

**Summary of the 52<sup>nd</sup> Meeting  
Special Committee 206  
Aeronautical Information Services (AIS) and Meteorological (MET) Data Link Services**

**Executive Summary**

A Joint Coordination WebEx was held between SC-206 and WG-76 on Thursday, September 20<sup>th</sup>. In addition, the 52<sup>nd</sup> Plenary meeting of SC-206 was held September 21, 2018, at RTCA Headquarters in Washington, DC.

- **SC-206 / WG-76 Joint Coordination WebEx Summary**
  - Both approved Terms of Reference (TORs) were reviewed with no significant differences between the two
    - However, several items of clarification and discussion were noted and will be addressed during future MASPS development Subgroup meetings / discussions
  - The intent is that once the MASPS has been harmonized, this document will provide a process that can be used by future Services
  - Three (3) Working Groups have been proposed to work on the harmonized document (e.g. AIS, MET, and CDM)
  - The harmonized MASPS is intended to be delivered in December of 2020
  
- **Plenary 52 Summary**
  - SG-1 – Aircraft-based Observation (AbO) Requirements
    - SG-1/WxS subgroup (Steve Darr) provided an extended briefing regarding the status of AbO under the Combined Surveillance Committee (CSC) since WG-76 is rejoining SC-206 and new members may not be familiar with the activity
    - WxS subgroup June 2018 deliverables to the CSC were generally well received
    - WxS subgroup was tasked by the CSC in June to further refine update intervals and reception ranges and that task was a focus for this week
    - WxS subgroup further developed recommended data encodings, bit allocations, and message structures to populate existing Mode S registers and transmit one high rate and one low rate message
    - WxS subgroup will present updated working papers, data range and data rate requirements at the October meeting of the CSC in DC.
    - AbO will again have a dedicated session (hosted by Steve Darr) at the upcoming Friends and Partners in Aviation (FPAW) Fall meeting
    - SG-1/WxS will continue outreach activities for AbO stakeholder groups
  
  - SG-5: FIS-B MOPS
    - SG-5 would like to have more representatives from the avionics community participating
    - Regarding the MRMS activities, Harris will ensure that their system is backwards compatible (i.e. certified versus uncertified avionics)

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- Due to scheduling and decisions to be made by the FAA SBS Office, DO-358A may be issued with the current icing information configuration
  - This capability would be updated in DO-358B
- The DO-358A revision is intended to ensure that the vendor will not put something in front of the pilot that is incorrect
  - However, for the pilot to have full set of information, there will need to be a ground system change
- SG-6: MASPS
  - SG-6 does not think all 12 of WG-76's Service Descriptions will need to be analyzed separately
    - It is believed that some can be combined
  - SG-6 discussed a proposed process to evaluate the WG-76 Service Descriptions and to merge them into the existing DO-364 document
  - SG-6 believes that if they are able to collectively aggregate many of the Service Descriptions into a smaller number, that may force a change in the level of detail in the Service Descriptions
- Industry Coordination
  - Rocky reported that he has had positive feedback from the CDM community
  - Representatives from the CDM community will be present at the December Plenary meeting in Melbourne, FL
- Next SC-206 Meetings:
  - December 3-7, 2018 at Harris in Melbourne, FL
  - March 18-22, 2019 in Washington, DC (RTCA) or Herndon, VA (Harris) and Brussels, Belgium
    - Coinciding Plenary Meetings with RTCA and EUROCAE
  - June 10-14, 2019 at AOPA Headquarters in Frederick, MD (tentative location)
  - September 9-13, 2019 U.S. location TBD and Airbus, Toulouse, France
    - Coinciding Plenary Meetings with RTCA and EUROCAE
  - December 9-13, 2019 at TBD (US)

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The 52<sup>nd</sup> meeting of SC-206 was held September 21, 2018, at RTCA headquarters in Washington, DC.

Presentations are posted at:

<https://workspace.rtca.org/apps/org/workgroup/sc-206/documents.php>

**Friday September 21<sup>st</sup> Plenary**

The Plenary session convened at approximately 0830 on Friday, September 21<sup>st</sup>.

