RTCA PROGRAM MANAGEMENT COMMITTEE
MEETING SUMMARY
March 18, 2021

The RTCA Program Management Committee (PMC) convened virtually at 8:30 a.m. on March 18, 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. Chairman Hegarty acknowledged and expressed appreciation to retiring long time RTCA contributors that have served as Special Committee leadership: Barbara Lingberg (Federal Aviation Administration), Lee Nguyen (Federal Aviation Administration), and Brad Green (EaglePicher Technologies, LLC). On behalf of the PMC, thank you for the support and well wishes for the next phase.

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 December 17, 2020 meeting was approved (RTCA Paper No. 001-21/PMC-2107).

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

- SC-214 – Standards for Air Traffic Data Communication Services – Chairman Claire Robinson's company change to Universal Avionics (RTCA Paper No. 081-21/PMC-2137).

- SC-231 – Terrain Awareness Warning System (TAWS) – Co-Chairman Yasuo Ishihara's Company change to Honeywell and updating the Co-Chairman Rick Ridenour's and Secretary Zach Reynolds's Company to L3Harris (RTCA Paper No. 082-21/PMC-2138).

- SC-240 – Topics on Software Advancement – Government Authorized Representative Change from retiring Member Barbara Lingberg (FAA) to Mike Vukas (FAA) (RTCA Paper No. 083-21/PMC-2139).

- SC-209 – Minimum Operational Performance Standards for ATCRBS/Mode S Transponder – Active Monitor Status for committee that completed all deliverables at the December 2020 PMC meeting (RTCA Paper No. 084-21/PMC-2140).

AGENDA ITEM 3
Publication Consideration/Approval

A. DO-358B – *Minimum Operational Performance Standards (MOPS) for Flight Information Services - Broadcast (FIS-B) with Universal Access Transceiver (UAT)***, presented by SC-206, Aeronautical Information Services (AIS) and Meteorological Data Link Services**

- John Farrer, SC-206 SG-5 Task Lead, presented.

This document contains Minimum Operational Performance Standards for Flight Information Services Broadcast-System (FIS-B) with Universal Access Transceiver (UAT). These standards specify system characteristics that should be useful to designers, manufacturers, installers and users of the equipment. This document considers an equipment configuration consisting of the airborne processing and cockpit display of aeronautical and meteorological data known as FIS-B provided by the Federal Aviation Administration (FAA). Functions or components that refer to equipment capabilities that exceed the stated minimum requirements are identified as optional features. This document supersedes DO-358A. It specifically adds two new FIS-B products: Temporary Restricted Area (TRA) and Temporary Military Operating Area (TMOA).

- The PMC approved the document. It will be published as DO-358B.

B. DO-358B Supplement – *Minimum Operational Performance Standards (MOPS) for Flight Information Services - Broadcast (FIS-B) with Universal Access Transceiver (UAT)***, presented by SC-206, Aeronautical Information Services (AIS) and Meteorological Data Link Services**

- John Farrer, SC-206 SG-5 Task Lead, presented.

The data "Supplement to DO-358B" is a zip file archive that contains test group files described in Section 2.4 of DO-358B, Minimum Operational Performance Standards for Flight Information Services Broadcast-System (FIS-B) with Universal Access Transceiver (UAT). The archive includes 27 sets of test group zip files. Each test group zip file includes a test procedures document, test stimulus timing information, and binary data input files for conducting the tests.

- The PMC approved the document. It will be published as DO-358B Supplement.

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

This document was not completed in time for this PMC meeting and is expected to be presented at the June 2021 Meeting.

D. DO-365B - *Minimum Operational Performance Standards (MOPS) for Detect and Avoid (DAA) Systems* **and DO-365B Supplement –** *Truth Track and Degraded Sensor Track Files,* **presented by SC-228, Minimum Performance Standards for Unmanned Aircraft System**

