

**RTCA PROGRAM MANAGEMENT COMMITTEE
MEETING SUMMARY
June 17, 2014**

The RTCA Program Management Committee (PMC) convened at 8:30 a.m. on June 17, 2014 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, PMC Member - FAA and the Designated Federal Officer (DFO) for the meeting added his welcome. Mr. Jennings 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.

Ms. Margaret Jenny, RTCA President – PMC Member, took the opportunity to pay tribute to Dr. Hegarty for his significant contributions to the successful accomplishments of RTCA’s mission and support of the aviation community over the past year and over a sustained period. Dr. Hegarty received RTCA’s highest honor, The Achievement Award, at RTCA’s 2014 Global Aviation Symposium on June 4th. Dr. Hegarty has chaired the PMC since 2006. PMC members were equally proud to join Margaret and recognize Chris’s honor and service with a round of applause.

AGENDA ITEM 2

Review / Approve Summary of the March 18, 2014 Meeting.

The summary of the March 18, 2014 meeting was provided during the meeting. PMC Members were requested to review/comment/approve by July 1, 2014. (RTCA Paper No. 095-14/PMC-1203)

[Secretary’s note: The March 18th meeting Summary was approved with one modification provided by Doug Arbuckle, PMC Member – FAA. The date in the secretary’s note for Agenda Item 7A was changed from April 1st to March 28th.]

[Note – Due to the presenter availability and “time block” requests, this Summary reflects the ‘order’ in which the Agenda Items were presented.]

AGENDA ITEM 4

Integration and Coordination Committee (ICC) – Report.

- George Ligler, PMC-ICC Chairman presented. (Activity Report – RTCA Paper No. 133-14/PMC-1221)

At the March 18, 2014 meeting, the PMC asked the ICC to work with SC-206, SC-214, and other Special Committees as appropriate to determine what work related to ATC winds is appropriate for each Special Committee, consistent with their Terms of References and considering—when it is available—the results of the FAA’s ATC Wind Study.

The ICC held a teleconference on June 12, 2014 to review, with the assistance of SC-206, SC-214, and SC-186 leadership, the status of the FAA Wind Study and ATC winds preparatory activities of these RTCA Special Committees. A cross-RTCA mechanism to feed back, informally, Special Committee comments on the draft FAA Concepts of Operations for Dynamic RNP and Advanced Interval Management was agreed. Special Committee DFOs are being asked to meet together, after the SC-214 meeting in late June, to accomplish this task.

The ICC agreed that it, along with SC leadership and SMEs, would have a further teleconference on August 18, after receipt of a Draft/Final ATC Winds Study from the FAA by the end of July. Several further actions on providing additional information, such as further ATC winds-related application CONOPS, to the group were undertaken.

PMC discussion questioned how many groups are working on wind studies, the ConOps available and affected by the Wind Study, and when the final Wind study will be available. The FAA is providing A-IM application requirements for winds to MIT. Whether one or two studies requires clarification. Four ConOps may need winds - A-IM, D-RNP, TSS and RTA. The A-IM and D-RNP have been provided to RTCA. TSS and RTA are new applications. The lines of delineation between Special Committees and what part of the problem they should be working on were provided as follows: SC-186 developing requirements for A-IM; SC-206 – ground requirements; SC-214 developing uplink and downlink based on SC-186 requirements.

The ICC will provide an update report at the next PMC meeting.

Action Item - Open

[The meeting returned to the Agenda as published.]

AGENDA ITEM 3

Publication Consideration/Approval.

A. Final Draft, Revised Document, DO-317A - *Minimum Operational Performance Standards (MOPS) for Aircraft Surveillance Applications (ASA) System*, RTCA Paper No. 102-14/PMC-1204, prepared by SC-186.

- Don Walker, SC-186/WG-4 – TSAA Co-Chair presented both SC-186 documents – Agenda Items 3A & B. (Briefing – RTCA Paper No. 172-14/PMC-1233)

The revised DO-317A adds requirements for Traffic Situation Awareness with Alerts (TSAA) and CDTI Assisted Visual Separation (CAVS), support for TCAS traffic selection, active range validation for all ADS-B versions and corrects various test procedures and appendix errors. Mr. Walker noted that DoD and DHS encouraged the FAA to improve the ability to detect ADS-B data that is wrong through active range validation for all ADS-B versions, which provides mitigation for spoofing and other interference.

