

Cargo MPS Task Group

10/31/2018

5:00 PM

Atlantic City, NJ

Type of meeting: Task Group Meeting

Note taker: Dhaval Dadia

Attendees: Dhaval Dadia, Calvin Ko, Enzo Canari, George McEachen, Doug Ferguson, Pat Baker, Robin Bennet, Hannah Prall, Karsten Kirbach, Andre Freiling, Rainer Beuermann, Terry Simpson, Ian Campbell, Mark Petzinger, Adam Chattaway, Xavier Tiger.

Minutes

CCHRAG was asked about a lithium battery standard

Technical assessment on Halon is based on just MPS and not additional test.

Intention to define framework

- expectation of new agent to meet
- EASA agrees to additional test.
- Standardize test conditions
- Criteria for pass
- Testing comparison of challenge fire to Halon 1301
- Clarify – steps
- Class-F cargo compartments has been asked to do special tests

Doug – A quantification of how big a threat battery fire is against Halon

Take a look at G-27 – how much gas can come out before it becomes a flammable threat.

Are other mitigation sources needed for batteries?

What did we learn from Challenge Fire Test

Unsuppressed challenge fire

Aerosol can valve – timing can be to what the current valve opening is or better performance.

Consensus reached.

Galvanized steel – unsuppressed fire data in 2005

Adam – unsuppressed fire

Airflow – Extracting 50 CFM

Standards for measuring air leakage rate – to be mentioned in the MPS

Blower door method to be tested by Airbus

Different limits depending on the method used to determine air exchange rates

Standard deviations for one of the test methods is wrong.

Back to Challenge Fire

- Direction from regulatory body – referenced somewhere or somehow and then the group can look into the details of the test.
- Does the new agent need to be better than Halon
- EASA would like to add to the MPS – Battery fire
- Simulate a scenario of declared/undeclared items?
- By Mid May EASA and FAA will need to talk and come up with a direction.
- Fires likely to occur in the cargo compartment.
- Not planning on making it stringent to look like bulk shipment of batteries.
- Equivalency of Halon
- Evolution of fire threat - why are battery fires being ignored in certification
- aspects of hazards of lithium batteries is present in MPS
 - keep Temp down
 - Flaming fire
 - Reignition
- Possible outcome – explanation to say lithium batteries hazard is mitigated already
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Action Items

Blower door vs CO2 decay

FAA and EASA will talk to give direction of battery fire test.

Aerosol can valve timing

Comparison – of old metal to new metal

Appendix
