AMS107b - Aircraft Safety analysis

From the Advanced Master AMS: E&M

(Aeronautical Maintenance and Support: Engineering & Management)



Highlights

- Safety evaluation for aircraft systems
- Industrial expertise
- SAE ARP4754 / 4761 guidelines

Key elements

Period: **December**

Estimated duration: 20 hours

For whom:

recent graduates, jobseekers and experienced employees

Location:

ISAE-SUPAERO, Toulouse

Language: English

This module provides a comprehensive understanding of the safety assessment process for aircraft systems.

Prerequisites

 Aircraft architecture and basic aeronautics knowledge

Learning objectives

After completing this course, participants will be able to:

- Describe the system safety assessment objectives and process, and the related techniques;
- Understand the content and conclusions of a safety assessment document.

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Course content

Complex system safety:

- Fundamentals, regulations and objectives
- Types of failures
- Safety assessment

Safety and reliability studies:

- System functional hazard assessment (FHA)
- Preliminary System Safety Assessment (PSSA)
- System Safety Assessment (SSA)

Common cause analysis:

- · Particular risk analysis
- · Zonal safety analysis
- Common mode analysis

Case studies:

· Safety analysis

Teaching methods

Teaching methods	Yes
Lectures / tutorial	X
Collaborative learning	
Flipped classroom	
Blended learning (online and face to face)	
Learning by doing	
Project-based	
Simulation	
Case study	Χ

Assessment

Written exam