The TSAA application is intended to reduce the number of mid-air collisions and near mid-air collisions involving general aviation aircraft. The TSAA application uses ADS-B information, and where available Automatic Dependent Surveillance-Rebroadcast (ADS-R) and Traffic Information Service-Broadcast (TIS-B) information to provide the flight crew with indications of nearby aircraft in support of their see-and-avoid responsibility. Mr. Walker noted that TSAA is not optimized for electronic news gathering rotorcraft operations in this version of the document and follow-on work is proposed. This is a NTSB request for which funding is in the pipe-line to address. The CAVS application requires display of differential ground speed, which in this version is not a universal industry consensus. He reported that SC-186 had resolved all Final Review and Approval Comments (FRAC) and it recommends document approval.

The PMC approved the document. It is published as DO-317B.

B. Final Draft, New Document, *Safety and Performance Requirements Document for CDTI Assisted Visual Separation (CAVS)*, RTCA Paper No. 103-14/PMC-1205, prepared by SC-186.

- Don Walker, SC-186/WG-4 – TSAA Co-Chair presented. (Briefing – RTCA Paper No. 172-14/PMC-1233)

CDTI Assisted Visual Separation (CAVS) assists the flight crew to visually acquire and monitor traffic to follow during visual approach procedures. Once traffic has been initially identified and designated on the CDTI, the display information may be used to monitor range and ground speed differential during the approach. The application originated in the ARC and represents a mature

version of the UPS work in Louisville. Mr. Walker reported that hundreds of FRAC comments were received; all were resolved and that SC-186 recommends document approval.

The PMC approved the document. It is published as DO-354.

C. Final Draft, Revised Document, DO-326 - *Airworthiness Security Process Specification*, RTCA Paper No. 104-14/PMC-1206, prepared by SC-216.

- Chuck Royalty, SC-216 Co-Chair presented both SC-216 documents – Agenda Items 3C & D. (Briefing – RTCA Paper No. 130-14/PMC-1218)

SC-216 in coordination with EUROCAE WG-72 developed this document. The document adds to current guidance for aircraft certification to handle the threat of intentional unauthorized electronic interaction to aircraft safety. It adds data requirements and compliance objectives, as organized by generic activities for aircraft development and certification, to handle the threat of unauthorized interaction to aircraft safety and is intended to be used in conjunction with other applicable guidance material.

Mr. Royalty reviewed the committee's FRAC process that received over 700 comments that addressed significant issues. He reported that all comments and the 47 non-concur comments were resolved.

A lengthy PMC discussion highlighted concerns that in the process of addressing and resolving the non-concurs earlier text submissions may have been removed or modified in a way that went beyond what was needed. While it is important to harmonize, a document needs to have appropriate balance to help ensure similar usage by regulatory authorities. Another concern noted that the documents genesis from special conditions for the Boeing 787 and that raises a concern on how the document may be applied beyond large complex systems. While the document is not a "cookbook" there was concern that some authorities will use it that way and have an applicant do everything in the document. That's not the intent, therefore the PMC agreed as a minimum to better define applicability and scope in the document.

The PMC withheld approval pending suggested text revisions to clarify the intended use/scope of the document and secondly, the PMC recommended text be added that points to the committee's third deliverable being developed to provide specific guidance that may be used within the airworthiness security process defined in DO-326(A). As the way forward, the PMC established an Ad Hoc with specific guidance to review the document and recommend text that will help clarify its intended use and then by reference or otherwise, note the companion document (Methods) being developed to provide additional guidance on the usage of DO-326(A). The PMC agreed to consider the Ad Hoc's recommendations for "approval" by electronic coordination.

[Secretary's note: The PMC Ad Hoc met twice – on July 10th and July 24th to reach consensus. Proposed text modified the Executive Summary and added clarification text to the Introduction, Purpose and Scope paragraphs in the document. The PMC was provided the recommendations on July 28th with a two-week review period. Unanimous PMC approval to publish DO-326A was achieved on August 6, 2014. The document was issued on August 6th and is available in RTCA's On-line Store]

D. Final Draft, New Document, *Information Security Guidance for Continuing Airworthiness*, RTCA Paper No. 105-14/PMC-1207, prepared by SC-186.

- Chuck Royalty, SC-216 Co-Chair presented. (Briefing – RTCA Paper No. 130-14/PMC-1218)

This document is a resource for civil aviation authorities and the aviation industry when the operation and maintenance of aircraft and the effects of information security threats can affect aircraft safety. It deals with the activities that need to be performed in operation and maintenance of the aircraft related to information security threats. It also gives guidance related to operational and commercial effects (i.e. guidance that exceeds the safety-only effects). Thus, it also supports harmonizing security guidance documents among Design Approval Holders (DAH), which is deemed beneficial to DAHs, operators and civil aviation authorities. It is a companion document to DO-326A that supports security in the development and modification part of the airworthiness process.