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

The Detect and Avoid (DAA) system was specified to assist the remote pilot with operating an aircraft safely in the NAS. All aircraft flying in the NAS must comply with the operating rules of 14 CFR, specifically, §§ 91.3, 91.111, 91.113, 91.123 and 91.181(b), which address see and avoid, collision avoidance, right-of-way rules, and remaining well clear. The DAA equipment may also be used to comply with the duties in International Civil Aviation Organization (ICAO) Annex 2 to the Convention on International Civil Aviation, specifically Chapter 2, Paragraph 2.3.1. These operating regulations assumed that a pilot would be onboard the aircraft and would be able to fully comply with these rules. This document contains MOPS for DAA systems used in unmanned aircraft transiting and performing extended operations in Class D, E, and G airspace along with transiting Class B and C airspace. It includes equipment to enable UAS operations near Terminal Areas during approach and departure in Class C, D, E, and G airspace, and off-airport locations, but not operating in the visual traffic pattern or on the surface. It does not apply to small UAS (under 55 pounds (lbs)) operating in low-level environments (below 400') or other segmented areas. This revision added Class 3 – ACAS Xu, Non-cooperative DWC applicable to all classes, updated ATAR classes for different performance levels.

- The PMC approved the documents. They will be published as DO-365B and DO-365B Supplement.

E. DO-376 (New Document) – *Minimum Operational Performance Standard (MOPS) for Offshore Helicopter Terrain Awareness & Warning System (HTAWS)***, presented by SC-237, Helicopter Terrain Awareness Warning System**

- Mike Deer, SC-237 Chairman, presented.

This document defines the Minimum Operational Performance Standards (MOPS) for an Offshore Helicopter Terrain Awareness and Warning System (Offshore HTAWS). It implements "classic" alerting modes similar to DO-367 TAWS, which is based on recommendations in UK CAA CAP1519 - Offshore Helicopter Terrain Awareness Warning System Alert Envelopes. This MOPS includes Offshore HTAWS functional requirements and not specific equipment requirements. The functionality can be imbedded within existing aircraft systems or in dedicated equipment.

- The PMC approved the document. It will be published as DO-376 concurrently with EUROCAE ED-285.

F. DO-389 (New Document) – *OSED for Counter UAS in Controlled Airspace***, presented by SC-238, Counter Unmanned Aircraft System**

- Dr. Ryan Wallace, SC-238 Chairman, presented.

To prevent disruptions from unauthorized Unmanned Aircraft System (UAS), the airspace around an airport needs to be protected and these activities need to be detected and reported at the earliest possible stage to flight crews, Air Traffic Control, airports and responsible authorities. In accordance with national regulations, neutralization of the UAS, through the Unmanned Aircraft (UA), the Command & Control Datalink (C2 Link), the Remote Pilot Station (RPS) or even the Remote Pilot (RP), could be considered as part of a risk-based response. The scope of this Operational Services and Environment Definition (OSED) is to introduce the overall capability of a C-UAS System, including the detection capabilities of unauthorized UAS in a protected area of influence around an airport and address the resulting hazard or threat, in a risk-based balanced manner. The OSED document provides a detailed description of the operational services of a C-UAS system, and the environment in which such a system will operate. It proposes operational requirements and associated assumptions that will be further detailed in the complementary standard documents: Safety and Performance Requirements (SPR) and Interoperability Requirements (INTEROP).

- The PMC approved the document. It will be published as DO-389 concurrently with EUROCAE ED-286.

Chairman Hegarty asked about the status of getting a GAR for SC-238. Mr. Secen mentioned that most GARs are out of the AIR office, while the more likely place would be out of the Test Center for this group. Still being worked.

AGENDA ITEM 4
Integration and Coordination Committee (ICC)

A. Investigate possible action for Spectrum monitoring or other activities

- Clay Barber (ICC Chairman) presented.

Following discussion at the December PMC meeting, the Spectrum Strategy Ad Hoc was provided further inputs. Discussed under agenda item 5C.

B. ISRA Process – Possible Review/Modification - Discussion

- Karan Hofmann, PMC Secretary, presented.

The Inter-Special Committee Requirements Agreement (ISRA) process has not been reviewed nor modified since mid-2013. The intended purpose is probably still valid, but comments from committee members indicate it is not effective – somewhat cumbersome with more handshake agreements now being used. The RTCA staff recommends a review and investigate possible

changes or even elimination of the ISRA Process. PMC members are welcome to provide inputs with possible follow-on action to get direct inputs from committee members. (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.

