RTCA PROGRAM MANAGEMENT COMMITTEE
MEETING SUMMARY
December 15, 2015

The RTCA Program Management Committee (PMC) convened at 8:30 a.m. on December 15, 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.

A.   The summary of the September 22nd meeting was approved with a few adjustments to the list of attendees (RTCA Paper No. 303-15/PMC-1412).

B.   Administrative Special Committee Terms of Reference (TOR) Revisions:

- Electronic Approval Revised TOR SC-147 - MOPS for Traffic Alert and Collision Avoidance Systems Airborne Equipment – Additional Deliverables to correct small errors in algorithms in DO-300 (change 2) and DO-300A. (RTCA Paper No. 300-15/PMC-1410). This also closed an action item from September PMC meeting.
- Electronic Approval Revised TOR SC-224 – Standards for Airport Security Access Control Systems – New Co-Chairman (RTCA Paper No. 299-15/PMC-1409)
- SC-228 – Minimum Performance Standards for Unmanned Aircraft Systems – New Co-Chairman and New Secretary. TOR approved with one abstention (Richard Heinrich). (RTCA Paper No. 006-16/PMC-1442)

AGENDA ITEM 3
Publication Consideration/Approval.

A.   Final Draft, Revised Document, DO-300A – *Minimum Operational Performance Standards (MOPS) for Traffic Alert and Collision Avoidance System II (TCAS II) Hybrid Surveillance,* prepared by SC-147.

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

Mr. Searight presented the SC-147 revision to "Minimum Operational Performance Standards (MOPS) for Traffic Alert and Collision Avoidance System II (TCAS II) Hybrid Surveillance." This document provides additional requirements to help prevent spurious Resolution Advisories during transition from passive to active surveillance. The change includes:

- New requirements which ensure that there is no "residue" from ADS-B surveillance when a track transitions from passive to active surveillance.
- An optional requirement allowing a system to be designed to only perform hybrid surveillance for an intruder whose ADS-B OUT version is greater than or equal to 2.
- Appendix G is added demonstrating that the safety analysis in Appendix D still applies. It documents that a TA and an RA will still be generated at the same time as a TCAS II system which does not use the hybrid surveillance techniques of this specification. Adopt the text from FAA TSO-C119d Appendix 2. That appendix was created in response to comments received during the public comment phase for TSO-C119d. FAA disposition of certain comments received during that review period necessitated creation of Appendix 2 to affect changes to certain sections of DO-300A.

See discussion under Item 3B referencing need for maintaining DO-300 and DO-300A.

The PMC approved the document. It is published as DO-300A Change 1.

B.   Change 2 to DO-300 - *Minimum Operational Performance Standards (MOPS) for Traffic Alert and Collision Avoidance System II (TCAS II) Hybrid Surveillance,* prepared by SC-147.

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

Mr. Searight presented the SC-147 revision to "Minimum Operational Performance Standards (MOPS) for Traffic Alert and Collision Avoidance System II (TCAS II) Hybrid Surveillance." This document provides additional requirements to help prevent spurious Resolution Advisories during transition from passive to active surveillance. The change includes:

- New requirements which ensure that there is no "residue" from ADS-B surveillance when a track transitions from passive to active surveillance.
- An optional requirement allowing a system to be designed to only perform hybrid surveillance for an intruder whose ADS-B OUT version is greater than or equal to 2.

There was some discussion on the distinction between DO-300A and DO-300 and the need to maintain two separate documents. Mr. Searight explained it was related to the TSO's (C119-c (DO-300) and C119-d (DO-300A)) and the request of Steve Plummer, SC-147 DFO, to maintain these two documents for each of the separate TSO's usage. New hardware and software obviously must comply with the latest TSO, but maintenance of previously released items need

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considerations in DO-300.

The PMC approved the document. It is published as DO-300 Change 2.

Separate note related to SC-147 is that the new chairman, Dan Tillotson from Rockwell Collins, is one year out from retirement. The group is already looking for a replacement.

C.   Final Draft, Revised Document, DO-262B - *Minimum Operational Performance Standards for Avionics Supporting Next Generation Satellite System (NGSS) Iridium Specific Appendix D*, prepared by SC-222.

- Chuck LaBerge, SC-222 Chairman, and Mike Hooper, Iridium SC-222 Member, presented.

Dr. LaBerge presented the SC-222 Change 1 to DO-262B Iridium Appendix D - Minimum Operational Performance Standards for Avionics Supporting Next Generation Satellite Systems (NGSS). This appendix corrects typographical errors, clarifies document language in several places, and updates test requirements and test procedures in support of AMS(R)S safety services.

