

Contamination & Aging Task Group Report and Recommendations

FAA Fire Test Working Group

June 26th, 2007

Billancourt, France

Daniel B. Slaton
Boeing

Contamination & Aging Task Group

Report and Recommendations

Abstract:

As part of the FAA International Aircraft Materials Fire Test Working Group, a Contamination and Aging Task Group was created in 2003. This task group was created to evaluate the effects of contamination and aging on flammability properties of interior materials. The task group has performed an airline contamination survey, evaluated the effects of certain contaminants on flammability performance of insulation blankets, evaluated in-service insulation blankets, and assisted in developing an approach to mitigate the risk of contamination buildup and associated flammability risks. This report summarizes the task group activities, and sets forth recommendations for future study by industry .

Topics:

- Airline Contamination Survey:
- In-service Insulation Blanket Evaluation:
- Flammability Testing of Contaminants:
- Aging Methodologies:
- Contamination Risk Mitigation Methodology and Roadmap:

Proposed Tasks and Recommendations

Awaiting Task Group Review and Approval

Airline Contamination Survey:

Task Group Recommendations:

- 1) Identify sponsor organizations in the Airline community to better enable data gathering and implementation of mitigation solutions.
- 2) Gather more specific data on potential “contaminant” materials used during maintenance in order to perform controlled testing.

In-service Insulation Blanket Evaluation:

Task Group Recommendations:

- 1) Define appropriate test methodology for evaluating in-service blankets.
- 2) After establishing test methodology, initiate “blanket” collection plan.

Proposed Tasks and Recommendations

Awaiting Task Group Review and Approval

Flammability Testing of Contaminants:

Task Group Recommendations:

- 1) Continue to work with Airlines to identify common materials used during maintenance, and evaluate flammability performance.
- 2) Review maintenance procedures to verify controlled processes are defined.

Aging Methodologies:

Task Group Recommendations:

- 1) Continue to support the aging consortium at University of Massachusetts.
- 2) Develop a plan for evaluating aged insulation blankets.

Contamination Risk Mitigation Methodology and Roadmap:

Task Group Recommendations:

- 1) Continue to support the “Risk Mitigation Strategy and Plan” with test data.
- 2) Develop plans to address future actions for control of contamination and aging effects on continued airworthiness.

Contamination Tasks and Recommendations

Contamination Task Group Roadmap

