Summary of the 43rd Meeting
Special Committee 206
Aeronautical Information Services (AIS) and Meteorological (MET) Data Link Services

Executive Summary

SG1/6 — MASPS for AIS/MET Data Link Services
- SG1/6 has a first rough draft of the MASPS. They are on track to release a final draft to SC-206 sometime after the May 10-12 face-to-face in Kansas City, for review prior to the June meeting in Ottawa. The goal for Ottawa is to get SC-206 approval to release the MASPS for FRAC.

SG4 — MOPS for Eddy Dissipation Rate (EDR) Reporting
- Met this week with Mike Emanuel of the FAA EDR Standards Recommendations team
- Finalized the MOPS outline
- Identified several intended functions: Flight crew planning, Wake turbulence applications, Meteorological applications, Aviation forecasters, Airline flight operations, Crosslink

SG5 — Update of DO-358 (MOPS for FIS-B via UAT)
- SG5 is being re-activated to update DO-358. SG5 will:
  o Review new FIS-B weather products proposed for inclusion.
  o Correct a few reported errors and omissions in DO-358.
  o Review changes made to the FIS-B ground system to meet the requirements in DO-358.
  o Review FIS-B weather product vendor change from WSI to Harris for impact on the doc.

SG7 — Guidance for the Use of Data Linked Forecast and Current Wind Info in ATM Operations
- Reviewed status of TBO/RTA simulations
- Reviewed survey to airlines
- Reviewed survey to FAA re what info is used in the ground automation tools
- Reviewed and updated initial document inputs
- Concerns
  o RTA Simulations – FMS limitations on speed authority
  o Mapping TBO/RTA to A-IM
  o Time crunch between June and September
  o Lacking ATC and airlines participation

SC-206 roadmap:

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Fapp = Approve for release for FRAC process
Fres = Resolve FRAC comments
Monday

Co-chairs Rocky Stone and Allan Hart welcomed the attendees to the 43rd meeting of SC-206. The meeting was held March 7 – 11, 2016, at Delta Air Lines facilities in Atlanta.


1. **Opening remarks from the chairmen**—
SC-206 is doing important work. SG6 now has a first full draft of the MASPS. For SG7, it has been a challenge getting interest and traction and scoping the winds guidance document. But in the scheme of NextGen and maximizing throughput and efficiency, the document’s recommendations will be crucial. SG4’s EDR MOPS is very pertinent. EDR issues have been festering in the industry for years. Some EDR systems were installed more than 15 years ago, but because of controversy and unwillingness to compromise, there are still major unresolved issues. SG4 is doing a lot of good work to close the gap. Finally, SG5 is in the process of being reactivated to update the FIS-B MOPS.

2. **Remarks from the host** —
Jeff Wright and Bill Watts welcomed the group to Delta Air Lines and provided logistical information.

3. **Introductions** —
1. Allan Hart, Co-chair Honeywell
2. Rocky Stone, Co-chair United Airlines
3. Moin Abulhosn FAA Aircraft Certification
4. Joe Bracken (telecom) AvMet
5. Bill Carson MITRE
6. Geoffrey Chisholm (telecom) FAA Enterprise Services
7. Stephen Darr Dynamic Aerospace
8. Ernie Dash AvMet
9. John Dutton (telecom) FAA ATO
10. Michael Emanuel FAA Aviation Weather
11. Cindy Engholm MIT Lincoln Labs
12. Tom Evans NASA Langley Research Center
13. Tammy Farrar FAA Aviation Weather
14. John Ferrara (telecom) Consultant
15. Eldridge Frazier FAA Aviation Weather
16. Paul Freeman (telecom) Harris
17. Marc Henegar ALPA
18. Karan Hofmann RTCA
19. Amanda Hoprich AvMet
20. Mike Jackson (telecom) Honeywell Advanced Technologies
21. Ed Johnson FAA
22. Marc Libant NavCanada
23. Clark Lunsford MITRE
24. Greg Meymaris UCAR
25. Gary Marsh (telecom) Panasonic Weather Solutions
26. Michael McPartland (telecom) MIT Lincoln Labs
27. Andrew Mirza (telecom) UK Met Office
29. Dan Mulally (telecom)  Panasonic Avionics
30. Mark Mutchler (telecom)  FAA Small Airplane Directorate
31. Lee Nguyen            FAA Aircraft Certification
32. Kevin Niewoehner (telecom)  Booz Allen
33. Mark Phaneuf         ALPA
34. Tim Rahmes            Boeing
35. Tom Ryan              FAA Flight Standards
36. Bill Watts            Delta Air Lines

