

**RTCA PROGRAM MANAGEMENT COMMITTEE
MEETING SUMMARY
September 12, 2019**

The RTCA Program Management Committee (PMC) convened at 8:30 a.m. on September 12, 2019 at RTCA. 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). PMC Secretary Karan Hofmann reviewed the anti-trust statement, proprietary policy, and membership policy.
- B. PMC Chairman introduced the new Government Authorized Representative Di Reimold, Deputy Director for Strategic Initiatives, AIR-600 Policy & Innovation Division.

AGENDA ITEM 2

Review / Approve

- A. The summary of the June 27, 2019 meeting was approved with administrative changes received during comment period (RTCA Paper No. 156-19/PMC-1923).

AGENDA ITEM 3

Publication Consideration/Approval

- A. **DO-290 Change 3 – *Safety and Performance Requirements Standard for Air Traffic Data Link Services in Continental Airspace (Continental SPR Standard)* prepared by SC-214 (Standards for Air Traffic Data Communications Services)**

- Captain Chuck Stewart, SC-214 Chairman, presented.

Change 3 to DO-290/ED-120 is to remove any reference to DM89 MONITORING message element as being required to support any datalink operations. This approach makes DO-290/ED-120 consistent with actual datalink procedures, in line with the approach already agreed by EUROCAE/RTCA subject matter experts when Baseline 2 Datalink standards were developed.

This change allows both existing ATN B1 interoperability standards (DO-280B/ED-110B) and B2 interoperability standards (DO-353A/ED-231A) being recognized as acceptable means of compliance with DO-290/ED-120. It will eliminate problems to demonstrate compliance with EUR Datalink Services Implementing Rule.

The PMC approved the document. It will be published as DO-290 Change 3 concurrently with EUROCAE ED-120 Change 3 expected prior to the end of this month.

PMC members expressed thanks to SC-214 and WG-78 members that supported this effort for their hard work to get this accomplished in such a short time.

B. New Document – *Aviation Profiles for Internet Protocol Suite* prepared by SC-223 (Internet Protocol Suite (IPS) and Aeronautical Mobile Airport Communication System (AeroMACS))

- Stephane Pelleschi, WG-108 Chairman (Joint Committee with SC-223), presented.

This Internet Protocol Suite (IPS) Profiles document specifies the unique adaptations required to enable the current Internet Engineering Task Force (IETF) Request for Comment (RFC) documents to specify technical requirements for aeronautical data communications between an aircraft system and its corresponding peer host systems on the ground. It should be noted that these Profiles may be applied to support ground-ground aeronautical communications as well as command and control communication of Remotely Piloted Aircraft Systems (RPAS) or Unmanned Aircraft Systems (UAS). Additional provisions would be required to support air-ground digital voice. Voice communication may be supported using these Profiles. However, no special provisions have been made in these Profiles for digital voice or ground-ground communications.

The PMC approved the document. It will be published as DO-379 concurrently with EUROCAE ED-262.

C. DO-385 Change 1 – *Minimum Operational Performance Standards for Airborne Collision Avoidance System X (ACAS X) (ACAS Xa and ACAS Xo)* prepared by SC-147 (Aircraft Collision Avoidance Systems)

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

This change documents important corrections and clarifications for the MOPS, primarily contained in the MOPS tests (primarily with Section 2.4). This set of changes is highly desirable for FAA Aircraft Certification so that it can be cited as a DO-xxx document in its ACAS Xa TSO which is scheduled to be released for public comment in the October/November timeframe.

The PMC approved the document. It will be published as DO-385 Change 1 concurrently with EUROCAE ED-256 Change 1.

**AGENDA ITEM 4
Integration and Coordination Committee (ICC)**

No ICC updates reported.

AGENDA ITEM 5
Cross Cutting Committee (CCC)

No CCC updates reported.

AGENDA ITEM 6
Action Item Review

A. Share RTCA-ICAO Document Reference Spreadsheet with PMC Members - Discussion

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

Mr. Secen will be attending the ICAO Standards Roundtable in a couple of weeks (a group that has not met in quite some time). Per this body's request, RTCA compiled a list of all RTCA documents and supplements and associated them with ICAO Annexes. Further tasking from ICAO was to match these items down to ASBU level. Both RTCA and EUROCAE agreed that this project was too difficult and abandoned it at this time. After some discussion, it was agreed to share what was accomplished with PMC members and then close this action.

