

RTCA- 228
Summary of Plenary #28 RTCA Paper No. 057-21/SC228-084
VIRTUAL
1:00 PM EST, February 25, 2021

The twenty-eighth plenary of RTCA Special Committee 228 was called to order by SC-228 Co-Chair, Brandon Suarez at 1:00PM (EST) on February 25, 2021 using WebEx audio and web conferencing only due to COVID-19 restrictions.

1. Agenda Item #1- Call to Order: Welcome
 - 1.1. Brandon Suarez, co-chair called the meeting to order and stated the purpose for today's plenary through a review of the agenda.

2. Agenda Item #2- Review RTCA meeting guidelines
 - 2.1. Al Secen welcomed everyone.
 - 2.2. Al reviewed the Anti-Trust Policy, the Proprietary Policy and the RTCA Committee Participation Membership Policy
 - 2.3. Al also briefed some meeting tips to ensure a successful virtual meeting
 - 2.4. Al then briefed self-rostering feature online at <https://workspace.rtca.org/kws>.
Thank you to all who self-roster!

3. Agenda Item #3- Opening remarks/ introductions
 - 3.1. Brandon stated there are currently 151 unique organizations and 710 registered members.
 - 3.2. Jennifer Ledford, FAA, was welcomed as the new WG2 secretary.
 - 3.3. Brandon reiterated, that he and John Moore are always available to discuss anything UAS, history of this committee, etc.
 - 3.4. The list of session participants is listed in Appendix A

4. Agenda Item #4- Approve meeting minutes from Plenary Meeting #27
 - 4.1. Christina Westover stated general formatting comments and sections were received.
 - 4.2. Christina called for a motion to approve the minutes. Fabrice Kunzi moved to approve the minutes, Siu O'Young seconded.
 - 4.3. There were no objections noted, minutes approved.

5. Agenda Item #5- Approve DO-304A to Enter FRAC
 - 5.1. Brandon provided a brief history of the background of this document and then shared the events of the past two years (2019-2020) to determine the need to move SC-228 into a Phase 3.
 - 5.2. Updating the document to Rev A reiterates the value of this document and the need to update with current Use Cases as the industry has evolved.
 - 5.3. At July 24, 2020 Ad-Hoc WG kickoff three sub-groups were established (Operations, Systems and Editorial).
 - 5.4. FRAC Schedule for DO-304A
 - 5.4.1. March 1-31: FRAC open
 - 5.4.2. April 7: Final comment adjudications
 - 5.4.3. April 7-12: Commenters review/accept adjudication
 - 5.4.4. April 12-14: SC-228 face to face (virtual) meeting
 - 5.4.5. April 15: SC-228 Plenary to approve to PMC
 - 5.4.6. June 17: PMC to approve document
 - 5.5. This document lays the foundation for the 2021-2023 work statement for SC-228 and for the direction industry is going.
 - 5.6. AI reminded this a motion to start/open final review and comment, no major sections are omitted. A potential issue is the cutover to the new RTCA workspace tool. AI asked anyone with issues to send Excel comments directly to him.
 - 5.6.1. A training package will be sent soon on how to use the new tool.
 - 5.7. Brandon reiterated him and John Moore are happy to field any document questions.
 - 5.8. Brandon asked for a motion to open FRAC. Andy Thurling made a motion and David Counts seconded. The motion carried.
6. Agenda Item # 6- Update from EUROCAE WG105
 - 6.1. Brandon shared the presentation provided by the WG 105 leadership team, Alexandra Florin and Maurizio Goiak, who were elected co-chairs in January 2021.
 - 6.2. MOPS for UAS Communicates by 4G LTE
 - 6.2.1. Ravi Jain asked why MOPS versus MAPS
 - 6.2.2. John and AI responded. A technology specific system is generally a MOPS; MAPS generally defines a system of equipment. Jim Williams can provide more information.
 - 6.2.3. John Moore and AI reminded everyone that the FRAC period for joint documents must be 45 days. It will also be a little more complicated with the time zones to coordinate.
 - 6.3. DAA RPAS IFR
 - 6.3.1. ED-271 MASPS comment resolution is still open with discussion ongoing on need for non-cooperative capability
 - 6.3.2. Differences between RTCA and EUROCAE OSEDs is in work.

