

**RTCA PROGRAM MANAGEMENT COMMITTEE
MEETING SUMMARY
March 24, 2015**

The RTCA Program Management Committee (PMC) convened at 8:30 a.m. on March 24, 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. Temporarily filling in for Rich Jennings as the Designated Federal Official (DFO), Michele Merkle 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 December 16, 2014 Meeting.

The summary of the December 16th meeting was approved (RTCA Paper No.030-15/PMC-1296). Chairman Hegarty mentioned that due to the lateness in distribution of the summary for review, comments would still be welcome.

AGENDA ITEM 3

Publication Consideration/Approval.

- A.** Final Draft, New Document, *Minimum Operational Performance Standards for Flight Information Services – Broadcast (FIS-B) with the Universal Access Transceiver (UAT)*, prepared by SC-206.

And

- B.** Final Draft, Supplement to New Document, *Minimum Operational Performance Standards for Flight Information Services – Broadcast (FIS-B) with the Universal Access Transceiver (UAT), Test Procedures / Electronic File only*, prepared by SC-206.

- Rocky Stone, SC-206 – Co-Chairman presented.

Mr. Stone presented the new SC-206 document “*Minimum Operational Performance Standards for Flight Information Services – Broadcast (FIS-B) with the Universal Access Transceiver*”

(UAT)”, developed by SC-206 SG5. FRAC was completed in December 2014 and all the comments have been addressed and resolved. The committee used Workspace to track and resolve comments. This document contains Minimum Operational Performance Standards for Flight Information Services Broadcast-System (FIS-B) with Universal Access Transceiver (UAT). These standards specify system characteristics that should be useful to designers, manufacturers, installers and users of the equipment. This document considers an equipment configuration consisting of: the airborne processing and cockpit display of aeronautical and meteorological data known as FIS-B provided by the Federal Aviation Administration (FAA). Functions or components that refer to equipment capabilities that exceed the stated minimum requirements are identified as optional features.

The data supplement is a zip file archive that contains test group files described in Section 2.4. The archive includes 18 sets of test group zip files. Each test group zip file includes a test procedures document, test stimulus timing information, and binary data input files for conducting the tests. This supplement is available only by electronic download.

The PMC approved the document and supplement. The document is published as DO-358.

Mr. Stone also briefed the PMC members on the SC-206 upcoming work; (1) Developing Minimum Aviation System Performance Standards (MASPS) for AIS and MET Data Link Services; (2) Developing Guidance for Data Linking Forecast and Real-Time Wind Information to Aircraft and (3) Developing Minimum Operational Performance Standards (MOPS) for Eddy Dissipation Rate (EDR). A new SG7 has been set up to develop item (3) and the KoM will be in April 13-17, 2015 at the next SC-206 Plenary.

C. Final Draft, New Document, *Enhanced Flight Vision Systems and Synthetic Vision Systems*, prepared by SC-213.

- David Domino, SC-213 – Chairman, Working Group 1, presented.

Mr. Domino presented the new SC-213 document “*Enhanced Flight Vision Systems and Synthetic Vision Systems*”, developed by SC-213 WG1. Two rounds of FRAC occurred due to the substantial comments received, particularly in sections 2 and 3 (Synthetic Vision Guidance System General Requirements and Synthetic Vision Guidance System Standard Performance Requirements, respectively).

This document contains Minimum Aviation System Performance Standards for a Synthetic Vision Guidance System. A Synthetic Vision Guidance System (SVGS) as defined in this MASPS is a new airborne flight instrument and guidance system designed to enable operations to a decision altitude/decision height (DH) as low as 150 ft height above touchdown. Minimum visibility will be determined in part by the SVGS display modality, head down display (HDD) or head up display (HUD). The system will be used during certain instrument approach procedures with operational minima that are less than the minima for current Category I Instrument Landing System (ILS) approach, RNAV (GPS) to the Localizer Performance with Vertical Guidance (LPV) line of minima, or a Category I GLS approach. For convenience, in the balance of this document the RNAV (GPS) approach to the LPV line of minima will be referred to as an “LPV

approach”.