Mr. Royalty reported that SC-216 had resolved over 200 comments only one of which was a non-concur. He recommended document approval.

The PMC approved the document. It is published as DO-355.

E. Final Draft, Appendices to Document, DO-262A - *Minimum Operational Performance Standards for Avionics Supporting Next Generation Satellite Systems (NGSS)*, RTCA Paper No. 111-14/PMC-1210, prepared by SC-222.

- Chuck LaBerge, SC-222 Chair presented. (Briefing – RTCA Paper No. 132-14/PMC-1220)

The revisions to DO-262B consist of minor changes to the main body of DO-262A, Appendix D Normative Requirements for Iridium AMS(R)S Equipment and Appendix E Normative Requirements for Inmarsat Swift Broadband AMS(R)S Equipment. Appendix D provides Iridium-specific technical requirements and information regarding the technical characteristics of an Aircraft Earth Station (AES) operating over the Iridium satellite network for the purpose of providing Aeronautical Mobile Satellite (Route) Service [AMS(R)S]. Appendix E provides information and requirements specific to an AES using the Inmarsat SwiftBroadband system for the purpose of providing AMS(R)S.

Appendix D and E become the Minimum Operational Performance Standards (MOPS) for Iridium and Inmarsat Aeronautical Earth Stations, respectively intended for AMS(R)S operation in procedural airspace (e.g. oceanic and polar) and provide the basis for FAA TSO-C159x for approval of AMS(R)S equipment.

Dr. LaBerge reviewed the committee's meetings and document reviews to reach consensus. An extended FRAC process, between April 25 – May 9, resolved 258 FRAC comments on Iridium/SBB documents -143 Iridium / 115 Inmarsat. All were resolved to commenter's satisfaction and reflect the collaborative review process.

SC-222 recommends approval of the revised DO-262, including the revised DO-262 main body, the revised and renumbered Appendix D for (current) Iridium AES equipment and the new Appendix E for Inmarsat SwiftBroadband AES equipment. The committee recommends issuing the document as the next revision, DO-262B.

The PMC approved the document. It is published as DO-262B.

[Note – Agenda Item 7A was addressed next.]

Agenda Item 7 Other Business.

A. SC-222 – AMS(R)S – Discussion – Future Work Plan Specific to Iridium

Dr. LaBerge presented his thoughts on where SC-222 should go following the expected completion of the committee's current TOR. The single outstanding TOR item is preparation of DO-210D, Change 4. It should require 2 Plenary meetings + 30 days + 45 days to come to PMC; realistically December 2014 or not at all.

Potential future work includes combined RTCA/EUROCAE WG-82/ effort for SBB-based SATCOM for ATM in continental airspace; potential MASPS & MOPS work as updates to SBB appendices and work on appendix(ices) for next-generation Iridium equipment - DO-343 Appendix at system level and DO-262 Appendix at equipment (AES) level plus additional consistency cleanup of DO-262B.

Dr. LaBerge noted that it's not assured that he will continue as Chair beyond DO-210D Change 4. With that in mind his recommendations, based on lots of RTCA SATCOM experience, are:

- 1) SC-222 should look at Iridium and EUROCAE/Inmarsat requests and make TOR recommendations to September PMC. This can be done as part of the FRAC approval for DO-210D Change 4 (Sept 2014)
- 2) If joint EUROCAE work is approved, it should progress first, as EUROCAE WG-82 is about ready to start. Probably 3 years, say June 2017 (consistent with WG-82)
- 3) That gives Iridium next-generation a chance to launch satellites (2015), design modems and collect information before MASPS/MOPS work begins.
- 4) Iridium MASPS work could begin in parallel with EUROCAE effort, but after the satellites are launched.

Dr. LaBerge offered that a decision would need to be made as to whether the work should be accomplished in either SC-222 or SC-223.

The PMC welcomed Dr. LaBerge's perspectives and agreed with his recommendation to take this up in the Fall with SC-222 and bring to the PMC when DO-210D, Change 4 is brought to the PMC possibly in December 2014.

[The meeting returned to the Agenda as published.]

AGENDA ITEM 5

Action Item Review.

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

- Margaret Jenny, PMC Member – RTCA presented.

The PMC discussion suggested that the PMC Ad Hoc work towards a “workshop” for the day after the next PMC meeting in September. The “workshop” would bring together Special Committee Chairs/Co-chairs/DFOs, FAA NextGen Program Office and RTCA Program Management Committee Membership.