4. Agenda for the week:

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5. Sub-Group Coordination Meeting

5.1 Status of SG4 — MOPS for EDR Reporting
Co-Chairs: Tammy Farrar and Bill Watts

- Getting close to defining what “operationally comparable” means for EDR algorithm outputs
- Bi-weekly telecons leading up to this meeting
  - Drafting Section 1
  - Firming up what they mean by accuracy
  - Building out the user needs table
- Continued close coordination between SG4 and Mike Emanuel’s FAA EDR Standards team, which delivered their EDR Standards Analysis Project Report to SG4 in February. They are still assessing airlines’ peak EDR performance needs. They are on course to meet their advertised schedule. EDR team next steps:
  - Finalize assessment of airlines’ needs
  - Determine how to leverage in-flight data
  - Clearly define peak EDR standard development and validation methodologies
  - Continue close collaboration with airlines, RTCA, and FAA Flight Standards

5.2 Status of SG5 – DO-358 Update
Co-Chairs: John Ferrara and Paul Freeman

- SG5 is being re-activated to update DO-358 (MOPS for FIS-B via UAT). Support contracts should be in place next week. SG5 will:
  - Review new FIS-B weather products that the FAA has contracted with Harris to implement. These include Lightning, Turbulence, Icing, Cloud Tops, and AWOS. The DO-358 update will account for these new products.
  - Correct a few reported errors and omissions in DO-358.
  - Review and comment on changes made to the FIS-B ground system to meet the requirements in DO-358.
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- Review and comment on FIS-B weather product vendor change from WSI to Harris in April 2016. This may necessitate DO-358 updates.
- Industry participation and new members are strongly encouraged, including vendors providing iPad-based non-certified ADS-B In products. Please consider joining SG5. Contact John Ferrara at joferra231@gmail.com.

5.3 Status of SG1/6 — AIS/MET MASPS
Co-Chairs: Bill Carson and Steve Darr

- Lots of work across all sections since last plenary. Now have a first rough draft of MASPS. Anticipate asking at the June plenary for SC-206 approval to release the MASPS for FRAC.
- Week’s goals
  - Ensure all annexes are 100% complete or method to get there
  - Get Sections 1, 2, and 3 to mature
  - Get Sections 4 and 5 built out to > 70% complete
  - No sections remain <70% complete
  - Need to put some items to bed
    - Operational credit issue
    - Finalize system diagram
    - Proposal to include AIS info in Section 3
- Now that SG1/6 has a draft MASPS, comments are welcome. (Include specific recommended changes in writing along with line numbers.)

Question: How well is the MASPS in sync with AC 00-63?
>> In a sense the two documents are under development concurrently. Since the draft AC 00-63 update being circulated now was written, some terminology in the MASPS has changed and it uses a more generic approach than the previous version. It replaces contract mode with pub/sub and demand mode with request/reply (reflecting SWIM and industry’s adoption of those terms). It also introduces the generic concept of transmitting, channel, and receiving functions. Both the draft MASPS and AC 00-63 update have dropped “Category 1” and “Category 2.”

5.4 Status of SG7 — Guidance for the Use of Data Linked Wind Info in ATM Operations
Co-Chairs: Ernie Dash and Michael McPartland

- SG7’s task is to provide guidance for the methodology of reporting and recommended quality of wind information necessary to support operations such as IM and 4D TBO
- Work since December plenary
  - Bi-weekly GTMs
  - January TIM organized by Eldridge
    - Good participation
      - Controllers (FAA/NATCA)
      - Industry avionics (Honeywell, GE)
      - NASA (ATM research)
      - Boeing (airline flight support)
  - Reviewed research hypotheses and scenario criteria for IM and RTA
    - Updated existing and added additional RTA hypotheses
  - Confirmed established priorities (IM, Wake, RTA)
  - First draft of Sections 1 (Intro), 3 (IM), and 7 (Membership)
  - TBO/RTA simulation/flight tasks starting
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- **Concerns**
  - Mapping TBO/RTA to A-IM
  - Don’t have a lead for the IM section of the document
  - Time crunch to develop a mature document between June and September