This updated appendix to DO-262 provides information and requirements specific to an Aircraft Earth Station (AES) using the Iridium communication system for the purpose of providing Aeronautical Mobile Satellite (Route) service (AMS(R)S). The International Civil Aviation Organization and the International Telecommunications Union reserve the designation "(Route)" for services related to the "priority and regularity of flights along national and international air routes". This document represents a significant update to the Iridium-specific minimum operational performance standards currently published in DO-262B. The document contains provision for identifying and potentially certifying several configurations of Iridium AES equipment.

Dr. LaBerge presented a recommendation to include "Change" as a type of publication. PMC members agreed to include this in discussion during the Forward Planning session on December 16th.

PMC members found incorrect references in the distributed version for review. They also requested a normative reference be added.

The PMC approved the document with the reference corrections and the normative reference added. (Action). The document will be published as DO-262B Change 1 to Iridium Appendix D.

D.   Final Draft, Revised Document, DO-230E – *Standards for Airport Security Access Control Systems,* prepared by SC-224.

- Christer Wilkinson, SC-224 – Co Chairman, and Jonathan Branker, SC-224 Acting DFO, presented.

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Mr. Wilkinson presented the SC-224 revision to "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 major areas covered are:

Introduction and Overview
Credentialing
Biometrics
Physical Access Control Systems (PACS)
Perimeter Intrusion Detection Systems (PIDS)
Video Surveillance Systems
Security Operations Center (SOC)
Integration
Communications Infrastructure
General Acquisition-Related Considerations

This revision predominately addresses the Credentialing Section and the technical criteria needed due to rapid advances in technology, trends and policy. The major items included changes such topics as potential use of an airport credential for both identification and for physical and logical access to a range of privileges; clarification of airport operator status as the ultimate responsible party for issuance of credentials; additional security measures consistent with state or local law on issuance of such credentials; and the airport credentialing process requirements specifics including background and security checks.

Of note, DO-230F is dedicated to Mr. Charles Chambers, Senior Vice President and Chief Development Officer of the National Safe Skies Alliance. Mr. Chambers was an active member of SC-224 until his untimely death in mid-October 2015. He was instrumental in increasing the distribution of DO-230 to Airport Security Officials and Security Consultants in the Aviation Domain. PMC members recommended a letter and copy of document be sent to Mr. Chambers family to acknowledge this dedication. (Action)

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

E.   Final Draft, Revised Document, DO-283A - *Minimum Operational Performance Standards for Required Navigation Performance for Area Navigation*, prepared by SC-227.

- Dave Nakamura, SC-227– Chairman, presented.

Mr. Nakamura presented the SC-227 revision to "Minimum Operational Performance Standards for Required Navigation Performance for Area Navigation." This document supersedes RTCA DO-283A, Minimum Operational Performance Standards for Required Navigation Performance for Area Navigation, published in October 2003. The document provides guidance to enable the implementation of RNP equipment containing navigation capabilities and functions defined in the RNP RNAV Minimum Aviation System Performance Standards (MASPS), DO-236C and Change 1 to DO-236C. Updated and new requirements included are those for Vertical Navigation, Temperature Compensation, and Time of Arrival Control. Also new to this version are the specifications for two equipment classes for RNP. Class A equipment has the advanced functions consistent with Advanced RNP operations as described in the ICAO PBN Manual. Class B equipment is consistent with RNP APCH operations and radius to fix leg capability described in the ICAO PBN Manual.

The PMC approved the document. It is published as DO-283B.

AGENDA ITEM 4
Integration and Coordination Committee (ICC).

A. Need for IP Standards – Update

- George Ligler, PMC Member and PMC ICC Chairman, will present at the March 2016 PMC Meeting.

AGENDA ITEM 5
Action Item Review.

A.   DO-361 Disclaimer – Discussion.

- Karan Hofmann, PMC Secretary, presented.

Ms. Hofmann informed PMC Members that the DO-361 disclaimer wording was agreed upon and is included on the cover of DO-361 and as part of the document description on the RTCA on-line store. This action is closed.

B.   PMC Ad-Hoc MASPS vs. guidance "discontinuity" between RTCA and EUROCAE documentation – Discussion

- Margaret Jenny, PMC Member, presented.

Ms. Jenny reported on discussion with EUROCAE referencing their document types and definitions. As with item 3C, discussion on all document types will be included in the Forward Planning session on December 16th. As action item for PMC, this will be closed and no longer tracked.

C.   Review of RTCA Document Types - Discussion

- Richard Heinrich, PMC Member presented.

Mr. Heinrich recommended his findings and follow on actions be discussed during the Forward Planning session on December 16th. PMC Members agreed with this proposal. As action item for PMC, this will be closed and no longer tracked.

D.   Industry Interest in Runway Overrun Alerting – possible new Special Committee (SC) – Discussion

- Richard Jennings, PMC DFO, presented.