**1. Opening remarks: Reference the Leadership Plenary Slides deck**

- Chairman
  - Rocky opened the meeting by stating that SC-206 has a new approved Terms of Reference (TOR)
  - The new TOR includes:
    - A new tasking to harmonize / create an updated DO-364 MASPS (version A)
    - Authorization for SC-206 to rejoin with EUROCAE WG-76
    - Address Collaborative Decision Making (CDM) issues within the DO-364 MASPS revision
  - Rocky added that there is a lot of work going on with SG-5 and SG-1
  - And we welcome Allan Hart's participation again as part of the SC-206 efforts
- RTCA
  - Karan Hofmann presented the associated RTCA slides

**2. Attendees' introductions**

- |                          |   |
|--------------------------|---|
| • Rocky Stone, Co-chair  | United Airlines                           |
| • Tom Evans, Co-chair    | NASA                                      |
| • Joe Bracken, Secretary | AvMet Applications, Inc.                  |
| • Eldridge Frazier       | FAA, Government Authorized Representative |
| • Moin Abulhosn          | FAA Aircraft Certification                |
| • Bill Carson            | The MITRE Corporation                     |
| • Stephen Darr           | Dynamic Aerospace                         |
| • John Ferrara*          | Consultant                                |
| • Tammy Flowe            | FAA Aviation Weather                      |
| • Paul Freeman*          | Harris                                    |
| • Allan Hart*            | Public                                    |
| • Brian Hint*            | FAA                                       |
| • Karan Hofmann          | RTCA                                      |
| • Amanda Hoprich*        | AvMet, Inc.                               |
| • Ed Johnson             | FAA                                       |
| • Matthew Lug*           | USAF                                      |
| • Clark Lunsford*        | The MITRE Corporation                     |
| • Jim Mills*             | HQ USAF                                   |
| • Mark Phaneuf           | Air Line Pilots Association (ALPA), Int'l |
| • Tim Rahmes*            | The Boeing Company                        |
| • Roger Sultan*          | Air Line Pilots Association (ALPA), Int'l |
- \*Remote

**3. Review and approval of meeting agenda**

- The meeting agenda was approved

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4. Approval of previous meeting minutes (Frederick, MD)
  - The minutes of the previous SC-206 Plenary (June 11-14, 2018 at AOPA Headquarters in Frederick, MD) were approved
  
5. Approved TOR changes
  - a. SG-5: Schedule change for DO-358A and new revision, DO358B
    - Rocky noted that SG-5 will be developing two revisions of DO-358
      - The desire is to not hold up some of the near term items
      - DO-358A is due to be completed March of 2019
      - DO-358B is due to be completed March of 2020
  - b. SG-6: Rejoining WG-76 to update DO-364 – Minimum Aviation System Performance Standards (MASPS) for Aeronautical Information / Meteorological Data Link Services
    - Rocky noted that the TOR change authorized SC-206 to become a joint Committee with WG-76
    - The TOR changes authorizes revision A of the MASPS (DO-364) to include EUROCAE'S proposed services as well as several CDM considerations
    - The December Plenary in Melbourne, Florida will be first official joint meeting
    - WG-76 has also had their TOR approved by their joint council
  
6. Sub-Groups reports
  - a. SG-1: CSC and Other SC Coordination (ISRAs) – Reference the SG1 Plenary Slides
    - Steve Darr provided the SG-1 update
      - SG-1/WxS subgroup (Steve Darr) provided an extended briefing regarding the status of AbO under the Combined Surveillance Committee (CSC) since WG-76 is rejoining SC-206 and new members may not be familiar with the activity
      - Regarding the WxS subgroup June 2018 deliverables, Steve reported that the deliverables were generally well-received
        - WxS subgroup was tasked by the CSC in June to further refine update intervals and reception ranges and that task was a focus for this week
        - Ed noted that the CSC meeting occurred 1 week after the June SC-206 Plenary
      - WxS subgroup further developed recommended data encodings, bit allocations, and message structures to populate existing Mode S registers and transmit one high rate and one low rate message
      - WxS subgroup will present updated working papers, data range and data rate requirements at the October meeting of the CSC in DC
      - SG-1/WxS will continue outreach activities for AbO stakeholder groups
      - Reference the Requirements Development Status
        - Eldridge asked how SG-1 is defining Air-to-Air (i.e. is it strictly air-to-air, or could it include a ground bounce?)
          - i. Steve responded that they are defining Air-to-Air as they did in DO-364; that being aircraft-to-aircraft only
      - Reference the Highest Rate ADS-B Parameters
        - Rocky asked if Steve is sure there have not been any reported winds greater than 255 knots

