

# **Program Overview**

MSG-3 Training aims to provide participants with a comprehensive understanding of the Maintenance Steering Group-3 (MSG-3) methodology and its application in the aviation industry. The training combines theoretical knowledge and practical exercises to enable participants to develop, implement, and optimize aircraft maintenance programs.

# **Objectives**

- Understand the MSG-3 Methodology
- Utilize Safety and Reliability Data in the MSG-3 Process
- Understand the Policy Procedure Handbook (PPH) and the Maintenance Review Board Report (MRBR)
- Create the Maintenance Planning Document (MPD)
- Develop and Optimize Maintenance Programs
- Plan and Schedule Maintenance Activities
- Implement and Audit Maintenance Processes
- Apply Practical Knowledge

## Who should attend?

This course is beneficial for CAMO personnel managing maintenance or reliability programs, reliability personnel, and other staff who are technically involved in aircraft reliability processes.

It is also valuable for individuals working in a CAMO environment, such as Maintenance Program Management and Quality Audit personnel, who need a comprehensive understanding of MSG-3.















## **Pre-requisites**

The course is designed to be a standalone training. Still, having a background in aviation maintenance planning and reliability will be a distinct advantage.

## Course Details and Schedule

#### Day 1

Fundamentals and Introduction to MSG-3

- Abbreviations and Terms
- Fundamentals of Aircraft Maintenance
- · Aircraft Reliability Systems and **Regulatory Requirements**
- General Introduction and History of MSG-3
- · Justifications and Technical Basis for **MSG-3 Implementation**
- Introduction to Aircraft Maintenance **Programs**

#### Day 2

Fundamentals of Reliability Programs and the MSG-3 Approach

- Structure and Development of a **Reliability Program**
- Benefits of an Effective Reliability **Program**
- FMECA and MSG-3 Assessments
- MSG-3 Analysis Methodology
- Zonal and EWIS / HIRF Analyses
- MSG-3 Algorithm Management

#### Day 3

Reliability Analysis and Performance **Evaluation** 

- Performance Standards and Reliability
- Reliability Evaluations of Aircraft **Maintenance Programs**
- Analysis and Interpretation of Reliability **Data**
- Structural Reliability Indicators
- · Reliability Indicators of Aircraft Components
- Engine Reliability Program

#### Day 4

Implementation, Optimization, and Audit **Processes** 

- MSG-3 Information Sources and Data Collection
- Effective Use of Reliable Data to Support **Continuous Airworthiness Management**
- · Management of External Information Sources
- Interaction Between Safety and Maintenance Plans
- Reliability-Based Maintenance Optimization
- Maintenance Planning Engineering **Function**
- · Measuring the Effectiveness of the **Maintenance Planning Process**
- · Management of Inspection Findings and **Corrective Actions**
- Reliability Audits
- · Assessment of Control, Service, and **Conditional Maintenance**
- Understanding and Implementing **Maintainability Reports**

#### Day 5

**Practical Training** 

- Alert Level Deviations
- Safety Applications
- Maintenance Planning and Packaging
- MRB Requirements
- Certification Maintenance Requirements (CMR)
- Safety and CMR
- Maintenance Planning and Optimization