Mr. Jennings reported on his discussion with Bruce DeCleene, the AFS-400 Division Manager. Mr. DeCleene will be attending a meeting at EASA in Cologne this month, and plans to discuss the runway overrun alerting EUROCAE activity with his counter-parts at EASA at that time. Mr. Jennings or Mr. Volchansky will provide feedback from Mr. DeCleene's trip. Action still open.

E.   Planning Forward Session – Discussion

- Chris Hegarty, PMC Chairman, presented.

All items (to include previously identified items (such as implementation of the Cross Cutting Committee (CCC) and things from today's meeting) will be discussed during the half day meeting on December 16th. Action closed.

F.   Wireless Avionics Intra Communication (WAIC) – possible new Special Committee (SC) – Discussion

- Richard Jennings, PMC DFO, presented.

Mr. Jennings provided an update on WAIC support. He discussed matter with Mr. Rob Duffer (FAA ANM-111) as a Part 25 Issue. Mr. Turner provided a Boeing input presentation to include recommendation that RTCA work with EUROCAE WG-96 proposing to develop MOPS. Airbus has also expressed support for this to be a joint effort.

Mr. Duffer is interested in sponsoring this effort and needs assistance in drafting a TOR for possible new SC. This will be coordinated with EUROCAE. (Action follow up)

G.   Update on UPS GPS Issue

- Richard Heinrich, PMC Member, presented.

Mr. Heinrich reported UPS had done additional testing and they have determined solving the drop

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out issue is complicated. Further testing is recommended – may not be GPS issue, could be installation. Mr. Walker commented the root cause is not known at this time and recommended waiting on next level of testing before any further action by the PMC. This action is closed for tracking purposes.

AGENDA ITEM 6
Discussion.

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

- Captain Rocky Stone and Allan Hart, SC-206 Co-Chairmen, presented.

Captain Stone and Mr. Hart presented the revised TOR to include an update to DO-358 *(MOPS for Flight Information Services – Broadcast (FIS-B) with Universal Access Transceiver (UAT)* per a formal request from The Program Management Organization, Air Traffic Organization (RTCA Paper No. 336-15/PMC-1432). Additionally, a six-month slip is being requested for the other three deliverables. This is due to time needed to complete the complex Use Cases *(MASPS for AIS/MET Data Link Services)*, dependency on the FAA Peak Eddy Dissipation Rate (EDR) recommendations report (not due until after current delivery date) *(MOPS for EDR)*, and guidance hypotheses approach taking longer than expected.

Some PMC members indicated there was a desire to speed up the DO-358 update. Captain Stone and Mr. Hart said that would require PMC assistance is getting help from supporting companies for this new tasking (action).

The PMC approved the revised TOR (RTCA Paper No. 001-16/PMC-1437).

B.   SC-209 – Air Traffic Control Radar Beacon System/Mode Select (ATCRBS/Mode S) Transponder – Discussion – Revised TOR

- Don Walker, SC-186 DFO, presented.

Mr. Walker presented a revised TOR that includes tasking a review/correction to Transponder MOPS (DO-181E) for issues that have been identified since DO-181E and DO-260B were published. Specifically, revisions are needed to maintain consistency with requirements developed for DO-260C, current and new collision avoidance systems and Detect and Avoid Systems.

SC-209 shall codify operational requirements based upon the airborne and ground user needs for a Mode S system. The development activities of SC-209 shall consider the relevant work of other bodies, including ICAO Panels, FAA/CAAs, EUROCAE, AEEC, SAE, and other RTCA Special Committees. SC-209 should work closely with SC-186, the ADS-B SC, and in particular SC-186 Working Group 3 and Working Group 4. The SC should also coordinate with EUROCAE and ICAO representatives.

The DFO is changing to John Fisher (FAA, AIR-132) and the Secretary is changing to Tim Steiner (FAA, ANG-C33).

With a few administrative edits, the PMC approved the revised TOR (RTCA Paper No. 002-16/PMC-1438).

C.   SC-213 – Enhanced Flight Vision Systems/Synthetic Vision Systems – Discussion – Revised TOR

- Trent Prange, SC-213 DFO, and Patrick Krohn and Tim Etherington, SC-213 Co-Chairmen, presented.

Mr. Prange presented a revised TOR that suggests the addition of the development of a MASPS for Vision Systems for Takeoff and a change in delivery date for DO-315C SVS for Attitude Awareness to July 2017. The suggested revision is also an attempt to further align to EUROCAE activity on this subject and adds a new deliverable is a Joint Combined Vision Systems for Rotorcraft Operations.

The PMC approved the revised TOR (RTCA Paper No. 003-16/PMC-1439).