B. Review IP Policy by Ad Hoc – Status

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

The Ad Hoc's refinement of the RTCA Proprietary Reference Policy (to specifically say the inclusion of any proprietary information anywhere in an RTCA document - main section or appendix – whether informative or prescriptive – would require a Commitment to License from the owner of the information) was coordinated with EUROCAE to align policies. This revised policy will be presented to the RTCA Advisory Board for final approval at their December meeting. The final approved copy will be provided to PMC members.

C. FAA capture use/need for output of a DO-178C supplement - Status

- Charles "Chip" Bulger (FAA) presented.

Mr. Bulger reported the FAA is looking across the trade-space, not just UAS but across the board for this action. They are continuing to work this action. When asked about coordination with EASA, Mr. Bulger said that Mr. George Romanski is on the Forum for Aeronautical Software (FAS) and has talked to his EASA counterparts. Action still open.

D. Provide outline for envisioned UAS FAS Supplement - Status

- Rebecca Morrison, RTCA Program Director, presented.

The FAS original recommendation included the following issues for possible supplemental guidance needed:

- Commercial Off The Shelf (COTS) Software
- Open Source
- Service History
- Levelling of Objectives

The FAS is refining these topics and have started investigation through the following FAS Topic Papers (FTP):

- FTP 1049 – Memory Management Software Levels – December 2019
- FTP 1050 – Agile Methodology – January 2020
- FTP 1051 – Alternate Development Methodologies – January 2020
- FTP 1052 – Compiler Clarifications - December 2019
- FTP 1053 – Constraints for Supplements – February 2020
- FTP 1054 – Operating Systems Clarifications – November 2019
- FTP 1055 – Tool Qualification Clarifications – February 2020

There is a face-to-face meeting scheduled for November 13-15, 2019 hosted by EASA in Cologne. This will provide basis to significantly advance FTPs and possibly complete some of the FTPs earlier than projected. They will report back at the December PMC meeting.

- The presentation is posted on Workspace (RTCA Paper No. 222-19/PMC-1938).

E. Investigate pulling Requirements from documents and making available in separate format

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

Mr. Secen reported RTCA is in a research project through a Department of Defense effort with Securborator, an engineering company based in Florida, to investigate making the requirements in RTCA documents available in a more useable format. Working to see if some type of demonstration would be possible at the next PMC meeting. Action still open.

F. Conduct Internal (FAA) 4D TBO Coordination

- Doug Arbuckle, PMC Member, presented.

Mr. Arbuckle noted this is more difficult than originally expected and the action it still being worked within the FAA. Action still open.

G. After FAA Coordination, Ad Hoc 4D TBO with SC-227 and SC-186 (w/WG-51) Leadership

Awaiting closure of item 6Q. This action still open.

H. Provide administrative corrections to SC-231 TOR

- Karan Hofmann, PMC Secretary, presented.

The administrative corrections provided by Mr. Jessie Turner, PMC Member, were included in the approved SC-231 TOR from the March 27th meeting. Action is closed.

I. Provide copy of meeting summary with PMC Members and EUROCAE leadership on UAS FAS Ad Hoc recommendations

- Rebecca Morrison, RTCA Program Director, presented.

Summary was posted in Workspace for PMC Member access. Action is closed.

J. Ad Hoc to determine COA for possible new Special Committees

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

Mr. Secen reported for Mr. McVenes:

- RTCA has been in contact with SAE, ASTM, and ARINC regarding future collaboration and coordination on future standards work.
- At this time an exchange of draft MOUs has taken place between RTCA and SAE, and between RTCA and ASTM
- The RTCA Board of Directors has been briefed on this activity and is supportive of this approach with the other standards organization
- Mr. McVenes has discussed this outreach to other standards organizations with FAA leadership, which was also met with support
 - Ms. Reimold added from their initial meeting that she and Mr. McVenes are very likeminded and agree on outreach approach. She also added that the FAA is looking internally to possibly create an informal standard steering group with RTCA and other standards organizations.
- Mr. McVenes has a meeting with FAA Administrator Dixon next week, and this will be a point of discussion with him at that meeting
- While it is too early in the discussions to commit to a timeline of when agreements will be completed, RTCA is committed to make this happen so that we can continue to serve the community in an effective and efficient manner

Follow-on discussion covered points that sum up as government and industry agreeing there is an issue of resources and this cooperation to share expertise for best inputs is the way forward. In the past, scopes were identified by SDO, but as new topics arise there are lots of unclear lines.