Following PMC discussion on what appeared to be some inconsistencies in the standards and some minor administrative notes in the document, PMC members recommended sending the document back to the committee for cleanup followed by electronic ballot for approval. (NOTE: This was accomplished and the PMC approved the document. It was published as DO-359 on May 18, 2015.)

At the conclusion of this discussion, there was a special recognition for Mr. Domino as he retires. Jennifer Iversen, RTCA Program Director, presented him with a thank you for his continued support to the RTCA community.

D. Final Draft, Change 4 to DO-210D, *Minimum Operational Performance Standards for Geosynchronous Orbit Aeronautical Mobile Satellite Services (AMSS) Avionics*, prepared by SC-222.

- Chuck LaBerge, SC-222 – Chairman, presented.

Dr. LaBerge presented the final draft, Change 4 to DO-210D, *Minimum Operational Performance Standards for Geosynchronous Orbit Aeronautical Mobile Satellite Services (AMSS) Avionics*, developed by SC-222. FRAC was completed in early Marcy 2015 and all initial formal and follow on comments have been addressed and resolved. The purpose of the change is to correct several known deficiencies in DO-210D, including Changes 1-3, and to bring certain sections of DO-210D into alignment with the new DO-262B, *Minimum Operational Performance Standards for Avionics Supporting Next Generation Satellite Systems*, Appendix E.

The PMC approved the document. It is published as DO-210D Change 4.

AGENDA ITEM 4

Integration and Coordination Committee (ICC).

No updates to report.

AGENDA ITEM 5

Action Item Review.

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

- Margaret Jenny, PMC Member and RTCA President presented.

Ms. Jenny briefed the PMC members on the Workshop #1 outcomes and the objectives of Workshop #2 (March 25, 2015 at RTCA) and the importance to have a good participation and involvement from the PMC members and SC Leadership. The group will review the list of key areas identified during the first Workshop held in September 2014. The group will also discuss

potential ways of improvement, a new methodology or approach in how RTCA set up new activities and develop Standards, and how to reinforce the collaboration between the FAA and Industry stakeholders. The four key areas concerned will be: (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).

Action Item – Open

B. RTCA Policy on Propriety Information - Discussion

- Margaret Jenny, PMC Member and RTCA President presented.

In response to questions raised by the Program Management Committee (PMC), the Policy for Proprietary References in RTCA Documents was reviewed and updated. The policy outlines a procedure to follow in developing proposals to incorporate references to proprietary systems or intellectual property in RTCA documents.

PMC members offered suggestions to expand the basic policy as originally written in 1999. Revision also included reviewing policies from IEEE, ARINC, and SAE and input from industry experts (Honeywell). The final version of the policy was reviewed by RTCA and FAA FACA attorneys.

The revised policy includes more publicized awareness of the policy and Special Committee member responsibilities with identifying any patented, patent pending, or copyrighted technology owned or controlled by the proponent, the participant, or the proponent the participant is from, employed by, or otherwise represents, is proposed and/or required for compliance with or implementation of the RTCA document being developed.

There was some concern expressed by PMC members about addressing at the SC level. Ms. Jenny ensured the PMC that the Program Directors will remain involved and bring any items that require action to her attention to follow up as soon as possible with the PMC.

Action Item - Closed

AGENDA ITEM 6

Discussion.

A. SC-147 – Traffic Alert and Collision Avoidance System – Co-Chair Nomination – Review/Approve.

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

The revised Terms of Reference (TOR) requested change of co-chairman from Robert Buley to

Dan Tillotson.

The PMC approved the revised TOR (RTCA Paper No. 138-15/PMC-1341) and extended a thank you to Mr. Buley for his outstanding support.

B. SC-214 – Standards for Air Traffic Data Communication Services – Discussion – Revised Terms of Reference

- Chuck Stewart (SC-214 Co-Chairman) and Dongsong Zeng (SC-214 VDLSG Chair) presented.

