

**RTCA PROGRAM MANAGEMENT COMMITTEE
MEETING SUMMARY
June 21, 2016**

The RTCA Program Management Committee (PMC) convened at 8:30 a.m. on June 21, 2016 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. Lou Volchansky, 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.

RTCA introduced Rebecca Morrison, new Program Director,

AGENDA ITEM 2

Review / Approve

- A. The summary of the March 17th meeting was approved with paragraph 5C on Page 7 changed to indicate that” the FAA did not see WAIC on safety critical path, but did see need for committee” (RTCA Paper No. 094-16/PMC-1483).
- B. Administrative Special Committee Terms of Reference (TOR) Revision:
 - SC-217 – Aeronautical Databases – new DFO, Mr. Brad Miller (FAA), replacing Ms. Diana Takata (FAA) due to workload realignments. TOR approved (RTCA Paper No. 150-16/PMC-1505).

AGENDA ITEM 3

Publication Consideration/Approval

- A. **Final Draft, Revised Document, DO-230F – *Standards for Airport Security Access Control Systems, prepared by SC-224***
 - Jonathan Brinker, SC-224 member, presented

This updated document incorporates the latest technological advances in security access control systems and identity management technologies, including smart cards and biometrics. The nature

of the changes in available technology, and the need to enhance sections pertaining to perimeter security, security operation support, and identity management requirements, has led to a major change in the layout and content of the document. DO-230G includes the addition of checklists to the major sections covered in this document along with any bold section highlighting essential changes that were made over the previous release.

- 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

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

AGENDA ITEM 4

Integration and Coordination Committee (ICC)

A. Review of Minimum Operational Performance Standard (MOPS) and Minimum Aviation System Performance Standard (MASPS) Guide Documents – Update

- Dr. George Ligler, PMC Member and PMC ICC Chairman, presented

At the March 2016 PMC meeting, the ICC was asked to look at RTCA MOPS and MASPS Drafting Guidelines, based upon helpful suggestions by Clay Barber of Garmin, with regard to promoting “standard” meanings in future RTCA MOPS and MASPS for a number of terms.

The ICC was briefed by Clay Barber on an investigation done by Garmin on the use of “shall,” “should,” “must,” and “may” in RTCA MASPS and MOPS. They found the use of these terms is inconsistent across SC documents.

Rich Jennings, AIR-100, briefed the ICC on a need for standard language in RTCA documents concerning “good practices” for cybersecurity considerations in avionics design.

The ICC agreed that standard usage conventions for “shall,” “should,” “must,” “may,” and “will” need to be codified in the MASPS and MOPS Guidelines. The ICC also agreed that “good practices” language on cybersecurity considerations would be an appropriate addition to the Guidelines. The ICC recommends that the PMC task the ICC to develop this language and subsequent PMC consideration at the PMC’s September 22, 2016 Meeting.

After discussion, the PMC members agreed consistency with words in future publications is needed and tasked ICC to draft such clarification definitions (action). As to how to handle

cybersecurity, the PMC members tasked an ad-hoc to review and draft words or provide appropriate guidance covering cybersecurity for guidelines (MOPS, MASPS, and TORs). Members of ad-hoc include George Ligler, Jens Hennig, Richard Jennings, and Al Secen. (Action)

B. Cross Cutting Committee Process Recommendations – Update

- Dr. George Ligler, PMC Member and PMC ICC Chairman, presented

Also at the March 2016 PMC meeting, the ICC was asked to look at the Cross-Cutting Committee (CCC) concept developed by a PMC ad-hoc group in 2015 and make recommendations for both the concept and how the concept might be implemented.

The ICC reviewed, with the assistance of Ron Stroup, the CCC Status presentation given to the PMC originally on September 22, 2015 and again on March 17, 2016. The ICC reached consensus that there was a need for a group to be available to review, from a “cross-cutting” perspective, TORs for new multi-domain Special Committees and major TOR changes for existing SCs.

- Requests for cross-cutting review of major TOR changes for existing SCs should emanate from the PMC
- Requests involving TORs for new SCs should preferably be made and responded to prior to review of those TORs by the full PMC

ICC Consensus was not reached on the specific “triggering” mechanism for review of TORs for newly proposed multi-domain SCs or on the level of documentation needed to support TOR approval for a new multi-domain SC—this level will likely vary.