Action Item - Open

B. PMC Ad Hoc – Part 23 ARC Report – Areas/Recommendations for RTCA Support – Discussion - Status.

- Margaret Jenny, PMC Member – RTCA presented.

RTCA continues to support the Part 23 activities of ASTM committee F44. ASTM committee F44 is the lead activity to develop an initial cut for standards for compliance prior to the FAA's NPRM. F44 next meets in Brussels in September. The PMC suggests a further review of existing RTCA standards that could be tailored for Part 23. The review is on hold for now.

Action Item – Open

C. RTCA Policy on Proprietary Information - Discussion.

- Hal Moses, PMC Secretary reviewed.

RTCA is considering several items/steps to provide more visibility to RTCA's Policy on Proprietary Information.

PMC members concurred that the RTCA's current Proprietary Reference Policy be posted on the PMC page of the RTCA public website. Several felt the current policy does not go far enough and offered suggestions to include the PMC in any future cases. A PMC Ad Hoc of members is willing to help work the issue. The RTCA staff will continue to develop RTCA's guidance. More detail will be provided at the next PMC meeting.

Action Item - Open

AGENDA ITEM 6

Discussion.

A. Selective Calling Equipment – Discussion – Possible New Special Committee to Update RTCA DO-93 – *Minimum Performance Standards – Airborne Selective Calling Equipment.*

- Andrew Roy, Aviation Spectrum Resources, Inc. presented. (RTCA Paper No. 131-14/PMC-1219)

Mr. Roy gave a brief history of Aviation Spectrum Resources, Inc. (ASRI) and Selective Calling. ASRI began as ARINC Frequency Management in 1929. It was created to support and coordinate operational control communications for the aviation industry. ASRI formed as an independent entity in January 2006. ASRI continues aviation industry control of the Aeronautical Operational Control (AOC) frequency spectrum in the US as the licensee for the AOC frequencies in CONUS. Its stockholders are airlines, aircraft operators and aviation companies. ASRI sponsors the Aeronautical Frequency Committee (AFC). It represents the interests of the US aviation industry in domestic and international spectrum regulatory forums (ITU-R, ICAO, etc.). It inherited ARINC's role as the worldwide SELCAL registrar for International Civil Aviation Organization (ICAO) that was delegated from ICAO to ARINC in 1958.

The SELCAL system is a signaling method used to alert an individual aircraft that a ground station wishes to communicate with the aircraft. SELCAL signals are capable of being transmitted on en-route frequencies with existing High Frequency (HF) or Very High Frequency (VHF) ground-to-air communication transmitters and receivers. With the SELCAL calling system, the normal voice calling method is replaced with the transmission of coded tones to the aircraft over the voice communications channel.

The total number of SELCAL code assignments, based on the current 16-tone system, provides 10,920 unique assignments. However, there are currently over 30,000 existing assignments and new requests are averaging approximately 200 per month. To meet the requirements for new assignments, it is necessary for the registrar to assign duplicate codes. Oversubscription is resulting in up to 6 aircraft responding to the same code. There have been over 250 known duplicate call occurrences recorded in 12 months by worldwide Air Navigation Service Providers (ANSPs). There is a concern that the continued duplication of SELCAL codes may lead to operational errors potentially impacting aviation safety. The SELCAL code pool expansion will reduce the probability of an operational error.

Mr. Roy discussed the proposed industry solution. ASRI working with SELCAL avionics vendors, manufacturers, and the FAA developed a SELCAL code pool expansion solution that expands the system from the current 16 tones to 32 tones. The update would create 215,760 unique codes. The AEEC Executive Committee unanimously voted to approve the SELCAL Code Pool Expansion APIM at the AEEC General Session meeting held April 14-17, 2014. The AEEC staff already produced a new draft SELCAL standard (714A) and the first working group meeting is scheduled for July 8-10, 2014 in Annapolis. ASRI is working with ICAO and ANSPs for September 2016 implementation for ground stations.

ASRI has coordinated the proposed solution with vendors and it is intended to be backwards compatible with existing avionics. No changes or costs would be required for existing aircraft and avionics. Existing users would continue to operate on 12 or 16 tone systems. The proposal is a long-term solution to the duplicate SELCAL calling as it will slow, and eventually reverse, the duplicate calling rate for SELCAL, mitigate the problem without a compulsory upgrade and be compatible with the normal lifecycle of existing avionics.

ASRI requests that the RTCA PMC approve the development of a Minimum Operational Performance Standards (MOPS) for the Airborne Selective Calling Equipment with the proposed code pool expansion. The committee would revise RTCA DO-93 first issued in 1959.