The first part was dedicated to a brief reminder on progress made on the Dynamic RNP Concept; the next step is to initiate insertion of detailed Dynamic RNP data link provisions in B2 standards; ATC Winds is not considered as part of Dynamic RNP.

Then Mr. Stewart addressed the A-IM Concept, timelines and risk mitigation; A mature Advanced-IM Conops/OSD is expected to be available by March 31, 2015. It provides approximately 5 months for SC-214 to prepare new Baseline 2 standards (FRAC Meeting August 31 – September 4 and Resolution meeting in December 2015); to mitigate the risk, Advanced-IM / SC-186 experts will be involved in the Advanced-IM detailed concept development and will consult with SC-214 as needed and a combined SC-186/SC-214 Tiger Team has been established to develop Advanced-IM message set. According to the SC-214 and SC-186 ToRs, there is a “3 years” period (lack of sequencing) between the SC-214 SPR/Revision deadline (Dec 2015) and the SC-186 SPR/MOPS documents (2018).

He asked the question: “Why SC-214 is being pushed to deliver documents in early 2016 instead of aligning with Adv-IM document deliveries?” The only response was because of the NextGen/FAA and SESAR letter signed in August 2013 engaging on a delivery of Final Standards in 2015.

The timeline for SC-214 documents delivery is significantly before Advanced-IM MOPS/SPR/Interop; Advanced-IM concept development still requires refinement and validation and it is not reasonable to label the next set of documents as “final”.

TOR recommended changes include:

- Remove “final” from all references to 2016 document deliveries
- Add statement “It is expected that the revision to the documents in the “Deliverables” table above will be used for FAA validation purposes and not be used for initial production.”

Dongsong Zeng presented on Link 2000+ issues and the need to revise the VDL documents; there is a need to improve the VDL2 Air/Ground interoperation and Europe is working on it. This might lead to the need to revise DO-224C (VDL MASPS) and DO-281B (MOPS); This study is done in collaboration with EUROCAE WG-92 and AEEC DLK. It has to be noted that the MASPS already has ground station requirements that are relevant to avionics implementation, while MOPS is historically for avionics.

The PMC agreed on the VDL changes only and SC-214 can move forward on that topic but the TOR will be resubmitted at the June PMC for approval. The Revised TOR as presented was not approved because of lack of consensus on the 2nd bullet listed above; Industry does not want to see another version of the documents not consolidated and with 3 years lack of sequencing with SC-186 documents. The Concept needs to be matured; SC-214 will come back to the PMC in June with additional inputs based on the Final A-IM Conops/OSD.

C. SC-216 – Aeronautical Systems Security – Discussion – Revised TOR

- Daniel Johnson and Chuck Royalty, SC-216 Co-Chairmen, presented.

A draft revised TOR was presented at last PMC. The PMC recommended the TOR update address the development of joint content and additional deliverables. The presentation provided current status on a joint methods document (ED-203 is being separately developed by WG-72), review of FAA/AVS Aircraft Security Five Year Plan, and comment on ARAC WG on Aircraft Systems Information Security/Protection (ASISP). Fully revised TOR is expected at June PMC.

D. SC-224 – Airport Security Access Control Systems – Discussion – Revised TOR

- Christer Wilkinson, SC-224 Co-Chairman, presented.

Mr. Wilkinson stated DO-230D was a total rewrite of the previous standard and is envisioned to break out in subsections to allow preparation of operational guidance checklists for inclusion in the next few revisions of DO-230 (DO-230E and DO-230F). DO-230E would be completed for the June 2015 PMC and DO-230F for early 2016.

Following further discussion, the PMC recommended adding a revision to review to align with anticipated TSA and DHS regulation. Time table was adjusted with DO-230E due in May 2015, DO-230F in September 2015, and DO-230G in May 2016.

The PMC approved the revised TOR with changes (RTCA Paper No. 094-15/PMC-1326).

E. SC-225 – Rechargeable Lithium Batteries and Battery Systems – Discussion – Revised TOR

- Richard Nguyen, SC-225 Chairman, presented.