- “Triggering”: Standing Review Committee vs. Reviews Only On Request from RTCA President, PMC Chair, and/or PMC DFO

The ICC noted that the skill set for “cross-cutting” TOR review was similar to that of the ICC: systems and operational expertise, augmented by SMEs.

The ICC Recommended:

- That a test case for “cross-cutting” review of TORs of new SCs and/or major TOR changes for existing SCs be identified and executed, with “lessons learned” used to refine the March 17, 2016 flowchart for CCC operation and to develop from that flowchart a “TOR Approval Guidance and Timeline” document for multi-domain new SCs and major multi-domain TOR changes for existing SCs.

The ICC is prepared to perform this test case:

- One Example Test Case: Any deliverable related to ELT triggering as follow-on from item F in the Specific Guidance section of SC-229’s TOR.

After much discussion, to include comments on CCC CONOPS and that the CCC should not be a “gatekeeper” for the PMC, the ICC was tasked to conduct three test case studies (one back, one forward, and one hypothetical). This would include the recent SC-223 activity with the other

two being of ICC choosing. Although requested to be complete by the September PMC meeting, it was agreed at least a progress report will be provided in September with final recommendations due at the December PMC meeting. (action still open)

AGENDA ITEM 5

Action Item Review.

A. Bilateral Oversight Board Agreement Posting - Update

- Karan Hofmann, PMC Secretary, presented

Document is posted on workspace for PMC member reference. Action closed.

B. ARINC ATC Winds Work - Update

- Jessie Turner, PMC Member, presented

Discussion at the March PMC meeting while approving DO-350a (*Safety and Performance Requirements Standard for Baseline 2 ATS Data Communications (Baseline 2 SPR Standard), Vol 1 and Vol 2*) and allowing ATC wind to be handled separately vs. including in DO-350A, led to a request for an update on the ARINC ATC Winds work to be provided to PMC members.

ARINC Project Initiation/Modification (APIM) 16-007: “Air Traffic Services (ATS) Wind Service Implementation” was approved at the 2016 Airlines Electronic Engineering Committee (AEEC) General Session Meeting (held April 25-28, 2016).

- Work Scope
 - Air Traffic Service Wind Service would allow for the transmission of wind and temperature gradient information to aircraft by an Air Traffic Control Center (ATCC). It is designed to support Interval Management and 4-D trajectory functions. Implementation would utilize existing air/ground message formats described in ARINC Specification 620.
- Work Product
 - Supplement 5 to ARINC 622, “ATC Data Link Applications Over ACARS Air-Ground Network”
- Work Plan
 - Work to be performed by the AEEC Data Link Systems Subcommittee
 - 3 Meetings in 2016
 - Next Meeting: July 26-27, 2016
 - Expected Completion: December 2016

Mr. Turner agreed to provide follow on update in December. Action remains open.

C. Feedback on NextGen Advisory Council (NAC) Performance Based Navigation (PBN) Study - Update

- Richard Heinrich, PMC Member, presented

At the March 17, 2016 PMC meeting, members requested more information on the NAC PBN Time, Speed, Spacing Task Group.

NAC leadership tasked for establishment of PBN strategy outline for near (2020), mid (2025), and far (2030) in following areas:

- Implement PBN throughout the NAS with the right procedures to meet capacity, efficiency, and throughput needs;
- Provide navigation structure where beneficial, and flexibility where possible;
- Shift to time- and speed-based air traffic management;
- Deliver resilient navigation services;
- Modernize the FAA navigation service delivery;
- Enable lower visibility access; and
- Innovate and continuously improve

This activity is complimentary to the NAC Implementation Working Group (NIWG) who is dealing with current PBN implementation. And to avoid confusion, this activity was re-named the Timing, Speed, Sequencing Task Group with initial deliverable is June 2016 with the final report due October 2016.

The work program involves:

- Establishment of core performance metrics
- Identifying candidate capabilities
- Consideration of air and ground contributions
- Allocation of performance between the candidate capabilities (air/ground)
- Alignment of capabilities with near/mid/far term strategy

D. SC-214 Participation with SC-223 Internet Protocol Suites (IPS) Activity - Update

- Dr. George Ligler, PMC Member, presented

Dr. Ligler reported he was unable to coordinate with Captain Stewart prior to today's meeting. Action still open.

