Solid Aerosol and Halon1301 results during Full-scale Demonstration Testing

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Kidde and Airbus have recently been working on demonstrating the capability of a solid aerosol to replace Halon1301 as an alternate fire extinguishing agent for the Engine / APU application. The full scale fire extinguishing performance of the solid aerosol to the halon1301 were compared on a real engine installation that was operated for 30 minutes before spooling down then starting an external blower to ventilate the engine compartment and having the fire threat ignited. The comparison of performance was based on the fire extinction of a dual fire threat created purposely in the engine core compartment of the FAA TC owned 747SP/JT9D engine. The two fire threats, a pool and a spray fire are both ignited before being submitted to the fire extinguishing agent discharge by the associated system built to meet the designed concentration criteria defined by the Minimum Performance Specification protocol.