A draft revised TOR was presented to alter delivery date of update to RTCA DO-313 to May 2015.

The PMC approved the revised TOR with change (RTCA Paper No. 140-15/PMC-1343).

F. SC-227 – Standards of Navigation Performance – Discussion – Revised TOR

- Dave Nakamura, SC-227 Chairman, presented.

Mr. Nakamura presented the revised TOR for SC-227. There is a consensus within SC-227 and FAA to re-open DO-257A: Minimum Operational Performance Standards for the Depiction of Navigational Information on Electronic Maps. The TOR has been updated to add this new task with a deadline as December 2017. This document will be updated to be consistent with DO-236C, DO-236C Change 1, and Revision to DO-283A with regard to its minimum standards (e.g. capability to display RF, FRT, map scaling, deviation scaling, etc.). The updated MOPS will become the foundation for a new revision to TSO-C165A and would require additional expertise and leadership.

Mr. Nakamura also briefed on the coordination with SC-186 to integrate ADS-B applications into the FMS; Concepts for Flight Deck Interval Management applications have progressed to point where a need for data computed in RNP MOPS systems/equipment has been determined; the committee is tentatively planning for minor clarification to DO-283 MOPS with regard to data interface and system capability supporting FIM. But significant issues must be resolved for IM, above the SC level, e.g. inconsistent handling of aircraft speed & speed constraints between IM, time based operations and non-IM/TBO. SC-186 request cannot be accommodated today and IM and TOAC are on a diverging path. The question was raised of how to deal with the incompatibility between SC-186 and SC-227; there is a need to rethink on both sides to see how it can be done in the same way (different behavior whether you fly on IM clearance or TOAC, the speed constraint is managed differently and it might be an issue). There was a question on which IM or TOAC model has to be pushed more on the other side; some manufacturers are going to implement the TOAC into the FMS and it is not compatible with IM applications that are part of NextGen. What exactly is NextGen - IM or TOAC? TOAC is considered as the primary tool and A-IM as a fine tuning. The potential impacts on ATC tools have to also be considered. There is also a need for a broader discussion with Europe as they are working to implement Change 1 to DO-236C. The ICC was tasked to handle that issue with SC-186, SC-227 members, SMEs, Pilots, ATC, NACSC members and to come back to the PMC in June with recommendations.

Another question was raised regarding App K and DO-257A; it seems that App K was there because DO-257A was not there; the committee will revise DO-283A according to that and will minimize the overlaps, the App K will be removed from the Revision to DO-283A (it is covered in other documents). There is a need to align Revision to DO-283A and Revision to DO-257A.

The PMC approved the revised TOR with changes (RTCA Paper No. 087-15/PMC-1324).

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

- Open discussion.

There appears to be a “disconnect” on what and how the final product will be used. If used in ICAO, it is a totally different venue and guidance document. Possibly it should be separate activity. Trigger enabled ELT’s may not be part of the process. The standard should be joint and EUROCAE MASPS “For In-flight Event Detection and Triggering Criteria” is now being worked. This MASPS is not an ELT document; it covers only the in-flight conditions/criteria to trigger a system. The suggestion was made to inform EUROCAE that RTCA would not be doing anything until FAA approved action.

Action: RTCA (Margaret Jenny) will assist in contacting EUROCAE with FAA (Rich Jennings) to suggest proceeding with caution.

H. SC-230 – Airborne Weather Detection – Discussion – Revised TOR

- Jeff Finley, SC-230 Co-Chairman, presented.

Mr. Finley presented the revised TOR to include the update of DO-213 “Minimum Operational Performance Standards for Nose-Mounted Radomes”. The scope of changes is to update references, to provide requirement clarification and updates and to incorporate previous changes as appropriate; this will require formation of new working group with radome expertise (including GA manufacturers). The deadline for both revised product DO-220 and DO-213 is November 2015. To date, SC-230 has received interest and volunteers from: Rockwell Collins, Honeywell, Garmin, Airbus, Boeing, St. Gobain, California Radomes and Nordam.

