring that the equipment will perform its intended function(s) satisfactorily under all conditions normally encountered in routine aeronautical operation. Any regulatory application of this document is the sole responsibility of appropriate governmental agencies.

- The PMC approved the document. It will be published as DO-317C concurrently with EUROCAE ED-194B (approved by the EUROCAE Council June 9th).

AGENDA ITEM 4
Integration and Coordination Committee (ICC)

A. **Ad Hoc Report – Near and Long-Term recommendations with respect to Aviation Spectrum**

- Clay Barber, ICC Chairman, presented.

Mr. Barber reported on the actions taken by the Ad Hoc (15 to 30 participants at each of the four meetings representing FAA, aircraft and equipment manufacturers, various associations, and RTCA) formed to provide both near and long-term recommendations for RTCA with respect to Aviation Spectrum. Near-term recommendation tasked SC-239 to produce a report assessing 5G telecom potential interference impact on radar altimeter operations. This involved completing and obtaining approval of the SC-239 TOR (agenda item 5D). Note that this work may also include supporting and/or participating in the FCC 3.7-4.2 GHz band final Report and Order (R&O) multi-stakeholder group (MSG).

Long term recommendations:

1. Triage known and anticipated potential incompatibilities; e.g., could classify as near and longer-term risks

2. Establish actions for each group of risks; e.g.:
    - New near-term risks may require more immediate ad hoc action
    - Longer term risks could focus on characterizing system performance

3. Establish guidelines for system performance characterization (propagation, operational environment parameters, realistic worst-case, etc.)

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4. Maintain/improve relationships with ICAO FSMP and advocacy organizations to ensure timely awareness of potential incompatibilities that results in efficient consensus based RTCA response with needed information that can be used to support those organizations

5. Define method for non-aviation entities to actively participate and collaborate in system performance characterization efforts

   - Need non-aviation expertise (e.g., 5G telecoms) when modeling systems compatibility

   - May need mechanism for sharing proprietary information to support system compatibility assessments

PMC members discussed these recommendations from many angles. Although no longer a Federal Advisory Committee, RTCA's technical expertise is its strength - RTCA should be source of true facts. All agree RTCA should be more involved – possibly a sub-group of a current SC or should it be some type of policy type of activity. Group agreed RTCA needs to start discussions with other organizations to collaborate and try to determine what their needs are in this area. This includes groups/organizations inside (FAA) and outside of the aviation community. The group should not work in isolation.

Action: Terry McVenes will lead an Ad Hoc to work the outreach for collaboration to address approach to Spectrum. Di Remold, Bob Lee, Clay Barber, and Chris Hagerty will be part of this group. Others interested should reach out to Terry.

Related to this topic, Chairman Hegarty noted that RTCA Ligado studies were submitted to the FCC in an ex parte filing on June 5.

Chairman Hegarty thanked Clay and his team for a great effort and much appreciated recommendations.

- The presentation is posted on Workspace (RTCA Paper No. 135-20/PMC-2024).

B. **MASPS Mitigation Wording Clarification**

- Rebecca Morrison (RTCA Program Director) presented.

As the RTCA staff continues updating the MASPS Drafting Guide, clarification on meaning is needed for the term "mitigation". Recommended possible ICC action. Mr. Barber agreed to review and assist as needed. We should also include EUROCAE representation on this activity.

- The presentation is posted on Workspace (RTCA Paper No. 158-20/PMC-2032).

AGENDA ITEM 5
Action Item Review

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

- Karan Hofmann, RTCA Program Director, presented.

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Work continues and progress is being made, things are a little slower with the current situation. Action still open.

B. Ad Hoc to investigate possible SMOPS Concept

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

Mr. Secen reported this effort has slowed with Chip Bulger's retirement. However, with a new FAA point of contact the work should be re-energized. Action still open.

C. Document Configuration Management Procedure/Process

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

This action involves the work associated with the drafting guides (agenda item 6I). The SPR-INTEROP-MASPS Drafting Guide is being extracted into separate guides to make things easier for SC use. The MASPS Guide should be ready for PMC review soon (following inputs from agenda item 4B).

D. Work SC-239 (Low Range Radar Altimeter) TOR in coordination with EUROCAE WG

- Karan Hofmann, RTCA Program Director, will present.

Related to agenda item 4A, the SC-239 TOR was refined by the ICC Ad Hoc and provided to PMC members for their review and comment. Consensus was reached for approval during electronic ballot on April 17th (RTCA Paper No. 105-20/PMC-2012). The EUROCAE WG-119 TOR was approved by their Council earlier and it does not include the additional Spectrum Report related to the ICC actions. But there will be joint work for DO-155/ED-30. Action closed.

