


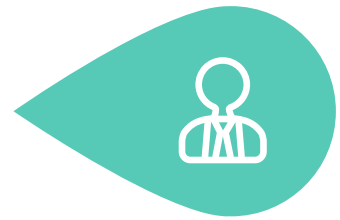
TRAINING ► CATALOG



PMV
engineering

The logo for PMV engineering is centered in a dark blue square. The text 'PMV' is in a large, bold, white sans-serif font, and 'engineering' is in a smaller, white sans-serif font below it. The square is connected to various icons by lines of different colors (teal, dark blue, light blue) that branch out across the page. These icons include a lightbulb, an airplane, a Wi-Fi symbol, a person icon, and another airplane.

About us



"Get decades of experience feedback"

Registration reference

76820082082



OUR TRAINERS

PMV Engineering trainers have gained development experience while working with most of the aircraft manufacturers and system providers (Airbus, Bombardier, Thales, Rockwell Collins, ...).

OUR SERVICES

PMV Engineering proposes several training options up to all-inclusive formulas.



Summary



- # 1 - DEVELOPMENT OF SYSTEMS ACCORDING TO ED-79A / SAE ARP-4754A
- # 2 - SAFETY ANALYSIS ACCORDING TO ED-135A / ARP-4761A (2018)
- # 3 - DEVELOPMENT OF SOFTWARE ACCORDING TO ED-12C / DO-178C
- # 4 - TOOLS QUALIFICATION ACCORDING TO ED-215 / DO-330
- # 5 - DEVELOPMENT OF ELECTRONIC ACCORDING TO ED-80 / DO-254
- # 6 - ORGANISATION AND ACCEPTANCE OF ED-14G / DO-160G TESTS
- # 7 - TPED TOLERANCE DEMONSTRATION FOR THE USE OF WIRELESS DEVICES ON BOARD



Development of systems according to ED-79A / SAE ARP-4754A

1



2 DAYS

- ▶ 2018, Jan 30th to 31st
- ▶ 2018, Jun 26th to 27th
- ▶ 2018, Sept 25th to 26th

Other dates ? Contact us



LOCATIONS

- ▶ Toulouse
- ▶ Paris
- ▶ Bordeaux

Other locations ? Contact us



1000 €

Price per person

Decreasing for groups



TRAINEES

From 4 to 15 persons

Other options ? Contact us

TARGET :

- ▶ Process assurance and certification engineers
- ▶ Systems design project managers
- ▶ Developers (aircraft, system, sub-systems and equipment levels)

PRE-REQUISITE :

- ▶ None

OBJECTIVES :

- ▶ Understand the objective of certification related to the development of aeronautic systems.
- ▶ Understand the certification requirements to comply with, in an aeronautic development (Aircraft and System levels).
- ▶ Be able to lead or support an audit related to the application of the ED-79A/ARP-4754A.

SCOPE :

- ▶ Relation with certification
- ▶ Safety analysis impact on the design
- ▶ Design assurance and Design Assurance Level
- ▶ Determination of DAL from aircraft to hardware and software
- ▶ Planning
- ▶ Management of the requirements
- ▶ Traceability, validation and independence
- ▶ Verification & verification coverage
- ▶ Configuration management
- ▶ Process assurance and certification liaison



Safety analysis according to ED-135A / ARP-4761A

2



2 DAYS

- ▶ 2018, Feb 1st to 2nd
- ▶ 2018, Jun 28th to 29th
- ▶ 2018, Sept 27th to 28th

Other dates ? Contact us



LOCATIONS

- ▶ Toulouse
- ▶ Paris
- ▶ Bordeaux

Other locations ? Contact us



1000 €

Price per person

Decreasing for groups



TRAINEES

From 4 to 15 persons

Other options ? Contact us

TARGET :

- ▶ Safety, certification and process assurance engineers
- ▶ Systems design project managers
- ▶ Developers (aircraft, system, sub-systems and equipment levels)

PRE-REQUISITE :

- ▶ None

OBJECTIVES :

- ▶ Understand the objective of certification related to the development of aeronautic systems.
- ▶ Understand the certification requirements related to aeronautic safety analysis (aircraft, system, equipment, hardware levels).
- ▶ Be able to lead or support an audit related to the application of the l'ED-135A/ARP-4761A.

SCOPE :

- ▶ Relation with certification
- ▶ Relation between ED-79A/ARP-4754A and ED-135A/ARP-4761A
- ▶ AFHA
- ▶ PASA/ASA
- ▶ SFHA
- ▶ PSSA/SSA
- ▶ FDAL/IDAL
- ▶ FMEA/FMES
- ▶ CCA/CMA/ZSA/PRA - Independence
- ▶ SEU/MBU/SEE



Development of software according to ED-12C / DO-178C

3



2 DAYS

- ▶ 2018, Feb 6th to 7th
- ▶ 2018, Apr 3rd to 4th
- ▶ 2018, Oct 2nd to 3rd

Other dates ? Contact us



LOCATIONS

- ▶ Toulouse
- ▶ Paris
- ▶ Bordeaux

Other locations ? Contact us



1000 €

Price per person

Decreasing for groups



TRAINEES

From 4 to 15 persons

Other options ? Contact us

TARGET :

- ▶ Process assurance and certification engineers
- ▶ Software project managers
- ▶ Developers involved in software development

PRE-REQUISITE :

- ▶ None

OBJECTIVES :

- ▶ Understand the objective of certification in relation with the aeronautic embedded software.
- ▶ Understand the certification requirements to apply, in an aeronautic embedded software development.
- ▶ Be able to lead or support an audit related to the application of the ED-12C/DO-178C.

