

Slide Evacuation Test Method TSO C69A

Dung Do

FAA Fire Safety Team

FAA Wm. J. Hughes Technical Center

Atlantic City International Airport, NJ 08405

International Aircraft Materials Fire Test Working Group

Savannah, GA

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Federal Aviation
Administration



Slide Evacuation Test Method

- The Task Group met in Atlantic City during the Triennial Conference and participants included representatives from Boeing, Airbus, Goodrich, Bombardier, and Zodiac Air Cruiser.
- Goals:
 - Update, clarify, and revise the TSO as well as the Material Test Handbook. For example:
 - Under Requirement (9.9.1) the Handbook states that the average time to failure for test specimens will not be less than 90 seconds.
 - The TSO states that the average time to failure may not be less than 180 seconds with no value less than 90 seconds.
 - Determine whether or not it would be better to evaluate each specimen individually rather than averaging the results of three specimens.

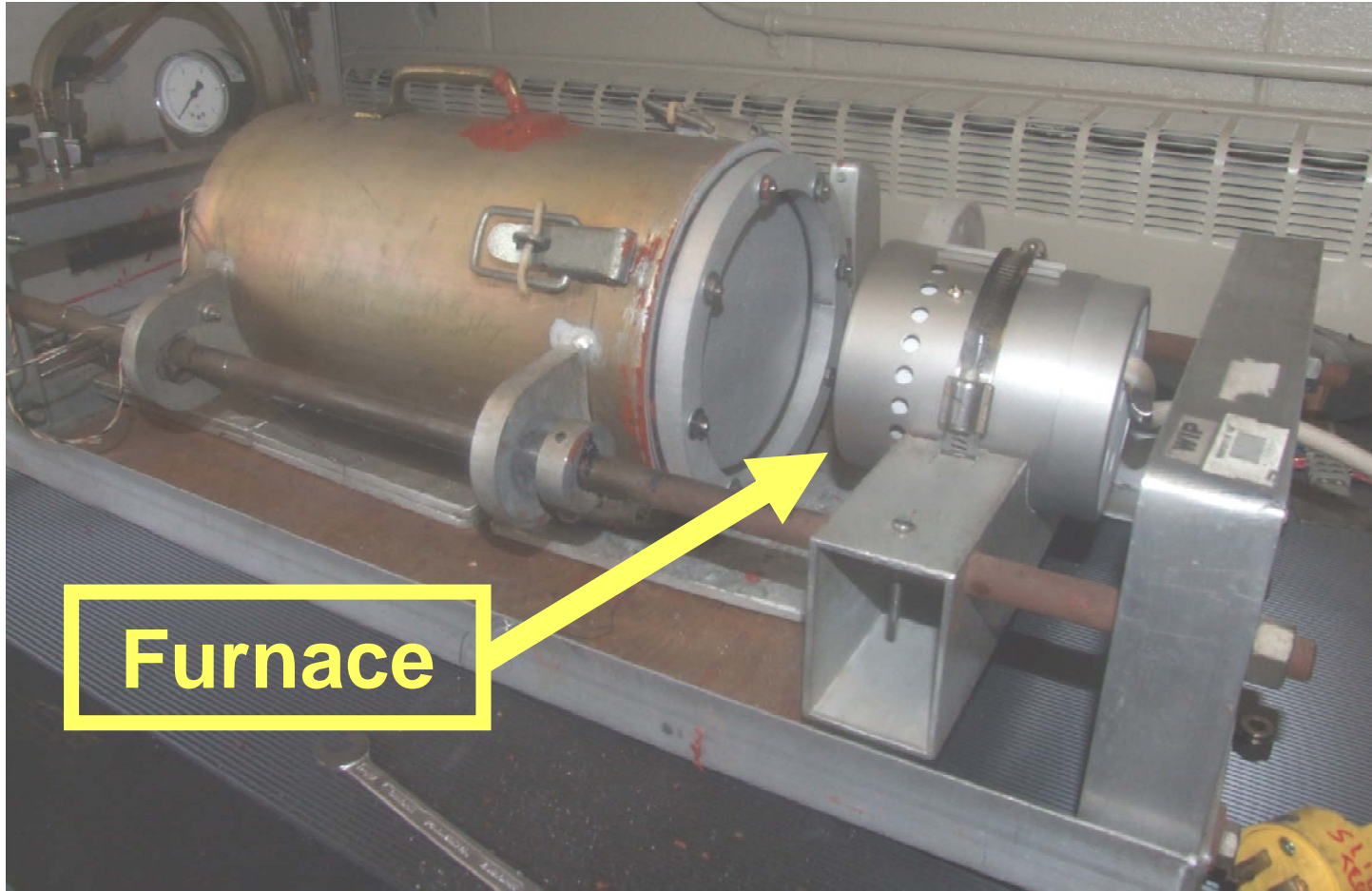


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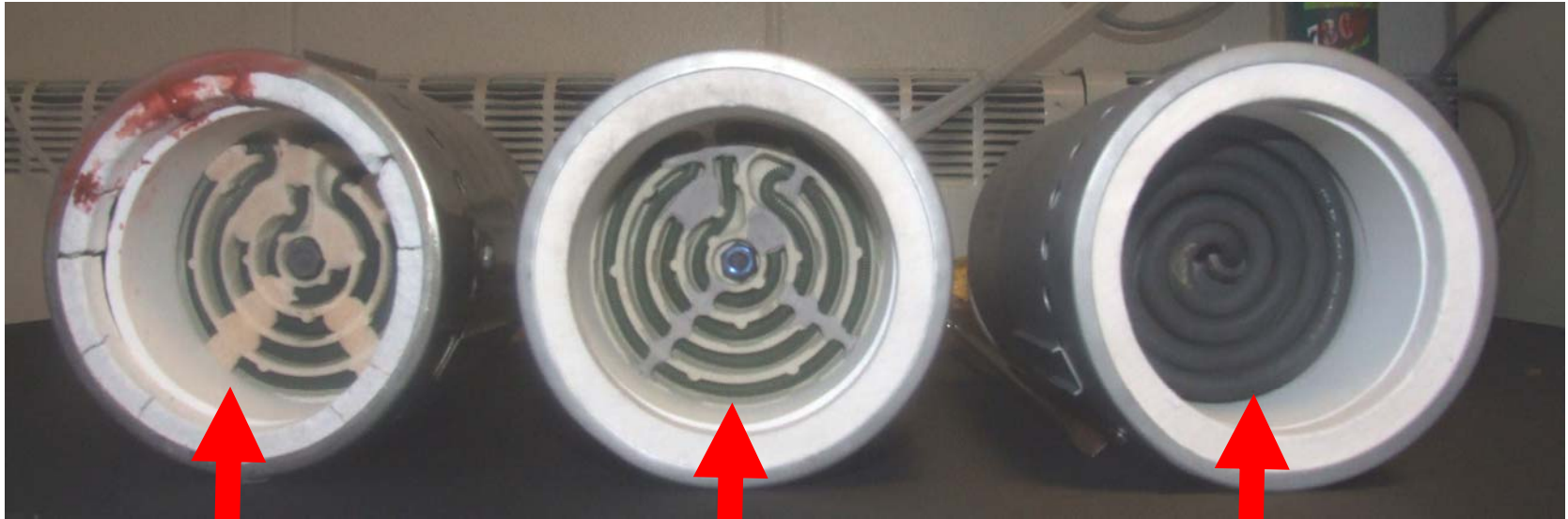
- Goals: (continued)
 - Task Group Members have agreed to participate in a Round Robin.
 - The first objective will be to check the calorimeters of the participants at the FAA Technical Center (We have received two calorimeters to date).
 - Materials for this Round Robin will be provided by two manufactures.
 - The Technical Center will send samples to the participating labs.
 - Test duration, pass/fail criteria, proper equipment functionality, and achieving good reproducibility will be evaluated.
 - Equipment will be of key interest as the furnace used for this test has changed over the years.
 - Early versions used a wire coil.
 - Recent versions use either a “new” wire coil or solid coil.
 - We will be evaluating and differences in test data based on the type of furnace used.



Slide Evacuation Test Apparatus



Slide Evacuation Test Furnace



**Original
Wire Coil**

**Recent
Wire Coil**

Solid Coil