# RTCA PROGRAM MANAGEMENT COMMITTEE MEETING SUMMARY June 18, 2015

The RTCA Program Management Committee (PMC) convened at 8:30 a.m. on June 18, 2015 at RTCA. The attendance list and action items are attached.

#### **AGENDA ITEM 1**

Welcome and Introductions.

PMC Chairman Chris Hegarty welcomed the group, asked attendees to introduce themselves and to note their organization of affiliation. Rich Jennings, the Designated Federal Official (DFO), read the Public Meeting Announcement that includes the date the Federal Register meeting notice was published, declares the meeting is "Open to the Public" and provides details for persons wishing to present or obtain information pertaining to the meeting.

#### **AGENDA ITEM 2**

Review / Approve Summary of the March 18, 2015 Meeting.

The summary of the March 18, 2015 meeting was not approved at the meeting due to lateness in dissemination (RTCA Paper No.119-15/PMC-1332). Chairman Hegarty announced electronic follow-on approval will be conducted.

#### **AGENDA ITEM 3**

### **Publication Consideration/Approval.**

- **A.** Final Draft, Revised Document, DO-200A *Standards for Processing Aeronautical Data*, prepared by SC-217.
  - Stephane Dubet, SC-217 Co-Chairman presented.

Mr. Dubet presented the SC-217 revised document "Standards for Processing Aeronautical Data". This document provides the minimum requirements and guidance for the processing of aeronautical data that are used for navigation, flight planning, terrain/obstacle awareness, flight deck displays, flight simulators and for other applications. The standard provides requirements to develop, assess change, and support implementation of data quality management. The document supports ATM modernization programs such as NextGen and SESAR, including the capabilities and flexibilities provided by Performance Based Navigation (PBN). The document addresses aeronautical databases as well as the associated data processing. These databases may be utilized by airborne or ground-based aviation products. When applied by each organization in

the aeronautical data chain, the standard will provide assurance that the level of data quality is established and maintained.

Some PMC members, GAMA and Garmin, expressed concern regarding the document's treatment of security and wanted to a clarifying statement. SC-217 Leadership said the security section was discussed throughout development of DO-200B and during FRAC. It was also brought up that this is a joint document that was approved by TAC at EUROCAE "as-is".

The PMC determined not to include the proposed security words recommended by GAMA and Garmin ("Data Security provisions may be tiered depending on the Data Process Assurance Levels as defined in Table B-1. For example, Routine data may implement less data security provisions when compared with Essential and Critical data."). Instead, FAA will work with EASA and will address these specific security concerns in a planned AC 20-153B.

The PMC approved the document. It is published as DO-200B.

- **B.** Final Draft, Revised Document, DO-230D *Standards for Airport Security Access Control Systems*, prepared by SC-224.
  - Christer Wilkinson, SC-224 Chairman presented.

Mr. Wilkinson presented the new SC-224 document "Standards for Airport Security Access Control Systems." This document provides guidance on acquiring and designing security access control systems, testing and evaluating system performance, and operational requirements. It incorporates the latest technological advances in security access control systems and identity management technologies, including smart cards and biometrics. The areas that included substitutive changes in this revision are: Biometrics, Physical Access Control Systems (PACS), Perimeter Intrusion Detection Systems (PIDS), Video Surveillance Systems, Integration, and Communications Infrastructure. The document indicates not only the current best practices and system requirements to meet the current regulatory requirements, but also provides guidance for those airport operators who wish to go beyond these requirements.

SC-224 received input from the TSA and this resulted in several forward-looking statements and inputs from the TSA Recommended Security Guidelines for Airport Planning, Design and Construction, (May 2011). It should be noted that TSA guidelines that cover passenger screening areas and checkpoint security are areas outside the scope of this document. Section inputs from airport operators and vendors relied on actual experience and operational issues faced.

The PMC approved the document. It is published as DO-230E.

- C. Final Draft, Revised Document, DO-311 Minimum Operational Performance Standards for Rechargeable Lithium Battery Systems, prepared by SC-225
  - Richard Nguyen, SC-225 Chairman, and Stephen Diehl, SC-225 Secretary, presented.