E. Ad-hoc on Change to Risk Base vs. Performance Base Recommendations - Update

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

Mr. Secen reported that the original action item "morphed" from a risk base vs. performance base recommendation (it was noted RTCA already does performance base standards and

recommendations), to specifically addressing potential of new SC's for Runway Overrun Awareness and Alerting (ROASS), Wireless Avionics Intra Communication (WAIC), and Global Aeronautical Distress and Safety System (GADSS).

ROASS:

- EUROCAE ED being referenced in EASA document
- Too late at this point to form Joint Committee
 - EUROCAE WG-101 Deliverable February 2017
- Other Discussion Point:
 - What is FAA process for dealing with stand-alone EUROCAE documents and ETSOs?

Mr. Volchansky said the new guidance covering FAA's reciprocal acceptance of European Aviation Safety Agency (EASA) European TSO (ETSO) articles has been signed and will be released in the next day or so. This will outline that the FAA will no longer issue a Letter of TSO Design Approval. Details forthcoming.

WAIC:

- Received Support from Several Companies
- Honeywell offered Chairman
- EUROCAE WG-96 Secretary to Serve Jointly
- FAA worked Request Letter and TOR
 - Mirror WG-96 TOR
 - MOPS Deliverable March 2019
- Present at June PMC Meeting for Approval

GADSS:

- EUROCAE ED-237 include a "generic" trigger for Autonomous Distress Tracking (ADT) and data streaming of FDR/CVR
- The triggering mechanism was intended to be technology agnostic (e.g. trigger an ELT, change the reporting rate from 4D/15 to 4D/1 using ADS-C, notify SAR Rescue Coordination Centers, etc.)
- Questions:
 - Since the trigger event was developed within the ELT standards effort, was their sufficient industry participation to ensure the broadest consensus characteristic?
 - Should the characteristic be "embedded" in another standard?
- Request: Invite Chris Parfitt from the FAA Flight Standards organization to provide a briefing and perspective
 - Propose a September briefing to PMC (Action)

Following discussion, the PMC agreed with the ad-hoc recommendation not to form ROASS SC, approved the WAIC TOR (RTCA Paper No. 149-16/PMC-1504) creating SC-236 with specification of bandwidth, and inviting Chris Parfitt to present further information on GADSS at September PMC meeting. It was noted the Program Director for SC-236 will be Rebecca Morrison (RTCA, rmorrison@rtca.org). Ad-hoc action closed.

F. URL for Library Equipment Options - Update

- Karan Hofmann, PMC Secretary, presented

Information is posted on workspace for PMC member reference. Action closed.

AGENDA ITEM 6

Discussion.

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

- Lou Volchansky, PMC DFO, presented

Mr. Volchansky reported the FAA is still working to streamline their processes and requested any consideration on this matter be held until complete. The action was tabled from PMC perspective for now, awaiting FAA follow up.

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

- Richard Nguyen, SC-225 Chairman, Stephen Diehl, SC-225 Secretary, and Norman Pereira, SC-225 DFO, presented

The chairmen provided an update on working status. The group has held two Plenaries, nineteen working group sessions since April Plenary, created battery and venting categories, and has completed revised the document to meet the MOPS template. They appear to be on track for completion by September 2016 with presentation to December PMC for approval.

The group was asked to prepare a white paper separately by the FAA. The PMC agreed once completed, the paper would not need to come through PMC for review/comment prior to sending back to FAA.

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

- Richard Heinrich, SC-228 Co-Chairman, presented

SC-228 Phase 1 work is wrapping up. WG1 (DAA) is preparing their document for FRAC including all the V&V efforts (expect completion of Phase 1 MOPS in December). WG2 (CNPC) is working to resolve FRAC comments with final face-to-face scheduled for July. Expect to submit document to September PMC for approval.

Of note, WG2 was challenged by a concern raised by DoD regarding the potential L-Band interference to TACAN and Link 16. Even though WG2 V&V had been performed at a higher power level, a new low power solution was included in the Phase 1 MOPS for L-Band in hopes of finding an acceptable non-interfering solution.