This project was started as part of a research project with a small business research project funded by USAF. It was looking to pull requirements from RTCA documents and make them available in an easily ingested format. The company's efforts have been re-directed as their project was ingested into a larger effort and would be more of a change of standard development process. They are still interested in continuing to try to meet RTCA's needs, but this change may be too much of a divergence. PMC members were generally not interested in defining a new process and noted there may already be tools available that would meet our needs, although personalizing a product would also be nice. RTCA staff will follow up. Action still open.

B. Document Configuration Management Procedure/Process

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

RTCA staff is working to update all drafting guides as part of defining internal procedures and processes. The MOPS and MASPS Drafting Guides have been revised, with the SPR, OSED and INTEROPS guides to follow. These new MOPS and MASPS guides were made available for PMC member inputs for this March 2021 meeting.

As this is an on-going activity, the PMC members agreed to close this action with recommending the other Drafting Guides be made available when compiled. (Action closed)

- The Drafting Guides are posted in AerOpus (RTCA Paper Nos. 344-20-20/PMC-2096 and 345-20/PMC-2097).

C. Ad Hoc for Spectrum Strategy Follow Up

- Terry McVenes, RTCA President, presented.

Mr. McVenes gave a brief summary of Ad Hoc meetings since the December PMC meeting. A draft TOR is being worked with potential deliverables to include a report on current RTCA standardized RF systems and their RF performance, as well as a new document to cover Spectrum Guidance for the development of aviation wireless systems.

On Radar (Radio) Altimeter, the following items were reported:
- ICAO ANC briefing – February 22, 2021 (PMC members requested a copy of this briefing. (action)
- ICAO Frequency Spectrum Management Panel (FSMP) – Al and Andy
- Formation of Radar Altimeters Coordination Group (GAMA, RTCA, NATA, HAI, NACA, CAA, NBAA,AOPA, A4A, EAA, AEA, ALPA, +)
- MITRE Engenuity – Synergies with Aviation and Spectrum Sharing
- RTCA outreach to CTIA

Ms. 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. She will provide the name and follow up information to Mr. Roy. (action)

Mr. Wright was able to provide a short summary of the FAA/DOD activities from Mr. Al Burke (the DOD Lead) involved with this agreement. He was to provide those words for inclusion here (action).

"All of this is pre-decisional because the main objective of JI-FRAI is to develop Combined and Operational Test methodologies that leverage service-conducted bench testing, RF over-the-air, and a representative real 5G laydown for full ops test. We can't to get on both sides of the 4.2-4.4 GHz aeronautics band—sub 5GHz. We'll include rotary wing and fixed wing. Mix will include Coast Guard, CBP, and service aircraft. We'll use a combination of "available assets" and bench and RF-over-the air testing to determine follow-on testing. Generally, expect to use an airport approach profile, rotary wing rescue/urban op profile."

When asked about discussion with the FCC, Ms. Reimold reported NTIA had asked for the AVSI data and that the Spectrum Office is working with those folks to obtain the information for them.

Recommendation – continue deliberations and report back to PMC in June. (action still open)

D. Conduct electronic ballot for DO-388 from SC-241 for publication by end of 2020

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

The document was completed, and the PMC approved the document via an electronic ballot conducted 17 – 24 December. It was published as DO-388 concurrently with EUROCAE's ED-287 document on 24 December 2020. Action closed.

AGENDA ITEM 6
Discussion.

A. SC-227 – Standards of Navigation Performance – Revised TOR

- Mike Cramer, SC-227 Chairman, presented.

SC-227 asked for changes confined to data driven charting standards work to better define the intent and modify the prescriptive language relative to charting implementation. No other changes were

proposed. When asked, Mr. Cramer indicated the group did not want to get into the realm of electronic charts.

- The proposed revised TOR was approved (RTCA Paper No. 085-21/PMC-2141).

B. SC-235 – Non-Rechargeable Lithium Batteries – Revised TOR

- John Trela, SC-235 Chairman, presented.

RTCA received some suggested changes to DO-227A (published September 21, 2017) and SC-235 Leadership thought it would be best to have the committee meet to discuss them to and provide recommendations. The group was approved for Active Monitor Status in March 2020 and held 5 Plenaries to discuss these inputs. Consensus was reached that these inputs, as well as other items brought up during discussion, warranted revision to the document. They requested to be fully active and work development of DO-227B within 12 months.