Mr. Nguyen and Mr. Diehl presented the new SC-225 document "Minimum Operational Performance Standards for Rechargeable Lithium Battery Systems." The document contains Minimum Operational Performance Standards (MOPS) for rechargeable Lithium battery systems to be used as permanently installed power sources on aircraft. The tests defined in this document also provide a standardized method for characterization of performance of batteries and battery systems. Compliance with these standards is recommended as a means of assuring that the Lithium battery will perform its intended function(s) safely, under conditions normally encountered in aeronautical operations. These standards apply to the chemical composition, cell size, cell construction, cell interconnection methods within batteries, venting provisions, operational and storage environments, packaging, handling, test, storage and disposal of rechargeable Lithium batteries, installed separately or in avionics equipment aboard aircraft.

Some PMC members felt the document did not cover all areas that were required per the TOR. After some discussion, action was taken to establish an ad hoc group to develop clear, unambiguous guidance to SC-225 to modify the document to address PMC-perceived shortfalls. At a minimum, the guidance will address the need to incorporate design criteria and requirements more clearly and to address requirements as they relate to battery size. Assumption for intended use of document, as stated in the TOR, is that the DO-311 revision will be referenced by TSO. Members include: Rich Jennings, Jens Hennig, Clay Barber (Garmin), Margaret Jenny, Jesse Turner, George Ligler, Jennifer Iversen, and SC-225 leadership.

#### **AGENDA ITEM 4**

Integration and Coordination Committee (ICC).

- Activity Report SC-186/SC-227 A-IM Concept Discussion
- George Ligler, PMC Member and PMC ICC Chairman, presented.

The PMC discussion on March 24, 2015 tasked the ICC to help with the coordination between SC-186 and SC-227 on issues of A-IM integration with Time of Arrival Control (TOAC). The ICC held a teleconference on June 2, 2015 to discuss A-IM and TOAC integration in general and within RTCA's work program. The ICC reported the U.S. and European studies related to A-IM and TOAC integration should be monitored by the PMC, with an update provided at the December 2015 PMC meeting by Don Walker, FAA. And as the A-IM/TOAC integration studies progress and CONOPS is being matured, an *integrated implementation roadmap* for these capabilities needs to be developed, to include standards (SC-206, SC-214, SC-227 and SC-186), manufacturer readiness, FAA automation system upgrades, and development of air traffic procedures. The FAA has taken an action to address the construction of such a roadmap and will present the integrated/services implementation roadmap at the December 2015 PMC. The PMC requested the continual updates on results of various studies as they are completed. Initial action closed.

## AGENDA ITEM 5 Action Item Review.

A. PMC Ad Hoc – Standards Overlap and Alignment – Discussion – Workshop Status

• Ron Stroup, FAA, presented.

Mr. Stroup reported that the second Standards Overlap and Alignment workshop was held Wednesday, March 25th. The group reviewed the list of key areas identified during the first Workshop held in September 2014. The group also discussed potential areas of improvement, a new methodology for establishing new RTCA activities and developing Standards, along with ways to reinforce the collaboration between the FAA and Industry stakeholders. The four key areas of concern were: (1) Culture and Communication, (2) Harmonization and Stakeholders/Expertise, (3) Integrated C.N.S / A.T.M, Conops and Requirements Allocation and (4) Cross-cutting (ISRA, HF, Security, etc.). The concept of a super-committee, a kind of high level, cross cutting committee has emerged. This new committee will assess early in the process the maturity of the conops and impacts on existing Special Committee or new SC (allocation of requirements, required expertise, need of coordination with other SC or Standardizations organizations, etc.).

Mr. Stroup gave a presentation on details of this super-committee. The cross-cutting committee will make recommendations to the PMC that sufficient material is in place to set up a new SC and/or tasking an existing SC to develop standards (MASPS, MOPS) and/or associated deliverables (OSED's, SPR's, etc.) in accordance with the TOR approved by the PMC. The process flowchart will be drafted and shared with the Workshop participants by the end of June 2015 and a synthesis of comments received will be presented during the September PMC. The objective is to put something in place, not to get a perfect solution and also answer the most pertinent questions/issues.

There was a question/remark on the process to develop the tasking letter and more involvement of the DFO. It was also mentioned that RTCA has less liberty than EUROCAE to set up a new activity and consequently adding another step may unduly burdensome.