Recognizing SC-228 were on schedule to have Phase 1 MOPS released in 2016, an ad-hoc committee (led by Kelly Markin (MITRE)) was formed to draft a Phase 2 TOR in December 2015. The goal was to ensure the momentum of the working groups could be maintained upon the completion of their work product.

The draft Phase 2 TOR is consistent with the Phase 1 TOR (develops whitepapers to validate the scope and work program and then MOPS developed based on the whitepapers and release as project papers until the V&V work is complete). This was presented to the Steering Committee for review and comment on May 27th, 2016. It showed strong alignment with other SC efforts (such as SC-147 ACAS and ITU Tasking to ICAO for Ka/Ku Band SATCOM SARPS).

SC-228's Plenary is scheduled for July 14-15, 2016 and the next Steering Committee meeting for July 21-22, 2016. Thus, goal is to bring a Phase 2 TOR to the September PMC meeting for approval.

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

- Tom Pack, SC-229 Chairman, presented

Mr. Pack provided a status update on the four SC-229 working groups progress to include videos of Cessna 172 crash test conducted at NASA Langley. SC-229 plans to finish Working Group Activities (Crash, Homing, GNSS, Power); merge documents and reconcile differences; add new requirements; reorganize the structure to better segregate requirements from verification means; draft reviews at Plenary; and submit to FRAC and resolution of comments to prepare final draft. It is estimated that this work will take 9-12 months to complete and enter into FRAC. This would put the planned FRAC submission in the Summer of 2017 and publication towards end 2017.

He also covered impact of dependent organizations. SC-229 leadership decided to decouple SC-229 work from that of dependent organizations. This would allow concentration on finishing the merging of the standards with the inputs we have to date but might mean some future specification are not referenced in the next publication of DO-204B/ED-62B.

The PMC approved the revised TOR (RTCA Paper No. 151-16/PMC-1506).

E. NextGen Advisory Committee (NAC) - Status Update

- Andy Cebula, RTCA Vice President, Strategy and Programs, presented

The most recent NAC meeting was held on June 17th, hosted by The Boeing Company in Crystal City, VA.

Items discussed included NAC Work Projects:

- Presentation to Mike Whitaker, as it was his final meeting as DFO
- Boeing Briefed on Equipage – ADS-B
- Recommendations Approved:
 - o NextGen Integration Working Group Four Priority Areas
 - o Wake ReCat Analysis
 - o Community Outreach
- Seattle Greener Skies – Next Steps to Improve Usage
 - o Challenges – Track Conformance
 - Discontinuity between arrival and approach
 - Addressed through crew procedure
 - Several aircraft went off track
 - Operators re-emphasized and have not seen another incident
 - Events caused ATC to lose confidence in crew procedure as mitigation
 - Procedure being modified to address issue
 - Facility limited EOR to VMC until procedure is published
- JetBlue Equipage – Scope and Timeline
 - o Current all aircraft are RNP capable and all crew are trained

F. Tactical Operations Committee (TOC) - Status Update

- Trin Mitra, RTCA Program Director, presented

The next TOC meeting is scheduled for this week (June 23rd) at RTCA.

Items of discussion include:

- Update on Ongoing Task Groups:
 - o PBN Route Structure Task Group
 - Task 1 – Use broader expertise and data to refine or validate CONOPs problem statement
 - Task 2 – Recommend refinement to the criteria-based methodology for establishing low and high altitude PBN route structure
 - Task 3 – Recommend a NAS-wide point to point navigation strategy
 - Task 4 – Recommend alternatives to the proposed approach for design and implementation
 - o Graphical TFR Task Group
 - Task 1 – Use broader expertise and data to clarify and validate issues associated with TFRs and recommend solutions
 - Task 2 – Recommend policy regarding an online authoritative source for TFR content and use of TFR information for flight planning purposes

- Task 3 – Develop an associated set of business rules around what can be disseminated; to whom the data should be disseminated; standardization of format; graphical depiction; and means of dissemination
- FAA Responses from Previous Recommendations
 - Airport Construction
 - National Procedure Assessment
 - NorCal Noise Initiative
 - Caribbean Operations
 - Class B Airspace
- Briefing on Commercial Space

The TOC meetings scheduled for the remainder of 2016 at RTCA: June 23rd and October 27th.