D.   SC-225 – Rechargeable Lithium Batteries and Battery Systems – Discussion – Status Update on DO-311 Revision

- Richard Nguyen, SC-225 – Chairman, and Stephen Diehl, SC-225 Secretary, presented.

Mr. Nguyen and Mr. Diehl presented a revised TOR that included a new timeline to complete the update to DO-311 based on input from the Ad Hoc. The group also provided an update on working status and showed a video of a heat test for demonstration to help use different categories. Mr. Jennings commented he had received positive feedback from Ad Hoc meetings.

The PMC approved the revised TOR (RTCA Paper No. 004-16/PMC-1440) with recommendation that new document be reviewed by Ad Hoc before final presentation to PMC for publication approval. Action for continued updates is closed.

E.   SC-233 – Addressing Human Factors/Pilot Interface Issues for Avionics – Discussion – Status Update

- Michelle Yeh, SC-233 DFO presented.

Ms. Yeh presented a more detailed outline on approach as tasked by the TOR. PMC members agreed with the approach.

F.   SC-234 – Portable Electronic Devices (PEDs) – Discussion – Status Update

- Brian Verna, SC-234 DFO, presented.

Mr. Verna presented the need for a revision of DO-307 at the September PMC. This is needed for DO-307 to be consistent with the existing HIRF requirements and to incorporate industry lessons learned during application of the existing requirements in DO-307.   The revised document will be published as a joint document, as SC-234 is a joint committee with WG-99. The revised TOR indicates this revision will be completed at the same time as the primary deliverable of the new industry standard for using risk assessments in determining aircraft ED tolerance. WG-99 TOR revision was approved by EUROCAE TAC December 7-8, 2015.

The PMC approved the revised TOR (RTCA Paper No. 005-16/PMC-1441).

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

- Richard Jennings, PMC DFO, presented.

Mr. Jennings provided an update on this item. It is still in work as there appears to be an apparent major disconnect between FAA and EASA on approach. Hope to have something to present to March PMC. Action still open.

H.   Forum of Aeronautical Software (FAS) – Discussion - Update

- Jim Krodel, FAS Chairman, and Patty Bath, new chairman, presented.

Ms. Bath and Mr. Krodel provided an update of the FAS progress. This included FAS scope, goals and products, organization, and operations. They also presented Ms. Bath as the proposed new chairman with Mr. Krodel stepping down.

The PMC approved Ms. Bath as the new chairman and thanked Mr. Krodel for his dedication and support.

I.   NextGen Advisory Committee (NAC) - Status Update

- Margaret Jenny, RTCA President and PMC Member, presented.

Ms. Jenny reported on the NAC meeting that was held on October 8, 2015, hosted by FedEx in Memphis, TN.

Items discussed included:

- NextGen Integration Working Group

- o Priorities: DataComm, Multiple Runway Operations, PBN, Surface
- o Updates for 2015
- o Rolling Plan – Review 2017, add 2018 & 2019
- Metrics: Measuring the Effects of Implementation
  - o Joint Analysis Team – Co-Chairs: Ilhan Ince (AA) and Dave Knorr (FAA)
  - o FAA-Industry (Passur Aerospace) Performance Tracking
  - o Common Statement of Facts
- Promote benefits from NextGen Implementations
- NAC Metrics & Performance Tracking
  - o Metrics: Taxi Out Time, Gate Departure Delay, Actual Block Time, Fuel Burn – City Pairs, Distance Flown and Airport Throughput
  - o Locations: Charlotte (RECAT), ORD/MDW (RECAT), North Cal Metroplex, and Denver (EoR)
- Performance Based Navigation (PBN) National Airspace System Navigation Strategy
- Community outreach in the implementation of PBN (community impacts)
- ADS-B – equipage plans, etc.
- NAC Actions and Tasking:
  - o Community Outreach – Role of NAC
  - o FAA Incorporate Priority Recommendations into Plans
  - o Initiate NextGen Rolling Plan
  - o Carriers to Report on ADS-B Out Equipage
  - o Industry to Promote NextGen Benefits
  - o New Tasking: PBN/TFM Roadmap
    - ▪ Strategy & Tools for Time, Speed, and Spacing

J.   Tactical Operations Committee (TOC) - Status Update

- Trin Mitra, PMC Member – RTCA Program Director, reported.