E. Provide copy of RTCA/EUROCAE Joint Procedures to PMC Members

- Karan Hofmann, PMC Secretary, presented.

These procedures were posted in Workspace (RTCA Paper No. 49-20/SECR-008). Action closed.

F. SC-240 (Topics on Software Advancement) TOR Approval

- Dr. Stephen Cook, SC-240 Chairman, presented.

SC-240 formation was approved at the March PMC meeting and they held their first meeting jointly with WG-117 in May. Dr. Cook presented the proposal for the SC-240 TOR to collaborate with WG-117's TOR.

There was discussion on embracing security as requirement – recommending vetting right up front as it is becoming a "big deal" and better addressed sooner than later. PMC Members felt SC-240's work would focus on framework and certification of equipment so difficult to point at SC-216 documents for low risk implementation. There was also discussion on scope of aircraft category to be covered by SC-240's work – recommending not to include transport as there are processes already in place.

The WG-117 TOR has not been approved yet but is expected at the upcoming TAC meeting (after meeting note: WG-117 TOR was approved 2 July).

The PMC provisionally approved SC-240 TOR for work to begin, but the two items of interest (addressing security and category scope) need to be made clearer in the TOR wording. SC-240 will report back at the September PMC meeting on this matter (action). Specific PMC members SC-240 should consult on TOR wording include: Clay Barber, Bob Lee, Jessie Turner, John Craig, and Ed Hahn.

- The TOR was provisionally approved (RTCA Paper No. 169-20/PMC-2036).

G. Post ISRA Table for PMC members

- Karan Hofmann, PMC Secretary, will present.

ISRA Table was posted in Workspace. Action closed.

AGENDA ITEM 6
Discussion.

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

- Ruy Brandao and Stuart Searight (SC-147 Co-Chairmen) presented.

The group presented a proposed revised TOR at the March PMC meeting to include MOPS development for ACAS sXu (DAA/CA compliant system for similar UAS) and reflect schedule slip for CAS interoperability MASPS. The PMC agreed to updates in principle, but there were some suggested adjustments from Garmin that the group needed to consider before official approval. All requests were implemented and presented at this meeting.

SC-147 leadership will continue to work closely with SC-228 counterparts and be fully coordinated with Phase 3 DAA MOPS (although a formal ISRA not needed at this time).

At EUROCAE (per Ms. von Groote), all WG-75 coordination on dates is still on-going with discussion at the TAC for the joint effort.

- The revised TOR was approved (RTCA Paper No. 170-20/PMC-2037).

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

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

As the group is coming to completion of Phase 2 deliverables, they looked ahead for Phase 3 possible activity. A revised TOR recommends continued efforts for WG1 (Detect and Avoid) and WG2 (Command and Control), as well as adding two new groups: WG3 (Lost Link) and WG4 (Navigation) with eight new deliverables.

There was much discussion on the amount of work for the timeframe, as well as concerns for addressing specialized UAS operations and spectrum concerns. Mr. Suarez assured the PMC members there was much thought in these requirements and believe they will be able take concerns into account.

- The revised TOR was approved (RTCA Paper No. 163-20/PMC-2034).

C. SC-229 – 406 MHz Emergency Locator Transmitters (ELTs) – Revise TOR to Active Monitor Status

- Thomas Pack, SC-229 Chairman, presented.

With completion of DO-204B Change 1 (agenda item 3C), the group requested to move to Active Monitor Status.

- The revised TOR was approved with one minor administrative change (RTCA Paper No. 171-20/PMC-2038).

D. SC-231 – Terrain Awareness Warning System (TAWS) – Revise TOR to Active Monitor Status

- Yasuo Ishihara and Rick Ridenour, SC-231 Co-Chairmen, presented.

With completion of the White Paper (agenda item 3E), the group requested to move to Active Monitor Status.

- The revised TOR was approved (RTCA Paper No. 172-20/PMC-2039).

E. SC-217 – Aeronautical Databases – Status Update

- Brian Gilbert, SC-217 Co-Chairmen, presented.

In their Active Monitor Status, the group is working jointly with EUROCAE WG44 and had several meetings to gather proposals and information on potential work topics. The topics

identified could result in new documents as well as revisions to DO-200B, DO-201B, DO-272D, DO-276C, and DO-291C. Papers on some of these topics may not go through FRAC, but could be made available as position papers with RTCA paper number as reference for availability to the public. This consideration would have to be worked, as there is no counter precedence on the EUROCAE side. May possibly be an ER designated item.

