

Louise C. Speitel

Louise has worked with the FAA Fire Safety Section as a research chemist and toxicologist since 1976. She has authored over 20 reports and journal articles dealing with fire safety issues including options to the use of Halons, pharmacokinetic modeling of Halon replacement agents, toxicity assessments and survival modeling, health hazards of fibers from burning aircraft composite materials, smoke hood benefit analyses of past accidents, small medium and full-scale fire tests, mechanistic studies of thermal degradation of polymers, and chemical methods of analysis.

She has designed instrument systems and methods of chemical analysis for numerous fire safety projects. Recent projects supported include full and small scale burn-thru fire tests of aircraft insulation systems using NDIR and FTIR spectroscopy, fire safety testing of contaminated Halon 1211, and Halon 1211 stratification in aircraft, with associated safety assessments.

Louise is active in developing fire standards and codes. She is active member of the NFPA committees on Clean Agent Fire Extinguishing Systems, writing standards for Halon replacement, Halon 1301 and CO₂ extinguishing systems. She is also active with various ISO committees developing standards for sampling and analysis of combustion gases using FTIR and developing standards for assessing smoke toxicity. She was The FAA Technical Center's Lead in developing the FAA Advisory Circular AC 20-42D "Hand Fire Extinguishers for use in Aircraft."

Education

BS Chemistry, Hunter College of the City University of New York, 1973

MS Chemistry, Purdue University, 1975