Aircraft Lightning: Requirements, Component Testing, Aircraft Testing and Certification

Instructors: C. Bruce Stephens, Kenneth C. Darbonne (This course may be taught by one or both instructors.)

SAN DIEGO, CALIFORNIA
September 19–23, 2016
Monday–Thursday, 8:00 a.m.–4:00 p.m. and Friday, 8:00 a.m.–11:30 a.m.
Course Number AA171110

CEUS
31.5 classroom hours
3.15 CEUs

COST $2,495
Includes instruction, course materials, refreshments and lunches.

EARN A CERTIFICATE
This course is part of the Certificate of Specialization in Avionics and Avionic Components and the Certificate of Specialization in Electromagnetic Effects.

Description
This course provides details for direct and indirect effects of aircraft lightning testing and certification. Requirements for both composite and metallic aircraft, including proper RTCA/DO-160 classifications, are examined. The course will also include a high-level overview of Electromagnetic Compatibility (EMC), High-Intensity Radiated Fields (HIRF), Precipitation Static (P-Static) and Electrical Bonding requirements. The new requirements of Electrical Wiring and Installation System (EWIS) and Fuel Tank Safety (14 CFR 25.981 Amd. 102) will also be addressed.

Highlights
• The electromagnetic environment of the aircraft
• Metallic and composite aircraft requirements
• The history of lightning requirements for aircraft certification
• Direct and indirect effects of lightning testing
• FAA compliance for lightning effects

Who should attend?
This course is designed for all design engineering disciplines, project managers, project engineers and laboratory personnel whose aircraft system may require protection from the effects of lightning.

“The valuable information, based on direct experience, was an important add-on to the full and comprehensive information provided for understanding the lightning phenomenon and relevant investigative approaches.”
—Massimo Semoli, Compliance Verification Engineer (CVE), Pilatus Ltd.