SC-217 expects to have a revised TOR proposal for the September PMC meeting.

F. FAA Actions Taken on Previously Published Documents – Update

- 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 Workspace (RTCA Paper No. 132-20/PMC-2021).

FAA Published Guidance (Since Previous PMC)

RTCA Document	Developed By	FAA Guidance	Approval Date	Comment
None				

RTCA Published Documents - FAA Pending Guidance

RTCA Document	Developed By	FAA Guidance	Planned Release Date	Comment
DO-373, MOPS for GNSS Active Antenna in the L1/E1 and L5/E5A Bands	SC-159	TSO-C215	TBD	New TSO (Need DO-292A (2021) for interference environment)
DO-315A, DO-359, MASPS for SVGS, MASPS for ASA-SVS	SC-213	AC 20-185A	TBD	Consolidates synthetic vision (SVS), synthetic vision guidance system (SVGS), and airplane state awareness guidance
DO-315A, MASPS for EVS, SVS, CVS, EFVS	SC-213	AC 20-167B	TBD	Consolidates enhanced and combined vision system airworthiness criteria. No new criteria.

DO-356A, Airworthiness Security Methods and Considerations	SC-216	AC -25.XX	TBD	AC-25.XX currently in internal FAA comment.
DO-355A, Information Security Guidance for Continuing Airworthiness	SC-216	AC 119-1 and AC 43-216	TBD	DO-355A is in drafted version, PMC approval 4thQTR 2020. To-be-updated for existing AC 119-1 and AC 43-216
DO-311A, MOPS for Rechargeable Lithium Batteries and Battery Systems	SC-225	AC 20-184A	TBD	Installation standard for rechargeable lithium batteries
DO-365A	SC-228, WG-1	TSO-C211a	TBD	Adds DAA supporting Ground Based Surveillance System (GBSS)
DO-XXX, Ground Based Surveillance System MOPS	SC-228, WG-1	TSO-CXXX	TBD	GBSS Sensor to support DAA System
DO-220A, Change 1, MOPS for Airborne Weather Radar Systems	SC-230	AC 20-182B	TBD	Airworthiness Approval for Aircraft Weather Radar Systems
DO-227A, MOPS for Non-Rechargeable Lithium Batteries	SC-235	AC 20-192	TBD	Airworthiness installation criteria for non-rechargeable lithium batteries
DO-385 MOPS for ACAS X_a System and ACAS $X_{a/o}$ Functionality (Class 1 ACAS X & Class 2 ACAS X)	SC-147	AC	2021	Performance standard and installation guidance for Class 1 ACAS X (basic collision avoidance functionality) and Class 2 ACAS X (closely spaced runway operations and do not alert)

DO-201B – User Requirements for Navigation Data	SC-217	AC 20-153B Change 1	TBD	Updates navigation data quality requirements (DQRs).
DO-317B Change 1	SC-186	Note to Manufacturers for TSO-C195b	TBD	Note to Manufacturers will post on FAA RGL with TSO-C195b, announcing availability of MOPS change.
DO-358A – MOPS FIS-B	SC-206	TSO-C157c	September 2020	FIS-B system that supports display of new weather products being broadcast by the FIS-B service provider
DO-370, Guidelines for the In Situ Eddy Dissipation Rate (EDR) Algorithm Performance	SC-206	TBD	N/A	FAA/Stakeholders discussion to be held at Turbulence workshop Oct 2020
Multiple RTCA data comm references from AC 20-140C	SC-214	AC 20-140D	TBD	Adds support for future ATN/IPS network and other miscellaneous changes
DO-281C, MOPS for aircraft VDL Mode 2 Physical Link and Network Layer	SC-214	N/A	N/A	SC-214/WG-92/AEEC DLK recommends TSO/ETSO-C160a not be revised until publication of DO-281D/ED-92D planned in late 2020
DO-328B – Safety, Performance and Interoperability Requirements (SPR) for Airborne Space – Flight Deck Interval Management (ASPA-FIM)	SC-186	N/A	N/A	