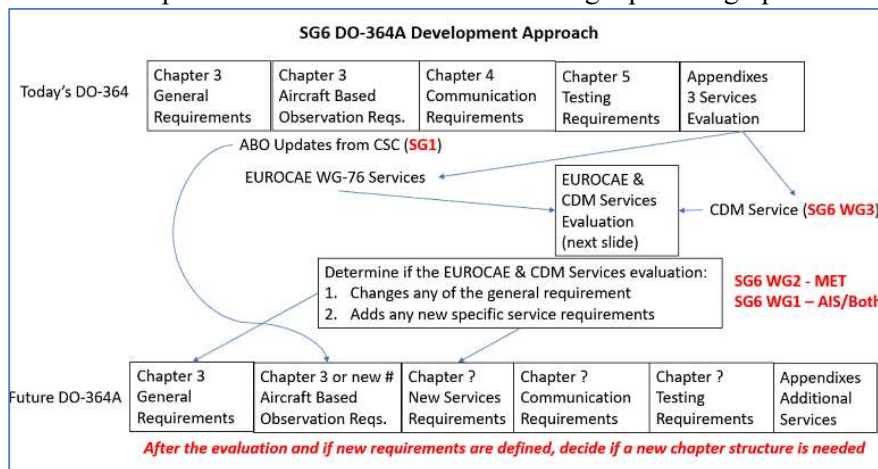


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- John Ferrara commented that he wants to be certain that the Harris MRMS capability is “backward compatible”
  - John is hopeful that Harris will look at the system prior to testing
  - Paul responded that he has followed up with the Harris test personnel and Harris uses certified and uncertified avionics in their testing and that they will ensure that their system is backwards compatible
  - John added that most of the equipment in the field is not build to DO-358A standards and that Harris must look at the theoretical condition to ensure that there is no hidden backwards incompatibility issues
- Regarding the icing activities
  - Paul noted that the FAA has proposed new requirements to Harris making the uplinked Icing products configurable among 4 options. Those options are:
    - Run encoding based on a contiguous set of cells having the same value for the icing Severity field within the product,
    - Run encoding based on a contiguous set of cells having the same value for the icing Probability field within the product,
    - Run encoding based on a contiguous set of cells having the same values for both the icing Severity field and the icing Probability field within the product, or
    - No run encoding.
  - Paul stated that the timing of the FAA’s icing decision is out of SG-5’s control
    - Harris has until October 5<sup>th</sup> to provide a response to the FAA
    - The SBS Office then will make a decision (which could take several months)
    - Paul added that Harris will propose a timeline that fits into the current work schedule
      - i. Therefore, DO-358A may go out with the current icing information configuration and this capability will be updated in DO-358B
- John noted that DO-358 was revised so that the vendor will not put something in front of the pilot that is incorrect
  - However, for the pilot to have full set of information, there will need to be a ground system change
  - Jim Mills stressed that SG-5 needs to ensure that NOTAMS are compatible in digital **and** ICAO format
- Tom Evans asked if SG-5 will need all 5 days for meetings during the split Plenary week in March, 2019
  - Paul responded that he does not think that will be necessary
- Bill Carson made a comment that the test procedures may not be available at the same time the main body of the document is planned to be released to the SC-206 members to review prior to the December Plenary
  - Rocky responded that RTCA documents cannot be published that way
  - Eldridge added that there has been a precedent set in that we did not have the test material ready for the DO-358 pre-FRAC review by SC-206
    - The test portion will be missing from early drafts of DO-358A
    - Bill stated that he will need to have the test material done by mid-November for incorporation into the draft

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- i. More detailed test material would be included later and reviewed in time for the December Plenary
          - ii. However, it may be difficult for all of the test material to be delivered in November
        - Rocky responded that he doesn't think it needs to be completed by November
          - i. The draft document could be released for FRAC minus some material
            - 1. But that material will need to be completed prior to the FRAC release
          - ii. Rocky added that the material needs to be done and included before the 30 day FRAC clock starts
      - Allan Hart asked if requesting FRAC comments by mid-January is realistic due to the holidays
        - Paul agreed
        - Karan commented that they are able to lengthen the comment period or start the comment clock at a later date
- c. SG-6: MASPS – Reference the SG6 Plenary Slides
  - Eldridge noted that WG-76 has a total of 12 Service Descriptions (SDs) on their website that SG-6 reviewed
  - SG-6 agreed that they do not think we will need to include all 12 separately
    - SG-6 decided to work with WG-76 to combine some of the SDs into one (or several)
    - Eldridge added that a number of the WG-76 SDs appeared to blend both AIS and MET
      - It will need to be decided which “bucket” (AIS or MET) to drop those in
  - SG-6 concurred that the level of specificity of the WG-76 SDs are not up to the level of detail as DO-364
  - Allan Hart provided and discussed the following 2 process graphics



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• Service Evaluation would be based on DO-364's appendixes

—Appendix A: Service Description

- Use template (Table of Content) to determine gaps in WG-76 service descriptions

DO-364A SD Appendix Sections	WG-76 SD Sections	Gaps (Y or N)	If no, is additional effort needed (Major or minor)
1			
2			
3			
...			

