AMS600 - Human factors and MRO Safety Management System

From the Advanced Master AMS: E&M

(Aeronautical Maintenance and Support: Engineering & Management)

Key elements

Period: **Early January to Late January**

Estimated duration: **20 hours**

For whom:
recent graduates, jobseekers and experienced employees

Location:
ISAE-SUPAERO, Toulouse

Language: **English**

Highlights

- Safety culture in maintenance
- Risk management tools
- Industrial expertise

This module provides participants with a thorough understanding of the concepts of human factors and Safety Management System in relation to aircraft maintenance, and how to mitigate errors and limitations using risk management techniques. This module focuses on safety culture and safety management.

Prerequisites

- Good aeronautical engineering and engineering management background;
- Knowledge of aviation safety regulatory bodies and regulation.

Learning objectives

After completing this course, participants will be able to:

- Understand the scope of human factors related to human performance and limitations involved in management of safety;
- Describe a Safety Management System within an MRO environment;
- Understand and apply risk management techniques, risks models and safety investigation means;
- Understand the significance of safety culture and develop its promotion.

Information and registration

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Course content

Human factors (HF):

- SHELL model
- Individual and collective human performance and limitations
- Human errors
- Workplace
- Communication & Role of management
- Organization performance and continuous improvement

Safety Management System (SMS):

- Objectives & main concepts
- Regulatory framework
- Methodology
- Organization and responsibilities
- MRO experience

Risk management techniques:

- Strategies for aircraft maintenance environment
- Models (bowtie, Reason, PEAR)
- Techniques (investigation, Maintenance Error Decision Air, safety studies, MLOSA)

Safety culture promotion

Case study: Evaluation of an aircraft maintenance situation

Teaching methods

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

Assessment

Written exam