The PMC approved the request, the proposed Terms of Reference, and the recommended Co-Chairs – Mr. Eric Kehoe and Mr. Victor Nagowski.

The new Special Committee (SC) is SC-232.

[Note – Agenda Item 6C was addressed next.]

C. SC-224- Airport Security Access Control Systems - Discussion – Revised Terms of Reference

- Christer Wilkinson, SC-224 Co-Chair presented. (TOR - RTCA Paper No. 120-14/PMC-1213)

Revised Terms of Reference (TOR) were presented for approval. The revision updates the committee's leadership and provides the committee's next major effort – partial updates to key Sections of the recently issued DO-230D, Standards for Airport Security Access Control System. The committee will return to a future PMC meeting to report on the Sections being updated. The committee's expected completion date is May 2015.

The PMC approved the revised TOR as presented.

[The meeting returned to Agenda Item 6B]

AGENDA ITEM 6

Discussion.

B. SC-213 – Enhanced Flight Vision Systems & Synthetic Vision Systems – Discussion – Revised Terms of Reference

- Trent Prange, SC-213 DFO presented. (Briefing – RTCA Paper No. 134-14/PMC-1222)

Mr. Prange noted that as the committee works for lower than standard minima for SVS and EFVS systems, the complexity of the work has required adjustment of dates from the original estimates. To enhance the presentation of the guidance being developed, the committee requests a new document number for Synthetic Vision Guidance System and further slip the date to December 2014. The document is currently in final review with intention to FRAC in July.

DO-341A delivery would slip from June 2015 to December 2015. SMGCS requirements are currently a moving target. The OSED would be eliminated as a separate document and would be attached as an annex in accordance with the new format guide.

DO-315C was originally intended to incorporate approach requirements for lower than standard minima for LVP. This work was changed from FAA guidance to SVGS. DO-315C will be used for intended function of attitude awareness.

The committee's future work would include a MASPS on Synthetic Vision Guidance System, a MASPS on EFVS for taxi as low as 300 feet RVR and a MASPS for Synthetic Vision System with the intended function of attitude awareness. The committee recommended that the Program Management Committee approve the modified terms of reference version 7 as submitted.

Unfortunately, the revised TOR for SC-213 was not posted for PMC review. The committee took an action to provide the TOR and return to present at the next PMC meeting in September.

Action Item – Open

D. SC-229 – Emergency Locator Transmitters (ELTs) - Discussion – Revised Terms of Reference

- Tom Pack, SC-229 Chair reported. (Briefing – RTCA Paper No. 063-13/PMC-1196)

Mr. Pack reviewed the formation of SC-229 and the TOR tasks to update DO-204 standards to address the latest design, performance, installation and operational issues for 406 MHz emergency beacons. The updated MOPS will become the foundation for a new revision to TSO-C126x. SC-229 plans to work jointly with EUROCAE WG-98, to ensure harmonization is maintained between the RTCA and EUROCAE ELT documents.

A comparison slide presented the EUROCAE WG-98 TOR and a draft Amendment to EUROCAE ED-62A MOPS Specification for aircraft ELTs. The Amendment tasks a Technical Report on the practicability on the use of the amendments with respect to their effectiveness; the development of a MASPS covering the function that would trigger the ELT transmission, defining some high level concepts and the typical functional interface requirements between the ELT and the emergency triggering element; and proposes the work of the working group be undertaken as a joint activity with RTCA.

The EUROCAE In-Flight Activation would create a new class of automatically activated next generation ELTs prior to impact and require defining criteria and ELT technical requirements to include criteria for in-flight activation, criteria for termination of an ELT triggered in flight and defining the frequency of transmission of data and applicable parameters.

Initially the SC-229 TOR included work items that were not in the WG-98 TOR and the FAA had not requested the creation of a MASPS. Mr. Pack added that the evolution of the C/S Second Generation Beacon standards would gate certain SC-229/WG-98 activities and the evolution and deployment MEOSAR system will affect the adoption of DO-204B into TSO-C126x. He added that the alignment of the SC-229 TOR was a major work product of the 1st Meeting. The WG-98 revised TOR that includes the MASPS was been approved by EUROCAE TAC in May.

Mr. Pack presented a revised SC-229 TOR noting a key difference being a second deliverable – a MASPS covering the function that would trigger the ELT transmission, defining some high level concepts and the typical functional interface requirements between the ELT and the emergency triggering element. He requested specific guidance for SC-229 to develop a new document/MASPS for In-Flight activation criteria.