G. FAA Actions Taken on Previously Published Documents – Report

- Lou Volchansky - PMC DFO presented (FAA Guidance based on RTCA Documents – RTCA Paper No. 121-16/PMC-1455)

FAA Published Documents that reference published RTCA Documents, FAA Pending Documents for RTCA Documents Published, and FAA plans for RTCA Documents pending PMC approval were reviewed.

FAA Published Guidance (Since Previous PMC)

RTCA Document	Developed By	FAA Guidance	Approval Date	Comment
DO-200B – Standards for Processing Aeronautical Data	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.
DO-283B - MOPS for Required Navigation Performance for Area Navigation	SC-227	TSO-C115d; AC 20-138D Chg 2	March 2016; April 2016	TSO-C115d implements the new DO-283B minimum operational performance standards for required navigation performance for area

				navigation. AC 20-138D contains installation guidance.
Change 2 to DO-300 - Minimum Operational Performance Standards (MOPS) for Traffic Alert and Collision Avoidance System II (TCAS II) Hybrid Surveillance	SC-147	Note to manufacturers posted on RGL (rgl.faa.gov)	June 2016	DO-300 Change 2 can be used by manufacturers in support of their justification package for a TSO deviation.
DO-93A – MOPS for Airborne Selective Calling Equipment	SC-232	TSO-C59b	June 2016	Expands number of SelCal frequencies

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

RTCA Document	Developed By	FAA Guidance	Planned Release Date	Comment
Change 1 to DO-300A – 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
DO-315A - Minimum Aviation System Performance Standards (MASPS) for Enhanced Vision Systems, Synthetic Vision Systems, Combined Vision Systems and Enhanced Flight Vision Systems	SC-213	AC 20-167A	2016	Plan to release AC 20-167A after EFVS rule is published

Chg 1 to DO-262B - MOPS for Avionics Supporting Next Generation Satellite System (NGSS) Iridium Specific Apdx D	SC-222	TSO-C159c	August 2016	DO-262B Appendix D will be used by Iridium manufactures in support of their TSOA for Iridium Technique Specific Equipment.
DO-350 (SPR ATNB2); DO-351 (Interop Std for ATNB2); DO-352 (Interop Std ATNB2, FANS 1/A); DO-353 (Interop Std for ATNB2, FANS 1/A)	SC-214	AC 20-140C	August 2016	ATN B1 Interop Standards improvements for CPDLC at Oceanic/ Continental boundaries. AC 20-140C includes B2.
		AC 20-160A	August 2016	Onboard recording of CPDLC Communication in Crash Survivable Memory
DO-220A – MOPS for Airborne Weather Radar Systems	SC-230	TSO-C63e; AC 20-182A	October 2016	Aircraft weather radar design approval; weather radar installation guidance
DO-213A – MOPS for Nose-Mounted Radomes	SC-230	AC 43-16 revision (Maintenance of Aircraft Radome); Job Aid	TBD	Standard for radome maintenance

RTCA Documents Pending PMC Approval

RTCA Document	Developed By	Planned FAA Guidance	Planned Release Date	Comment
DO-230G – Standards for Airport Security Access Control Systems	SC-224	Provide basis for FAA, TSA, and user community planning for the deployment of security access	TBD	Includes operational guidance checklist (with format included in Recommended Security Guidelines for Airport Planning, Design and

		control systems at airports.		Construction)
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H. Special Committees – Chairmen’s Reports and Active Inter-Special Committee Requirements Agreements (ISRA) - Review

- Karan Hofmann, RTCA Program Director, reported

Highlights from the Chair Reports for several selected Special Committees were reviewed. Reports were received from SCs 135, 206, 216, 222, 229, 230, 231, and 235. Other information was included in other presentations during this PMC. The complete matrix is posted on Workspace (RTCA Paper No. 122-16/PMC-1490).

I. European/EUROCAE Coordination – Status Update

- Karan Hofmann, RTCA Program Director, reported

Ms. Hofmann reported for Ms. Jennifer Iversen, RTCA Program Director, who coordinates regularly with EUROCAE and provided inputs of ongoing RTCA / EUROCAE cooperation.