Mr. Mitra reported on the TOC November 12th meeting. This was the first meeting for new Co-Chairman Captain Bryan Quigley of United Airlines,

Items of discussion include recent and future activities:
- Final recommendation received from NOTAM Task Group on NOTAM Search implementation
- Initial responses from FAA on recommendations for Caribbean operations and Class B airspace
- Introduction of potential new task on PBN Route Conops

Anticipated for the next TOC meeting include:
- Final recommendations expected from:
  - o Airport Construction Group
    - ▪ Lessons Learned (Case Studies)
    - ▪ Evaluate FAA Planning Tools
    - ▪ Evaluate FAA Processes
    - ▪ Understand Stakeholders

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- ▪ Outreach Strategies
- ▪ Managing Safety Risk
- o National Procedure Assessment Group
  - ▪ Criteria for Procedure Cancelation
    - • For both regulatory and non-regulatory tracks
    - • Validate or recommend changes to current approach
    - • Explore opportunity to define one track
  - ▪ Implementation
    - • Validate or recommend changes to current plans
  - ▪ Outreach
    - • Validate or recommend changes to current plans
    - • Particular attention to non-regulatory track
  - ▪ Recommend where to go next beyond current plan

The TOC meetings scheduled for 2016 at RTCA: March 3rd, June 23rd, and October 27th.

K.   FAA Actions Taken on Previously Published Documents – Report

- • Rich Jennings - PMC DFO presented. (FAA Guidance based on RTCA Documents – RTCA Paper No. 328-15/PMC-1425

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-359	SC-213	AC 20-SVGS	December 2015	Airworthiness guidance for use of Synthetic Vision Guidance System on SA CAT I ILS.
DO-260B; DO-282B	SC-186	AC 20-165B (based on TSO-C166b, TSO-C154c)	December 2015	Airworthiness Approval of Automatic Dependent Surveillance - Broadcast OUT Systems
DO-347	SC-225	AC 20-184	October 2015	Guidance on Testing and Installation of Rechargeable Lithium Battery and Battery Systems on Aircraft

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

RTCA Published Documents - FAA Pending Guidance (through mid-2016)

RTCA Document	Developed By	FAA Guidance	Planned Release Date	Comment
DO-335	SC-220	(Originally AC 23-17C, but now in ASTM document)	TBD	Obj: Incorporate with 14 CFR part 23 rewrite regarding autopilot function
DO-358 (DO-267A, 2004)	SC-206	AC 20-149B	December 2015	Supports use of Flight Information Services-Broadcast. Aligns to TSO-C157b
DO-315A	SC-213	AC 20-167A	2016	Plan to release AC 20-167A after EFVS rule is published.
Chg 4 to DO-210D	SC-222	TSO-C132a	January 2016	Change 4 makes adjustments to environmental test procedures.
DO-200B	SC-217	AC 20-153B Order 8110.55B	March 2016	Show compliance for equipment with an installed database, not just for LOA. AC harmonized with upcoming EASA AMC/GM for implementing DAT provider certificates in lieu of LOAs. Honors previous DO-200A approvals.

RTCA Document	Developed By	Planned FAA Guidance	Planned Release Date	Comment
Chg 1 to DO-280B	SC-214	AC 20-140C	July 2016	ATN B1 Interop Standards improvements for CPDLC at Oceanic/Continental boundaries. Plan to invoke with the B2 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, Change 1 to Document, DO-300A – Minimum Operational Performance Standards (MOPS) for Traffic Alert and Collision Avoidance System II (TCAS II) Hybrid Surveillance	SC-147	TSO-C119e	June 2016	DO-300A Change 1 will be invoked by the FAA in a pending revision of TSO-C119d
Final Draft, Change 2 to DO-300 - Minimum Operational Performance Standards (MOPS) for Traffic Alert and Collision Avoidance System II (TCAS II) Hybrid	SC-147	No change	(Note to manufacturers posted on RGL)	DO-300 Change 2 will be used by manufacturers in support of their justification package for a TSO deviation.

Surveillance				
Final Draft, Revised Document, DO-262B - Minimum Operational Performance Standards for Avionics Supporting Next Generation Satellite System (NGSS) Iridium Specific Apdx D	SC-222	TSO-C159c	July 2016	DO-262B Appendix D will be used by Iridium manufactures in support of their TSOA for Iridium Technique Specific Equipment.
Final Draft, Revised Document, DO-230E – Standards for Airport Security Access Control Systems	SC-224	---	Provide systems and operational guidance for the deployment of security access control systems at airports.	Provide basis for FAA, TSA, and user community planning, investment analysis, and architectural decision making.
Final Draft, Revised Document, DO-283A - Minimum Operational Performance Standards for Required Navigation Performance for Area Navigation	SC-227	TSO-C115d	February 2016	TSO-C115d implements the new DO-283B minimum operational performance standards for required navigation performance for area navigation.

Mr. Jennings announced this would be his last PMC due to his upcoming retirement. He introduced Lou Volchansky as the interim PMC DFO until a final decision is made on filling the position. Ms. Jenny made a presentation as a humble gesture of thanks for the support Mr. Jennings has provided to the PMC over the years.

