

RTCA Development of a New Flammability Test for Electronic Black Boxes

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RTCA/DO-160G Environmental Conditions and Test Procedures for Airborne Equipment, provides a laboratory means to determine the performance characteristics of airborne equipment. Chapter 26 defines test conditions and procedure for flammability and fire resistance. The main focus of this group is on flammability testing of electronic boxes in aircraft. To test an electronic box currently, it must be broken down and each part must be tested individually. This has led to several tests having to be done to certify one box and a lot of confusion over how the rules apply to each part. The goal of this group is to create an alternative test method where the complete electronic box can be tested whole to simplify testing while maintaining or improving the level of safety. The plan is to be finished by January 2019, which is when the next revision of DO-160 is due.