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DO-361A – MOPS for FIM	SC-186	N/A*	N/A	*TSO-C195c will add FIM as a new ASA and will invoke DO-361A as the MPS for the new FIM application.
DO210D Change 5 – MOPS for AMISS, Aeronautical Mobile Satellite (Route) Services AMS(R)S	SC-222	TSO-C132b	September 2020	New TSO for system with new DLNA (diplexer-low noise amplifier) with new EMI filters.
DO-262E MOPS for NGSS, Aeronautical Mobile Satellite (Route) Services AMS(R)S	SC-222	TSO-C159e	October 2020	MOPS changes to INMARSAT specific appendix only.
DO-343C – MASPS for AMS(R)S and RCP	SC-222	None	N/A	Minor change to SATVOICE dialing operation, which is not part of AC 20-150B.
DO-365A – MOPS for Detect and Avoid (DAA) Systems	SC-228	TSO-C211a	TBD	DAA Supports GBSS and Terminal Operations
DO-381 (New Document) – MOPS for Ground-based Surveillance System (GBSS) for Traffic Surveillance	SC-228 WG-1	TSO-CXXX	TBD	Adds GBSS Sensor to DAA Systems

RTCA Documents Pending PMC Approval

RTCA Document	Developed By	Planned FAA Guidance	Planned Release Date	Comment
DO-317C - MOPS for Aircraft Surveillance Applications (ASA) System	SC-186 WG-4	TSO-C195c	2021	Adds Flight Interval Management (FIM) as a new ASA

DO-343D MASPS to include ATN/IPS, VoIP, dual dissimilar operation required communication technical performance (RCTP) functionality, and IRIDIUM Certus service capability	SC-222	None	N/A	
DO-262F MOPS: Airborne equivalent MOPS to include ATN/IPS, VoIP, and IRIDIUM Certus requirements	SC-222	TSO-C159f	TBD	

G. 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-238, SC-237, SC-224, SC-214, and SC-213.

SC-240 – Presented today on their TOR (agenda item 5F)

SC-231 – Presented today on completed White Paper (agenda item 3E) and revised TOR (agenda item 6D).

SC-230 – Presented today on completed Feasibility Study (agenda item 3D).

SC-229 – Presented today on completed document (agenda item 3C) and revised TOR (agenda item 6C).

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

SC-186 – Presented today on completed document (agenda items 3I).

SC-159 – Presented today on their administrative TOR change (agenda item 2B).

SC-147 – Presented today on revised TOR (agenda item 6A).

SC-135 – Presented today on completed document (agenda item 3A).

The complete matrix and individual committee reports are posted on Workspace (RTCA Paper No. 133-20/PMC-2022). ISRA spreadsheet is posted in Workspace.

There was a question if the publication of DO-380 closes 228-ISRA-003. Follow up is needed to ensure ISRA closing process. (Action)

H. European/EUROCAE Coordination – Status Update.

- Rebecca Morrison (RTCA Program Director) and Anna von Groote (EUROCAE Director Technical Programme) presented.

New Documents Released by EUROCAE since last PMC:
- ED-266 – *Guidance on Spectrum Access Use and Management for UAS* – WG-105, March 2020
- ED-195B - *Safety and Performance and Interoperability Requirements Document for Airborne Spacing Flight-deck Interval Management (ASPA-FIM)* – WG-51, March 2020
- ED-243B - *Minimum Operational Performance Standards for Avionics Supporting Next Generation Satellite Systems (NGSS)* – WG-82, April 2020 (Joint)
- ED-247A - *Technical Standard for Virtual Interoperable Simulation for Tests of Aircraft Systems in Virtual or Hybrid Bench* – WG-97, April 2020
- ED-236A - *Minimum Operational Performance Standards (MOPS) for Flight-deck Interval Management (FIM)* – WG-51, April 2020
- ED-242B - *MASPS for AMS(R)S Data and Voice Communications Supporting Required Communications Performance (RCP) and Required Surveillance Performance (RSP)* – WG-82, April 2020 (Joint)
- ED-158 - *User Manual for certification of aircraft Electrical and Electronic systems for the indirect effects of lightning* – WG-31, April 2020
- ED-137C_1 Ch. 1 - *Interoperability Standard for VOIP ATM Components - Volume 1 Radio - Change 1* – WG-67, May 2020
- ED-137C_2 Ch. 1 - *Interoperability Standard for VOIP ATM Components - Volume 2 Telephone - Change 1* – WG-67, May 2020
- ED-137C_4 Ch. 1 - *Interoperability Standard for VOIP ATM Components - Volume 4 Recording - Change 1* – WG-67, May 2020
- ED-269 – *Minimum Operational Standard for UAS Geo-Fencing* – WG-105, June 2020

New Committees at EUROCAE:
- At the July meeting, EUROCAE will ask the TAC to form a new committee for standards in detecting passengers with elevated fevers

Reactivated Committees:
- The Council has approved WG-85 to be reformed to work with SC-227 on the DO-236 Rev C MASPS

EUROCAE Upcoming Meetings:
- TAC#82 – July 2-3, 2020, Virtual Meeting

I. RTCA Drafting Guides – Status Update.

- Karan Hofmann, RTCA Program Director, presented.