Topic of Note:

- SC-223 (Internet Protocol Suite): Concerns over joint work, lack of maturity and non-coordinated efforts by multiple groups
- Airlines Electronic Engineering Committee (AEEC) Report Due Out in 6-8 months
- Should SC-223 have a hiatus for 8 months to have consistency with report and launch work jointly with EUROCAE WG-82?
- Expect an official paper from Council to PMC to consider matter

Key dates for future coordination:

- The Next TAC Meetings are set for September 13-14, 2016, Cologne, EASA or London BAE and October 21, 2016, Toulouse, Airbus.
- RTCA/EUROCAE Secretariat Coordination: October 10-11, 2016, Washington DC, RTCA

International Civil Aviation Organization (ICAO) Update:

- Standards Round Table
 - o September 2016
- 39th Triennial Assembly
 - o September 27 – October 7, 2016

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

AGENDA ITEM 7

Other Business.

A. Cyber Security in Mission Critical Environments – Presentation

- Stephen Deakin, Eccton, Cyber Security Consultant, presented

Mr. Deakin, a consultancy specializing in Technology Strategy, Enterprise Architecture, Cyber Security, Big Data, Internet of Things and Mobility, provided an informative presentation concentrating on cybersecurity. He gave a background of recent experience in policing and protecting critical systems, cybersecurity threats (types an organization will encounter in business), people (role they play in cybersecurity context), and technology (role it plays in the cybersecurity context).

Briefing is posted on Workspace (RTCA Paper No. 140-16/PMC-1498).

B. Drone Advisory Committee - Presentation

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

Mr. Secen provided a presentation on the newly forming Drone Advisory Committee (DAC).

Description:

- Drone Advisory Committee (DAC) announced May 4th by the administrator
 - o Chaired by Brian Krzanich of Intel; DFO will be the FAA Deputy Administrator
 - o NAC-like: 30 ± members, C-Suite decision-makers
 - o Likely will require a sub-committee of staffers and additional task groups, working groups or other data-gathering groups (not all RTCA administered)

Status:

- o Application process ran May 4th to May 19th
- o Gathered data from interested parties (390+ applied)
 - Initial cut to 200: removed federal employees; foreign owned organizations without US offices; non-executive-level candidate
- o Loaded data into the mathematically-based AHP tool for analysis
- o Completed analysis including sort ordered 200; Top 40; Top 10 per domain
- o Complete set of statistics provided to FAA on June 8th with final version June 17th
- Next steps:
 - o FAA must make final decision on members
 - o Notify the members
 - o Training
 - o Plan for first meeting
- First meeting is tentatively planned for the Washington DC area the 1st week of August

- Notional first topic: help the FAA prioritize the UAS Integration tasks in the FAA reauthorization bill

C. Administrative Note - Presentation

- Karan Hofmann, PMC Secretary, presented

It was noted future green cover (i.e. DO) documents will have the document number on each page.

D. Standards Referencing of RTCA Documents - Discussion

- Clay Barber, Garmin, offered

Mr. Barber brought up point that many other organizations reference RTCA documents. When a document is superseded, what is the action for updating references? RTCA took action to investigate and propose recommendation at September PMC meeting (action).

E. Out of Cycle PMC Document Approval - Discussion

- Richard Heinrich, SC-228 Co-Chairman, presented

Mr. Heinrich asked about the possibility of a special telephonic or electronic out-of-cycle approval for SC-228 WG1 document (*Final Phase One, DAA MOPS and V&V*) for the first week of November. PMC membership consensus was to hold on any required discussion until the September PMC meeting and the presentation of the revised SC-228 TOR.

F. Topic of Potential Interest- Discussion

- Robert Grove, PMC Member, offered

Mr. Grove pointed out batteries for electronic propulsion may be upcoming as a need for a standard in the future.

AGENDA ITEM 8

Schedule for Committee Deliverables and Next Meeting Date

Document expected for the September 2016 meeting:

- SC-228 Minimum Performance Standards for Unmanned Aircraft Systems
 - *Final Phase One, C2 Data Link MOPS and V&V (Terrestrial)*

The dates for the next three PMC meetings were confirmed: Thursday, September 22, 2016; Thursday, December 15, 2016; and March 21, 2017.