Discussion:
Is there an organization or individual we need to contact to get some IM support?
>> SG7 can synthesize something from the concepts that are out there (e.g., Bryan Barmore papers) and socialize it, and give people a shot at it that haven’t been at the table. IM is a hot topic. SG7 expects to get some guidance and feedback on this. A big issue is how to map MIT’s analytical work into the document and tie it to what people want to do with IM.

Does SG7 have a clear definition of what the schedule risks are and how to mitigate them?
>> The risk is what may be included in the doc, not in the publication schedule. The issue is with IM and limited support for IM analysis. The mitigation partly has been to leverage RTA work. Information related to IM may have to go into an Appendix, and not the main body, when the doc goes out the door.

Can SG7 get some help from SC-186?
>> SC-186’s approach is to try to specify the accuracy bound and how bad the weather info can be and have the system still work. We’re trying to get to how much more capability could you gain with better data. It’s not clear how much more we can get from SC-186. They put a stake in the ground that says, our system can deal with weather info that’s this bad. But there’s an opportunity for SC-186 to instead say how we can make it a little bit better. From an operational point of view IM is trying to minimize variance in inter-arrival spacing so you can maintain capacity, and anything that minimizes that variance is a good thing. And one of the biggest unknowns is the uncertainty in the winds fields.

Rocky said all parties would prefer the IM stuff to go into the main body, not an appendix. He will try to get some SC-186 support to help achieve that.

5.5 **Update on the FAA EDR Performance Standards Project: Michael Emanuel**
- The briefing addressed initial results and challenges going forward. There has been a lot of progress and outreach beyond the research community to the airlines and other EDR users. After years of controversy and debate, we’re not that far from where we want to be from an operational perspective. The final report is due February 2017. The work is on schedule; some acceleration may even be possible.
- Mean EDR performance activities are basically complete. Now the team is focused on peak EDR, which is a more difficult problem. They might revisit the mean approach and recommendation based on the peak analysis.
- The goal is to improve safety and efficiency. Looked at the Peak EDR User Needs table, and decisions based on turbulence level / EDR value:
  - Route avoidance (EDR 0.18)
  - Notify crew of potential turbulence along route (EDR 0.18)
  - Seat belt sign turned on (EDR 0.18)
  - Cabin service suspension (EDR 0.20)
  - Deviation in lateral or vertical route (EDR ≥ 0.22)
  - Notify dispatch and crew of forecast turbulence (EDR 0.18)
• Turbulence calculations are influenced largely by a continually changing atmosphere
  o Don’t draw conclusions based on individual EDR reports
  o A “perfect algorithm” may be impossible to define
  o EDR is best suited to quantify the state of the atmosphere

• Optimistic that we can converge on a solution that provides results around the key region of 0.20 – 0.25 EDR that meets user needs, and we can get there fairly quickly.

Feedback from the group:
Regarding decisions to turn on the seat belt sign based on EDR value: We have typically thought of EDR information in terms of downlink and DO-178B Level E (failure has no effect on safety). We probably want to keep it there, and not try to come up with something certified. Recommend you focus the scope on just downlink. You’ll make more progress than trying to certify this to, say, Level C (failure has major effect on safety) or higher.

It was said that we want to allow the potential for this information to also be crosslinked.

Bill Watts said Delta does not want to see numbers in the report such as that at EDR = 0.18 the seat belt sign is turned on. These numbers should be operationally defined, but we are not in a position to say what the numbers are now and won’t be even six months from now. EDR is the energy in the atmosphere and does not differentiate between chop and turbulence, but pilots do.

Mike Emanuel said the user needs table will not go into their report, but the EDR numbers in the table are not arbitrary; a subset of the community helped develop these. The data show that most decisions are made around an EDR of 0.20.

