

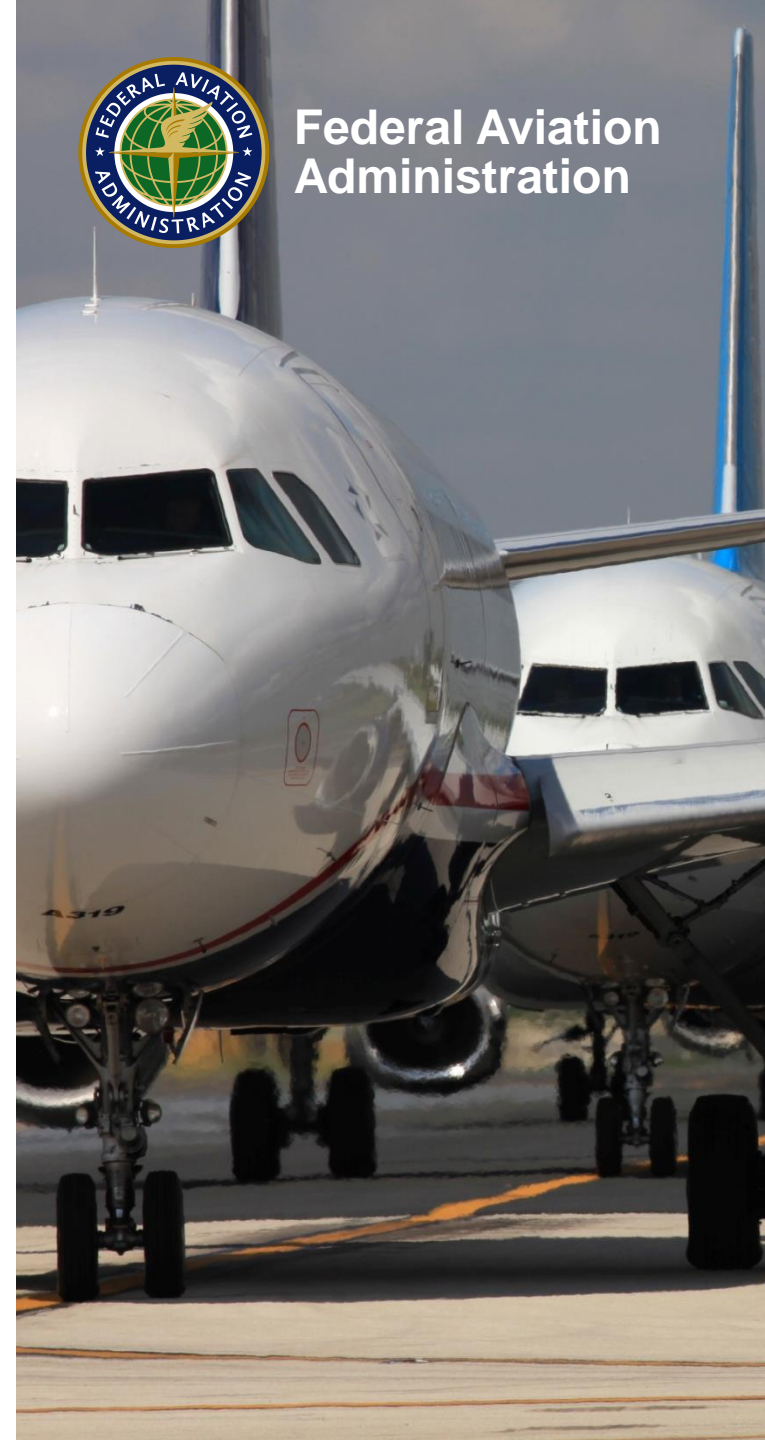
RTCA SC-225: Rechargeable Lithium Batteries and Battery Systems

International Aircraft Systems Fire
Protection Working Group
Bremen, Germany
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<http://www.fire.tc.faa.gov>



Federal Aviation
Administration



Background

- **RTCA SC-225 was formed to provide certification guidance for lithium batteries and battery systems that are permanently installed in aircraft**
- **Group has been meeting regularly since March, 2011.**
- **Points of contact are:**
 - Chairperson: Richard Nguyen (Boeing)
 - Secretary: Stephen Diehl (Boeing)
 - DFO: Norm Pereira (FAA)



Background

- **Members of SC-225 include representatives from:**
 - Battery and cell manufacturers
 - Avionics manufacturers
 - Aircraft operators
 - Pilot and flight attendant associations
 - Regulatory and other government agencies
 - Other related industry associations



Previous Documents

- **RTCA/DO-311: “Minimum Operational Performance Standards for Rechargeable Lithium Battery Systems”**
 - Published in March, 2008. Prepared by SC-211.
 - Intended for batteries being used as power sources for equipment devices, emergency lighting, and engine/APU starting.
- **RTCA/DO-347: “Certification Test Guidance for Small and Medium Sized Rechargeable Lithium Batteries and Battery Systems”**
 - Published in December, 2013. Prepared by SC-225.
 - Intended for small and medium sized batteries that are permanently installed on aircraft.
 - Defines test requirements based on battery size.

Battery Size	Single Cell Battery	Multi Cell Battery
Very Small	< 2 Wh	< 2 Wh
Small	$2 \leq \text{Wh} < 10$	$2 \leq \text{Wh} < 50$
Medium	$10 \leq \text{Wh} < 60$	$50 \leq \text{Wh} < 300$



Current Status

- **Committee is currently working on document RTCA/DO-311A**
 - This is an update to the current DO-311.
 - Will integrate coverage for all sizes of batteries.
 - Will incorporate the latest understanding of lithium battery technology, battery testing and installation guidance.



Questions?

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