RTCA DO-160 Qualification: Purpose, Testing and Design Considerations

Instructors: C. Bruce Stephens, Franklin L. Cummins (This course may be taught by one or both instructors.)

Description
This class is designed to educate engineers of all disciplines - hardware design engineers, test engineers, certification engineers, program managers, project engineers and laboratory employees - in DO-160 as it pertains to the equipment qualification in support of aircraft certification. For system and hardware engineers, the intent is to educate and empower them to develop equipment designs that are compliant with DO-160 by design and avoid expensive redesigns to correct issues found late in the development cycle during test. For test engineers, it is intended to assist them to properly develop test plans for their products. Certification engineers, program managers and project engineers will gain knowledge in the process and requirements of conducting the testing. Laboratory employees will learn the details of each DO-160 section and the requirements for certification. For each test section of DO-160, we provide purpose, adverse effects, categories, and a high-level, step-by-step guide through the test procedure and design considerations for passing the test. A high-level review of related FAA advisory material and certification requirements will be discussed.

Highlights
• The aircraft environment
• Overview of RTCA and DO-160
• Advisory circular AC 21-16G
• Requirements, development and management
• FAA test requirements
• Pass/fail requirements

Who should attend?
This class is designed for all engineering disciplines, program and project management employees, certification employees, and test lab personnel responsible for developing qualification requirements for airborne electronic equipment.

Additional Course Format
An online version of this course is also available. See page 54 for details.

“Listening to real DO-160 testing experiences by the instructors was what I enjoyed the most.”
— Aida Urrutia, Electrical Engineer, Jamco America Inc.