A pilot offered his perspective: when moderate turbulence is announced, don’t worry, you have everyone’s attention. The distinction between light and moderate is significant, and if the aircraft hits severe turbulence it has to go out of service for a maintenance inspection. Would not want to see reported EDR values lead to governance of pilot decisions.

It was noted that you don’t normally put operational decisions in a MOPS. You leave that to the regulators in Flight Standards. If you can show the operational comparability between the three vendors, and if you can be 95% confident the EDR number is, say, 0.20, that’s all you really need out of the MOPS. Let the airlines decide how they’re going to use that information.

If we think of the user as the pilot and take care of that, the needs of the other users should fall into place.

Do you really need to know what the peak EDR user needs are to do your analysis?
>> Yes. I need a target, something to shoot for to define performance thresholds. Right now it’s 0.20 plus or minus some variance. If that’s not the right number and range, tell me what you’re looking for. If you tell me you’re looking for EDR = 0.20 ± 0.02, I think we’re there. If you’re looking for a wide range of EDR values, you’re not going to get it.

Can’t you just use the mean EDR?
>> We’re trying to model the real world in our simulations and tie that to performance. We’re developing a performance standard.
5.6 Update on the ICAO Information Management Panel — Allan Hart

- Allan serves the IMP as an advisor for the International Coordinating Council of Aerospace Industries Associations (ICCAIA)
- The IMP was established June 2014 to develop a global approach to effective management of information. This includes further development of SWIM (ground-to-ground only now) and the framework for international air navigation. It also includes new information exchange formats and standardization across information domains. Expected deliverables ~2018.

- Objectives:
  - Define a global interoperability framework (functions, architectures, system design).
  - Define ATM information management concepts including quality-assured and timely info (and digital MET info exchange and NOTAM system review) including avionics.
    - Envision real-time info management where NOTAMs are no longer needed
  - Identify quality of service requirements to maintain ATM information security, integrity, confidentiality and availability.
  - Develop an ATM information service architecture.
  - Identify requirements for SARPs to support the information requirements.
  - Develop guidance for the implementation of global SWIM and new information exchange formats, including future avionics requirements.
  - Identify anticipated data flows in relation to future ATM requirements and capabilities and assess the capacity of appropriate facilities to support them.

- IMP Working Groups
  - Information Architecture & Management : Leader – Paul Bosman, Eurocontrol
    - Looking at the info exchange standards that have evolved
  - Information Services: Leader – Abigail Smith, FAA
    - Will address the NOTAMs question, among others
  - SWIM Awareness and Communication: Leader - Richard Williams, CANSO
    - Communicating the work of the IMF
  - Governance: Leader – Stephane Dubet, SIA-France
    - One aspect is options for SWIM registries (federated, centralized, …)
    - Another is DQR for aeronautical, MET, flight plan, and surveillance info
      - Allan will be developing a paper on DQR for surveillance info

Tuesday through Thursday

Sub-Group meetings were held throughout each day.

Friday - Plenary

6 Plenary

6.1 Eldridge Frazier: Public meeting announcement —

Pursuant to the Federal Advisory Committee Act, Eldridge Frazier was the Designated Federal Officer (DFO) for this meeting and read the following announcement:

In accordance with the Federal Advisory Committee Act, this Advisory Committee meeting is open to the public. Notice of the meeting was published in the Federal Register on February 26, 2016. Attendance is open to the interested public. With the approval of the Chairs, members of the public may present oral or written statements at the meeting. Persons wishing to present or
obtain information should coordinate with the RTCA Program Director Karan Hofmann and Chairs Allan Hart and Rocky Stone.

6.2 Karan Hofmann: RTCA proprietary references policy
RTCA seeks to develop standards that don’t require proprietary information for compliance. However, patented technology and copyrighted material that are required for compliance may be included in a standard if RTCA determines it provides significant benefit. If your company holds a patent or copyright relevant to an SC-206 document being developed, advise RTCA Program Director Karan Hofmann and Chairs Allan Hart and Rocky Stone.

6.3 Karan Hofmann: RTCA membership policy
Organizations with a representative participating on RTCA Committees must be members of RTCA.