K. Present ideas to SC-216 leadership for consideration from CHIP SCAN

- Karan Hofmann, PMC Secretary, presented.

The CHIP SCAN presentation was shared with SC-216 leadership (including GAR). Their determination is this is not an SC-216 matter. Any discussion on a revision of DO-254 is beyond scope of their committee. Action is closed.

L. Ad Hoc to investigate possible SMOPS Concept

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

Mr. Secen reminded PMC members the Ad Hoc was created to determine if a new document type is appropriate for RTCA. Specifically, to be more streamlined and allow faster development. This initiative is in response from concerns expressed by UAS community that RTCA standards are difficult to meet. RTCA wishes to allow flexibility in the MOPS content.

Problem Statement: Current TSO's often use RTCA MOPS in specifying materials, parts and appliances used in civil aircraft. When authorized to manufacture a material, part, or appliances to a TSO standard, this is referred to as TSO authorization. Receiving a TSO authorization is both **design and production** approval.

TSO's also call out acceptable process for design processes and testing conditions that need to be met for both hardware and software.

Also noted: processes like DO-178()/ED-12() and DO-254/ED-80 are time-consuming, require additional work outside a company's internal quality processes, and can be over-designing ("perfect" is becoming the enemy of "good enough").

The Ad Hoc panel met twice virtually and met one member in-person. There was discussion on concerns and issues at a low-level and found:

- The vast majority of RTCA standards are developed to the correct level and pose no issues with applicants
- DO-178 (Software) and DO-254 (Hardware) are exceptions
 - Do not deal with a single technology, rather act as standards for entire disciplines
 - Discontented include new entrants and traditional aviation community

The idea of a "Scaleable" MOPS emerged. The potential options are being considered:

- Software Only MOPS
- Write options into MOPS that can be tailored by the developer for specific aircraft types
- Use the MOPS to reduce complexity of implementing DO-178() and DO-254

At least two projects are considering how sMOPS might be used for their upcoming work (HTAWS and ACAS sXu). Strong dependency exists on a regulatory vehicle to make use of the sMOPS.

Ms. von Groote mentioned that the EUROCAE Council has approved a similar pilot program with their new VTOL Working Group (WG-112) (see agenda item 7G slides for more specifics).

Following discussion, major points included:

- Original documents may be too cumbersome for GA community
- Will regulators use this type of document (possibly sTSO)?
- Other SDO's taking approach to combine safety and security
- This type of document may not be applicable for larger aircraft
- Different level of detail long provided different levels of regulation for different aircraft
- Must remember things change (example: cars and other ground transportation)

Mr. Bulger mentioned the FAA is implementing a safety continuum which is looking across the board and could include potential sliding scale. This could include be applied to TSOs. And the FAA would be able to adapt to any size MOPS with the goal being the correct level that's needed.

The Ad Hoc will continue to refine these initial points to bring forward a final recommendation with potential implementation schedule to the December PMC meeting.

- The presentation is posted on Workspace (RTCA Paper No. 221-19/PMC-1937).

AGENDA ITEM 7

Discussion.

A. SC-206 – Aeronautical Information and Meteorological Data Link – Discussion – Revised TOR.

The group is working jointly with EUROCAE WG-76 and they are still in coordination for collaboration on changes. Expect presentation at a later PMC meeting.

B. SC-223 – Internet Protocol Suite (IPS) and Aeronautical Mobile Airport Communication System (AeroMACS) – Discussion – Revised TOR

- Rebecca Morrison, SC-223 RTCA Program Director, presented.

The group requested a delay to their MASPS delivery to align with dependencies on ICAO work that have been delayed. Additionally, they requested a revision to the Profiles document (approval today – see agenda item #3B) to accommodate any changes arising from MASPS validation. This will be a joint effort with EUROCAE WG-108.

