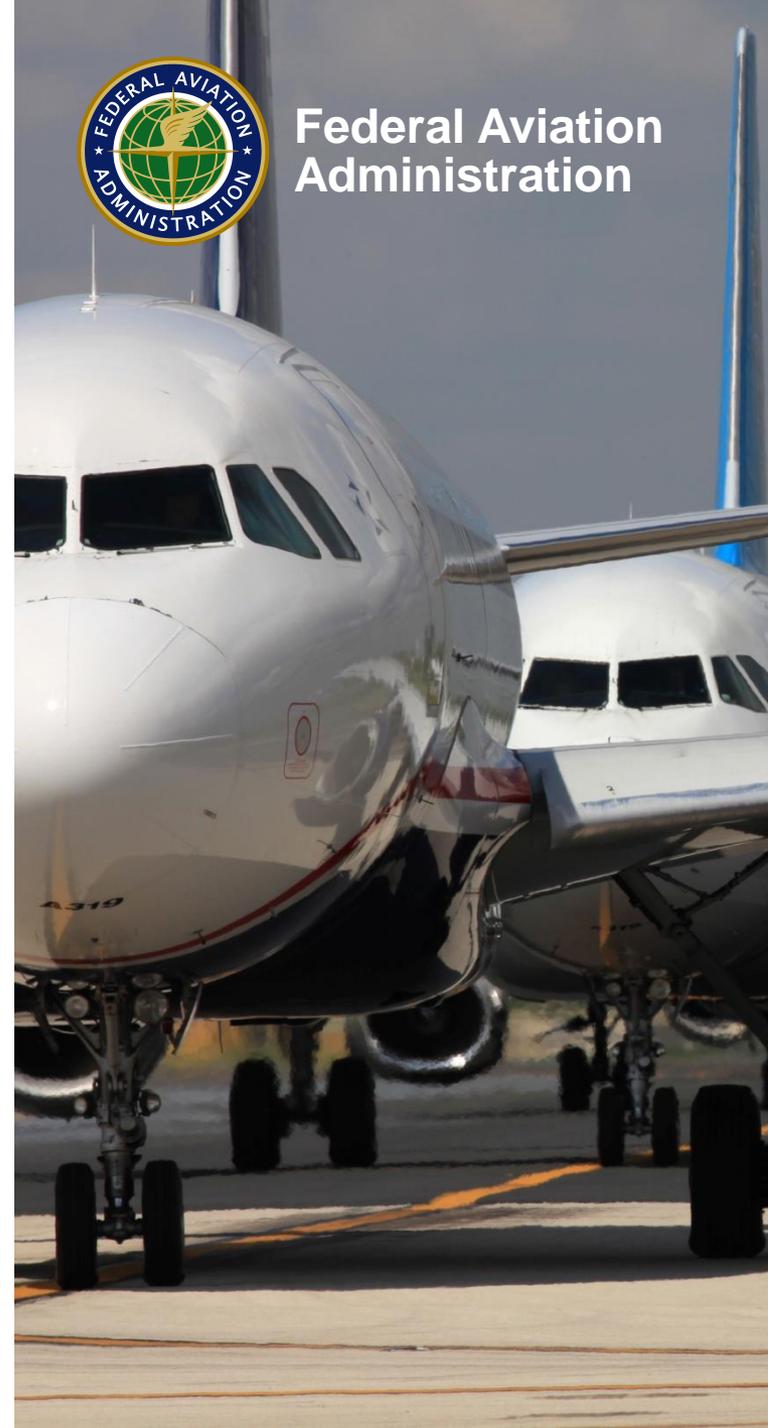


# RTCA Update

Presented to: International Aircraft Materials Fire  
Test Working Group Meeting  
By: Steven Rehn  
Date: 06/03/2014



Federal Aviation  
Administration



# Introduction

- **RTCA DO-160G is the current international standard for environmental testing of commercial avionics**
- **Section 26, Category C defines the flammability testing requirements for electronic housings and component parts**
- **Next revision for DO-160(H) is due January 2019**
- **The goal is to eliminate confusion on how to apply the current standards and simplify the tests required for the next revision**



# Current test standards

**Table 26-2 Type of Test Determination**

<b>Components</b>	<b>Method</b>	<b>Paragraph</b>
All materials other than rubber or elastomer parts, wire and cable	Vertical 12 second bunsen burner test	26.6.2
Rubber or elastomer parts	Horizontal bunsen burner test	26.6.3
Wire and cable	60 degree bunsen burner test	26.6.4

- **Small part exemptions**

# Goal

- **Alternative test procedure (ex: test the electronic enclosure whole instead of breaking down by components)**
- **If not:**
  - Further guidance on appropriate component testing (ex: thin gasket sandwiched between two metal plates required?)
  - Additional method to show or support the definition of hermetic enclosure for flammability purposes (lack of oxygen to support combustion of internal components, no flammability test required?)

# Since the February Meeting

- **Sent out survey to task group members about the type of electronic box to be tested**
- **Questions such as:**
  - Type of test the box has to pass?
  - Volume of box?
  - Maximum power dissipation?
  - Venting or no venting?
  - Location on aircraft?
- **Only received one response**

# Questions?