There was some discussion on similarity between DO-227A and DO-311A (MOPS for Rechargeable Lithium Batteries and Battery Systems). Committee members agreed there were some similarities but enough difference that the documents need to remain separate. Also, the items for consideration for DO-227A revision do not affect DO-311A.

- The revised TOR with some recommended editorials/formatting changes by the PMC members during discussion was approved (RTCA Paper No. 086-21/PMC-2142).

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

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

Mr. Secen alerted the PMC of a possible out of cycle approval revised TOR approval, as it wasn't quite ready to present at this meeting. The group is anxious to get started on the proposed work and would like approval before the June PMC meeting.

D. DO-358A Supplement Errata – Presentation

- John Farrer, SC-206 SG-5 Task Lead, presented.

The data "Supplement to DO-358A" is a zip file archive that contains test group files described in Section 2.4 of DO-358A, Minimum Operational Performance Standards for Flight Information Services Broadcast-System (FIS-B) with Universal Access Transceiver (UAT). The archive includes 24 sets of test group zip files. Each test group zip file includes a test procedures document, test stimulus timing information, and binary data input files for conducting the tests.

Errors in test groups: TG6, TG11, TG13, and TG22 were discovered. These errors will cause some tests to fail on system designs that comply with the DO-358A FIS-B MOPS. A complete set of DO-358A Supplemental Test Files with the corrected test groups has been prepared. Only test group files

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that contained errors were corrected, all other files in the DO-358A Supplemental Test Files are unchanged from the original DO-358A Supplemental Test Files baseline.

- The PMC approved release of the Errata version to replace the DO-358A Supplement entirely.

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. 062-21/PMC-2124).

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-237, SC-236, SC-230, SC-224, SC-223, and SC-222.

SC-240 – Hette Hoekema (EASA Member to PMC and also member of EUROCAE TAC) was unable to attend today's meeting, but forwarded a concern about SC-240 that Chairman Hegarty shared:

"When the Worksheet/Tasking of the corresponding WG-117 was discussed at the EUROCAE TAC there was, after some discussion, agreement that the scope of the task should include low end General Aviation.

This was added to the scope at EASAs request in response to observations from industry, that the current standards for development of software were too stringent and burdensome for that segment of industry to comply with.

Since handing the task over to the WG-117/SC-240 however, there appears to have been reluctance in accepting the scope as defined and agreed by the TAC and WG-117/SC-240 has been slow to progress on the topic.

I have been blunt on the issue of including low end GA applications in the scope: Either RTCA/EUROCAE produce a standard that is meaningful to this community, or other SDOs will take the lead. From an EASA perspective, the quality of the standards that RTCA/EUROCAE produce is well recognised and much appreciated. Hence there is a genuine preference for us to work with WG-117/SC-240 on addressing this particular concern. But it certainly requires more commitment than the committee has shown thus far.

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It is disappointing to read the current draft definition of 'lower risk', since it hardly reflects the scope of the task given to the committee. Of particular concern is the note stating that (even after many months of discussion), SG-1 still hasn't been able to reach consensus.

I'd therefore urge the leadership of the committee and particularly the leadership of SG-1 to swiftly get their act together and start working on a standard, rather than endlessly debating a definition."

Rebecca Morrison (SC-240 Program Director) provided inputs from Mr. Steve Cook (SC-240 Chairman) who could not attend today's meeting. "SC-240/WG-117 share many of the concerns raised. Please consider that the group has not had a single face-to-face meeting due to the pandemic. This is a very emotional, passionate topic and hard to handle virtually. It is harder for form relationships to work these issues without the face-to-face interaction. SG-1 has defined two use cases - one for low risk (with FAA and EASA input). Including GA in scope maybe a little misinformation. They need better understanding of concerns."

Mr. Ed Hahn of ALPA agree with Mr. Cook's concerns.

The change was a TAC addition to the WG-117 Task Sheet. The PMC members recommended a discussion between RTCA and EUROCAE Secretariats, SC and WG Leads, Ed Hahn (ALPA), GAR, and Hette Hoekema (EASA). (action)

SC-238 – Presented today on completion of new document (agenda item 3F).

SC-237 – Presented today on completion of new document (agenda item 3E).

