

RTCA Paper No. 090-15/SC217-059

SUMMARY OF THE TWENTY-FOURTH MEETING
JOINT RTCA SPECIAL COMMITTEE 217
EUROCAE WORKING GROUP 44
15th through 19th, June 2015
Washington DC - Hosted by RTCA

Executive Summary – Rev 2

RTCA SC-217 met jointly with EUROCAE WG-44 for the Twenty-Fourth Plenary at RTCA Headquarters in Washington DC from June 15th to 19th, 2015. The focus for this meeting was resolving comments received during the Final Review and Comment (FRAC) on draft DO-272D/ED-99D, DO-276C/ED-98C, and DO-291C/ED-119C.

In the opening plenary session, John and Stephane presented the outcome of a series of web meetings related to revising DO-201A/ED-77. RTCA and EUROCAE meetings were held in May 2015 as scoping exercises to determine the potential need for updating DO-201A/ED-77. Another RTCA meeting was held June 9 to discuss the path forward based on the discussion of the joint meeting. The scoping exercise came to the joint conclusion that DO-201A and ED-77 should be updated, and that the revision should focus on Navigation data, with other types of aeronautical data not covered by RTCA/EUROCAE standards to be addressed in subsequent steps or in specific appendices.

Ground rules were established for completing the FRAC resolution process, and the Editing team that held virtual meetings to disposition the comments reported out on their findings. There were 770 total comments submitted, comprised of 11 Non-concur, 92 High, 159 Medium, 102 Low, 402 Editorial, and 4 N/A comments. The Editing team dispositioned these as 163 Duplicates, 348 Agreed, and 259 Need Discussion (items that will take group discussion to resolve).

Over the course of the week, the committee was able to successfully resolve all comments submitted. Across the three documents, 717 out of 770 comments were accepted (some with changes), with 28 rejected and 25 withdrawn. There were 24 deferred action items created during FRAC discussions across the three documents, bringing the total number of actions targeted for future revisions to 40.

In the closing plenary, the membership agreed to the FRAC Resolution of DO-272D/ED-99D, DO-276C/ED-98C, and DO-291C/ED-119C. The plan for implementing the FRAC resolutions was put in place. An editing team was formed to complete the comment resolutions by July 17. A sanity check on the final documents will be performed by July 31, and then they will be delivered to RTCA by August 5. All three documents will be submitted for RTCA PMC and EUROCAE Council approval in September.

There are no plans to revise these DO-272D/ED-99D, DO-276C/ED-98C, and DO-291C/ED-119C again in the near term, therefore the AMDB and Terrain and Obstacle working groups will go on hiatus. SC-217 will continue to collect feedback on DO-272/ED-99, DO-276/ED-98, and DO-291/ED-119 to monitor if/when an appropriate to revise them comes about.

In the June 2015 PMC, RTCA agreed to proceed with drafting Terms of Reference for SC-217 to revise DO-201A, and EUROCAE had previously agreed as well with this proposition for ED-77. John and Stephane will draft the ToR to be submitted to RTCA by August 5, to be presented at the next PMC in September as well as at the EUROCAE TAC and Council.

1 Opening Plenary

1.1 Attendance List

Name	Organization	Email
Reuss Anderson*	Garmin	reuss.anderson@garmin.com
Sophie Bousquet	RTCA	sbousquet@rtca.org
Mike Burski	FAA	michael.burski@faa.gov
Travis Clemens*	Jeppesen	travis.clemens@jeppesen.com
Stéphane Dubet	DGAC	stephane.dubet@aviation-civile.gouv.fr
Britta Eilmus	Avitech	britta.eilmus@avitech-ag.com
Brian Gilbert	Boeing	brian.d.gilbert@boeing.com
Mike Gilmore*	Astronautics	m.gilmore@astronautics.com
Andrew Goldsmith*	FAA	andrew.e.goldsmith@faa.gov
Maxime Haroch*	Airbus Helicopters	maxime.haroch@airbus.com
Jason Harvey	Honeywell	jason.harvey@honeywell.com
Jean-Etienne Hiolle	Thales	jean-etienne.hiolle@fr.thalesgroup.com
Simon Innocent*	Honeywell	simon.innocent@honeywell.com
Kim Jordan*	Universal Avionics	kjordan@uasc.com
John Kasten	Jeppesen	john.kasten@jeppesen.com
Thomas Koebel	Airbus	thomas.koebel@airbus.com
Terrance McCraw*	Astronautics	t.mccraw@astronautics.com
Jeff Meyers*	FAA	jeffrey.meyers@faa.gov
Brad Miller	FAA	brad.miller@faa.gov
Stephen Moody	Jeppesen	stephen.moody@jeppesen.com
Kelly Osterhage	AeroNavData	kmiller@aeronavdata.com
Alex Petrovsky*	Eurocontrol	alexandre.petrovsky@eurocontrol.int
Christian Pschierer	Jeppesen	christian.pschierer@jeppesen.com
Anja Reinicke	Lufthansa Systems	anja.reinicke@lhsystems.com
Felix Turcios	Rockwell Collins	felix.turcios@rockwellcollins.com
Sam van der Stricht	Eurocontrol	sam.van-der-stricht@eurocontrol.int
Ronny Wenzel*	Airbus Defense & Space	ronny.wenzel@astrium.eads.net
Scott Wilson	Eurocontrol	scott.wilson@eurocontrol.int