- The briefing is posted on Workspace (RTCA Paper No. 147-15/PMC-1349).
- B. SC-229 406 MHz Emergency Locator Transmitters (ELTs) Discussion Coordination Status Aircraft tracking and In-Flight Triggering
  - Rich Jennings and Margaret Jenny, PMC Members FAA & RTCA respectively, presented.

Ms. Jenny and Mr. Jennings reported on follow up from discussions following the March PMC. PMC members need to be aware of an ICAO State Letter on Distress Tracking and a EUROCAE activity with respect to WG-98 and the MASPS "For in-flight event detection and triggering criteria" in progress. Rich mentioned that FAA is working on comments to the letter and would recommend to have a new SC with a broader expertise to work on a more global approach. The content of this draft MASPS is very valuable but it is not a MASPS, it would be more appropriate to call it "Guidance." Following discussion, PMC agreed to establish an ad-hoc to work MASPS vs. guidance "discontinuity" between RTCA and EUROCAE documentation. This will include follow-up with EUROCAE and/or TAC (next TAC meeting is September 2-3, 2015). Members

include Richard Jennings, Margaret Jenny, Jesse Turner, Rick Heinrich, and Chris Hegarty. It was noted that resolution needs to be quick, as WG-98 is working pre-consultation in July and open consultation in September with a publication of the document expected in February 2016.

- C. SC-159 Global Positioning System Discussion Revised Terms of Reference (TOR)
  - George Ligler, PMC Member & SC-159 Co-Chairman, presented.

Dr. Ligler presented an initial draft of proposed changes to the SC-159 TOR at the March PMC. Recommendations were made to change MOPS deliverables to "Initial MOPS for Verification and Validation" and adjust dates based on the current schedule for deployment of L5-capable satellites. A note was added to advise constellation providers to provide final needed technical information at least two years prior to the completion of the initial MOPS for Verification and Validation to ensure their constellations are included in the MOPS.

Lockheed Martin provided a position paper recommending an accelerated schedule for the L1/L5 MOPS. It was pointed out that this recommendation did not affect this TOR revision, as SC-159 can't produce new MOPS until requisite data is available. The PMC agreed on an action to provide a response to Lockheed Martin.

There was also discussion on including a cybersecurity considerations in the TOR. Exact words could not be agreed upon. The TOR was approved without the inclusion of a provision for SC-159 to address cyber, but the PMC should expect a modest proposed revision of the TOR from the FAA in the near future that includes such a provision.

The PMC approved the revised TOR (RTCA Paper No. 176-15/PMC-1360).

### AGENDA ITEM 6

#### Discussion.

- A. SC-214 Standards for Air Traffic Data Communication Services Discussion Revised TOR.
  - Sophie Bousquet, RTCA Program Director, and Dongsong Zeng, VDLSG Co-Chairman SC-214 presented.

The revised Terms of Reference (TOR) indicates several changes to the Committee's deliverables. Due to the timeline for SC-214 document delivery being significantly before Advanced-IM MOPS/SPR/Interop, recommend wording change from "Final" for any reference to 2016 document deliveries and replace by "Revision" to match RTCA process. Also, the TOR adds revisions to DO-224C and DO-281B to allow for VDL2 MASPS and MOPS joint development with EUROCAE WG-92.

The PMC approved the revised TOR (RTCA Paper No. 159-15/PMC-1359).

#### B. SC-217 – Aeronautical Databases – Discussion – Revised TOR

• John Kasten and Stephane Dubet, SC-217 Co-Chairmen, presented.

Mr. Kasten and Mr. Dubet provided an update on the DO-201A/ED-77 "Standards for Aeronautical Information" scoping exercise held in May-June 2015 jointly with EUROCAE. SC-217 and EUROCAE members involved recommend updating DO-201A/ED-77. A revised TOR will be drafted and submitted at the September PMC meeting for approval. The draft TOR will be provided to the PMC members on August 5th for review.

### C. Wake Vortex Tiger Team (WVTT) - Discussion – White Paper – Review/Approve

• Rocky Stone, WVTT Chairman, presented.

This White Paper lists a set of recommendations for standards setting activities to enable the implementation of applications described in RTCA DO-339, Aircraft Derived Meteorological Data via Data Link for Wake Vortex, Air Traffic Management and Weather Applications – Operational Services and Environmental Definition (OSED).