6.4 Introductions
The attendees introduced themselves.

6.5 The minutes of the previous meeting (Washington, DC) were approved.

6.6 Future meetings

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<td>FRAC release for MASPS</td>
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<td>Sept 12 – 16, 2016</td>
<td>Kansas City, MO</td>
<td>FRAC resolution for MASPS</td>
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<td>FRAC release for Winds Guidance</td>
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<td>Dec 5 – 9, 2016</td>
<td>Herndon, VA (ALPA)</td>
<td>FRAC resolution for Winds Guidance</td>
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<td>March 2017</td>
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<td>June 2017</td>
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<td>FRAC release for FIS-B MOPS</td>
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<td>Sept 2017</td>
<td>Washington, DC (RTCA)</td>
<td>FRAC resolution for EDR MOPS</td>
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<td>FRAC resolution for FIS-B MOPS</td>
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Discussion:
For the next meeting, there is a room block at a downtown Ottawa hotel in a nice area. The meeting is at the airport, outside the city. Sharing taxis is recommended to speed up getting through the double security gates. Taxis should be about $15 (US) one way. A cafeteria and restaurants are near the meeting facility.

About a dozen recommended actions came out of the Wake Vortex Tiger Team and DO-360 Standards Development Activities for Using Near Real-Time Aircraft-Derived Data in Future Applications. Several of these could result in new standards development activities. How do we move this forward?
>> Eldridge is getting tasking for a small group to look at the Tiger Team’s inputs and report back to FAA leadership, which will make a recommendation to the PMC.

Allan raised some questions we need to start thinking about:
• What comes after SG7’s Winds Guidance doc?
  >> Ernie said SG7 was brought in because of the activities of SC-186, SC-214, and SC-227, and their documents and their references to winds and how winds fits within those activities. In a
sense the SG7 doc becomes guidance for them. Also, there may be a fit for SG7 with one of WG-76’s 17 services.

- What happens when SG6 finishes the MASPS? Does it start a MOPS? When do we re-align with EUROCAE WG-76? If we become joint WG-76 again what’s going to happen with our MASPS with its generic approach versus their MASPS with its specific services approach?
  >> If WG-76 decides to update the SPR (DO-324/ED-175), there is interest in SC-206 to join.
  >> We will have to harmonize at some stage. Do we just adopt their 17 services? The airlines need harmonized standards.
  >> That’s true, but it’s not the SPR and MASPS that drive the avionics. It’s the MOPS. Advisory Circulars refer to MASPS to describe operations. But your TSOs really come out of MOPS.

6.7 PMC Feedback on SC-206 TOR Changes
The PMC approved the TOR changes. One major change is that SG5 is being re-activated to update DO-358. They also approved SC-206’s schedule slips. We really need to hit these dates. We don’t want to go back to the PMC and request any extensions. The outlook is positive for the Sub-Groups to meet their dates.

6.8 Sub-Group Reports

6.8.1 SG4 – EDR MOPS
- This week
  o Session with Mike Emanuel and FAA EDR Standards Recommendations team
  o Reviewed Mean EDR Report
  o Discussions:
    ▪ Scope
    ▪ Intended function
    ▪ Performance requirements and test procedures
  o Finalized the MOPS outline
  o Writing assignments, began drafting Sections 1 & 2
  o EDR discussions with DAL Chief Meteorologist. DAL meteorologists are getting live EDR data on their screens. It’s being integrated into airline operations.
  o Identified the following intended functions:
    ▪ 1.4 Intended Functions
      This MOPS applies to the computation of peak and/or mean EDR from data obtained from aircraft systems. The applications compliant with the performance standards set forth in this MOPS support the use of mean and/or peak EDR in functions such as:
        ▪ 1.4.1 Flight crew planning: EDR data will be used as advisory information that supplements a primary turbulence information source of the user of potential conditions to assist flight crew with flight path and cabin management planning decisions.
        ▪ 1.4.2 Wake turbulence applications: EDR data will be combined with other sources of data to make predictions of wake turbulence transport and decay.
        ▪ 1.4.3 Meteorological applications: EDR data will be combined with other sources of data to make predictions of turbulence intensity and duration, as well as broader weather applications.
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- 1.4.4 Aviation forecasters: EDR data will be combined with other sources of data to assist meteorologists in the production of analyses and forecasts of turbulence, such as SIGMETS and other weather products, for use in support of NAS operations.
- 1.4.5 Airline flight operations: EDR data will be used as advisory information that supplements the primary turbulence information source of the user of potential conditions to assist with flight planning decisions.
- 1.4.6 Crosslink: *Awaiting input from Ed*