*via Webex

1.2 Administration & Agenda

The joint RTCA SC-217 and EUROCAE WG-44 Twenty- Fourth Plenary Meeting was opened by John Kasten (RTCA SC-217 co-chairman) and Stéphane Dubet (RTCA SC-217 co-chairman and EUROCAE WG-44 chairman).

Sophie Bousquet shared logistical information for the meeting facilities. She also showed the RTCA Proprietary References Policy for the group to read.

Mike Burski, as Designated Federal Official, read the Public Meeting Announcement in accordance with the Federal Advisory Committee Act.

Around the room introductions were given by each attendee.

John solicited comments on the minutes from the March 2015 meeting in Prague. Jean-Etienne stated that the minutes included notes from a Friday afternoon working session that was not part of the official

meeting. This was acknowledged, but as everybody was able to provide comments via the FRAC process, the group agreed there was no need to modify the Prague meeting minutes.

John reviewed the agenda and working arrangements for the week. Jean-Etienne asked if the group would extend the meeting into Friday afternoon. John said the target was to end at noon on Friday, but it depends on whether all comments have been resolved or not. Sophie noted that the closing plenary needs to be adjourned by noon per the Federal Registry, therefore all Non-concur and High comments need to be resolved before then. The agenda was approved.

Stephane explained that DO-200B/ED-76A will be presented at PMC this week and if approved, will be published by September 2015. Sophie explained the process for approval and the subsequent method to obtain a copy of the published document.

John explained the ground rules for FRAC resolution. Only comments submitted during the Open Consultation period will be considered. The Editing team comment review spreadsheets are the basis for discussion. There will be no “on-the-fly” editing done to the documents, rather everything will be recorded in the spreadsheets and applied after the meeting.

Sam asked when the group will be able to see the final version of the documents. Sophie said that RTCA needs the documents by August 5, 2015 in order to be approved in the September 2015 PMC. The group will have a final chance to see the document by the end of July. Stephane explained that WG1 followed a similar process, allowing for a one week sanity check of the final version.

The Editing team met virtually three times from June 9-11, 2015, and provided comments and metrics back to the group. The comments were dispositioned in three different ways: duplicate items, agreed items, and items that need discussion. There are a small number of items that are expected to incur large debate. There are also a number of comments that need further proposal material prepared prior to discussion.

There were 770 total comments submitted. There were 11 Non-concur, 92 High, 159 Medium, 102 Low, 402 Editorial, and 4 N/A comments. The Editing team dispositioned these as 163 Duplicates, 348 Agreed (items that should take little to no discussion where the proposal is clear and needed), and 259 Need Discussion (items that will take group discussion to resolve).

A pre-FRAC version editing meeting was held in Phoenix from April 14-16, hosted by Honeywell, to prepare the documents for distribution by RTCA and EUROCAE for Open Consultation. Some additional editorial work was done during Open Consultation to address issues that were found after release of the documents for FRAC, such as broken hyperlinks and formatting mistakes.

John shared an email from Sam regarding the AMXM website that Eurocontrol has set up. John will post the email on the Workspace.

1.3 **DO-201A/ED-77**

John and Stephane presented the outcome of a series of web meetings related to revising DO-201A/ED-77. Three meetings were held in May 2015 as scoping exercises to determine the potential need for updating DO-201A/ED-77: one within EUROCAE membership, one within RTCA membership, and a joint RTCA/EUROCAE meeting. Another RTCA meeting was held June 9 to discuss the path forward based on the discussion of the joint meeting. John shared the main reasons for revising DO-201A/ED-77 based on these web meetings.

The scoping exercise came to the conclusion that DO-201A/ED-77 should be updated. The update should focus on Navigation data, with other types of aeronautical data not covered by RTCA/EUROCAE standards to be addressed in subsequent steps or in specific appendices.