The WVTT proposed the White Paper be published by RTCA as a miscellaneous document with PMC approval. After discussion on means to forward recommendations to FAA, the PMC members decided to run the White Paper through the FACA process. This would involve inviting appropriate Special Committees (SC-206, SC-147, SC-209, SC-214 and SC-186) to participate in an open Final Review and Coordination (FRAC) with a DFO. Goal is to run the FRAC, complete the document and re-submit a new version to the PMC in September.

# D. Minimum Operational Performance Standards for Small Cell Non-Rechargeable Lithium Batteries - Discussion – Possible New Special Committee to Revise RTCA DO-227

• Norman Pereira, Federal Aviation Administration, presented.

Mr. Pereria presented a request for RTCA to form a special committee to update RTCA document DO-227, *Minimum Operation Performance Standards for Lithium Batteries*. Since the release of DO-227 in 1995, non-rechargeable lithium battery technology has advanced and their use in avionics and cabin equipment has increased. The FAA needs revised guidance to address the design, testing, and validation of non-rechargeable lithium batteries and systems.

The revised guidance should incorporate new developments and lessons learned since the original release of DO-227 and provide an updated design standard. A revision to DO-227 would help ensure a more standardized approach in non-rechargeable lithium battery design and performance. This revision will be used as the basis for FAA technical standard order (TSO), TSO-C142a, Non-Rechargeable Lithium Cells and Batteries, and references in an advisory circular.

The PMC approved the TOR and the formation of SC-235 (RTCA Paper No. 184-15/PMC-1365).

# E. SC-233 – Addressing Human Factors/Pilot Interface Issues for Avionics – Discussion – Document Table of Contents "Buckets"

• Susan Taylor and Trish Ververs, SC-233 Chairmen, presented.

Ms. Taylor and Ms. Ververs gave a brief overview of the committee's progress to include breakout of membership, outcome of the two meetings held, and breakout of work into four subcommittees to match document sections (Introduction; Overview of prevalent recurring pilot interface issues that have been observed during certification of avionics; Recommended process for evaluating human factors / pilot interface aspects of avionics; and Appendices: Development of HFE artifacts that can be used to assist in the evaluation of process). There will be two more meetings (September and December) before the next report to the December PMC meeting.

# F. Design Assurance Guidance for Airborne Electronic Hardware – Status – Possible New Special Committee to Update RTCA DO-254

• Richard Jennings, PMC DFO, presented.

At the March PMC, an update was provided on the FAA-sponsored DO-254 workshop. There were gaps and opportunities identified. Mr. Jennings reported that the FAA and EASA will hold a harmonization meeting in late August. A TOR should come out of that meeting and will be forwarded to RTCA and EUROCAE for action. Follow-up will be reported at the September PMC meeting.

# G. SC-186 – Automatic Dependent Surveillance-Broadcast – Discussion – BADA Testing Criteria / MITRE Software FastLicense

• Rocky Stone, SC-186 Co-Chairman, presented.

Captain Stone reported during SC-186/WG4/EUROCAE WG51 SG3 FRAC resolution, there was a non-concur issue with respect to resolving legal/licensing aspects of BADA aircraft characteristics for MOPS testing, MITRE aircraft model software for MOPS testing, and MITRE Sample Algorithm source code. Several outside meetings have occurred and determined sample algorithm is not needed for testing, just the data. MITRE has agreed to allow access to the data. The final document will comply with the RTCA Policy for Proprietary References in RTCA Documents.

#### H. NextGen Advisory Committee (NAC) - Status Update

• Margaret Jenny, PMC Member – RTCA, reported.

Ms. Jenny reported on the NAC Advisory Committee meeting held June 5, 2015 at RTCA.

The NAC meeting covered performance metrics for 4 focus areas. Six performance metrics (Actual Block Time, Actual Distance Flown, Estimated Fuel Burn, Throughput – Facility Reported Capacity Rates, Taxi-out Time, and Gate Departure Delay) were approved. Next steps include: (1) the FAA beginning to act upon the metrics and (2) aviation industry, through RTCA, determining the means to identify impacts on industry. The NAC also approved an ADS-B Ad Hoc recommendation ("What implementation commitments are necessary for the 2020 ADS-B implementation mandate?") to complement Equip 2020 efforts.