In the ensuing discussion PMC members raised many questions ranging from committee “make-up/expertise/forum” to triggering being a part of aircraft installation vs being an ELT component. The discussion resulted in no support for the MASPS deliverable. The PMC requested SC-229 provide an updated TOR in line with the discussion and agreed to consideration “review/approval” by electronic coordination.

[Secretary's note: The updated SC-229 TOR was provided to PMC Members on July 1st with replies requested by July 14th. Early PMC comments highlighted concerns in several areas and appealed for additional maturity to the SC-229 Terms of Reference and the expectations/tasks for the committee. The comment period closed without approval. To move forward, RTCA staff, FAA and special PMC Member support have reviewed the concerns, the TOR and related issues with the goal of presenting a more mature TOR and necessary background information for the September PMC meeting. The plan is to come to the September meeting with the necessary background information and revised TOR for a more detailed review.]

Action Item - Open

[Note – Agenda Item 7B was addressed next.]

Agenda Item 7 Other Business.

B. SC-231 – TAWS-GPWS – Discussion – Revised Terms of Reference

- Yasuo Ishihara, SC-231 Co-Chair presented. (Briefing - RTCA Paper No. 114-14/PMC-1211)

Mr. Ishihara reported on the first meeting of SC-231 held on 28 May 14. One of the specific guidance items in the TOR was to review the TOR during the first meeting and recommend changes to the PMC. A second item in the TOR was to determine if the TAWS and GPWS requirements should reside in a single MOPS or two separate MOPS.

He reported that the committee decided that a single MOPS document for TAWS should be created, which will include the requirements for both the “new” TAWS modes introduced in TSO C151 as well as the legacy modes described in DO-161A and required by TSO C92c. The committee plans to remove references to “GPWS” modes in the new TAWS MOPS, since all of the modes (both the old modes 1 through 5 as well as the new modes such as Forward Looking Terrain Awareness) are all now required TAWS modes. Moreover, the committee could not identify a need to create an updated MOPS for a stand-alone GPWS, since there is no indication that any manufacturer continues to build a GPWS-only device. Currently SC-231 is an independent advisory committee. There is no EUROCAE Working Group established at this time.”

SC-231 is currently identified as “TAWS and GPWS”. If the PMC approves the proposed changes to the TOR, the PMC may wish to consider naming the committee “TAWS” instead of “TAWS and GPWS” to more closely reflect the focus of the committee.

[The meeting returned to Agenda Item 6E]

Agenda Item 6

Discussion

E. NextGen Advisory Committee (NAC) - Status Update

- Andy Cebula, NAC Secretary and RTCA staff reported.

This report highlighted the NAC meeting held June 3, 2014 at RTCA. The meeting built on the prioritization tasks approved in September 2013. The task was in response to FAA's request to understand industry priorities and followed a review of current FAA NextGen plans and activities. The developed prioritized list includes:

- Tier 1 - what should continue no matter what (11 capabilities)
- Tier 2 - what should continue, resources permitting (8 capabilities)
- All Other (17 capabilities not ranked as priority)

The NextGen Integration Working Group (NIWG) identified four areas as a subset of Tier 1 – to “Deep Dive” for implementation by certain dates:

- Performance Based Navigation (PBN)
- Surface
- Closely Spaced Parallel Runways
- DataComm-enabled Controller-Pilot DataLink Communications (CPDLC) and pre-departure clearances

Plans are to be developed and progress tracked. Mr. Cebula reviewed the NIWG leadership, SME leads and Team leads. The structure represents a new way of functioning: joint FAA-Industry teams. The final recommendations are due for the October NAC meeting.

PBN Blueprint Tasking from FAA will be chaired by Jim Crites (DFW) & Brian Townsend (AA). The tasking includes:

- Identify key stakeholders for successful implementation
- Describe needed outreach
- Describe outcomes and metrics for success
- Incorporate lessons learned from previous & current processes
- Develop methodology for capturing lessons learned in future efforts

Interim Observations:

- Essential to identify and articulate reason for PBN (the most pressing)
- Broad interest by various stakeholders (in particular airports) in PBN implementations
- Roles and responsibilities defined – looking at filling gaps, providing consistency, connecting constituencies
- Community Outreach strategies have proven effective but need to be tailored to situation and more structured
- Desire for common approaches to development and implementation of PBN to promote efficiency and consistency
- Incomplete understanding of lessons learned and metrics as part of PBN development process

PBN Implementations at Denver and Houston were briefly reviewed.

The next meeting was set for October 8th at RTCA.