Stephane further explained that there was a divergence of opinion between RTCA and EUROCAE whether to expand the scope to include more than Navigation data, but feels that we can find a way forward to make it a joint activity.

Brad provided some background on the need for guidance to exist for general types of aeronautical data, as the FAA often receives inquiries for how to handle other types of data beyond Navigation data. He also raised the point that ARINC 424 covers more than Navigation data. Brad recommended not orphaning general guidance in the long term, even if the FAA can fill the gap in the short term through other means. Stephane and John agreed that the vision is to keep general Data Quality Requirement (DQR) guidance for aeronautical data within the scope of the activities.

Assuming PMC agreement at the June 2015 PMC, draft updates to the WG-44/SC-217 Terms of Reference (ToR) will be developed and presented at the September 2015 PMC and the September EUROCAE TAC meeting. It is anticipated that work could start before the end of 2015, with an expected timeframe for completion of about 2.5 years. Stephane explained that the desire to get started soon is to keep as much continuity within WG-44/SC-217 as possible.

Brad raised the question of DO-257 updates. John thinks it would be under the purview of a different SC (now part of SC-227 ToRs), as it is not a database standard.

Sophie asked about communication of the activity if it is approved at the September PMC. She noted that SC-217 needs to brief at the September PMC. John said that he plans to do this virtually, although it will be just after his retirement. A new chairman will need to be determined to take over for John.

2 DO-272D/ED-99D Open Consultation / FRAC resolution

There were 423 comments received, including 8 non-concur comments. During the week, the Non-concur comments from Jeppesen, Lufthansa Systems, and Thales were resolved. The group also covered all High and Medium comments together that were not duplicates of another comment. Editorial comments were dispositioned by the Editing team offline prior to the meeting. The majority of Low comments (and some Editorial comments requiring discussion) were handled by a break-out group of Steve Moody and Scott Wilson.

Significant discussions were held for issues relating to overlapping of polygon features (especially Deicing Areas) and segmentation of vertical structures. Compromises were reached that included the addition of a new feature type (Deicing Group), attributes (such as *deicegrp*), and capture rules. Two proposals for new content not discussed in previous meetings were worked on a time-permitting basis and eventually led to the addition of new attributes (*idrwy* for Runway Exit Line, and *alstype* for RunwayThreshold). The group agreed on how to handle several formatting and consistency issues, although none resulted in major changes to the documents. There were 11 action items created that were deferred to a future revision.

The following table presents the statistics for the resolution of comments:

	Non-Concur	High	Medium	Low	Editorial and N/A	
Accepted	1	28	66	35	185	
Accepted with changes	6	28	27	17	7	
Rejected	0	0	1	4	3	
Withdrawn	1	6	6	2	0	
TOTAL	8	62	100	58	195	423

3 DO-291C/ED-119C Open Consultation / FRAC resolution

There were 149 comments received, including 2 non-concur comments. During the week, the Non-concur comments from Boeing and Lufthansa Systems were resolved. The group also covered all High and Medium comments together that were not duplicates of another comment. Editorial comments were dispositioned by the Editing team offline prior to the meeting. The majority of Low comments (and some Editorial comments requiring discussion) were handled by a break-out group of Steve Moody and Scott Wilson.

The majority of DO-291/ED-119 comments were uncontroversial and quick to resolve. Many of the changes impact the UML model and XML Schema, along with the auto-generated feature catalog content. DO-291C was also impacted by the resolution of many of the DO-272D/ED-99D comments and some of the DO-276C/ED-98C comments.

The following table presents the statistics for the resolution of comments:

	Non-Concur	High	Medium	Low	Editorial and N/A	
Accepted	1	9	31	6	91	
Accepted with changes	1	0	3	0	1	
Rejected	0	0	1	0	0	
Withdrawn	0	1	3	0	1	
TOTAL	2	10	38	6	93	149

4 DO-276C/ED-98C Open Consultation / FRAC resolution

There were 198 comments received, including 1 non-concur comment. The Non-concur comment from Jeppesen was resolved on Tuesday when the Airbus Helicopter team and Alex Petrovsky from Eurocontrol joined via Webex. The group also covered several High comments together, but the rest of the High, Medium, and Low comments were handled by a break-out group of Stephane Dubet, Britta Eilmus, and Kelly Osterhage, with the helicopter team and Alex attending virtually. Editorial comments were dispositioned by the Editing team offline prior to the meeting.