Included in discussion under agenda item 5C. Although living documents, these guides will be provided to PMC members for review.

AGENDA ITEM 7
Other Business.

A. **RTCA Status Update with COVID-19.**

- Terry McVenes, RTCA President, presented.

Mr. McVenes gave an overview of RTCA operational status. SC work continues with just a few hiccups -- most continue right on track. For the workplace, RTCA is moving offices/conference rooms from the 4th floor to 9th floor – so the entire 9th floor will be RTCA space. This will assist for staff support and convenience for members with face to face meetings once we get back to that state of affairs. On that note, RTCA is following DC opening guidelines, so will be phased approach to office openings. Chairman Hegarty commented that the amount of work presented at today's meeting is a testament to the continued effort by all despite the current situation.

B. **Notification of Chairman Status**

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

Mr. Secen explained there have instances involving SC leadership personnel no longer able to fulfill the role (usually from departure of the individual from a member company) and RTCA not being updated. We are asking PMC members to assist with notification with the opportunity to fill the position from within the organization. The idea of having Co-Chairman for all SC's was discussed as a possibility to assist with transition and not hold up SC progress.

C. **Cockpit and Cleaning Standard – Possible New Special Committee.**

- Terry McVenes, RTCA President, presented.

SAE started a cleaning cockpit and aircraft project and the FAA Commercial Aviation Safety Team (through Ali Bahrami) indicated RTCA should be involved. Mr. McVenes said he had also been approached by several organizations (such as Airbus, Boeing, A4A, and RAA) suggesting that RTCA be involved with this activity.

This would be an industry lead effort with obvious FAA backing. Expect a short timeline (approximately 3 months) as it is a political "hot potato" and needs quick action. Potential for

doing this with EUROCAE – although would add some complexity. It would also be complex if bring in SAE and/or ASTM. Possibly a quick initial release with revisions as needed.

Recommend soliciting the required industry endorsements and conduct electronic vote to PMC members for TOR.

Bob Lee indicated Collins Aerospace would support, as would ALPA (Ed Hahn). Agreed it's an issue of public confidence in travel or will be harder for aviation industry to come back.

Chairman Hegarty expressed concern for getting involvement by folks with proper skill set.

RTCA will put package together and then conduct electronic ballot. (Action)

AGENDA ITEM 8
Schedule for Committee Deliverables and Next Meeting Date

Documents expected for the September 10, 2020 meeting:

- SC-213 Enhanced Flight Vision Systems/Synthetic Vision Systems
    - DO-374 Change 1 – *Safety, Performance and Interoperability Requirements Document Defining Takeoff Minima by Use of Enhanced Flight Vision Systems*

- SC-214 Standards for Air Traffic Data Communication Services
    - DO-382 (New Document) – *Guidance on Air to Ground VDL Mode 2 Interoperability*

- SC-216 Aeronautical Information Systems Security
    - DO-355A – *Information Security Guidance for Continuing Airworthiness*

- SC-228 Minimum Performance Standards for Unmanned Aircraft Systems
    - DO-366A - *Minimum Operational Performance Standards (MOPS) for Air-to-Air Radar for Traffic Surveillance*

The dates for the next four PMC meetings were confirmed: Thursday, September 10, 2020; Thursday, December 17, 2020; March 18, 2021; and Thursday, June 17, 2021.

AGENDA ITEM 9
New Action Item Summary

See PMC Action Item Table.