- Need a Service Description for CDM
- Keep in mind that our efforts to develop the service description were driven by questions that needed answers per the development of the OPA and OSA.

—Appendix B: OPA

—Appendix C: OSA

○ Tim Rahmes asked how the WG-76 SDs compare with the EUROCAE MASPS template

- Allan responded that he was not sure
- Bill Carson responded that he is not sure if they have a MASPS or equivalent document template
  - The expectation was that WG-76 would be doing the work to put their information into our MASPS
- Tim asked if we are confident that we will be providing the document that they are expecting
  - Eldridge commented that we will need to take it up with Alex and Boris as to what the end product is intended to be / do
  - Karan asked what the WG-76 TOR calls for
    - i. Review of their TOR indicated they are expecting a revised MASPS document
  - Allan commented that that provides more leverage for SC-206 to drive the effort the way we want it if they do not have an equivalent to a MASPS
    - i. Everyone in attendance concurred
    - ii. This will be discussed during the follow-up call with WG-76 on October 12<sup>th</sup>
    - iii. Tim noted that it appears that their current level of detail is at the OSED level
- Allan stated that we need to verify that WG-76 does not have a template as to how to write a MASPS
  - Karan responded that they do have a MASPS drafting guide and RTCA is working with EUROCAE to ensure the content is the same
    - i. Karan agreed to provide copies of the updated drafting guides when they are harmonized**
- Tom noted that WG-76 presented their SDs as being complete
  - Tom asked Bill if they thinks their SDs will need to be redone
    - i. Bill responded that he is hesitant to use the word “redone”
  - Bill displayed a June “burn-down” diagram for their various SDs
  - Eldridge stated that Bill will need to look at the WG-76 procedures and let SG-6 know how much work will be involved



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- i. Bill responded that he will not be able to support SG-6 until the November / December timeframe due to funding and contractual issues
  - 1. However, after that, he would be able to evaluate how much work would be involved in helping WG-76 conduct a joint assessment
- Bill noted that the OSA associated with each SD is part of the respective SD
  - i. And all OPA work for all SDs is contained in one spreadsheet
- Bill added that if SG-6 aggregates many of the SDs into a smaller number, that may force a change in the level of detail in the SDs

7. Industry coordination

- Rocky reported that he has had positive feedback from the CDM community
  - Representatives from the CDM community will be present at the December Plenary meeting in Melbourne, FL
  - The plan is to set aside a single day during that Plenary specific to CDM discussions

8. Future meetings plans and dates

Meeting Dates	Locations (Hosts)	Releases / Approvals
Dec 3-7, 2018	Melbourne, FL (Harris)	Approve DO-358A for FRAC release Joint WG-76/SC-206 Plenary
March 18-22, 2019	Coinciding Plenary Meetings Washington, DC (RTCA) or Herndon, VA (Harris)  Brussels, Belgium (EUROCONTROL)	SG-5 - DO-358A FRAC resolution review / Plenary approves release of DO-358A to PMC  Joint WG-76/SC-206 Plenary (SG-1 & SG-6)
June 10-14, 2019	Frederick, Maryland (AOPA?)	PMC approves DO-358A for publication  Joint WG-76/SC-206 Plenary
September 9-13, 2019	Coinciding Plenary Meetings U.S. (TBD)  Toulouse, France (Airbus?)	SG-5  Joint WG-76/SC-206 Plenary (SG-1 & SG-6)
December 9-13, 2019	U.S. (TBD)	Approve DO-358B for FRAC release  Joint WG-76/SC-206 Plenary