SC-235 - Presented today on revised TOR (agenda item 6B).

SC-228 – Presented today on completion of a revised document and supplement (agenda item 3D) and revised TOR (agenda item 7E).

SC-227 – Presented today on revised TOR (agenda item 6A).

SC-206 – Presented today on completion of revised document and supplement (agenda items 3A and 3B) and Errata for previously released supplement (agenda item 6D).

SC-135 – Presented today on revised TOR (agenda item 7B).

To focus the discussions during the PMC meetings, the following changes were presented as a means to shorten this agenda item.

- Chairmen Reports will be provided for PMC Review no less than 7 days before the PMC Meeting

- RTCA will show the matrix of reports

- PMC members can raise any questions about a report or inquire with the Program Director on the status of a committee

PMC members agreed with this change as long as a table of summary is included.

The complete matrix and individual committee reports are posted on AerOpus (RTCA Paper No. 064-21/PMC-2126). 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, new working group information, and next TAC meetings summary is posted on AerOpus (RTCA Paper No. 063-21/PMC-2125).

Similar to Chairmen Reports, it was suggested the contents of this topic not be presented in detail at PMC meetings. The information will be available to PMC members at least 7 days prior to meeting for members' review. If there are any questions they can be addressed at the meeting. PMC members agreed this would work for most topics. However, some items, such as joint committees, that directly influence PMC actions would probably need to be addressed.

AGENDA ITEM 7
Other Business.

A. RTCA Award Nominations – Consideration / Approval of Nominations

- Karan Hofmann, RTCA Program Director, presented.

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

B. SC-135 – Environmental Testing – Revised TOR

- Kyle McMullen, SC-135 Chairman, presented.

The group has some leadership changes with retirement of two members (Co-Chairman and GAR). Additionally, they requested delay in delivery of DO-380A due to difficulty in finding experts and participants and thus a DO-380B release will not be needed.

They mentioned changed scope on volcanic ash and carbon dust, as they are really struggling to define for both Europe and US needs. The original composition and purpose of the committee was for integrating avionics and not planned on pushing further. Also having difficulty getting experts for earthquake and lightning (more ground based equipment than airborne). If industry says there is a need for this to be included in the document, then they need to step up to support. SC-228 folks are supporting for special needs.

As SC-135 is the longest standing committee, their TOR has been through many revisions and templates. PMC members recommended a clean up to align with the latest template.

- The proposed TOR was approved (RTCA Paper No. 089-21/PMC-2144).

C. R&D Community – Possible Means to Coordinate

- Terry McVenes, RTCA President, presented.

There is a lot going on with respect to research and development (R&D). Some current R&D Activities include:

- FAA – ACY
- Industry
- Academia
- Research, Engineering and Development Advisory Committee (REDAC)

Ms. Reimold reported there is an MOU between FAA AVS and ANG for joint collaboration on FAA R&D.

Mr. McVenes brought up idea of RTCA Center of Excellence.

Basic question: What is the role of RTCA's PMC in R&D collaboration with government, industry, and academia and what is the best venue to support it? How do we align outcomes of R&D with standards development? Would it require additional time for committee process to allow for this consideration?

Follow up PMC Discussion – establish coordination with some of these "houses". It was noted some SC's have trouble getting support for specific SC work. It was pointed out that the PMC was originally set up under FACA rules (establish/approve SC formation; review SC activity; resolve issues; approve final deliverables). Now much more and many moving parts are involved with establishing SC's. An SC might not be established in the normal manner (such as Cockpit and Cabin Cleaning).

This might need an extra day (say annually) to discuss upcoming/future activities. A possible source for inputs might be the FAA's REDAC Group – good collaboration with many new research topics discussed. Another suggestion was when something comes up from any source, add to PMC meeting agenda for discussion on possible action.

Group agreed good initial thoughts. "Open Invite" to provide any comments on R&D topics or possible actions to Terry. (action)

- The presentation is posted on AerOpus (RTCA Paper No. 075-21/PMC-2135).

D. ICAO Collaboration - Discussion

- Terry McVenes, RTCA President, presented.