• Issue: Each airframe type requires unique EDR algorithm tuning. The FAA EDR Standards Team only developed a simulation for a 747, so the test procedures in the MOPS/TSO will only test an applicant’s ability to tune their algorithm for a 747. Need to include in the MOPS/TSO the requirement that whatever tuning method the applicant uses to validate their test results, they must use the same method to tune any additional implementations on other airframe types. Need to require that applicants provide their method of tuning when they provide the test results to FAA, and put the requirement in the TSO that the applicant follow the same tuning for future implementations on all aircraft types.

Discussion:
If EDR data supplements a primary turbulence information source, what is the primary source?
>> It varies by user. Delta uses turbulence plots. It’s not the pilot in the cockpit.

Does this list cover all intended functions?
>> No. It says “such as” in the first paragraph. But it’s not a bad idea to clarify that.

You could add another intended use: Air traffic operations.
>> SG7 took an action to look at that.

In the TOR it’s clear the scope of the MOPS is around defining requirements to facilitate calculation of EDR by various algorithms such that their outputs are operationally comparable. Is it clear to SG4 what is meant by a MOPS for algorithms?
>> This is new ground. There’s never been a MOPS for algorithms. It would be easy to overstep our scope.

Bill Watts expressed concern from the airline perspective. We have discussed Advisory Circulars and TSOs. We just want to say that if the algorithms meet the given criteria they’re comparable. It would be OK if an AC were developed out of this MOPS, but not a TSO. That would make the airlines very uncomfortable.

But Lee has said that he intends to invoke the EDR MOPS in a TSO.

Moin said we are here to help industry and the system, not to hinder it. Half of aircraft incidents are due to weather.

Bill Watts strongly advocated against the TSO route. Delta would prefer an AC and to get operational approval to load the algorithm on a box such as they do now.

In a sense, the AC already exists as 00-63, although it would need to be updated.

MOPS are usually about hardware. Maybe SG4’s document should be a Minimum Interoperability Standard, such as DO-252A (MIS for AUTOMET).
This goes back to some old and difficult issues for SC-206. What is the service? What is the system that supports the service?

Eldridge emphasized as DFO that we are here to support industry and make it easier for them, not to make it harder.

SG4 has not reached consensus on this. It’s an open issue.

**6.8.2 SG5 – Update of DO-358 (MOPS for FIS-B via UAT)**

SG5 kickoff date is TBD. Making some progress getting additional members.

**6.8.3 SG1/6 – AIS/MET MASPS**

- Accomplished this week (or will be very shortly):
  - All annexes (OSED, OPA, OSA) are done
  - Sections 1 (Purpose), 2 (Approach) and 3 (Requirements) are mature
  - Sections 4 (Interop) and 5 (Verification) are > 70% complete
  - No sections still need input
  - Big items were resolved
    - Operational credit question
    - System diagram finalized
    - Proposal to include AIS info in Section 3 (MET info is already there)
- Risk: Results of requirements gap analysis. Will look at SC-206’s other products, our TORs, the draft MASPS, and ask: Did we miss any requirements? There are no known gaps now.
- The goal is to release the MASPS to SC-206 sometime after the May 10-12 face-to-face in Kansas City, for review prior to the June 13-17 meeting in Ottawa. The goal for Ottawa is to get SC-206 approval to release the MASPS for FRAC.

