



CERTIFICATION OF AIRBORNE ELECTRONIC HARDWARE (DO-254)

This two-day course is geared for the hardware engineer, technical manager, or project manager wanting to understand DO-254 compliance in the greater context of certification as well as within the myriad of supplemental policy documents that now define what it means to comply with DO-254. *UPDATED*: To include content from AC/AMC 20-152A, Order 8110.105B, and more.

<u>Understand the aircraft</u> <u>certification process</u> and how this drives DO-254 compliance

<u>Learn about the role of the</u>
<u>regulators</u>, including FAA, EASA

Explore the DO-254 life cycle and objectives and learn what is applicable to your project

Review DO-254 documentationand discuss common scenarios that must be considered in planning

Examine the latest policy modifications such as Order 8110.105B, AC/AMC 20-152A, AC 00-71, AC 00-72, AC/AMC 20-189

<u>Understand common pitfalls</u> and how to avoid them

KNOWLEDGE INTEGRITY EFFICIENCY 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 this experience and these materials, Tammy Reeve, President of Patmos Engineering Services, developed this DO-254 course offering for DO-254 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

"Tammy has provided valuable training classes to hardware design and quality engineers in our company. The training material provided a fresh perspective on certification processes and allowed us to improve our own internal processes."

Gregg Stavig, Manager, Hardware Design/Verification, Crane Aerospace

Tammy was also selected as the primary developer for a military specific training on DO-254 and has delivered this training for multiple sites with great reviews.

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





DO-254 Training Outline

- 1. Review Certification Overview
 - A. Application of DO-254
 - B. Other Sources of guidance or policy
 - C. System Safety and DAL
 - D. Digital complexity and DO-254
- DO-254 Documentation and Life Cycle Overview
 - A. Missing Objectives?
 - B. What is implementation?
 - C. Appendix A & B
- 3. Writing Hardware Documents
 - A. Planning and the PHAC
 - B. HDP
 - C. HVP
 - D. HCMP
 - E. HCI & VCI
 - F. HPAP

- 4. Hardware Design Process
 - A. Certification oversight
 - B. Planning Phase
 - C. Requirements Phase
 - D. Conceptual Design Phase
 - E. Detailed Design Phase
 - F. Implementation Phase
 - G. Production Transition
 Phase
 - H. Verification & Validation
 - I. Appendix B techniques
- 5. Wrap-up & Summary & References