

Summary of the 36th Plenary Special Committee 235 - Non-Rechargeable Lithium Batteries

Meeting Summary:

The 36th Plenary Meeting of Special Committee 235 (SC-235) was held on July 30, 2024. The meeting was conducted as a Virtual Meeting with the following attendees participating via WebEx.

John Trela (Chairman)	The Boeing Company
Norman Pereira (Government Authorized Representative)	Federal Aviation Administration
Jeff Densmore (Secretary)	Radiant Power Corporation
Karan Hofmann (Program Director)	RTCA, Inc.
Antonio Chiesa	Transport Canada
Tom Jaeger	American Airlines
Nazih Khaouly	Federal Aviation Administration
Tom Maloney	Federal Aviation Administration
Sam McCrory	NIAR
Kathryn Mulhollen	US Air Force
Paul Pfeifer	Textron
Ray Rodriguez	US Air Force
Alan Rudnai	Leonardo DRS
Adrian Sfetcu	Bell Helicopter
Greg Smith	US Air Force
Clayton Vondrasek	Garmin

Opening Plenary

- The 36th Plenary meeting of SC-235 was convened on July 30, 2024 at 10:00am EDT by Chair John Trela (Boeing). Jeff Densmore (Radiant Power) was the SC-235 Recording Secretary.
- Norman Pereira was introduced as the Government Authorized Representative.
- An RTCA overview, including RTCA's Proprietary References Policy was read by Karan Hofmann, the Program Director.
- Welcoming remarks were made by John Trela. Each person in attendance was invited to introduce themselves.
- The meeting agenda was reviewed.
- The Meeting Summary for SC-235 Plenary #35 was reviewed and approved as written. The meeting summary has been posted on AerOpus.

- All documents and presentation material reviewed during Plenary #36 have been uploaded and are available in the RTCA AerOpus documents folder for this meeting.

Plenary #35 Action Item Review

There were six open Action Items following Plenary #34

- 1) Delegate resolution of the requirements rationale changes proposed by Antonio Chiesa
 - a. Assigned to: ~~Jim Russell~~ ~~Jeremy Zee~~ John Trela
 - b. Status: **OPEN**. These continue to be reviewed and closed, but some remain open
- 2) Create a DO-227A vs DO-227B comparison Table for Insertion into the document
 - a. Assigned to; Jeff Densmore and John Trela
 - b. Status: **OPEN**. This action cannot be completed until all of the FRAC comments have been resolved.

DO-227B Final Review and Comment

Plenary #36 was the fourth plenary of SC-235 following the second Final Review and Comment (FRAC) process for DO-227B. Entering Plenary #36, the status of all comments was as follows.

Comment Type	Total	Resolved	Percentage	Unresolved	Percentage
Non-Concur	1	1	100%	0	0%
High	30	30	100%	0	0%
Medium	124	114	92%	10	8%
Low	98	94	96%	4	4%
Editorial	98	96	98%	2	2%
	351	335	95%	16	5%

Comment Discussion and Resolution

High, Medium, Low, and Editorial Comments

The following table summarizes the comments reviewed and resolved during the Plenary meeting.

Id	Category	Section	Subject	Comment	Disposition	Resolution
68079	Medium	2.4.1.2.4	Environmental Conditions	This test is often performed outdoors due to safety concerns. That makes temperature control impossible.	partially Accepted	7/19/24: Discussion around proposed expansion of outside temperatures for 7°C to 38°C if test is performed outside for safety reasons. Tabled to plenary for closure. 7/30/24: Added the following to test procedure: a. Thermally stabilize the test articles at 23°C per section 2.3.4. b. The test articles may be removed from the environmental chamber (if used) in order to avoid damage to the chamber during the test. If the test articles are removed from the environmental chamber, start the test before the test articles temperatures varies by more than 5°C.
68082	Medium	2.4.2.2.2	Environmental Conditions	This test is often performed outdoors due to safety concerns making environmental control impossible.	partially Accepted	7/19/24: Discussion around proposed expansion of outside temperatures for 7°C to 38°C if test is performed outside for safety reasons. Tabled to plenary for closure. 7/30/24: Added the following to test procedure: a. Thermally stabilize the test articles at 23°C per section 2.3.4. b. The test articles may be removed from the environmental chamber (if used) in order to avoid damage to the chamber during the test. If the test articles are removed from the environmental chamber, start the test before the test articles temperatures varies by more than 5°C.
68083	Medium	2.4.2.2.3	Environmental Conditions	This test is often performed outdoors due to safety concerns making climate control impossible.	partially Accepted	7/19/24: Discussion around proposed expansion of outside temperatures for 7°C to 38°C if test is performed outside for safety reasons. Tabled to plenary for closure. 7/30/24: Added the following to test procedure: a. Thermally stabilize the test articles at 23°C per section 2.3.4. b. The test articles may be removed from the environmental chamber (if used) in order to avoid damage to the chamber during the test. If the test articles are removed from the environmental chamber, start the test before the test articles temperatures varies by more than 5°C.

During Plenary #36, the committee successfully reviewed and resolved 3 comments. The resulting status of all comments is shown below.

Comment Type	Total	Resolved	Percentage	Unresolved	Percentage
Non-Concur	1	1	100%	0	0%
High	30	30	100%	0	0%
Medium	124	117	94%	7	6%
Low	98	94	96%	4	4%
Editorial	98	96	98%	2	2%
	351	338	98%	13	2%

Requirements Rationale

During the working group meetings, Antonio Chiesa from Transport Canada identified inconsistencies with the requirements rationale throughout the document. As a result, he submitted a proposal of suggested changes to improve the document.

These items continue to be reviewed during working group meetings. As of the close of this Plenary, 45 of the 56 additional items have been reviewed and resolved, leaving 11 open items. It was agreed that these rationale changes continue to be worked and resolved during future working group meetings.

DO-227B Final Review and Comment (FRAC) Schedule Update

John Trela reviewed the schedule progress towards closure of the FRAC process as summarized below. Because the committee was unable to resolve all comments during Plenary #36, it was agreed to continue to use the Working Group meetings to complete this task and schedule an additional Plenary in August with the objective of closing the FRAC. It was discussed that meeting the September PMC window for DO-227B was becoming highly unlikely. However, this will allow more time to complete the DO-227A vs DO-227B comparison Table.

- Second FRAC Start: 14 Nov 23
- FRAC Comments Due: 12 Jan 24
- Plenary #33 (WDC): 3-7 Mar 24
- Plenary #34 (WDC): 14-16 May 24
- Plenary #35 (Virtual): 26 Jun 24
- Plenary #36 (Virtual): 30 Jul 24
- Plenary #37 (Virtual): 13 Aug 24 (FRAC Closure – Planned)
- DO-227B Transmitted to RTCA: TBD
- RTCA PMC Approval: TBD



Action Item Summary

There were no new actions generated during Plenary #36:

Working Group Meetings

Working Group meetings will continue Mondays and Wednesdays from 10:00am to 12:00pm (Eastern).

Next Plenary

Plenary #37 was scheduled for 13 August 2024 as a Virtual Meeting.

-S-
Jeff Densmore
Secretary

CERTIFIED as a true and accurate summary of the meeting.

-S-
John Trela
Chairman