A couple of administrative items were brought up during review/commenting. (Action)

The revised TOR was approved with the administrative corrections (RTCA Paper No. 224-19/PMC-1940).

It was noted the joint effort task sheet for WG-108 will be presented at the upcoming TAC meeting.

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

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

The group requested a rename of Ground-based Non-Cooperative Radar to Ground-based Surveillance System, consolidation of the SATCOM MASPS into C2 Link MASPS (DO-377A), and adjustment of delivery dates. Additionally, Christina Westover is moving into the Secretary position.

A couple of administrative items were brought up during review/commenting. (Action)

The revised TOR was approved with the administrative corrections (RTCA Paper No. 225-19/PMC-1941).

D. SC-229 – 406 MHz Emergency Locator Transmitters (ELTs) – Discussion – Revised TOR

- Thomas Pack, SC-229 Chairman, presented.

The group requested to become “Active” to review the thirteen change requests that have been received since publication of DO-204B in December 2018 for clarifying text to ensure consistency. If determined more significant, the group will return to the PMC for modification in scope. This will be a joint effort with EUROCAE WG-98.

An administrative item was brought up during review/commenting. (Action)

The revised TOR was approved with an administrative change (RTCA Paper No. 226-19/PMC-1942).

It was noted the joint effort task sheet for WG-98 will be presented at upcoming TAC meeting.

E. Actions Taken on Previously Published Documents – Report and Government Authorized Representative (GAR) List –Update.

- Charles “Chip” Bulger, 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. 199-19/PMC-1929).

FAA Published Guidance (Since Previous PMC)

RTCA Document	Developed By	FAA Guidance	Approval Date	Comment
DO-297 Integrated Modular Avionics (IMA) Development Guidance and Certification Considerations	SC-200	TSO-C153a	5/1/2019	Update to TSO. TSO references DO-297 in Appendix 1

RTCA Published Documents - FAA Pending Guidance

RTCA Document	Developed By	FAA Guidance	Planned Release Date	Comment
DO-311A, MOPS for Rechargeable Lithium Batteries and Battery Systems	SC-225	AC 20-184A	December 2019	Installation standard for rechargeable lithium batteries
DO-227A, MOPS for Non-Rechargeable Lithium Batteries	SC-235	AC 20-192	March 2020	Airworthiness installation criteria for non-rechargeable lithium batteries
DO-315A, DO-359, MASPS for SVGS, MASPS for ASA-SVS	SC-213	AC 20-185A	September 2019	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	January 2020	Consolidates enhanced and combined vision system airworthiness criteria. No new criteria.
DO-220A, Change 1, MOPS for Airborne Wx Radar Systems	SC-230	AC 20-182B	January 2020	Aircraft weather radar installation guidance
Multiple RTCA data comm references from AC 20-140C	SC-214	AC 20-140D	January 2020	Incorporates clarification memo from Dec 2017 and policy for partial FANS-1/A installations
DO-362, Command and Control Data Link MOPS	SC-228	AC 20-187	March 2020	Airworthiness C2 installation guidance.
DO-365, Detect and Avoid MOPS Phase I.	SC-228	AC 20-DAA	May 2020	Airworthiness installation of a UAS DAA system

DO-366, MOPS for Air-to-Air Radar for Traffic Surveillance				
DO-253D Change 1, MOPS for GPS Local Area Augmentation System Airborne Equipment	SC-159	TSO-C161b and TSO-C162b	September 2019	TSOs completed public comment in August 2019
DO-356A, Airworthiness Security Methods and Considerations	SC-216	AC	November 2020	Supports Special Conditions
DO-370, Guidelines for the In Situ Eddy Dissipation Rate (EDR) Algorithm Performance	SC-206	TBD	N/A	FAA solicits industry feedback on need for FAA guidance on use of this document
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 (2020) for interference environment)
DO-385 MOPS for ACAS Xa System and ACAS Xa/o Functionality (Class 1 ACAS X & Class 2 ACAS X)	SC-147	TSO	December 2019	Performance standard and installation guidance for Class 1 ACAS X (basic collision avoidance functionality) and Class 2 ACAS X (closely spaced runway operations)
		AC	May 2020	
DO-281C, MOPS for aircraft VDL Mode 2 Physical Link and Network Layer	SC-214	TSO	2021	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-201B – User Requirements for Navigation Data	SC-217	AC 20-153B Change 1	July 2020	Updates navigation data quality requirements (DQRs).
DO-317B Change 1	SC-186	Note to Manufacturers for TSO-C195b	September 2019	