Mr. McVenes provided a little background on major items with RTCA/EUROCAE/ICAO Collaboration:

- Technical Information Sharing Agreement – December 2017
- Fifth Standards Roundtable Meeting – September 2019
    - Work Program Alignment
    - RTCA/EUROCAE Discussions
    - Annual/Semi-Annual Coordination Meeting
    - Observer Status – PMC/TAC
    - RTCA/EUROCAE/ICAO ANB Meeting – February 26, 2021
    - Not good alignment between SRT/Agreement and the ANC Commissioners
    - Need for confidence building measures between ICAO and SDOs
    - Concerns about power shifting from ICAO to SDOs

- Possible Next Steps

    - ANB (Steve Creamer) – work with Air Navigation Commission
    - ICAO panel job cards – get information from SDOs about current standards
    - Grant ICAO observer status to the RTCA PMC/EUROCAE TAC

Mr. McVenes proposed the PMC approve ICAO Air Navigation Bureau observer status to the PMC to optimize future communications and alignment with ICAO SARPS development. Chairman Hegarty pointed out that PMC membership was actually as the discretion of the RTCA President per the Bylaws, but PMC members agreed with the recommendation. (action)

There was discussion on the general cooperation between the organizations – some differing opinions on referencing RTCA/EUROCAE documents in SARPS.

Mr. Secen pointed out that RTCA is active at ICAO as observer on a few panels and ICNS member since 2017. We also have new agreement (and now means to implement) to share RTCA documents to member states for support to SARPS development.

A major point would be duplication of efforts between the three organizations. We need to work together. Members brief SCs/WGs as needed. Does PMC need to know more about what is being presented? More discussion will follow.

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

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

The group requested to develop a MOPS for LTE commercial networks for C2 Link Systems used for type-certificated UAS jointly with EUROCAE WG-105. Additionally, they requested adjustments to delivery dates.

- The proposed TOR was approved (RTCA Paper No. 088-21/PMC-2143).

F. FAS Way Forward - Discussion

- Terry McVenes, RTCA President, presented.

The Forum for Aeronautical Software (FAS) has existed since 2012 in an Ad Hoc format. RTCA and EUROCAE appreciate what they have done. But as with any group that has been in existence for a while, we need review setup and look to the future. What should their role be and how should they coordinate with SCs/WGs? RTCA and EUROCAE Secretariats are setting up a Leadership Group for this purpose. It will consist of Terry, Christian, PMC Rep, TAC Rep, and FAS Leaders. Any PMC member who wishes to participate should contact Terry. (action)

G. Software Symposium - Announcement

- Terry McVenes, RTCA President, presented.

RTCA and EUROCAE will be co-hosting a Software Symposium June 23rd – 24th (fully virtual). It provides an opportunity to demonstrate leadership in software standards development and bring the industry and regulators together for education and collaboration. The event presents a platform to conduct important conversations, better equipping both organizations to adapt to the needs of newer entrants.

Further details can be found in the presentation that is posted on AerOpus (RTCA Paper No. 074-21/PMC-2134).

AGENDA ITEM 8
Schedule for Committee Deliverables and Next Meeting Date

Documents expected for the June 17, 2021 meeting:

- SC-213, Enhanced Flight Vision Systems/Synthetic Vision Systems
  - New Document – *Test Procedures for Qualified Visual Advantage*
  NOTE: Committee may request out of cycle approval, as AC is ready to go.

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

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- SC-224, Airport Security Access Control Systems
    - DO-230K, *Standards for Airport Security Access Control Systems*
    NOTE: Completing early, so added since March PMC meeting.

- SC-228, Minimum Performance Standards for Unmanned Aircraft Systems
    - DO-304A - *Guidance Material and Considerations for Unmanned Aircraft Systems*
    - DO-387 (New Document) - *Minimum Operational Performance Standards (MOPS) for Electro-Optical/Infrared (EO/IR) Sensors System for Traffic Surveillance*

- SC-240, Topics of Software Advancement
    - New Document - *Software Considerations in Lower Risk Applications, Equipment Certifications and Approvals*
    NOTE: Expected to be delayed, revised TOR forthcoming.