L.   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, 159, 186, 228, 230, 231, 232, and 235. Other information was included in other presentations during this PMC. The complete matrix is posted on Workspace (RTCA Paper No. 338-15/PMC-1433).

M.   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:

RTCA/EUROCAE Secretariat Coordination
- Participants:
    o RTCA: Margaret Jenny, Jennifer Iversen, Karan Hofmann, Chris Hegarty
    o EUROCAE: Christian Schleifer, Anna von Groote, Hugues Meunier
- Topics of Consideration:
    o IT Collaboration
    o Membership
    o Symposium/Awards
    o ICAO Coordination
    o Committee Status

Special Committee Coordination
- SC-206/WG-76 AIS/MET Datalink Applications
    o Open to Coordination
    o Both groups considering revising TOR to re-enforce stronger working relationship
    o SC-206 TOR came to December PMC
        ▪ Will not include formal joint committee guidance
        ▪ Joint expected after MASPS completion (Dec 2016 with revised TOR)
- SC-213/WG-79 Enhanced Flight Vision Systems/Synthetic Vision Systems, (EFVS/SVS)
    o Coordinating to agree to common work plans
    o Both groups revising TOR
    o TOR came to December PMC

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- SC-227
    o EUROCAE Postponed decision to join for next TAC Meeting
- WG-78 (SC-214) will be dormant following publications in early 2016
- DO-254/ED-80 Update
    o Potential to Launch Jointly

Key dates for future coordination: EUROCAE will hold their Symposium on April 29-30, 2016 in Vienna. The Next TAC Meetings are set for 9-10 February 2016 (Paris, EUROCAE) and 7-8 June 2016 (TBD).

International Civil Aviation Organization (ICAO) Update:
- Standards Round Table
    o March 2016
- BUDSS
    o Will be rescheduled for Fall 2015 or Early 2016

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

AGENDA ITEM 7
Other Business.

A. Thank you for Support.

Mr. Wilkinson, SC-224 Co-Chair, extended a special thanks and tribute to Leonard Wood, who is resigning from the committee due to his retirement. We recognize his extraordinary effort throughout SC-199 and SC-224 development of DO-230 and its many revisions. His dedication is very much appreciated and he will be missed.

B. SC-186 Request.

Mr. Jennings, PMC DFO, presented a formal letter to request RTCA's assistance in undertaking work identified by the NAC and Equip 202 to determine the feasibility and practicality of encrypting ADS-B broadcasts and transponder interrogations. The FAA specifically requests utilizing the expertise of SC-186 to provide responses to two questions to support the March 18, 2016 Equip 202 meeting:

- Is it technically feasible to encrypt the ADS-B and transponder signal?
- Is it technically practical to encrypt the ADS-B and transponder signal?

After discussion, the PMC approved to let SC-186 investigate and answer these questions. It was also requested the possibility of having an Equip 2020 update at future PMC meetings, similar to NAC and TOC. (Action)

C. SC-147 X$_u$ Kickoff.

Mr. Walker, FAA Surveillance Team Lead, reported the kick off of SC-147 X$_u$ deliverable will start on January 12, 2016 with members of SC-228 (consumer of SC-147 activity in this area) also attending. The objective is to include new features for collision avoidance. Initial activity will be U.S. only, but hope to eventually become a joint effort.

The PMC requested a report back on progress of meeting and coordination efforts with SC-228. (Action)

AGENDA ITEM 8
Schedule for Committee Deliverables and Next Meeting Date

Documents expected for the March 2016 meeting:

- SC-214 Standards for Air Traffic Data Communication Services
    - Revision to DO-350/ED-228 - *Safety and Performance Standard for Baseline 2 ATS Data Communications, Vol 1 and Vol 2*
    - Revision to DO-351/ED-229 - *Interoperability Standard For Baseline 2 ATS Data Communications via the ATN, Vol 1 and Vol 2*
    - Revision to DO-353/ED-231 - *Interoperability Standard For Baseline 2 ATS Data Communications, ATN Baseline 1 Accommodation*
    - Revision to DO-352/ED-230 - *Interoperability Standard For Baseline 2 ATS Data Communications, FANS 1/A Accommodation*

- SC-230 Airborne Weather Detection Systems
    - Revision to DO-220 and DO-220 Change 1 - *Minimum Operational Performance Standard (MOPS) for Aircraft Weather Radar Equipment*
    - Revise DO-213 and DO-213 Change 1 - *Minimum Operational Performance Standards for Nose-Mounted Radomes*

- SC-232 Airborne Selective Calling Equipment
    - Revision to DO—93 - *Minimum Operational Performance Standard (MOPS) for Airborne Selective Calling Equipment*

The dates for the next three PMC meetings were confirmed: Thursday, March 17, 2016; Tuesday, June 21, 2016; and Thursday, September 22, 2015.