DO-262D MOPS for Next Gen Satellite Systems	SC-222	None	N/A	TSO revision will synch with subsequent MOPS update
New C2 Link MASPS	SC-228	AC 20-187A	December 2020	
DO-358A – MOPS FIS-B	SC-206	TSO-C157c	April 2020	
DO-378, MASPS-Coexistence of Wireless Avionics 4200-4400 MHz	SC-236	None	N/A	FAA will review future MOPS for potential TSO.

RTCA Documents Pending PMC Approval

RTCA Document	Developed By	Planned FAA Guidance	Planned Release Date	Comment
DO-290 Change 3 – <i>SPR Standard for Air Traffic Data Link Services in Continental Airspace</i>	SC-214	None	N/A	
New Document – <i>Aviation Profiles for Internet Protocol Suite (IPS)</i>	SC-223	None	N/A	FAA plans to utilize future MASPS as basis for certification guidance. MASPS will utilize IPS.
DO-385 Change 1 – <i>MOPS for ACAS X (ACAS Xa and ACAS Xo)</i>	SC-147	TSO	December 2019	FAA plans to include initial DO-385 and Change 1 in the initial TSO

Mr. Bulger commented there were more delays due to evaluation of potential impacts on industry due to following Safety Continuum direction – with slips up to one calendar quarter. Can influence priority as needed, so he recommended members reach out if a particular TSO/AC is needed sooner than later. Members asked if there was a schedule of when these issues would be resolved. Ms. Reimold said that the agency is aware of the problem and is conducting lots of internal discussions on reasonable approach to follow the continuum. Her new position is part of trying to resolve these types of issues.

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

- Rebecca Morrison, RTCA Program Director, presented.

Reports were received from SC-237, SC-236, SC-230, SC-224, SC-222, and SC-186.

SC-229 – Presented today on their TOR update (agenda item 7D).

SC-228 – Presented today on their TOR update (agenda item 7C).

SC-223 – Presented today on DO-379 (agenda item 3B).

SC-214 – Presented today on DO-290 Change 3 (agenda item 3A).

SC-147 – Presented today on DO-386 Change 1 (agenda item 3C).

The complete matrix and individual committee reports are posted on Workspace (RTCA Paper No. 200-19/PMC-1930).

G. European/EUROCAE Coordination – Status Update.

- Rebecca Morrison, RTCA Program Director, presented.

Topics of Note:

- New Documents Released by EUROCAE since last PMC
 - ED-263 – *Minimum Operational Performance Standard for On Board Weight and Balance Systems* – WG-88, June 2019
 - ED-87D – *MASPS for ASMOCS including new Airport safety Support Service Routing Service and Guidance Service* – WG-11, July 2019
 - ED-260/DO-378 – *MASPS for coexistence of Wireless Avionics Intra-Communication Systems within 4 200-4 400 MHz* – WG-96/SC-236, July 2019
- EUROCAE Upcoming Meetings:
 - TAC #79 – September 19-20, 2019, Brussels, EASA
 - TAC380 – January 14-15, 2020, Cologne, EASA
 - TAC#81 – April 28, 2020, Geneva, IATA
- New EUROCAE WG-112 – VTOL
 - WG-112 shall develop the appropriate industry standards necessary as Acceptable Means of Compliance to support the EASA Special Condition on VTOL aircraft.
 - This activity is part of the EUROCAE Technical Work Programme and will be performed as a Pilot Project for the EUROCAE Lean process
 - Initial Scope Includes: Electrical, Thrust/lift, Safety, Flight, Ground
 - Details of the work program were updated since the kickoff meeting 6/28/19
 - Updated work program for WG-112 is included in slide deck posted in Workspace (RTCA Paper No. 201-19/PMC-1931)

H. RTCA Drafting Guides – Status Update.

- Karan Hofmann, RTCA Program Director, presented.