- 6.3.3. ED-267 OSED for DAA UAS VLL (very low level) published. Development of white paper/use cases is in work.
- 6.3.4. ED-265 SAT C2 MOPS
 - 6.3.4.1. Document not approved for 2nd time by EUROCAE as spectrum management and compatibility issues still need to be resolved.
 - 6.3.4.2. RTCA and ICAO submitted non-concurs.
- 7. Agenda Item # 7- New Business
 - 7.1. Brandon and Christina presented a notional schedule for phase three documents
 - 7.2. Don Walker asked for a leadership meeting to discussion editorial schedule, and Jim Williams and John Moore want to work schedule at the next leadership meeting on March 4th.
 - 7.2.1. Action: Christina to send schedule slides to WG chairs.
- 8. Agenda Item #8- Adjourn
 - 8.1. Brandon and Jim Williams stated they would stay on to reply to Ravi Jain's LTE questions.
 - 8.2. Brandon called for any final questions/comments, there were none. Jim Williams made a motion to adjourn; AI seconded.
 - 8.3. Meeting adjourned at 2:05 PM EST.

SC-228 Leadership

John Moore	SC-228 Co-Chair Ad Hoc Co-Chair	Collins Aerospace
Brandon Suarez	SC 228 Co-Chair Ad Hoc Co-Chair	General Atomics Aeronautical Systems, Inc
Don Walker	SC-228 WG1 for DAA, Co- Group Lead	A3 by Airbus
Fabrice Kunzi	SC-228 WG1 for DAA, Co- Group Lead	General Atomics Aeronautical Systems, Inc.
Matt Spanos	SC-228 WG1 for DAA, Secretary	Transport Canada
Steve Van Trees	SC-228 GAR, WG2 for C2, Co- Group Lead	FAA, AIR-130
Jim Williams	SC-228 WG2 for C2, Co-Group Lead	Unmanned Solutions
Jennifer Ledford	SC-228 WG2 for C2, Secretary	FAA
Al Secen	SC-228 Program Director	RTCA
Christina Westover	SC-228 Secretary Ad Hoc Secretary	Boeing
Randy Willis	SC-228 WG3 for Lost Link, Co-Group Lead	Northrop Grumman
James Foster	SC-228 WG3 for Lost Link, Co-Group Lead	FAA
Mack Horton	SC-228 WG3 for Lost Link, Secretary	LS Technologies
Joel Wichgers	SC-228 WG4 for Navigation, Co-Group Lead	Collins Aerospace
Matt Harris	SC-228 WG4 for Navigation, Co-Group Lead	Boeing
Andrew Videmsek	SC-228 WG4 for Navigation, Secretary	General Atomics Aeronautical Systems, Inc.

Appendix A- List of SC-228 Plenary Participants

ATTENDEES

Company	Name
A3 by Airbus	Don Walker
ACES, Inc.	Alfonso Malaga Michael Neale
Adaptive Aerospace Group	Devin Jack Keith Hoffler
ALPA	Mark Reed
Aurora Innovations	Johnathan Saunders
The Boeing Company	Christina Westover Dan Ellis Regina Estkowski John Vian Matt Moser Tim Murphy
Civil Aviation Authority of New Zealand	Charlie Morris
Cobham Aerospace Communications	Jeffrey Knickelbein
Collins Aerospace	John Moore
COMAC	Mingwei Wang
Esterline CMC Electronics	Jean-Pascal Joary
Federal Aviation Administration (FAA)	Art Hinaman Chris Nassif Don Nellis Jennifer Ledford Neal Suchy Paul Campbell Peter Georgiou Ravi Jain Ray Mei Ruth Hirt Tony Long
Garmin LTD.	Ben Peetz
General Atomics Aeronautical Systems, Inc	Andrew Videmesk Brandon Suarez Fabrice Kunzi Naiel Askar Tim Grebe TojumiOluwa Adegbyega Xaviar Aloysius Redondo
Honeywell International, Inc.	David Counts
INMARSAT	Kristen Mineck
Iridium	Joseph Darden
Iris Automation	Akaki Kunchulia
JHW Unmanned Solutions, LLC.	Jim Williams

Company	Name
L3Harris	Kevin Diamond
MIT Lincoln Laboratory	Matthew Edwards Wes Olson
Mosaic ATM, Inc	Todd Kilbourne
NASA	Aaron Dutle Elliot Lewis Evan Dill Jeffrey Homola
NextNav	Ashu Pande
Northeast UAS Airspace Integration Research Alliance (NUAIR)	Andrew Thurling
Northern Plains UAS Test Site	Erin Roesler
Northrup Grumman Corp	Lance King Randy Willis
Regulus Group	Bill Benner
RTCA	Al Secen
SAIC	Kolie Lombard
Semantica Aerospace Limited	Carl Thibault Paul St John Siu O'Young
Transport Canada	Matthew Spanos Tom Hastie
US Navy	Mathias Boddicker
Wisk	Garv Stephenson