Presented to: Materials Working Group By: Pat Cahill Date: June 26, 2007

# st Results



**Federal Aviation** 

- Conducted in order to evaluate independent labs and OEMs.
- All future Round Robins will include <u>all</u> labs.
- Each participating lab received 6 taped samples.

![](_page_1_Picture_5.jpeg)

**Picture of Sample:** 

![](_page_2_Picture_2.jpeg)

![](_page_2_Picture_4.jpeg)

#### After Flame

![](_page_3_Figure_2.jpeg)

![](_page_3_Picture_4.jpeg)

#### **Flame Propagation**

![](_page_4_Figure_2.jpeg)

![](_page_4_Picture_4.jpeg)

• Something seems strange with these results (*with respect to the Standard Deviation for both After Flame and Flame Propagation*) when compared to the Standard Deviations observed in Round Robin 8.

![](_page_5_Picture_3.jpeg)

- **Question**: What went wrong?
- <u>Answer</u>: You were all set up.
- All samples were numbered 1 through 6 and were tested in that order by each lab.
- Everyone failed sample #4, just as they were supposed to.
- When sample #4 is eliminated from the data set, things look *much better ...*

![](_page_6_Picture_7.jpeg)

After Flame

![](_page_7_Figure_2.jpeg)

Lab C Noted: "remnant of tape ignited, sample partially escaped frame;" hence the anomaly.

![](_page_7_Picture_5.jpeg)

#### **Flame Propagation**

![](_page_8_Figure_2.jpeg)

![](_page_8_Picture_4.jpeg)

#### **Reported Controller Set Points**

![](_page_9_Figure_2.jpeg)

![](_page_9_Picture_4.jpeg)

#### **Reported Stabilization Times**

![](_page_10_Figure_2.jpeg)

![](_page_10_Picture_4.jpeg)

• Typical Sample #4 after test. Lab extinguished flame.

![](_page_11_Picture_2.jpeg)

![](_page_11_Picture_4.jpeg)

- We are very pleased with the results from this Round Robin.
- Each Lab's equipment appears to be functioning properly.
  - Lab J's higher than usual Controller Set Point is the result of their special "electrical" configuration.
- A future Round Robin is in the works and is scheduled for late Fall 2007.
- If anyone is experiencing any problems with their equipment or operation, please do not hesitate to contact the FAA.

![](_page_12_Picture_7.jpeg)