Other NAC items covered included: FAA Response to "Blueprint for Success to Implementing Performance Based Navigation" (received report, incorporated majority of NAC recommendations); PBN NAS Navigation Strategy (NACSC will work with FAA PRAC to develop revision to 2006 PBN Roadmap and report to NAC); Wake ReCat Acceleration (FAA reviewing schedule to identify opportunities to accelerate implementation); DataComm Security Protections (Airline CIO outreach); Access to SWIM Data (brief at July NACSC meeting); and NextGen implementation Concept of Operations (Future briefing).

The next NAC meeting will be held on October 8, 2015, hosted by FedEx in Memphis, TN.

### I. FAA Actions Taken on Previously Published Documents – Report

 Rich Jennings - PMC Member – FAA presented. (FAA Guidance based on RTCA Documents – RTCA Paper No. 133-15/PMC-1336)

Mr. Jennings reviewed FAA Published Documents that reference published RTCA Documents:

FAA Published Guidance (Since Previous PMC)

RTCA Document	Developed By	FAA Guidance	Approval Date	Comment
DO-358	SC-206	TSO-C157b	5/28/15	Flight Information Services – Broadcast or FIS-B
DO-329	SC-221	AC 120-110	4/14/15	Guidance on secondary cockpit barrier methods to support 14 CFR 121.584 for flight deck security

Mr. Jennings reviewed FAA Pending Documents for RTCA Documents Published:

RTCA Published Documents - FAA Pending Guidance

RTCA Document	Developed By	FAA Guidance	Planned Release Date	Comment
DO-315A	SC-213	AC 20-167A	September 2015?	Plan to release AC 20- 167A after rule is published
DO-335	SC-220	AC 23-17C to address AFGCS	September 2015	Plan to reference document in the Part 23 Systems AC (planned release date move from 2014 as a result of Part 23 rewrite and other priorities)
DO-359	SC-213	AC 20-SVGS	September 2015	Airworthiness guidance for use of Synthetic Vision Guidance System on SA CAT I ILS.
DO-347	SC-225	AC 20-184	September 2015	Certification Test Guidance for Small and Medium Sized Rechargeable Lithium Batteries
Chg 4 to DO-210D	SC-222	TSO-C132a	December 2015	Change 4 makes adjustments to environmental test procedures.
Chg 1 to DO-280B	SC-214	AC 20-140C	July 2016	Interoperability Requirements Standard for Aeronautical Telecommunication Network Baseline 1. Plan to invoke with the B2 (final) standards in AC 20-140C

Mr. Jennings reviewed FAA plans for RTCA Documents pending PMC approval:

RTCA Documents Pending PMC Approval

RTCA Document	Developed By	Planned FAA Guidance	Planned Release Date	Comment
Final Draft, Revised Document, DO- 200A - Standards for Processing Aeronautical Data	SC-217	AC 20-153B Order 8110.55B	December 2015	Plan to allow Mfg to retain their current LOA under AC 20-153A for 3 years, and is being harmonized with EASA (EUROCAE ED-76A)
Final Draft, Revised Document, DO- 230D - Standard for Airport Security Access Control Systems	SC-224	No plans at this time	N/A	New DFO proposed: Ed Ebright, FAA ID Media Division, AIN-600,
Final Draft, Revised Document, DO-311 - Minimum Operational Performance Standards for Rechargeable Lithium Battery Systems	SC-225	AC 20-184A	September 2016	Small/ Medium  Rechargeable Lithium  Battery and Battery  Systems. However, will  allow DO-311A to be used as a means of compliance to Special Conditions in the meantime at request of applicant.

# J. Special Committees – Chairmen's Reports and Active Inter-Special Committee Requirements Agreements (ISRA) - Review

• Jennifer Iversen, RTCA Program Director, reported.

Highlights from the Chair Reports for several selected Special Committees were reviewed. Reports were received from SCs 135, 147, 206, 213, 222, 231, and 234. Other information was included in other presentations during this PMC. The complete matrix was posted on Workspace (RTCA Paper No. 152-15/PMC-1354).