Significant discussions were held for issues relating to obstacle geometry guidance, such as the bounding box to use for determining when to capture an obstacle as a polygon, line, or point. Other major discussions involved harmonizing with DO-200B/ED-76A for terms such as “data provider” and

“application integrator”, the segmentation of obstacles, and the distinction between the Data Source and Data Originator attributes.

The following table presents the statistics for the resolution of comments:

	Non-Concur	High	Medium	Low	Editorial and N/A	
Accepted	1	6	7	13	97	
Accepted with changes	0	11	10	15	14	
Rejected	0	2	3	7	7	
Withdrawn	0	1	1	3	0	
TOTAL	1	20	21	38	118	198

5 Closing Plenary

The membership agreed to the FRAC Resolution of DO-272D/ED-99D, DO-276C/ED-98C, and DO-291C/ED-119C. The final resolution spreadsheets are available on the RTCA Workspace site, along with any working papers or other materials that contributed to resolving comments during the week.

The group discussed plans for implementing the resolutions reached during the week. A Resolution Implementation team was formed consisting of Brian, John, Mike, Britta, Scott, and Sophie. The group will have Webex meetings in the weeks following this meeting to determine working arrangements and check on progress.

The comment resolutions are expected to be implemented by July 17. A “sanity check” period from July 20 to July 31 will commence for FRAC attendees and those who submitted comments to check that the resolutions were implemented correctly. The instructions for the sanity check are to only verify that what was in the Resolution column of the FRAC spreadsheets were implemented properly. No new comments will be allowed, although a new deferred action items for next revision can be created if new issues are encountered.

Web meetings are encouraged if a sanity check comment needs to be discussed. If something was missed or improperly implemented per the FRAC resolution, send Brian an email. The resolution of any sanity check comments will be performed August 3-4, and the final version of all three documents will be delivered to RTCA/EUROCAE by August 5.

DO-272D/ED-99D, DO-276C/ED-98C, and DO-291C/ED-119C will be presented for approval at the next PMC meeting on September 22, 2015 and at the EUROCAE TAC in early September. If approved, they will be published in late Sept or October 2015. There are no plans to revise these three documents in the near term, therefore the AMDB and Terrain and Obstacle working groups will go on hiatus. WG-44/SC-217 will continue to collect feedback on DO-272/ED-99, DO-276/ED-98, and DO-291/ED-119 to monitor if/when an appropriate to revise them comes about.

In the June 2015 PMC, RTCA agreed to proceed with drafting Terms of Reference for SC-217 to revise DO-201A/ED-77. John and Stephane will draft the ToR in consultation with Mike and Brad, and distribute it for review via Workspace by July 24. The ToR will be submitted to RTCA by Aug 5, and will be presented at the next PMC on Sept 22. EUROCAE TAC for the same purpose is in early September 2015.

The scope of DO-201A/ED-77 revisions will be addressed in the ToR. It will be limited to Navigation data, but what "Navigation data" entails needs to be agreed upon. Brad would also still like it to provide general DQR guidance for other types of aeronautical data (which was its original intent prior to development of DO-272/ED-99 and DO-276/ED-98).

Brad asked about ARINC 815. ARINC 816 and ARINC 815 are based off of RTCA, aligned per latest standards, and will not originate anything that needs to be pushed back into RTCA standards.

John pointed out that SC-217/ED-77 can solicit inputs from other SCs via the ISRA process to drive scope and timing of DO-201A/ED-77 revision activities. Accommodating other types of aeronautical data may be a follow-on activity or a parallel activity, but this is not yet decided. Stephane told the group to spread the word in their organizations about the DO-201A/ED-77 revision activity.

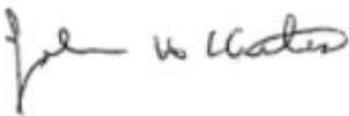
Stephane told the group not to expect any DO-201A/ED-77 revision face-to-face meetings until December 2015 at the earliest. The start date is undecided. It is expected that there will be three meetings per year once the activity is started. The group agreed to the need to ensure good participation in first meeting, and all organizations were encouraged to solicit involvement from their subject matter experts. Brad also stressed that a strong WG leader for the DO-201A/ED-77 revision needs to be identified.

Finally, as this was John Kasten's last committee meeting before retirement, the group thanked John for his leadership as chairman of SC-217 and long-time service to the industry.

Certified as a true and accurate summary of the meeting.



Brian Gilbert
Secretary, RTCA SC-217, EUROCAE WG-44



John Kasten
Chairman, RTCA SC-217



Stéphane Dubet
Chairman, EUROCAE WG-4