SCOPE :

- ▶ Relation with certification and safety
- ▶ Objectives versus DAL
- ▶ Verification & verification coverage, including structural coverage
- ▶ Independence
- ▶ Planning, additional considerations
- ▶ Management of requirements
- ▶ Design as per §11.10
- ▶ Coding objectives, traceability
- ▶ Configuration management, process assurance
- ▶ Overview of the supplements (tools qualification, models...)



Tools qualification according to ED-215 / DO-330

4



1 DAY

- ▶ 2018, Feb 15th
- ▶ 2018, Apr 12th
- ▶ 2018, Oct 12th

Other dates ? Contact us



LOCATIONS

- ▶ Toulouse
- ▶ Paris
- ▶ Bordeaux

Other locations ? Contact us



500 €

Price per person

Decreasing for groups



TRAINEES

From 4 to 15 persons

Other options ? Contact us

TARGET :

- ▶ Process assurance and certification engineers
- ▶ Software project managers
- ▶ Developers involved in software development

PRE-REQUISITE :

- ▶ To be knowledgeable about DO-178C key concepts.

OBJECTIVES :

- ▶ Understand the regulatory context and the need for tools qualification.
- ▶ Understand the Certification requirements to comply with, in tools qualification.
- ▶ Be able to lead or support a Certification Audit related to the Tools Qualification.

SCOPE :

- ▶ Origin of the need for tools qualification
- ▶ Relation with DO-178C
- ▶ TQL
- ▶ Development and verification tools, compilers & linkers, state of the art
- ▶ When is it necessary to qualify ? / Cases & examples
- ▶ Planning
- ▶ Activities and documentation versus TQL



Development of electronic according to ED-80 / DO-254

5



2 DAYS

- ▶ 2018, Feb 13th to 14th
- ▶ 2018, Apr 10th to 11th
- ▶ 2018, Oct 10th to 11th

Other dates ? Contact us



LOCATIONS

- ▶ Toulouse
- ▶ Paris
- ▶ Bordeaux

Other locations ? Contact us



1000 €

Price per person

Decreasing for groups



TRAINEES

From 4 to 15 persons

Other options ? Contact us

TARGET :

- ▶ Process assurance and certification engineers
- ▶ Electronic hardware design project managers
- ▶ Developers involved in electronic development

PRE-REQUISITE :

- ▶ None

OBJECTIVES :

- ▶ Understand the objective of certification in relation with the aeronautic embedded electronic.
- ▶ Understand the certification requirements to apply, in an aeronautic embedded electronic development.
- ▶ Be able to lead or support an audit related to the application of the ED-80/DO-254.

SCOPE :

- ▶ Relation with certification and safety
- ▶ State of the art – EASA & FAA additional considerations
- ▶ Differences Europe & USA
- ▶ Objectives versus DAL
- ▶ Independence
- ▶ Planning, additional considerations
- ▶ Management of requirements and validation
- ▶ Design drawings
- ▶ Code (VHDL) objectives and traceability
- ▶ Verification & verification coverage, including structural
- ▶ Configuration management and process assurance



Organisation and acceptance of ED-14G / DO-160G tests

6



1 DAY

- ▶ 2018, Feb 8th
- ▶ 2018, Apr 5th
- ▶ 2018, Oct 4th

Other dates ? Contact us



LOCATIONS

- ▶ Toulouse
- ▶ Paris
- ▶ Bordeaux

Other locations ? Contact us



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TRAINEES

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Other options ? Contact us

TARGET :

- ▶ Process assurance and certification engineers
- ▶ Equipment design project managers
- ▶ Developers involved in hardware development
- ▶ People in charge to handle the environmental qualification

PRE-REQUISITE :

- ▶ None

OBJECTIVES :

- ▶ Understand the regulatory context and the need in relation with the installation and aircraft type.
- ▶ Anticipate the design impact.
- ▶ Be able to establish a qualification plan and qualification procedures, to be able to establish a qualification report and handle the potential deviations

SCOPE :

- ▶ Origin of DO160 requirements
- ▶ Why, how and when to build qualification plan ?
- ▶ How and when to build qualification procedures ?
- ▶ Organization of the tests, tools and laboratories
- ▶ Evidences, witnessing
- ▶ Monitoring
- ▶ Changes during qualification
- ▶ Qualification report, acceptable deviations



TPED tolerance demonstration for the use of wireless devices on board

7



1 DAY

- ▶ 2018, Feb 22th
- ▶ 2018, Mar 15th
- ▶ 2018, Apr 19th

Other dates ? Contact us



LOCATIONS

- ▶ Toulouse
- ▶ Paris
- ▶ Bordeaux

Other locations ? Contact us



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TRAINEES

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Other options ? Contact us

TARGET :

- ▶ Airlines staff
- ▶ Aircraft modifications engineers
- ▶ Aircraft modifications project managers

PRE-REQUISITE :

- ▶ None

OBJECTIVES :

- ▶ Understand the issue and the regulatory context.
- ▶ Understand which type of tests is required depending on aircraft type.
- ▶ Be able to define a T-PED compatibility demonstration plan.

SCOPE :

- ▶ CAT.GEN.MPA.140 regulation
- ▶ D130A regulation
- ▶ "Front Door" coupling assessment
- ▶ "Back Door" coupling assessment



Where are we ?



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