

CERTIFICATION OF SOFTWARE (DO-178C)

This two-day course is tuned for the software engineer facing compliance with DO-178 for the first time or simply wanting to refresh their understanding of today's airborne software compliance processes – now including a comparison of the changes from DO-178B to DO-178C.

Understand the context of DO-178C with respect to the FAA, EASA, and other regulatory agencies/policy

Explore the DO-178C life cycle and objectives and learn what is applicable to your project

Review real examples and obtain free templates for project use

Examine the changes in “C” versus DO-178B

Understand the new supplements and how and when to use them

See what is pertinent for Military and UAS applications

Compare DO-278A and DO-248C to DO-178C

Since 2000, Tammy Reeve, President of Patmos Engineering Services, has been helping applicants with DO-178 compliance. In 2008, the FAA awarded Patmos Engineering Services the contract for developing and delivering the “Complex Electronic Hardware” training course that was taught at the FAA Academy to DO-254 program auditors.

From both her DO-178 auditing experience and FAA training experience, Tammy developed this course offering for DO-178C applicants. Today, Tammy has taught this course to over 40 companies around the globe. The feedback has been overwhelmingly positive.

“Tammy delivers tailored training and certification support to her clients that is hands-on and practical. She is effective in helping the recipient define a usable and compliant process.”

Karen Brack, Airborne Electronic Hardware Engineer, The Boeing Company

Patmos offers this and several other industry leading compliance training courses, which can be delivered on-site or on-line, and can be tailored to your specific needs. You can also pair these classes with any other Patmos offering (such as a process “Gap Analysis”) for a fully customized services package.

KNOWLEDGE
INTEGRITY
EFFICIENCY

DO-178C Training Outline

1. Software Certification Related Information
 - Regulation and Policy
 - Safety Analysis and Deriving DALs
 - FAA AC20-115C and EASA AMC 20-115C
 - EASA CM SWCEH – 002
 - Order 8110.49 chg1
 - CAST Papers
 - Software Job Aid
 - Issue Papers & CRIs
2. Where DO-178B/C Fits in the Certification Process
 - System and Software Process Relationship
 - Purpose and Charter of DO-178C/ED-12C
 - Objectives and Annex A
 - Software Approval Process
3. Overview of DO-178B/C Objectives and Lifecycle Data
4. Planning
 - PSAC
 - SDP
 - Transition Criteria
 - SVP
 - Software Configuration Management and SCMP
 - Baselines
 - Traceability
 - SQAP
 - Certification Liaison
 - SOI-1 (Planning)
5. Requirements Capture
 - High
 - Low
 - Derived
6. Design Capture
 - Description
 - Coding & Integration
 - SOI-2 (Development)
7. Verification, Analysis and Test
 - Verification Activities
 - Robustness
 - Structural Coverage Methods
 - Data and Control Flow Coupling
 - SOI-3 (Verification/Test)
8. Certification Liaison
 - Conformity
 - Production transition
 - Activities
 - SAS
 - SOI #4 (Final Review)
9. Additional Considerations
 - Tool Qualification
 - Previously Developed Software
 - Major and Minor Changes
 - Alternate methods
10. Changes from DO-178B to DO-178C
11. Overview of Supplements
 - DO-330 – Tool Qualification
 - DO-331 – Model-Based Design
 - DO-332 – Object Oriented Technology
 - DO-333 – Formal Methods
12. DO-278A and DO-248C

No Better Choice than Patmos.