***THE NINTH TRIENNIAL INTERNATIONAL***

***AIRCRAFT FIRE AND CABIN SAFETY***

***RESEARCH CONFERENCE***

***Resorts Casino-Hotel***

***Atlantic City, New Jersey, USA***

***October 28-31, 2019***

***CALL FOR PAPERS***

***Cabin Safety Session***

# Background

The Aircraft Fire and Cabin Safety Research Conference is held every three years and organized by the Fire and Cabin Safety Research Group (FCSRG). FCSRG members are drawn from major aviation regulatory authorities including the European Union Aviation Safety Agency, the United States Federal Aviation Administration (FAA), Transport Canada Civil Aviation (TCCA), the National Agency of Civil Aviation (ANAC) of Brazil, the Civil Aviation Authority of Singapore (CAAS) and the Japan Civil Aviation Bureau (MLIT JCAB). Abstracts for paper presentations at the conference should be no more than 400 words and should be submitted electronically by May 1, 2019, to:

Ms. April Horner

Email: [april.ctr.horner@faa.gov](mailto:april.ctr.horner@faa.gov)

Presentations based on the papers should have a duration of approximately 20 minutes, allowing for up to 10 minutes of questions. General topic areas are as suggested below although other applications will be considered within the general constraints of airplane fire and cabin safety research. The general focus is to be large public transport airplanes.

Background information and previous conference topic areas may be reviewed at www.fire.tc.faa.gov.

**Cabin Safety and Operational Issues topics may include:**

*Evacuation and Post-Crash Survival*

*Exit Doors and Escape Slides –* Performance of door/slides during laboratory trials and real evacuations.

*Water Survival Equipment and Rafts -* Performance of life vests and rafts in sea trials and in actual usage.

*Interior Arrangement –* Effects of seat pitch, staggered rows, passageway restrictions/obstacles.

*Human Behaviour in Emergencies –* Studies of controlled experiments or observation of actual passenger behaviour.

*Computer Modelling –* Predicting passenger behaviour during evacuation; Procedures for validating behaviour models; Use of models for emergency equipment evaluation.

*In-Flight Safety*

*Emergency Oxygen* - Proper usage; Inadvertent deployment.

*Turbulence –* Evaluation of in-flight incidents and potential mitigation strategies.

*Passenger Education and Management*

*Safety Briefings –* Card content and pre-flight instructions to passengers.

*Application of Interactive Media to Safety Information –* Effectiveness of media versus conventional communication methods; Serious Game development.

*Cabin Crew Procedures –* Communication during emergencies; Evacuation procedures.

*Cabin Crew Training –* Implementing the latest rules and guidance; Consistency between operators.

*Passenger Management –* Compliance with crew instructions during emergencies; Unruly behaviour; Effectively communicating policies (child seat use etc.)

The conference will also contain other session topics including:

# Fire Research

*Aircraft Fire Safety*

*Materials Fire Safety*

*Systems Fire Safety*

*Test Method Development*

*Cargo fire, Batteries and Oxygen*

*Halon Replacement*

*Engine and Fuel Tank Fire Safety*

*Advanced Material Research*

# Crash Dynamics

*Structural Strength and Load Attenuation*

*Airframe Structures*

*Cabin Interior Components*

*UAS Airborne Collisions*

*Analytical Modelling*

*Airframe Structures Models*

*Seat/occupant Models*

*Verification and Validation*

*Human Injury Criteria*