The PMC approved the revised TOR with changes (RTCA Paper No. 088-15/PMC-1325).

I. SC-234 – Portable Electronic Devices – Discussion – Status Update

- Brian Verna, SC-234, SC-234 DFO, presented.

The PMC approved a new SC-234 in principal at their December 2014 meeting. Three administrative items were requested: the FAA letter of request; the envisioned use the deliverable, and coordination with EUROCAE for a common time-line for the committee’s deliverable. These three items were fulfilled and presented to PMC.

The PMC approved the TOR with incorporated adjustments (RTCA Paper No. 085-15/PMC-1322) and approval of committee formation.

J. Wake Vortex Tiger Team – Discussion – White Paper – Progress Status

- Rocky Stone, Tiger Team Chairman, presented.

Mr. Stone presented the White Paper developed by the Wake Vortex Tiger Team (WVTT) between May 2014 and January 2015. The purpose of the White Paper was to develop 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 primary objective of the White Paper was to be developed with sufficient Industry-wide consensus (domestic and international) on the need for transmitting near real-time weather parameters from aircraft; such that it is acceptable to the FAA and the PMC to take forward into pre-identified and actionable activities.

Margaret Jenny, RTCA President, chartered the Tiger Team to address:

- Requests from various manufacturers for standards to support Wake Vortex Safety Systems
- The lack of follow-on standards development work for transmitting weather parameters from aircraft as suggested by DO-260B and DO-282B (published in December 2009) and DO-339 (published in June 2012)

There was significant participation in the WVTT, approximately 60 members (many active members), including representatives from FAA, EUROCONTROL, Industry, Research Organizations, pilots and NATCA.

Mr. Stone is planning to come back to the June or September PMC with more clarification on the SC-206 and SC-186 TORs. There was a request from SC-223/FAA to add the AeroMax to Recommendation 15.

The document received many positive remarks and comments. Margaret Jenny mentioned that the overall business case was missing and would like the TT to revise the document one more time to add this consideration. The report should be more understandable to those not involved in writing it. The document will be updated then circulated within the TT for approval. Once we have concurrence on the document, RTCA will publish it as a "miscellaneous" document (not a "DO-" document).

K. Design Assurance Guidance for Airborne Electronics Hardware – Discussion – Possible New Special Committee to Update RTCA DO-254

- Barbara Lingberg, FAA, presented

Following the December PMC, the FAA Sponsored a DO-254 workshop. Results were presented and a discussion took place on a plan to go forward.

Ms. Lingberg reported the forum was deemed successful. It was ideal for identifying, discussing,

and formulating recommendations. Attendees were engaged, prepared to discuss, and amiable to differing opinions. It was felt that overall goals were achieved. Four recommendations resulted from the forum:

- Draft TOR: Draft an RTCA TOR using problem statements, consideration of domain of use, and the draft EUROCAE TOR as input. Focus changes to problem identified as having high impact on safety or urgency to address.
- Domain Collaboration: Initiate discussion with systems, hardware, device, and software domain representatives to define transition, coordination, and boundaries between domains.
- Intellectual Property: Conduct a workshop of equipment suppliers, applicants, device manufacturers, IP providers, and certification authorities for purposed of harmonizing on high level objectives or criteria for intellectual property.
- Documents beyond DO-254A/ED-80: Consider a DO/ED (DO-248C/ED-94C like) in conjunction with a revision to DO-254/ED-80 to capture FAQs, examples, etc.

There were some dissenting opinions:

- A DO-254 “lite” should be considered to address certain aircraft.
- Rather than revising DO-254/ED-80, have those that have the authority, role, or responsibility address consolidated systems, hardware, and software assurance processes.
- Before revising DO-254/ED-80, need agreement between authorities on certain points.

L. NextGen Advisory Committee (NAC) - Status Update

- Jennifer Iversen, RTCA Program Director reported.