**6.8.4 SG7 - Guidance for the Use of Data Linked Wind Info in ATM Operations**

- This week:
  - Reviewed status of TBO/RTA simulations
    - Infrastructure being updated to support RTA test matrix
    - Results expected in June
  - Reviewed survey to airlines
    - Will reach out to AOCs and flight planning departments
    - Met with Tom Fahey and Russ Richmond of Delta for their input
  - Reviewed survey to FAA regarding what info is used in the ground automation tools
  - Reviewed and updated initial document inputs
    - Sections 1 (Intro), 3 (IM), 5 (Wake), and App C (Wake scenario)
    - Reviewed approach to Section 2 (Quality) (will use survey results for background)
  - Established face-to-face meeting and work plan for completion
    - May 9 in Washington, DC; potential to extend to May 10
    - Will look at initial sim results; start thinking about the path to recommendations
    - This may overlap with the SG6’s face-to-face May 10-12 in Kansas City
  - Concerns
    - RTA Simulations – FMS limitations on speed authority (pushing the limits of this box, may be able to fix with a software change)
      - Working issue; result in change in test matrix
    - Mapping TBO/RTA to A-IM (may be affected by same issue above)
- Time crunch to develop a mature document between June and September
- Lacking ATC and airlines participation; SG7 leaders reaching out
  o Survey may stimulate participation
  o Document status: All sections either need input or need revision

Question: Does the FMS software change already exist or does it have to be developed?
>> This would be a minor modification to the FMS. But it would require a new software build after the minor fix. It’s not a huge effort, but there is no funding in place to do it.

6.9 Open action items were reviewed.

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<td>263b</td>
<td>Eldridge</td>
<td>Ask Jim Baird to brief SC-206 on the 1090 MHz congestion analysis after the report comes out from FAA Systems Engineering. Will inform whether ADS-B will be available for AIS &amp; MET information.</td>
<td>Dec 2011 DC</td>
<td>Parking lot</td>
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<td>269</td>
<td>Rocky</td>
<td>Coordinate with ARINC re data labels for SG1 (e.g. EDR, weight, wake circulation). This action is dependent on whether we do further maturation of the DO-339 parameters in the MASPS.</td>
<td>June 2012 Atlantic City</td>
<td>Open Parking lot</td>
</tr>
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<td>282</td>
<td>Moin</td>
<td>Clarify what type of AIS/MET data link MOPS would be needed (as follow on to the MASPS), if one or multiple MOPS are needed, or one with different sections for different systems.</td>
<td>March 2014 Kansas City</td>
<td>Open Parking lot</td>
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<td>290</td>
<td>Rocky</td>
<td>Regarding the “next step” after the WVTT White Paper: o “Collaborate with the FAA on the decisions necessary to implement the recommendations in the White Paper o How can weather data be transmitted in near real-time to support ATM, wake vortex, and weather applications o ADS-B, request/reply via Enhanced Mode S, others?” Provide a better understanding of what “Collaborate with FAA” means.</td>
<td>Sept 2015 Chicago</td>
<td>Open</td>
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Steve Bradford, Chief Scientist for NextGen, is expected to task FAA response to the PMC. This is mostly relevant SG1, but SC-206 can track it with this action item.
Summary of the 43rd Meeting
RTCA SC-206 – AIS/MET Data Link Services

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<td>291</td>
<td>Karan Hofmann, Hal Moses</td>
<td>Invite WMO, WSI, and AeroTech Research (ATR) to participate in the work of SC-206 and SG4. (WSI licenses ATR technology.) Advise leadership of SC-206 and SG4 of their response.</td>
<td>Dec 2015 DC</td>
<td>Closed</td>
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<td>294</td>
<td>Tammy Farrar, Bill Watts</td>
<td>Determine whether to add another intended use “Air Traffic Operations” to the EDR MOPS.</td>
<td>March 2016</td>
<td>Open</td>
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There is an issue similar to Action Item #291 for SG5. Participation from smaller organizations that are not currently RTCA members is expected to be needed. Karan said this would be worked on a case by case basis. It’s not impossible, but she needs specific names and good justification. She can also reach out and contact them if necessary.

6.10 Any other business
Special recognition to Jeff Wright, Bill Watts, and Kathey Fowler of Delta Air Lines for all their work to make this a successful meeting venue and a great week. A lot of work went on behind the scenes.

This concluded the 43rd meeting of SC-206.

CERTIFIED as a true and accurate summary of the meeting.

Tom Evans, Secretary

Rocky Stone, Co-chair

Allan R. Hart, Co-chair