/Signed/
Karan Hofmann, Secretary
RTCA Program Management Committee

Program Management Committee
June 11, 2020

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

/Signed/
Christopher Hegarty, Chairman
RTCA Program Management Committee

Program Management Committee – June 11, 2020
ATTENDANCE LIST

PMC MEMBERS:

Christopher	Hegarty	The MITRE Corporation Chairman
Doug	Arbuckle	Federal Aviation Administration
Jonathan	Archer	General Aviation Manufacturers Association
Clay	Barber	Garmin, Ltd
John	Craig	Aviation Information Sharing and Analysis Center
Jeffrey	Hausmann	Gulfstream Aerospace Corporation
Hette	Hoekema	EASA
Donald	Kauffman	Honeywell International, Inc.
Bob	Lee	Collings Aerospace
Terry	McVenes	RTCA, Inc.
Di	Reimold	Federal Aviation Administration Government Authorized Representative
Al	Secen	RTCA, Inc.
Ron	Stroup	Federal Aviation Administration (Proxy for Joseph Post)
Jessie	Turner	The Boeing Company
Heidi	Williams	National Business Aviation Association

OTHER ATTENDEES:

Kevin	Bean	The MITRE Corporation
Robert	Bouza	Federal Aviation Administration
Ruy	Brando	Federal Aviation Administration
Steve	Cook	Northrop Grumman
Jim	Daum	Federal Aviation Administration
Stephane	Dubet	DSNA
Jeff	Finley	Collins Aerospace
Donna	Froehich	Aurora Innovations
Dawn	Gidner	Honeywell International, Inc.
Brian	Gilbert	The Boeing Company
Brad	Green	EaglePicher Technology
Charisse	Green	Federal Aviation Administration
Ed	Hahn	Air Line Pilots Association
Jens	Hennig	General Aviation Manufacturers Association
Andy	Hoag	Aireon, LLC
Karan	Hofmann	RTCA, Inc.
Yasuo	Ishihara	Consultant

Frank	Jackman	RTCA, Inc.
Sai	Kalyanaraman	Collins Aerospace
Barbara	Lingberg	Federal Aviation Administration
Kyle	McMullen	NIAR
John	Moore	Collins Aerospace
Rebecca	Morrison	RTCA, Inc.
Tom	Pack	ACR Electronics
Brenda	Perez	Federal Aviation Administration
Rick	Ridenour	L3Harris
Venkata	Sishtla	Collins Aerospace
Brandon	Suarez	General Atomics Aeronautical Systems, Inc.
Michelle	Swearingen	Federal Aviation Administration
Steve	Van Trees	Federal Aviation Administration
Anna	von Groote	EUROCAE
Christina	Westover	The Boeing Company

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	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	Al Secen	Sep 2020	Open
06/27/2019 Agenda Item 8D	06/27/2019 – Ad Hoc to investigate possible SMOPS concept	Terry McVenes, Al Secen, Jens Hennig, Bob Lee, and Dan Elgas	Sep 2020	Open
12/19/2019 Agenda Item 6O	12/19/2019 – Document Configuration Management Procedure/Process 03/26/2020 – still in progress	RTCA Staff	Sep 2020	Open
12/19/2019 Agenda Item 7G	12/19/2019 – Work SC-239 TOR in coordination with EUROCAE WG 03/26/2020 – Will be completed at first meeting in June 04/17/2020 – ICC took action followed by PMC Electronic approval.	SC-239	Jun 2020	Closed
12/19/2019 Agenda Item 7K	12/19/2019 – Copy of the RTCA/EUROCAE Joint Procedures to PMC members 03/26/2020 – Procedures not finalized yet 6/11/2020 – Distributed.	Al Secen	Jun 2020	Closed
03/26/2020 Agenda Item 5M	03/26/2020 – Ad Hoc for recommended actions WRT FCC R&O 5G Spectrum (Near) and RTCA role for protecting aviation spectrum (Long) 06/11/2020 – Ad Hoc Report presented	ICC & SME's	Jun 2020	Closed

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03/26/2020 Agenda Item 6H	03/26/2020 – Rework SC-240 TOR 06/11/2020 – TOR provisionally approved, with further refinement required	SC-240	Sep 2020	Open
03/26/2020 Agenda Item 6K	03/26/2020 – Post ISRA Table for PMC members 06/11/2020 – Posted	Karan Hofmann	Jun 2020	Closed
06/11/2020 Agenda Item 4A	06/11/2020 – Ad Hoc for Spectrum Strategy Follow Up	Terry McVenes, Di Remold, Clay Barber, Bob Lee, Chris Hegarty	Sep 2020	Open
06/11/2020 Agenda Item 4B	06/11/2020 – Definition for "Mitigation" to include in Drafting Guides	ICC	Sep 2020	Open
06/11/2020 Agenda Item 6G	06/11/2020 – Review ISRA Process and ensure definition of closure procedure	RTCA Staff	Sep 2020	Open
06/11/2020 Agenda Item 7C	06/11/2020 – Solicit support for Clean Cockpit and Aircraft SC and follow up with package for electronic ballot approval	Terry McVenes, Al Secen	Jul 2020	Open

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