Ms. Iversen reported on the NAC Advisory Committee meeting held February 26, 2015 hosted by Delta Air Lines in Atlanta, GA. The NAC received the Atlanta MRO/ReCat Benefits Story presentation. The meeting covered Metrics discussion and the NextGen Integration Working Group updates (PBN – LAS, Surface – NY AEFS, and DataComm – Recorder Rule).

The NAC meeting output focused on three areas: ADB-B Ad Hoc Group (“What implementation commitments are necessary for the 2020 ADS-B implementation mandate?”), Performance Metric for 4 Focus Areas (identifying a high level suite of exiting metrics that measure the effect on NAS performance attributable to the deployment of the capabilities for the 4 focus areas), and Wake ReCat Acceleration (request the FAA to determine locations where wake re-categorization efforts should be accelerated based on quantifying the benefits of increased throughput),

The next NAC meeting will be held in June 5, 2015 at RTCA in Washington, DC.

M. FAA Actions Taken on Previously Published Documents – Report

- Rich Jennings - PMC Member – FAA presented. (FAA Guidance based on RTCA Documents – RTCA Paper No. 44-15/PMC-1303)

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-262B	SC-222	AC 20-150B	12/23/14	Satellite voice equipment supporting Air Traffic Service (ATS) Communication

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-329	SC-221	AC 121- Secondary cockpit barrier	May 2015	Document still in final review by AFS.
DO-315A	SC-213	Draft AC 20-167A	July 2015 (revised)	Plan to release AC 20-167A and AC 90-106A after rule is published
DO-335	SC-220	AC 23-17C to address AFGCS	September 2015 (revised)	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-347	SC-225	AC 20-Li Ion	May 2015	Certification Test Guidance for Small and Medium Sized Rechargeable Lithium Batteries
Chg 1 to DO-281C	SC-214	TSO C160b	July 2016	Chg 1 will be invoke in revised TSO-C160b after the DO-281C is revised again (Chg 2 or Rev D) to address provider abort (PA) criteria.
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 , New Document, <i>Minimum Operational Performance Standards for</i>	SC-206	TSO-C157b	June 2015	

<i>Flight Information Services – Broadcast (FIS-B) with the Universal Access Transceiver (UAT)</i>				
Final Draft, Supplement to New Document, <i>Minimum Operational Performance Standards for Flight Information Services – Broadcast (FIS-B) with the Universal Access Transceiver (UAT), Test Procedures.</i>	SC-206	N/A	N/A	Invoked with TSO-C157b
Final Draft, New Document, <i>Enhanced Flight Vision Systems and Synthetic Vision Systems</i>	SC-213	AC 20-SVGS	September 2015	Airworthiness guidance for use of Synthetic Vision Guidance System to achieve decision altitudes as low as 150 feet.
Final Draft, <i>Change 4 to DO-210D, Minimum Operational Performance Standards for Geosynchronous Orbit Aeronautical Mobile Satellite Services (AMSS) Avionic</i>	SC-222	TSO-C132a	September 2015	Change 4 made adjustments to environmental test requirements.

N-1. 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 217, 230, 231, and 233. Other information was included in other presentations during this PMC. The complete matrix was posted on Workspace (RTCA Paper No. 082-15/PMC-1320).

N-2. SC-159 Summary Response – Adjacent Band Compatibility (ABC) -Q1-3

- George Ligler, PMC Member and SC-159 Co-Chairman, presented.

Dr. Ligler, PMC Member and SC-159 Co-Chairman, presented a Summary Response to “FAA GPS Adjacent Band Compatibility Study Methodology and Assumptions” Questions 1-3. He reported following three rounds of review over a period of six months with the SC-159 approval of majority report, along with 2 white papers, to answer three of these questions on March 20, 2015. The final submission to the FAA is expected to be completed by April 3, 2015 (missing the March 31st suspense). There may also be a minority report, as there was one body with a last minute input with differing opinion. This additional input will not be reviewed or commented on by the rest of SC-159.

Ms. Jenny commented the additional three questions associated with ABC are being addressed by the Tactical Operations Committee and completion will be at a later date.