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9. Action item review

- One Action Item was identified during the Plenary session

#	Owner	Action	Date	Status
<b>Open Action Items</b>				
329	Karan Hofmann	Provide copies of harmonized MASPS drafting guides to SG-6 when complete	9/21/18	Open
330				
331				
332				
<b>Closed Action Items</b>				
282	Moin	Clarify what type of AIS/MET data link MOPS would be needed (as follow on to the AIS/MET MASPS), if one or multiple MOPS are needed, or one with different sections for different systems. -- Can close pending resolution of AI 299.	March 2014	Closed
299	Eldridge	Advise SC-206 what the FAA would like to see as follow on to the AIS/MET MASPS (outside of what's already covered by the MOPS ISRAs with SC-186 and SC-209). -- Coordinating with FAA's AWD, AVS, and others.	Sept 2016	Closed
308	SG1	Put together a document (presentation or white paper) that provides insight into how SC-206 can move forward with updating DO-364 while keeping the scope from impacting the work of the CSC and our ISRAs with SC-186 and SC-209. As part of this, define what material in DO-364 needs to be protected from modification when the document is updated. -- Closed and rolled into TOR feedback.	July 2017	Closed
309	SC-206	Consider dates for 2018 meetings (WG or plenary).	July 2018	Closed
310	SG5	There are serious problems with providing Temporary Restricted Areas information via NOTAM and FIS-B. Address this in a white paper to SC-206 leadership. The problem is system-wide, but focus on the FIS-B perspective. Formulate some options for SC-206 leadership.	Sept 2017	Closed Mar 2018
311	Eldridge	Eldridge to verify date of personal event in June 2018 in order to identify June Plenary date	Dec 2017	Closed
312	Eldridge	Eldridge to coordinate with AOPA for a June 2018 Plenary venue	Dec 2017	Closed Mar 2018
313	Karan	Karan to check on RTCA room availability for September 2018 Plenary	Dec 2017	Closed

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314	Tammy	Tammy to prepare 2 additional slides to include in her December 19th PMC briefing deck to provide details on why SG4 chose not to pursue a MOPS	Dec 2017	Closed
315	Karan	Karan agreed to arrange another telecom with the WG76 leadership regarding the combined MASPS	Dec 2017	Closed Mar 2018
316	SC206	SC206 team to review proposed TOR change language as it relates to rejoining WG76 and provide comment by the March 2018 Plenary meeting. This includes coordination by Karan with WG76 to obtain their feedback	Dec 2017	Closed June 2018
317	Karan	Karan to reach out to her WG76 counterpart to obtain their feedback on the proposed TOR changes (combined with 316)	Dec 2017	Closed
318	Rocky	Rocky to provide an update on the CDM activities to the SC206 team in January 2018	Dec 2017	Closed June 2018
319	Bill	Bill Carson to complete and provide an update on his harmonized MASPS tasking in January 2018	Dec 2017	Closed Mar 2018
320	Amanda	Amanda to update the March Plenary agenda to remove the opening Plenary session and to change the end date / time	Dec 2017	Closed Mar 2018
321	Karan	Karan Hofmann agreed to look for latest WG-76 documents and post to Workspace accordingly	Mar 2018	Closed June 2018
322	Karan	Karan Hofmann agreed to pull down all recent WG76 documents from the WG76 Sharepoint server, post to Workspace, and provide the link to the 206 membership	June 2018	Closed June 2018
323	SC206	Rocky Stone suggested the membership review and edit the existing draft TOR document regarding rejoining WG76, joint MASPS development, and MOPS product additions	June 2018	Closed June 2018
324	Frances	Frances Prott agreed to post / distribute most recent TOR with proposed language for review and comment by the team for the Thursday Plenary session	June 2018	Closed June 2018
325	Tom	Tom Evans agreed to provide Frances with a copy of / reference to the ICAO Gold document	June 2018	Closed June 2018
326	Steve	Steve Darr agreed to forward to Frances / Karan the FPAW meeting information being provided to AMS	June 2018	Closed Sept 2018
327	Moin	Moin Abulhosn agreed to speak with the head of Flight Standards about minimum CDM requirements for operators and coordinate with Rocky	June 2018	Closed Sept 2018

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328	Paul / John	Paul Freeman / John Ferrara were tasked with developing a FIS-B MOPS Burn Down diagram	June 2018	Closed Sept 2018

10. Other business

- There was no new business discussed at this time

11. Adjourn

The Plenary session adjourned at approximately 1030 on September 21<sup>st</sup>.

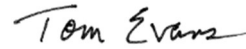
CERTIFIED as a true and accurate summary of the meeting.



Joe Bracken, Secretary



Rocky Stone, Co-chair



Tom Evans, Co-chair