Cargo MPS Alternate Agent Test Results

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As the deadline for cargo compartment Halon replacement agents nears, the search for acceptable replacements resumes with the testing of a potential agent at the W.J. Hughes Technical Centers Full Scale Fire Test Facility. Meggitt Blend D was proposed to the Fire Safety Branch as a potential Halon replacement for cargo compartments. To ensure the safety of the test fixture, the agent was tested to the aerosol can explosion simulation test in the pressure vessel at its design concentration and sub-inerting concentrations to ensure it wasn't enhancing the combustion process.

The design concentration of Meggitt Blend-D was determined to be 12% v/v for the knockdown phase and 11.5% v/v for the sustaining phase. Testing was conducted according to the specifications of the minimum performance standard [1]. The presentation exhibits the procedures that were followed in conjunction with the results obtained from the testing.

References

[1] "Minimum Performance Standard for Aircraft Cargo Compartment Halon Replacement Fire Suppression Systems (2012 Update)", John W. Reinhardt, DOT/FAA/TC-TN12/11
https://www.fire.tc.faa.gov/pdf/TC-TN12-11.pdf