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 – June 21, 2016
ATTENDANCE LIST**

PMC MEMBERS:		
Christopher	Hegarty	The MITRE Corporation Chairman
Steve	Brown	National Business Aviation Association
Robert	Grove	Garmin Ltd.
Richard	Heinrich	Rockwell Collins, Inc.
Jens	Hennig	General Aviation Manufacturers Association
Margaret	Jenny	RTCA, Inc.
Randy	Kenagy	Air Line Pilots Association
George	Ligler	Project Management Enterprises Inc
Michele	Merkle	Federal Aviation Administration
Jessie	Turner	The Boeing Company
Lou	Volchansky	Federal Aviation Administration (Designated Federal Representative)

OTHER ATTENDEES:		
Jonathan	Archer	General Aviation Manufacturers Association
Clay	Barber	Garmin Ltd.
Jonathan	Branker	Federal Aviation Administration
Andy	Cebula	RTCA, Inc.
Stephen	Deakin	Eccton
Stephen	Diehl	The Boeing Company
Karan	Hofmann	RTCA, Inc.
Trin	Mitra	RTCA, Inc.
Rebecca	Morrison	RTCA, Inc.
Richard	Nguyen	The Boeing Company
Thomas	Pack	ACR Electronics
Andrew	Paszter	Wall Street Journal
Norman	Pereira	Federal Aviation Administration
Al	Secen	RTCA, Inc.
Brandi	Teel	RTCA, Inc.

PMC ACTION ITEM TABLE

TRACKING NUMBER (Meeting Date and agenda item from which original action resulted)	ACTION	ACTION ASSIGNED TO	DUE DATE	STATUS
03/17/2016 Agenda Item 1	03/17/2016 – Post FAA provided copy of BOB Agreement on Workspace 06/21/2016 (Item 5A) – Item posted in workspace	PMC Karan Hofmann	Jun 2016	Closed
03/17/2016 Agenda Items 3A-D	03/17/2016 – Report back on Boeing/ARINC ATC Winds work and results 06/21/2016 (Item 5B) – Update provided; follow on in Dec	PMC Jesse Turner	Jun 2016 Dec 2016	Open
03/17/2016 Agenda Item 4A	03/17/2016 – Provide feedback on PBN study from NAC 06/21/2016 (Item 5C) – Feedback provided	PMC Rick Heinrich	Jun 2016	Closed
03/17/2016 Agenda Item 4B	03/17/2017 – Determine SC-214 participation with SC-223 IPS activity 06/21/2016 (Item 5D) – Still being worked	PMC George Ligler SC-214 Chuck Stewart	Jun 2016 Sep 2016	Open
03/17/2016 Agenda Item 4C	03/17/2016 – ICC review input of RTCA’s MOPS and MASPS Guide Documents 06/21/2016 (Item 4A) – Update provided; “word” definition – new AI	ICC George Ligler	Jun 2016	Closed
03/17/2016 Agenda Item 5C	03/17/2016 – Ad-hoc recommended to address how RTCA does business w/focus on changing to risk base vs. performance base wrt ROAAS, WAIC, and GADDS (include L Volchansky, C Durkin, Garmin, J Hennig, R Heinrich, J Turner) 06/21/-2016 (Item 5E) – Ad-Hoc reported back recommendations	PMC Al Secen	Jun 2016	Closed
03/17/2016 Agenda Item 6H	03/17/2016 – Provide URL for Library Equipment Options 06/21/2016 (Item 5F) – Information provided and posted in workspace	PMC George Ligler Jens Hennig	Jun 2016	Closed
03/17/2016 Agenda Item 7C	03/17/2016 – ICC Look at CCC concept with recommendations for implementation 06/21/2016 (Item 4B) – Reported back; follow on action	ICC George Ligler	Jun 2016 Sep & Dec 2016	Open
06/21/2016 Agenda Item 4A	06/21/2016 – Word Definitions/usage for Shall, Should, Must, May, Will and be included in MOPS & MOPS	ICC George Ligler	Sep 2016	Open
06/21/2016 Agenda Item 4A	06/21/2016 – Ad-hoc to draft words covering Cyber Security Guidelines (MOPS, MASPS, TORs)	George Ligler, Jens Hennig, Al Secen, Richard Jennings	Sep 2016	Open
06/21/2016 Agenda Item 5E	06/21/2016 – GADSS Presentation by FAA	FAA Chris Parfitt	Sep 2016	Open
06/21/2016 Agenda Item 7D	06/21/2016 –Updating References to RTCA documents recommendation	RTCA	Sep 2016	Open