F. FAA Actions Taken on Previously Published Documents – Report

- Rich Jennings - PMC Member – FAA presented. (FAA Guidance based on RTCA Documents – RTCA Paper No. 121-14/PMC-1214)

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

RTCA and FAA Published Documents (Since Previous PMC)

RTCA Document	Developed By	FAA Guidance	Approval Date	Comment
DO-346	SC-223	TSO-C207	5/13/14	Aeronautical Mobile Airport Communication System (AeroMACS),

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

RTCA Published - FAA Pending Documents

RTCA Document	Developed By	FAA Guidance	Planned Release Date	Comment
DO-329	SC-221	AC 121- Secondary cockpit barrier	August 2014	Document in final edit, and pending management review
DO-315A	SC-213	Draft AC 20-167A	March 2015 (revised)	Plan to release AC 20-167A and AC 90-106A after rule is published (target date now 2/15/15)

DO-335	SC-220	AC 23-17C to address AFGCS	September 2014	Plan to reference document in the Part 23 Systems AC
DO-336	SC-220	Add MG-23 to AC 27-1B/29-2C to address AFGCS	September 2014	In comment disposition and final review
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 C160A	2015	Aircraft VDL Mode 2 Physical Link and Network Layer. Plan to invoke through TSO revision.
Chg 1 to DO-280B	SC-214	AC 20-140C	2016	Interoperability Requirements Standard for Aeronautical Telecommunication Network Baseline 1. Plan to invoke with the B2 (final) standards in AC 20- 140C

RTCA Documents Pending PMC Approval

RTCA Document	Developed By	Planned FAA Guidance	Planned Release Date	Comment
Final Draft , Revised Document, DO-317A – Minimum Operational Performance Standards (MOPS) for Aircraft Surveillance Applications (ASA) System, prepared by SC-186	SC-186	TSO-C195b	September 2014	Adds Traffic Situation Awareness with Alerts (TSAA) and CDTI Assisted Visual Separation (CAVS)
Final Draft , New Document, Safety and Performance Requirements Document for CDTI Assisted Visual Separation (CAVS)	SC-186	N/A	N/A	No plan to directly invoke this document
Final Draft , Revised Document, DO-326 – Airworthiness Security Process Specification	SC-216	AC 25 Series	TBD	Plan to reference in a Part 25 AC. However, the document may be too conservative to directly use without some adjustment in the AC
Final Draft , New Document, Information Security Guidance for Continuing Airworthiness	SC-216	AC 43 Series	November 2015	Planned to be used as the basis for the maintenance operation specifications for e-enabled airplanes
Final Draft , Appendices to Document, DO-262A	SC-222	TSO-C159b	September 2014	Appendices add minimum performance standards to support Iridium and

– Minimum Operational Performance Standards for Avionics Supporting Next Generation Satellite Systems (NGSS.				Inmarsat equipment
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G. Special Committees – Chairmen’s Reports and Active Inter-Special Committee Requirements Agreements (ISRA) - Review

- Jennifer Iversen, RTCA staff reported.

Ms. Iversen reviewed the Chair Reports received between March 18, 2014 and June 17, 2014. Reports were received from SCs -147, 206, 213, 214, 216, 217, 222, 224, 225, 227, 228, 230 and 231. A brief synopsis of each Report was provided noting areas of process and status.

In addition to the Chairmen reports, Ms. Iversen presented a matrix listing the active ISRAs and which of the RTCA committees have ISRAs in progress. The matrix was developed to aid the ICC’s review of the ISRA process. There were no new ISRAs since the last PMC meeting.

H. European/EUROCAE Coordination – Status Update.

- Chris Hegarty and Jennifer Iversen reported. (Briefing – RTCA Paper No. 270-13/PMC-1151)

Dr. Hegarty reported on PMC/TAC coordination meeting held June 3rd with Mr. Luc Deneufchattel, EUROCAE’s TAC Chairman. Respective committee activities of RTCA and EUROCAE were reviewed. The meeting was most useful and plans were tentatively made for a follow-on in the Fall.

Ms. Iversen reported on her continued coordination with EUROCAE on current and pending committee activities. The routine review of activities is proving helpful with committee support and will be available for PMC review and use.

The information for three new EUROCAE Work Groups was provided for PMC review. Earlier coordination with the FAA indicated no new requests would be coming to RTCA at this time. The new activities are:

- EUROCAE Work Group – 99, Portable Electronic Devices.
- EUROCAE Work Group – 100, Remote and Virtual Towers.
- EUROCAE Work Group – 82, New Air-Ground Data Link Technologies.

An update from EUROCAE provided dates for their first meetings. WG-82 will meet on July 8th; WG-99 PEDS on July 9-11 and WG-100 also on July 9-11.

