RTCA Flammability Test Criteria

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RTCA/DO-160F *Environmental Conditions and Test Procedures for Airborne Equipment*, provides a laboratory means to determine the performance characteristics of airborne equipment. Advisory Circular AC 21-16F identifies this document as containing acceptable environmental qualifications to show compliance with certain airworthiness requirements. However, it also states Section 26, *Fire, Flammability*, is not sufficient for 14 CFR parts 25 and 33.

A working group was assembled to define the problem and find a solution that would satisfy the FAA with regards to flammability testing. This discussion will focus on the findings of this group starting with the confusion of applying 14 CFR parts 25 and 33 to electronic components/enclosures and ending with a proposed test method acceptable to both industry and FAA. We will also discuss potential new alternative methods including testing components whole instead of breaking down electronic devices into individual material samples.