10th Triennial International Aircraft Fire and Cabin Safety Research Conference October 17 – October 20, 2022 Atlantic City, NJ

Presenter:

Name: Levi Breeding, M.A., David Weed, M.A, and Melissa Beben M.S.

Affiliation: FAA Civil Aerospace Medical Institute, Cabin Safety Research Team

Topic: Emerging Technologies in Training and Research

Title: Extended Reality for Cabin Safety II: Flight Attendant Training

Abstract

The FAA Air Carrier Training Systems and Voluntary Safety Programs Branch, AFS-280, requested this research project to investigate the use of extended reality (XR) in flight attendant training. The issue identified is a dearth of criteria from which to evaluate the efficacy and guidance for certifying such devices (i.e., hardware and/or software) as an approved or accepted training modality. Although few airlines have implemented this technology, even as a supplemental training modality, industry experts and manufacturers believe there will be increased implementation of this technology in aviation training over the next several years. Therefore, this study aims to understand the efficacy and effectiveness of XR training, when compared to Advanced Qualification Program (AQP) and/or Subparts N & O (traditional) training modalities, among flight attendants. This data-driven study will analyze performance and proficiency data collected by a Part 121 airline during its regular training activities using both AQP and XR training methodologies.