N-3. SC-159 – Global Positioning System - Discussion – Revised TOR

- George Ligler, PMC Member and SC-159 Co-Chairman, presented.

Dr. Ligler presented a proposed TOR revision. The highlight is the deliverable table, taking dependency of data from navigation satellite service providers into account for deliverable time line. Any delay in receipt of this data will delay document publication. Need to work a joint MOPS, but still needs to be coordinated with EUROCAE.

SC originally expected to ask for PMC electronic approval within 2 weeks, although after some discussion it was recommended the revised TOR be available at least one month prior to June PMC for review. The current TOR is broad enough to allow continued SC-159 work.

O. 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-222/WG-82 New Air-Ground Datalink Technologies

- Newly Joint Work starting from RTCA DO-343 and DO-262B
- Joint Meeting – April, 2015

SC-213/Reactivation of WG-79 EVS/SVS

- Joint Meeting-April 2015

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

- Future collaboration being defined – More in June 2015

Other topics being discussed included:

Runway Overrun Alerting and Avoidance System

- MOPS on Runway Overrun Alerting and Avoidance System
- Interest in Joint Committee

WG-95: Icing Long Range Awareness

- SC-230 Leadership Participating with WG-95

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 26-27 May (Langen, DFS), 2-3 September, Cologne, EASA), and 1-2 December (Toulouse, DSNA).

International Civil Aviation Organization (ICAO) Update:

Recognition with Observer Status at ICAO

- December 2015

High Level Safety Conference, February 2015

- Attended by Margaret Jenny and Sophie Bousquet

RPAS

- Symposium – Margaret Jenny spoke on panel 03/23/15
- Panel – Hal representing RTCA and providing link between SC-228 and RPAS Panel

BUDSS

- May 2015

The RTCA staff continues to keep the PMC apprised of developments.

P. RTCA Award Nominations – Consideration / Approval of Nominations.

- Karan Hofmann, RTCA Symposium Managing Director presented slate of candidates.

PMC approved all nominations for Outstanding Leader Awards and Significant Contributor Awards. Presentations will occur at the RTCA 2015 Global Aviation Symposium, June 3, 2015.

AGENDA ITEM 7

Other Business –

No other business items were addressed.

AGENDA ITEM 8

Schedule for Committee Deliverables and Next Meeting Date

Documents expected for the March 2015 meeting:

- SC-217 Aeronautical Databases
 - Revision to DO-200A – *Standards for Processing Aeronautical Data*

- SC-225 Rechargeable Lithium Batteries and Battery Systems
 - Revision to DO-311 – *Minimum Operational Performance Standards for Rechargeable Lithium Battery Systems*

The dates for the next three PMC meetings were confirmed: Thursday, June 18, 2015; Tuesday, September 22, 2015; and Tuesday, December 15, 2015

/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 – March 24, 2015
ATTENDANCE LIST**

PMC MEMBERS:		
Christopher	Hegarty	The MITRE Corporation Chairman
Doug	Arbuckle	Federal Aviation Administration
Chris	Baum	Air Line Pilots Association
Steve	Brown	National Business Aviation Association
Robert	Grove	Garmin Ltd.
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
Col. Juan	Narvid	DoD Policy Board on Federal Aviation
Jessie	Turner	The Boeing Company