### K. European/EUROCAE Coordination – Status Update.

• Jennifer Iversen, RTCA Program Director reported.

Ms. Iversen coordinates regularly with EUROCAE and provided updates of ongoing RTCA / EUROCAE cooperation in several areas:

SC-206/WG-76 AIS/MET Datalink Applications

Waiting on reactivation approval form EUROCAE Council

SC-234/WG-99 Portable Electronic Devices

First Joint Meeting – May 2015

Second Meeting – September 2015 (note: now scheduled October 2015)

Other topics discussed included:

WG-73 UAV and WG-93 Light RPAS

• Updated Terms of Reference expected Sept/Dec 2015

WG-99 Portable Electronic Devices (PEDs)

• Terms of Reference updated to align dates and cooperation with RTCA

Runway Overrun Alerting and Avoidance System

- MOPS on Runway Overrun Alerting and Avoidance System
- Will launch late summer U.S. Industry Interest, IATA involved, coordination with ICAO ORSTI WG
- Follow on note: KoM scheduled in September at EUROCAE facilities

WG-95: Icing Long Range Awareness

- SC-230 Leadership Participating with WG-95
- SC-230 Plans to draft TOR for September
- Next meetings: Later Summer, Oct 2015, Feb 2016

DO-254/ED-80 Update

• Potential to Launch Jointly

Key dates for future coordination: EUROCAE will hold their Symposium on April 29-30, 2015 in Rome. The Next TAC Meetings are set for 2-3 September (Cologne, EASA), 1-2 December (Toulouse, DSNA), and 9-10 February 2016 (Paris, EUROCAE).

International Civil Aviation Organization (ICAO) Update:

Standards Round Table

- Working on path forward via correspondence
- 2 Hour Videocon June 22, 2015
- Face-to-face meeting Fall 2015

#### **RPAS**

- Panel Hal representing RTCA and providing link between SC-228 and RPAS Panel BUDSS
  - May 2015 Postponed
  - Will be rescheduled for Fall 2015 or Early 2016

Following PMC discussion on the Runway Overrun Alerting and Avoidance System, it was agreed to investigate possible US industry interest and if appropriate prepare letter and draft TOR for possible joint committee.

The RTCA staff will continue to keep the PMC apprised of developments.

#### **AGENDA ITEM 7**

Other Business.

## A. SC-147 – Traffic Alert & Collision Avoidance System – Discussion – Possibly Revise TOR.

• Robert "Scott" Dann, General Atomics Aeronautical Systems, presented.

Mr. Dann presented a letter from Unite requesting a change to SC-147 TOR to include an ACAS-Xu MOPS. They indicated TCAS-2 will be replaced by ACAS-Xu and should be included. PMC members indicated any such effort should be coordinated with SC-147 and SC-228.

#### Two actions resulted:

- The request for inclusion of ACAS-Xu in SC-147 TOR needed to go through PMC process coordinate with FAA (Neil Suchy Program Office) to evaluate workload and recommendation to revisit TOR if appropriate (possibly by September PMC).
- A parallel effort to work with SC-147 and SC-228 for their consideration.

## B. SC-224 – Standards for Airport Security Access Control Systems – Discussion – Revised TOR.

• Rich Jennings - PMC Member – FAA presented.

Mr. Ed Ebright will be the new Designated Federal Official for SC-224.

The PMC approved the revised TOR with changes (RTCA Paper No. 183-15/PMC-1364).

### C. SC-186 – Automatic Dependent Surveillance-Broadcast – Discussion – Revised TOR.

• Bob Ireland, PMC Member – Airlines for America, presented.

Mr. Ireland brought a UPS concern, through its in-service trials that GPS satellite reception is subject to occasional "dropouts". Apparently DO-260B specifies that transponders should assure signal integrity without losses of more than two seconds' duration, but GPS signal restoration after these dropouts tends to take longer than two seconds. Following DO-260B, depending on implementation, a transponder fault light may illuminate, resulting in maintenance action when the equipment is not to blame.

Following discussion, PMC members agreed this was not a MOPS problem, but agreed this is something that needed awareness. Mr. Ligler agreed to provide the PMC an update of the UPS status at the September PMC.

#### D. Forward Planning Discussion for September PMC- Discussion.

• Karan Hofmann, RTCA Program Director, presented.