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, Chair
RTCA Program Management Committee

Program Management Committee – December 15, 2015
ATTENDANCE LIST

PMC MEMBERS:

Christopher	Hegarty	The MITRE Corporation Chairman
Doug	Arbuckle	Federal Aviation Administration
Robert	Grove	Garmin Ltd.
Richard	Heinrich	Rockwell Collins, Inc.
Jens	Hennig	General Aviation Manufacturers Association
Richard	Jennings	Federal Aviation Administration (Designated Federal Representative)
Margaret	Jenny	RTCA, Inc.
Richard	Kahne	DoD Policy Board on Federal Aviation
Randy	Kenagy	Air Line Pilots Association
Michele	Merkle	Federal Aviation Administration
Jessie	Turner	The Boeing Company
Lou	Volchansky	Federal Aviation Administration

OTHER ATTENDEES:

Moin	Abulhoan	Federal Aviation Administration
Jonathan	Archer	General Aviation Manufacturers Association
Jonathan	Branker	Federal Aviation Administration
Stephen	Diehl	The Boeing Company
Tim	Etherington	Rockwell Collins
John	Fisher	Federal Aviation Administration
Allan	Hart	Honeywell
Karan	Hofmann	RTCA, Inc.
Michael	Hooper	Iridium
Bob	Ireland	Airlines For America
Jennifer	Iversen	RTCA, Inc.
Logen	Johnson	SAE
Nazih	Khaouly	Federal Aviation Administration
Charles	LaBerge	EFC LaBerge Engineering & Analysis
Trin	Mitra	RTCA
Dave	Nakamura	Advanced PBN Solutions
Gregg	Nesemeier	Federal Aviation Administration
Richard	Nguyen	The Boeing Company
David	Robinson	Federal Aviation Administration
Al	Secen	Lockheed Martin/RTCA
Stuart	Searight	Federal Aviation Administration
Rocky	Stone	United Airlines, Inc.

Susan	Taylor	Gulfstream
Brian	Verna	Federal Aviation Administration
Don	Walker	Federal Aviation Administration
Christer	Wilkinson	AECOM
Dongsong	Zeng	The MITRE Corporation

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PMC ACTION ITEM TABLE – 2015				
TRACKING NUMBER Indicates the meeting Date and agenda item From which the action resulted.	**ACTION**	**ACTION ASSIGNED TO**	**DUE DATE**	**STATUS**
03/24/2015 Agenda Item 6G 06/18/2015 Agenda Item 5B 09/22/2015 Agenda Item 5C 12/15/2015 Agenda Item 5B	03/24/2015 – RTCA and FAA reach out to EUROCAE on different approach to handling MOPS for triggerable ELTs 06/18/2015 – Ad-Hoc to work discontinuity between MASPS vs. guidance between RTCA and EUROCAE documentation 09/22/2015 – Topic of discussion for upcoming RTCA/EUROCAE Coordination Meeting (10/26-27) 12/15/2015 – Part of further investigation on all types of documents. Item closed for tracking purposes.	RTCA Margaret Jenny FAA Rich Jennings	June 2015 Sep 2015 Dec 2015	Closed
06/18/2015 Agenda Item 4 12/15/2015 Agenda Item 4	06/18/2015 – Report on US and EUROCAE studies 12/15/2015 – Moved to Mar as Mr. Ligler was not able to attend Dec PMC	ICC George Ligler	Dec 2015 Mar 2016	Open
09/23/2014 Agenda Item 6B 12/16/2014 Agenda item 6F 03/24/2015 Agenda Item 6C	09/23/2014 – Further TOR review pending new FAA security activities. 12/16/2014 – Further coordination / review necessary pending WG-72 schedule 03/24/2015 – PMC recommended TOR update to address development of joint content and additional deliverables 09/22/2015 note – Awaiting final report from ASISP ARAC (due in Aug 2016)	SC-216	Dec 2014 Mar 2015 Dec 2015 Dec 2016	Open
09/23/2014 Agenda Item 6I 12/16/2014 Agenda Item 6K 03/24/2015 Agenda Item 6K 06/18/2015 Agenda Item 6F 09/22/2015 Agenda Item 6I 12/15/2015 Agenda Item 6G	09/23/2014 – Further discussion planned for Dec. meeting 12/16/2014 – Workshop planned to consolidate the desires of industry – revise DO-254 or not 3/24/2015 – Workshop update provided; recommendations being reviewed 06/18/2015 - FAA and EASA will hold a harmonization meeting; possible TOR for new joint committee 09/22/2015 – Meeting with FAA Chief Scientist scheduled for 10/22 for discussion on course of action 12/15/2015 – FAA still working with EASA for harmonization.	PMC Member Jessie Turner Rich Jennings	Dec 2014 Jun 2015 Sep 2015 Dec 2015 Mar 2016	Open
06/18/2015 Agenda Item 3A 12/15/2015 Agenda Item 5E	06/18/2015 – FAA work with EASA on security wording in AC vice inclusion in DO-200B 12/15/2015 – FAA working. Item closed for tracking purposes.	FAA Rich Jennings Brad Miller	Dec 2015	Closed

