

AEROSPACE

SHORT COURSES

Cabin Safety and Crashworthiness of Aircraft Cabin Interiors (AERO0170)

Instructor: Prashant Chillamcharla

Course Description

This course provides a fundamental review of transport airplane regulatory requirements and compliance-finding methodologies associated with cabin safety and crashworthiness regulations on aircraft cabin interior configurations. The course also reviews FAA/EASA criteria to determine the certification bases of Type Certification and Supplemental Type Certification projects.

Learning Objectives

- Understand FAA requirements and advisory material associated with cabin safety/crashworthiness
- Obtain practical insight into industry practices to evaluate transport airplane cabin interiors
- Understand FAA requirements to determine certification basis applicable to TC/STC projects
- Review seats qualification requirements and impact on cabin safety/crashworthiness compliance

Who Should Attend?

This course is designed for FAA designees, FAA organizational designees/authorized representatives and certification engineers associated with STC cabin interior projects.

Course Outline

Day One

- Introductions
- Course Outline and Objectives
- Type Certification and Supplemental Type Certification
 - Definitions: Exemptions, Special Conditions, Equivalent Levels of Safety
 - Establishment of Type Certification Basis
 - Review of Part 21 and associated Advisory Material
 - Certification Bases for Commercial and Private Operations

Day Two

- FAA/EASA Regulatory Material

- Airworthiness Requirements
- Operational Requirements
- FAA/EASA Advisory Material
- Compliance Inspection
 - Definition
 - FAA/ODA authorization
 - Means of Compliance

Day Three

- Cabin Crashworthiness Inspection
 - Cabin Layout Configurations
 - Review of AC25-17A (Cabin Interior Crashworthiness Handbook)

Day Four

- Seats Crashworthiness Inspection
 - Review of Seat Qualification
 - Seat Deformation (Static and Dynamic) effect on Crashworthiness
 - Review of FAA/EASA Regulations and Advisory Material

Day Five

- Compliance Inspection Reports
 - Format
 - Compliance Inspection Findings and Disposition
- Knowledge Test

Classroom hours / CEUs

31.50 classroom hours

3.15 CEUs

Certificate Track

Aircraft Maintenance and Safety

Aircraft Structures

Course Fees

Early registration course fee: \$2,595 if you register and pay by the early registration deadline (45 days out).

Regular registration course fee: \$2,795 if you register and pay after the early registration deadline.

Course Materials

Course materials, including outlines, presentation copies, and supplementary materials, will be accessible through Canvas, KU's online learning system. Instructions to access

Canvas will be provided upon completed registration. Students are required to bring a computer or other electronic device with PDF-viewing capabilities with them to class each day. If you require accommodation contact us at professionalprograms@ku.edu and we will work with you on an accessible solution.

U.S. Federal Employee Discount

This course is available to U.S. federal employees at 10% off the registration fee. To receive the federal employee discount, you must enter the code **FGVT116** during the checkout process. Please note that you must validate your eligibility to receive this discount by entering your U.S. government email address (ending in .gov or .mil) when creating your online registration profile. This discount is available for both the early registration and regular registration fees.

Canada Department of National Defence Discount

This course is available to Canada DND employees at 10% off the registration fee. Please contact the DND Procurement Authority (DAP 2-3) for details. Please note that you cannot register using our online system when requesting this discount. This discount is available for both the early registration and regular registration fees.

Instructor Bio

Prashant Chillamcharla is a Federal Aviation Administration (FAA) Designated Engineering Representative (DER) with delegations in 14 CFR Part 23 and 14 CFR Part 25 in the areas of Structures, Major Repairs, Major Alterations and Cabin Safety. In addition, he holds delegations of a structures and cabin safety Unit Member on several Organization Designation Authorizations (ODA). Chillamcharla embarked on his aerospace journey after earning a master's degree in mechanical engineering from Wichita State University. He has been in the industry for over two decades and during his tenure has held various key positions which involved managing and supporting several certification programs ranging from TSO, STC, PMA and Major Alterations. Having worked both in the private business jet sector and commercial airlines sector, he has gained valuable experience and insights in both areas of the industry. His industry experience brings a practical perspective to his teaching, allowing students to bridge the gap between theoretical knowledge and real-world application.

This class is available for delivery at your company.

Your company can realize substantial savings by bringing an aerospace short course to your workplace. On-site delivery is ideal for organizations that need to train 10 or more employees on a specific topic. For more information on on-site course delivery, or to request a cost proposal, please email us at ProfessionalPrograms@ku.edu.

CONTACT US:

KU Jayhawk Global
Aerospace Short Course Program

1515 St. Andrews Dr.
Lawrence, KS 66047
Email: jayhawkglobal@ku.edu
Phone: 785-864-6779 (Registration)