Ms. Hofmann reminded PMC members that from last fall's survey it was decided to add a "Forward Planning" discussion at the September PMC meeting. This is an opportunity for PMC members to provide input on how best to prepare for this discussion.

Action: all members should provide any inputs by July 31, 2015 to RTCA.

#### **AGENDA ITEM 8**

#### **Schedule for Committee Deliverables and Next Meeting Date**

Documents expected for the September 2015 meeting:

- SC-186, Automatic Dependent Surveillance-Broadcast
  - Final Draft, Revised Document, DO-328 Safety, Performance and Interoperability Requirements Document for Airborne Spacing – Flight-deck Interval Management (ASPA-FIM).
  - o Final Draft, New Document, MOPS for Flight-deck Interval Management (FIM).
- SC-217 Aeronautical Databases
  - o Final Draft, Revised Document, DO-272C *User Requirements for Aerodrome Mapping Information*.
  - o Final Draft, Revised Document, DO-276B *User Requirements for Terrain and Obstacle Data*.
  - Final Draft, Revised Document, DO-291B Interchange Standards for Terrain, Obstacle and Aerodrome Mapping Data.

The dates for the next three PMC meetings were confirmed: Tuesday, September 22, 2015; Tuesday, December 15, 2015; and Thursday, March 17, 2016.

/Signed/
Karan Hofmann, Secretary
RTCA Program Management Committee

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

/Signed/ Christopher Hegarty, Chair RTCA Program Management Committee

Program Management Committee – June 18, 2015 ATTENDANCE LIST			
PMC MEMBERS:			
Christopher	Hegarty	The MITRE Corporation Chairman	
Doug	Arbuckle	Federal Aviation Administration	
Clay	Barber	Garmin Ltd.	
Chris	Baum	Air Line Pilots Association	
Steve	Brown	National Business Aviation Association	
Chris	Durkin	Honeywell	
Richard	Heinrich	Rockwell Collins, Inc.	
Jens	Hennig	General Aviation Manufacturers Association	
Robert	Ireland	Airlines for America	
Richard	Jennings	Federal Aviation Administration	
		(Designated Federal Representative)	
Margaret	Jenny	RTCA, Inc.	
George	Ligler	Project Management Enterprises Inc.	
Michele	Merkle	Federal Aviation Administration	
Jessie	Turner	The Boeing Company	

OTHER ATTENDEES	S:	
Moin	Abulhosn	Federal Aviation Administration
Jonathan	Archer	General Aviation Manufacturers Association
David	Batchelor	SESAR
Jonathan	Branner	CGH Technologies
Sophie	Bousquet	RTCA, Inc.
Robert "Scott"	Dann	General Atomics Aeronautical Systems
Stephen	Diehl	The Boeing Company
Allan	Hart	Honeywell
Joe	Hebert	FAA
Karan	Hofmann	RTCA, Inc.
Jennifer	Iversen	RTCA, Inc.
Nazih	Khaouly	FAA
Brad	Miller	Federal Aviation Administration
Thomas	Mustach	Federal Aviation Administration
Warren	Nooger	Air Line Pilots Association
Richard	Nguyen	The Boeing Company
Rocky	Stone	United Airlines, Inc.
Ronald	Stroup	Federal Aviation Administration
Susan	Taylor	Gulfstream
Brian	Verna	Federal Aviation Administration
Christer	Wilkinson	AERCOM
Michelle	Yeh	Federal Aviation Administration
Dongsong	Zeng	The MITRE Corporation