The RTCA staff continues working on updates to the drafting guides in coordination with EUROCAE to align the guides as much as possible. Ms. von Groote mentioned that EUROCAE was implementing a Quality Management System (QMS) which includes developing document templates to more formalize groups' work. And she agreed we needed to keep the templates in-sync between RTCA and EUROCAE.

AGENDA ITEM 8

Other Business.

A. RTCA Terms of Reference Template – Discussion – Possible Revisions.

- Karan Hofmann, PMC Secretary, presented.

The TOR Template needs to be updated/revised. Basic suggested revisions include updating DFO to GAR and to include indicating the “Original Requester(s)” vs. “Requester(s)” for historical preservation.

There was much discussion on the following items:

- Possibly adding a column in the “Deliverables” table for “Publication Date” (which would be the PMC Approval Date) for clarification of when to expect release of document by the PMC. EUROCAE TOR's include two date – Open Consultation date and Publication Date (which includes Council review and approval). Members agreed there should only be one date but to possibly include definition or further comment on what the definition of the date. Should it be the date when the committee is finished with a document and turns it over to the RTCA Secretariat as it currently is? Or should it be the Plenary month and year for the FRAC Resolution? Either should probably have a sentence below the table on publication expectations.
- Wording covering configuration management of the document once published. The new Active Monitor Status fills this role (as evidenced by SC-229's activities during this meeting), but what about documents completed by SC's that are now sunset?

Members agreed further work was needed and this discussion would continue at the December PMC meeting. (Action)

B. Errata Processing - Discussion.

- Karan Hofmann, PMC Secretary, presented.

By definition, errata is the removal of low impact mistakes by correcting minor procedural/editorial errors. This cannot, with the exception of editorial updates, add, remove or modify a requirement or test. There is no specified process for handling of errata for documents.

Chairman Hegarty recommended all changes should come through the PMC. Members agreed, but not all errata needs formal presentation at a PMC meeting. Some instances could be handled through electronic review. Members agreed future errata will be handled on a case by case basis in the quickest and easiest means possible.

This discussion was brought up associated with an item related to DO-325 that recently surfaced. Although very minor, members requested being able to review this errata item. (Action)

AGENDA ITEM 9

Schedule for Committee Deliverables and Next Meeting Date

Documents expected for the December 19, 2019 meeting:

- SC-224, Standards for Airport Security Access Control Systems
 - DO-230J – *Standards for Airport Security Access Control Systems*

- SC-228, Minimum Performance Standards for Unmanned Aircraft Systems
 - DO-365A – *MOPS for Detect and Avoid Systems*

The dates for the next four PMC meetings were confirmed: Thursday, December 19, 2019; Thursday, March 26, 2020; Thursday, June 25, 2020; and Thursday, September 10, 2020.

AGENDA ITEM 10

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 12, 2019
ATTENDANCE LIST**

PMC MEMBERS:

Christopher	Hegarty	The MITRE Corporation Chairman (Also Proxy for Rune Duke (AOPA))
Doug	Arbuckle	Federal Aviation Administration
Clay	Barber	Garmin, Ltd
John	Craig	Aviation Information Sharing and Analysis Center
Jeffrey	Hausmann	Gulfstream Aerospace Corporation
Jens	Hennig	General Aviation Manufacturers Association
Robert	Ireland	Airlines for America
Richard	Kahne	U.S. Air Force
Donald	Kauffman	Honeywell (Proxy for Randy Robertson)
Robert	Lee	Collins Aerospace
Di	Reimold	Federal Aviation Administration Government Authorized Representative (Also Proxy for Joseph Post)
Al	Secen	RTCA, Inc.
Jessie	Turner	The Boeing Company
Heidi	Williams	National Business Aviation Association

OTHER ATTENDEES:

Chip	Bulger	Federal Aviation Administration
Charisse	Green	Federal Aviation Administration
Ed	Hahn	Air Line Pilots Association
Karan	Hofmann	RTCA, Inc.
John	Moore	Collins Aerospace
Rebecca	Morrison	RTCA, Inc.
Thomas	Mustach	Federal Aviation Administration
Gregg	Nesemeier	Federal Aviation Administration
Thomas	Pack	Arcrartex
Stephane	Pelleschi	Collins Aerospace
Gordon	Putsche	The Boeing Company
Stuart	Searight	Federal Aviation Administration
Anna	von Groote	EUROCAE
Jim	Williams	Unmanned Solutions

