

Acceleration | Innovation | Development

ARP4761 – Safety Assessment Process on Civil Airborne Systems and Equipment

## Duration: 2 Days

## Language: DE/EN

SAE Aerospace Recommended Practice ARP4761 provides guidelines and methods of performing the safety assessment for certification of civil aircraft. The concept of Aircraft Level Safety Assessment is introduced and the tools to accomplish this task are outlined. Participants of this seminar get an insight of the processes of ARP4761 and learn how to conduct a safety assessment consisting of a Functional Hazard Assessment, Preliminary System Safety Assessments and System Safety Assessments. Participants also learn the methods needed to conduct the safety assessment, including Fault Tree Analysis, Dependence Diagram, Markov Analysis, Failure Modes and Effect Analysis, Failure Modes and Effects Summary and Common Cause Analysis.

## Contents:

- Introduction, Process Overview and Objectives
  - o ARP4754A Aircraft & System Development Process
  - o ARP4761 Safety Assessment Process Guidelines and Methods
  - o DO-178 Software Development Life Cycle
  - o DO-254 Electronic Hardware Development Life Cycle
- Safety Assessment Process
  - Safety Assessment Overview
  - Functional Hazard Assessment (FHA)
  - Preliminary System Safety Assessment (PSSA)
  - System Safety Assessment (SSA)
  - Verification Means Used for Aircraft Certification
- Safety Assessment Analysis Methods
  - o Fault Tree Analysis (FTA), Dependence Diagram (DD) and Markov Analysis (MA)
  - Failure Mode and Effects Analysis (FMEA)
  - Failure Modes and Effects Summary (FMES)
  - Common Cause Analysis (CCA)
    - Zonal Safety Analysis (ZSA)
    - Particular Risk Analysis (PRA)
    - Common Mode Analysis (CMA)
- Safety Related Maintenance Tasks and Intervals
- Practical Work Examples

For more Information or if you need a customised training contact us

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