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

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 – March 18, 2021 ATTENDANCE LIST		
PMC MEMBERS:		
Christopher	Hegarty	The MITRE Corporation Chairman
Doug	Arbuckle	Federal Aviation Administration
Clay	Barber	Garmin, Ltd
Rita	Estrada-Cavallini	Federal Aviation Administration
Nazeif	Habboub	Collins Aerospace
Ed	Hahn	Air Line Pilots Association
Jeff	Hausmann	Gulfstream
Jens	Hennig	General Aviation Manufacturers Association (for Jonathan Archer)
Robert	Ireland	Airlines for America
Donald	Kauffman	Honeywell International, Inc.
Terry	McVenes	RTCA, Inc.
Di	Reimold	Federal Aviation Administration Government Authorized Representative
Andrew	Roy	Aviation Spectrum Resources, Inc.
Al	Secen	RTCA, Inc.
Jessie	Turner	The Boeing Company
Heidi	Williams	National Business Aviation Association
Ed	Wright	U.S. Air Force

OTHER ATTENDEES:		
Robert	Bouza	Federal Aviation Administration
Steve	Cook	Northrop Grumman
Mike	Cramer	The MITRE Corporation
Michael	Deer	Bell Helicopter
Jeff	Densmore	Radiant Power Corp
John	Ferrara	John Ferrara Consulting
Eldridge	Frazier	Federal Aviation Administration
Karan	Hofmann	RTCA, Inc.
Kyle	McMullen	National Institute for Aviation Research (NAIR) at Wichita State University
John	Moore	Collins Aerospace
Rebecca	Morrison	RTCA, Inc.
Alex	Rodriguez	Federal Aviation Administration
Aloke	Roy	Honeywell International, Inc.
Paul	Sigmund	Federal Aviation Administration

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Ron	Stroup	Federal Aviation Administration
Brandon	Suarez	General Atomics Aeronautical Systems, Inc.
Michelle	Swearingen	Federal Aviation Administration
John	Trela	The Boeing Company
Steve	Van Trees	Federal Aviation Administration
Anna	von Groote	EUROCAE
Ryan	Wallace	Embry-Riddle Aeronautical University
Jim	Williams	JHW Unmanned Solutions LLC
Yasuo	Ishihara	Honeywell International, Inc.

Program Management Committee
March 18, 2021

	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	Al Secen	June 2021	Open
12/19/2019 Agenda Item 6O	12/19/2019 – Document Configuration Management Procedure/Process 03/26/2020 – still in progress 12/17/2020 – New MOPS and MASPS Drafting Guides provided for PMC member input 03/18/2021 – Considered ongoing project – action closed for tracking purposes	RTCA Staff	Sep 2020	Closed
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	Terry McVenes, Di Remold, Clay Barber, Chris Hegarty, Andy Roy, Anna Guégan	Mar 2021	Open
12/17/2020 Agenda Item 7C	12/17/2020 – Conduct electronic ballot for DO-388 from SC-241 publication by end of year	RTCA Staff	Dec 2020	Closed
03/18/2021 Agenda Item 4B	03/18/2021 – Inputs for ISRA Process as part of review	PMC Members	June 2021	Open
03/18/2021 Agenda Item 5C	03/18/2021 – Provide ICAO ANC briefing to PMC Members	RTCA Staff	April 2021	Open

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03/18/2021 Agenda Item 5C	03/18/2021 – Reach out to Pres McVenes if interested in participating in Spectrum Strategy Ad Hoc	PMC Members	June 2021	Open
03/18/2021 Agenda Item 5C	03/18/2021 – Provide inputs to Andy Roy on new FAA/DOD Spectrum Testing	Di Reimold	June 2021	Open
03/18/2021 Agenda Item 5C	03/18/2021 – Provide summary of DOD 5G Testing	Ed Wright	June 2021	Open
03/18/2021 Agenda 6F	03/18/2021 – Setup Call to discuss SC-240/WG-117 TORs	Rebecca Morrison	June 2021	Open
03/18/2021 Agenda Item 7C	03/18/2021 - Reach out to Pres McVenes if have comments on R&D topics/possible actions	PMC Members	June 2021	Open
03/18/2021 Agenda Item 7D	03/18/2021 – Add ICAO representative to PMC invite	Terry McVennes & Karan Hofmann	June 2021	Open
03/18/2021 Agenda Item7F	03/18/2021 - Reach out to Pres McVenes if interested in participating in FAS Way Forward Gp	PMC Members	June 2021	Open

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