	PMC ACTION ITEM TABLE – 2015				
TRACKING NUMBER Indicates the meeting Date and agenda item	ACTION	ACTION ASSIGNED TO	DUE DATE	STATUS	
From which the					
action resulted.	02/24/2045 DTCA LEAA L. L. SUDOCAS	DTC4	1 2015		
03/24/2015	03/24/2015 – RTCA and FAA reach out to EUROCAE on	RTCA	June 2015	Open	
Agenda Item 6G	different approach to handling MOPS for triggerable ELTs	Karan Hofmann	Sep 2015		
06/18/2015	06/18/2015 – Ad-Hoc to work discontinuity between MASPS	FAA			
Agenda Item 5B	vs. guidance between RTCA and EUROCAE documentation	Rich Jennings			
03/24/2015 Agenda Item 4 06/18/2015 Agenda Item 4	3/24/2015 - Help with the coordination between SC-186 and SC-227 on issues of A-IM integration with Time of Arrival Control (ToAC) 06/18/2015 - Reported the A-IM/ToAC CONOPS is being matured, an integrated implementation roadmap for these	ICC George Ligler	June 2015	Closed	
	capabilities is being developed, and PMC will monitor.				
06/18/2015	06/18/2015 – Report on US and EUROCAE studies	ICC	Dec 2015	Open	
Agenda Item 4	30, 20, 2020 Hoporton 30 and 20 Hook 12 octains	George Ligler	200 2010		
03/18/2014	03/18/2014 – Tiger Team reports back to PMC upon	Wake Tiger	Dec 2014	Open	
Agenda Item 7B	completion	Team	Mar 2015	ope	
3/24/2015	03/24/2015 – Tiger Team presented paper; received further	Rocky Stone	Jun 2015		
Agenda Item 6J	guidance from PMC for submission Jun 2015 PMC	RTCA	Sep 2015		
6/18/2015	06/18/2015 – Paper to go through full FRAC process	Sophie	3cp 2013		
Agenda Item 6C	ooy 10, 2013 Taper to go timoagiriaii Tikhe process	Bousquet			
09/23/2014	09/23/2014 – Further TOR review pending new FAA security	SC-216	Dec 2014	Open	
Agenda Item 6B	activities.		Mar 2015		
12/16/2014	12/16/2014 – Further coordination / review necessary		Dec 2015		
Agenda item 6F	pending WG-72 schedule				
3/24/2015	3/24/2015 – PMC recommended TOR update to address				
Agenda Item 6C	development of joint content and additional deliverables				
09/23/2014	09/23/2014 – Further discussion planned for Dec. meeting	PMC Member	Dec 2014	Open	
Agenda Item 6I	12/16/2014 – Workshop planned to consolidate the desires	Jessie Turner	Jun 2015		
12/16/2014	of industry – revise DO-254 or not	Rich Jennings	Sep 2015		
Agenda Item 6K	3/24/2015 – Workshop update provided; recommendations	J	•		
3/24/2015	being reviewed				
Agenda Item 6K	6/18/2015 - FAA and EASA will hold a harmonization				
6/18/2015	meeting; possible TOR for new joint committee				
Agenda Item 6F	, possible remaining joint committee				
06/18/2015	06/18/2015 – Work possible inclusion of WG-XU into SC-147	RTCA	Sep 2015	Open	
Agenda Item 7A	TOR	Hal Moses	3cp 2013	Орен	
06/18/2015	06/18/2015 – Parallel effort to above with SC-147 and SC-228		Sep 2015	Open	
Agenda Item 7A	35/15/2015 - Graner Chort to above with 36 147 and 36-220	Hal Moses	JCP 2013	Open	
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06/18/2015	06/18/2015 – FAA work with EASA on security wording in AC	FAA	Dec 2015	Open
Agenda Item 3A	vice inclusion in DO-200B	Rich Jennings		
		Brad Miller		
06/18/2015	06/18/2015 – Ad-Hoc to meet with SC-225 to address PMC-	RTCA	Sep 2015	Open
Agenda Item 3C	perceived shortfalls for new DO-311	Jennifer Iversen		
06/18/2015	06/18/2015 – Draft response to Lockheed Martin on input for	PMC	Sep 2015	Open
Agenda Item 5C	SC-159 TOR	George Ligler		
06/18/2015	06/18/2015 – Discuss cybersecurity concerns with FAA for SC-	PMC	Sep 2015	Open
Agenda Item 5C	159 TOR	George Ligler		
06/18/2015	06/18/2015 – Provide input for Sep Forward Planning	PMC	Jul 2015	Open
Agenda Item 7D	Discussion	All		
06/18/2015	06/18/2015 – Investigate possible new SC for runway overrun	PMC	Sep 2015	Open
Agenda Item 6K	alert	Rich Jennings		
		Doug Arbuckle		
06/18/2015	06/18/2015 – Provide update on UPS GPS concern	PMC	Sep 2015	Open
Agenda Item 7C		George Ligler		