OTHER ATTENDEES:		
Moin	Abulhosn	Federal Aviation Administration
Jonathan	Archer	General Aviation Manufacturers Association
Barbara	BonJour	The Boeing Company
Sophie	Bousquet	RTCA, Inc.
Stephen	Diehl	The Boeing Company
Dave	Domino	
Jeffery	Finley	Rockwell Collins
Eldridge	Frazier	Federal Aviation Administration
Dawn	Gidner	Honeywell International, Inc.
Alan	Hart	Honeywell International, Inc.
Karan	Hofmann	RTCA, Inc.
Victor	Iatsouk	Geysler-Telecom, Ltd
Jennifer	Iversen	RTCA, Inc.
Daniel	Johnson	Honeywell International, Inc.
E.F. Charles	LaBerge	EFC LaBerge Engineering & Analysis, LLC
Barbara	Lingberg	Federal Aviation Administration
Barry	Miller	Federal Aviation Administration
Thomas	Mustach	Federal Aviation Administration
Dave	Nakamura	Advance PBN Solutions, LLC
Gregg	Nesemeier	Federal Aviation Administration
Richard	Nguyen	The Boeing Company
Phillippe	Plantin de Hughes	BEA
Trent	Prange	Federal Aviation Administration
David	Robinson	Federal Aviation Administration
Chuck	Royalty	The Boeing Company
Stuart	Seabright	Federal Aviation Administration
Stephanie	Smith	Garmin Ltd
Rocky	Stone	United Airlines, Inc.
Ronald	Stoup	Federal Aviation Administration
Brian	Verna	Federal Aviation Administration
Lou	Volchansky	Federal Aviation Administration
Christer	Wilkinson	AERCOM
Dongsong	Zeng	The MITRE Corporation

PMC ACTION ITEM TABLE – 2015

TRACKING NUMBER <small>Indicates the meeting Date and agenda item From which the action resulted.</small>	ACTION	ACTION ASSIGNED TO	DUE DATE	STATUS
3/24/2015 Agenda Item 6G	3/24/2015 – RTCA and FAA reach out to EUROCAE on different approach to handling MOPS for triggerable ELTs	RTCA	June 2015	Open
12/18/2013 Agenda Item 5B 03/18/2014 Agenda Item 5D 06/17/2014 Agenda Item 5C 09/23/2-14 Agenda Item 5C 12/16/2014 Agenda Item 8A 3/24/2015 Agenda Item 5B	12/18/2013 – IP Policy to be reviewed 03/18/2104 – Initial recommendations reviewed 06/17/2014 – More detail next meeting 09/23/2014 – Further staff review in progress 12/16/2015 – IP Policy to be presented March 24, 2015 3/24/2015 – IP Policy presented and approved	RTCA	March 2014 June 2014 Sept 2014 TBD - ASAP	Closed
03/18/2014 Agenda Item 4 06/17/2014 Agenda Item 4 09/23/2014 Agenda Item 4 12/16/2014 Agenda Item 4	03/18/2014 – ICC tasked to determine what work related to ATC winds is appropriate for each SC, consistent with their TOR. 04/17/ 2014 – Initial meeting with SCs held. Wind Study not yet received. 09/23/2014 – ICC task complete...SCs to report status in Dec 12/16/2014 – All SCs briefed they are proceeding with ICC recommendations.	ICC	When ATC Wind Study is Avail.	Closed
3/24/2015 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)	ICC	June 2015	Open
03/18/2014 Agenda Item 7B 3/24/2015 Agenda Item 6J	03/18/2014 – Tiger Team reports back to PMC upon completion 03/24/2015 – Tiger Team presented paper; received further guidance from PMC for submission Jun 2015 PMC	Wake Tiger Team	Dec 2014 Mar 2015 Jun 2015	Open
09/23/2014 Agenda Item 6B 12/16/2014 Agenda item 6F 3/24/2015 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 3/24/2015 – PMC recommended TOR update to address development of joint content and additional deliverables	SC-216	Dec 2014 Mar 2015 Jun 2015	Open

09/23/2014 Agenda Item 6A 12/16/2014 Agenda Item 6D	09/23/2014 – TOR to be revised for scope and intended use. 12/16/2014 – TOR reviewed and approved	PMC Ad Hoc	Dec 2014	Closed
09/23/2014 Agenda Item 6I 12/16/2014 Agenda Item 6K 3/24/2015 Agenda Item 6K	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 3/18/2015 – Workshop update provided; recommendations being reviewed	PMC Member Jessie Turner	Dec 2014 Jun 2015	Open
12/16/2014 Agenda Item 6L 3/18/2015 Agenda Item 6I	12/16/2014 – Request for RTCA new SC incomplete 3/18/2015 – All items complete – new SC created	FAA	Mar. 2015	Closed