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06/18/2015 Agenda Item 3C 09/22/2015 Agenda Item 5B 12/15/2015 Agenda Item 6D	06/18/2015 – Ad-Hoc to meet with SC-225 to address PMC-perceived shortfalls for new DO-311 09/22/2015 – Update provided to PMC; new timeline set; PMC requested December update with revised TOR 12/15/2015 – Revised TOR presented and approved	RTCA Jennifer Iversen	Sep 2015	Closed
06/18/2015 Agenda Item 6K 09/22/2015 Agenda Item 5F 12/15/2015 Agenda Item 5F	06/18/2015 – Investigate possible new SC for runway overrun alert 09/22/2015 – Further investigation for industry support 12/15/2015 – FAA is meeting with EASA this month to discuss.	PMC Rich Jennings Rick Heinrich Jens Hennig	Sep 2015 Dec 2015 Mar 2016	Open
06/18/2015 Agenda Item 7C 09/22/2015 Agenda Item 5G 12/15/2015 Agenda Item 5G	06/18/2015 – Provide update on UPS GPS concern 09/22/2015 – Further investigation on potential input for MOPS 12/15/2015 – Despite additional testing route cause still not known – will wait for next level of testing for any further action	PMC George Ligler Rick Heinrich	Sep 2015 Dec 2015	Closed
09/22/2015 Agenda Item 3A	09/22/2015 – Correct identified PDF "oddities" for DO-328A	RTCA Perla Domingo	Oct 2015	Closed
09/22/2015 Agenda Item 3B 12/15/2015 Agenda Item 5A	09/22/2015 – Agree upon disclaimer to be included with publishing of DO-361 12/15/2015 – Disclaimer wording was agreed upon and included on DO-361 cover and RTCA Store Description	PMC Rich Jennings Rick Heinrich	Oct 2015	Closed
09/22/2015 Agenda Item 5A 12/15/2015 Agenda Item 5E	09/22/2015 – Identify CCC Leader and members to implement CCC and return first recommendations for action to PMC 12/15/2015 – Implementation will be discussed as part of Forward Strategic Planning	PMC Chris Hegarty Rich Jennings Margaret Jenny	Dec 2015	Closed
09/22/2015 Agenda Item 6A 12/15/2015 Agenda Item 2A	09/22/2015 – SC-147 TOR revision for additional deliverable to be electronically approved 12/15/2015 – SC-147 TOR revised and approved by PMC	SC-147 Stuart Searight PMC Karan Hofmann	Dec 2015	Closed
09/22/2015 Agenda Item 6B and 6M 12/15/2015 Agenda Item 5C	09/22/2015 – Investigate types of documents and potential need for ad hoc to review for recommended changes (this will include reviewing items in Special Committee "Tool Box" 12/15/2015 – Part of further investigation on all types of documents. Item closed for tracking purposes.	PMC Richard Heinrich	Dec 2015	Closed
09/22/2015 Agenda Item 6C	09/22/2015 – Investigate need for IP considerations to be included in all SC's	ICC George Ligler	Mar 2016	Open
09/22/2015 Agenda Item 7A 12/15/2015 Agenda Item 5F	09/22/2015 – Approach Rob Duffer on potential support for joint RTCA/EUROCAE activity on WAIC 12/15/2015 – Potential interest; follow up with draft TOR	PMC Rich Jennings Karan Hofmann	Dec 2015 Mar 2016	Open
12/15/2015 Agenda Item 3C	12/15/2015 – Correct references and add normative reference prior to publish Change 1 to DO-262	SC-222 Chuck LaBerge PMC Robert Grove RTCA Jennifer Iversen	Mar 2016	Open

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12/15/2015 Agenda Item 3D	12/15/2015 – Letter and document copy to Mr. Chambers family notifying them of dedication of DO-230F.	PMC Karan Hofmann	Mar 2016	Open
12/15/2015 Agenda Item 6A	12/15/2015 – Provide assistance to SC-206 on getting industry support for DO-358 revision	PMC All	Mar 2016	Open
12/15/2015 Agenda Item 7B	12/15/2015 – Schedule an Equip 2020 update to the PMC	PMC Karan Hofmann	Mar 2016	Open
12/15/2015 Agenda Item 7C	12/15/2015 – Report back on initial X_u January 12th meeting.	SC-147 Dan Tillotson Stuart Searight	Mar 2016	Open

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