

A review of FAA ARFF Research Concerning Freighter Aircraft Fires

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Over the past decades there has been an increase of freighter aircraft operations at airports and aircraft rescue and firefighting (ARFF) personnel have had to evolve their tactics to respond to incidents involving these types of aircrafts. On February 7, 2006, the United Parcel Service Flight 1307 was involved in a cargo fire incident at the Philadelphia International Airport. The official investigation of the incident identified deficiencies in training that ARFF personnel had in fighting cargo fires inside freighter aircraft. The National Transportation Safety Board made several recommendations to the Federal Aviation Administration (FAA) related to ARFF training, tactics, strategy, and performance, to provide cargo firefighting training methods to ARFF personnel. As part of a response to these recommendations, the FAA launched a series of research efforts to evaluate different tactics to combat cargo fires. Tests ranged from evaluating the ability of aircraft skin-penetrating nozzles (ASPNS) to pierce through cargo liner to running full-scale fires inside a freighter aircraft to evaluate effectiveness of ASPNS in extinguishing ULD fires.