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	Al Secen	Dec 2019	Open
12/13/2018 Agenda Item 6D	12/13/2018 – Once complete, share RTCA-ICAO document referenced spreadsheet with PMC 09/12/2019 – Project determined to be too difficult and abandoned at this time. Will provide what was accomplished with PMC members.	Al Secen	Sep 2019	Open
03/21/2019 Agenda Item 6N	03/21/2019 – Ad Hoc review IP Policy (coordinate with EUROCAE) and recommend action for SC-159 GNSS-aided inertial navigation systems MOPS 06/27/2019 – Ad Hoc recommendations reviewed; being coordinated with EUROCAE and then to RTCA Advisory Board for approval; recommend SC-159 not include info without CtL 09/12/2019 – EUROCAE coordination complete and IP Policy scheduled for Dec RTCA Advisory Board Review	Terry McVenes, Al Secen, George Ligler, Mats Brenner, EUORCAE Rep	Dec 2019	Open
03/21/2019 Agenda Item 7A	03/21/2019 - FAA capture their use/need for output of a DO-178C supplement	FAA Chip Bugler	Dec 2019	Open
03/21/2019 Agenda Item 7A	03/21/2019 - UAS FAS Ad Hoc provide an outline for the envisioned supplement	UAS FAS Ad Hoc	Dec 2019	Open
03/21/2019 Agenda Item 7C	03/21/2019 – SC-213 present to June PMC mtg on MASPS deviation request	SC-213	Sep 2019	Open
03/21/2019 Agenda Item 8F	03/21/2019 – Internal FAA 4D TBO coordination	Doug Arbuckle	Dec 2019	Open

03/21/2019 Agenda Item 8F	03/21/2019 – After FAA coordination, Ad Hoc with SC-227 and SC-186 (w/WG-51) leadership on 4D TBO	Doug Arbuckle	Dec 2019	Open
06/27/2019 Agenda Item 6G	06/27/2019 – Jessie Turner provide administrative corrections to SC-231 TOR 09/12/2019 – Action complete with published SC-231 TOR	Jessie Turner	Jun 2019	Closed
06/27/2019 Agenda Item 6K	06/27/2019 – Provide copy of meeting summary w/ Chris Hegarty and EUROCAE leadership on UAS FAS Ad Hoc recommendations 09/12/2019 – Action complete	Chris Hegarty / Karan Hofmann	Jul 2019	Closed
06/27/2019 Agenda Item 7A	06/27/2019 – Ad Hoc to determine follow on COA for possible new SC’s (Counter UAS, HEE, & AI)	Terry McVenes, Jens Hennig, Jessie Turner, Bob Lee, and Randy Robertson	Dec 2019	Open
06/27/2019 Agenda Item 8C	06/27/2019 – Present ideas to SC-216 for consideration 09/12/2019 – Action complete	Calvin Chu through RTCA	Sep 2019	Closed
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	Dec 2019	Open
09/12/2019 Agenda Item 3B	09/12/2019 – Post email authorization on IETF for DO-379	Karan Hofmann	Oct 2019	Open
09/12/2019 Agenda Item 7B	09/12/2019 – Incorporate revised SC-223 TOR to include correct title for DO-379 in reference prior to publication	Karan Hofmann	Oct 2019	Open
09/12/2019 Agenda Item 7C	09/12/2019 – Incorporate revised SC-228 TOR admin changes (dates and document versions) prior to publication	Karan Hofmann	Oct 2019	Open
09/12/2019 Agenda Item 7D	09/12/2019 – Incorporate revised SC-229 TOR admin change prior to publication	Karan Hofmann	Oct 2019	Open
09/12/2019 Agenda Item 8A	09/12/2019 – Further review of TOR template	RTCA Members	Dec 2019	Open
09/12/2019 Agenda Item 8B	09/12/2019 – Distribute the DO-325 Errata to PMC members	Karan Hofmann	Oct 2019	Open