Next TAC meetings are scheduled for 9-10 September and 9-10 December 2014.

RTCA staff will keep the PMC apprised of developments.

AGENDA ITEM 7

Other Business –

A. SC-222 – AMS(R)S – Discussion – Future Work Plan Specific to Iridium

This Agenda item was addressed after item 3E – see above.

B. SC-231 – TAWS-GPWS – Discussion – Revised Terms of Reference

This Agenda Item was addressed after item 6D – see above.

AGENDA ITEM 8

Schedule for Committee Deliverables and Next Meeting Date

Three documents are possible for the September 23, 2014 meeting:

- SC-227 – one document – Change 1 to DO-236C – *MASPS – Required navigation Performance for Area Navigation*
- SC-216 – one document – new document – *Information Security Guidance for Continuing Airworthiness*
- SC-206 – one document – revised DO-252 – *Minimum Interoperability Standards (MIS) for Automated meteorological Transmission (AUTOMET)*

The dates for the next three PMC meetings were confirmed: Tuesday, September 23rd, Tuesday, December 16, 2014 and Tuesday, March 24, 2015.

/Signed/

Harold Moses, 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 17, 2014
ATTENDANCE LIST**

PMC MEMBERS:		
Christopher	Hegarty	The MITRE Corporation Chairman
Chris	Baum	Air Line Pilots Association
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.
George	Ligler	Project Management Enterprises Inc.
Mark	Lopez	Airlines for America (Alternate for Robert Ireland)
Col. Juan	Narvid	DoD Policy Board on Federal Aviation
Jessie	Turner	The Boeing Company

OTHER ATTENDEES:		
Sophie	Bousquet	RTCA, Inc.
Andy	Cebula	RTCA, Inc.
Tim	Etherington	Rockwell Collins, Inc.
Mike	Hooper	Iridium
Kris	Hutchison	ASRI
Yasuo	Ishihara	Honeywell International, Inc.
Jennifer	Iversen	RTCA, Inc.
E.F. Charles	LaBerge	EFC LaBerge Engineering & Analysis, LLC
Kathryn	Martin	Acan Partnership
Harold	Moses	RTCA, Inc. PMC Secretary
Victor	Nagowski	ASRI
Tom	Pack	ACR Electronics
Brent	Phillips	Federal Aviation Administration
Trent	Prange	Federal Aviation Administration
David	Robinson	Federal Aviation Administration
Andrew	Roy	ASRI
Chuck	Royalty	The Boeing Company
Cyro	Stone	L-3 Comm / ACSS
Don	Walker	Federal Aviation Administration
Christer	Wilkinson	AECOM

PMC ACTION ITEM TABLE – 2014

TRACKING NUMBER <small>Indicates the meeting Date and agenda item From which the action resulted.</small>	ACTION	ACTION ASSIGNED TO	DUE DATE	STATUS
06/19/2013 Agenda Item 4A 12/18/2013 Agenda Item 5B 03/18/2014 Agenda Item 5B 06/17/2014 Agenda Item 5A	06/19/2013 – Ad Hoc to review committee “standards delivery” with respect to implementation “time lines” 12/18/2013 – PMC discussion - suggest for possible Workshop in conjunction with RTCA Symposium 03/18/2014 – More detail next meeting 06/17/2014 – Planning for a Workshop for Sept. 24 th ...the day after the next PMC meeting	Ad Hoc	October 2013 March 2014 June 2014	Open
06/19/2013 Agenda Item 4A 12/18/2013 Agenda Item 5B 03/18/2014 Agenda Item 5C 06/17/2014 Agenda item 5B	06/19/2013 – Part 23 12/18/2014 – PMC discussion - Part 23 03/18/2014 – Part 23 – continue to monitor 06/17/2014 - Part 23 – continue to monitor	Ad Hoc	October 2013 March 2014 June 2014	Open
12/18/2013 Agenda Item 5B 03/18/2014 Agenda Item 5D 06/17/2014 Agenda Item 5C	12/18/2013 – IP Policy to be reviewed 03/18/2104 – Initial recommendations reviewed 06/17/2014 – More detail next meeting	RTCA	March 2014 June 2014 Sept 2014	Open
03/18/2014 Agenda Item 4 06/17/2014 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.	ICC	When ATC Wind Study is Avail.	Open
03/18/2014 Agenda Item 7B	03/18/2014 – Tiger Team reports back to PMC upon completion	Wake Tiger Team	Dec 2014	Open
03/18/2014 Agenda Item 7C	03/18/2014 – Assist with review of new GPS spectrum standards	SC-159 & other committee as required	Upon receipt of material to review	Open