

FAA Type Certification Plan Development (AERO0561)

Instructors: Travis L. Dahna, Scott West (This course may be taught by either instructor.)

Course Description

This course will prepare you to develop a thorough FAA certification plan/project specific certification plan (CP/PSCP) that meets the requirements of Order 8110.4C associated with new type certification projects. Tools for developing a robust compliance checklist (CCL) and the use of appropriate means of compliance will be discussed in detail, including the necessary sections, required information and how to define the appropriate documentation supporting those means of compliance. You will utilize the outline and sample template of a certification plan, which can be crafted to meet your project's specific needs. You will also become familiar with the requirements and activities associated with an FAA conformity plan.

Who Should Attend?

Those actively involved in product or article certification (aircraft/equipment OEM, aircraft modifiers, suppliers and ODA personnel) including airworthiness engineers, consultants, certification specialists, FAA designees (engineering/manufacturing), and FAA Organization Designation Authorization (ODA) unit and support personnel.

Before you register: it is recommended that you 1) complete the following TWO courses OR 2) have sufficient knowledge of the FAA, including direct involvement in the type certification process:

- FAA Aircraft Certification and Airworthiness Approvals (OR the retired course: FAA
 Functions and Requirements Leading to Airworthiness Approval
 AND
- FAA Type Certification Process

Learning Objectives

- Understand the need for a proper Certification Plan/Project Specific Certification Plan (CP/PSCP), Compliance Checklist (CCL), and Conformity Inspection Plan (CIP) supporting a type certification project.
- Review a type certificate data sheet to produce a CCL that matches the certification basis of the aircraft or propose a new certification basis associated with the new type certificate project.

- Accurately identify the typical means of compliance, associate them with project activities/documentation and thoroughly explain the proposed change to the aircraft.
- Use FAA accepted means of compliance guidance to support proper showing activities for the associated project.

Course Outline

Day One

- Introductions/Team Formation
- Review of Title 14 Code of Federal Regulations, FAA Orders, Advisory Circulars, and Memorandums
- Review of Title 14 Code of Feral Regulations, Parts 1, 21, 23, 25, 26, 27, 29, 33, and 183
- Review of FAA Orders and guidance material to assist in the FAA Type Certification Process
- Building Blocks for a Certification Plan
- Development of a strong project description (how much is enough)
- Factors to consider when developing a certification schedule

Day Two

- Pitfalls to avoid when developing a comprehensive certification approach
- Explaining project personnel roles
- Developing a Compliance methodology and why it is imperative
- As available, team interaction and planning for final project and presentation

Day Three

- Compliance Checklist components
- Conformity Inspection Plan development
- Team assignments for certification plan development

Day Four

- Team interaction and planning for final project and presentation
- Presentation of certification plan, compliance checklist, and conformity plan

Classroom hours / CEUs

28 classroom hours 2.8 CEUs

Certificate Track

Aerospace Compliance

Course Fees

Early registration course fee: \$2,295 if you register and pay by the early registration deadline (45 days out).

Regular registration course fee: \$2,495 if you register and pay after the early registration deadline.

U.S. Federal Employee Discount

This course is available to U.S. federal employees at 10% off the registration fee. To receive the federal employee discount, you must enter the code FGVT116 during the checkout process. Please note that you must validate your eligibility to receive this discount by entering your U.S. government email address (ending in .gov or .mil) when creating your online registration profile. This discount is available for both the early registration and regular registration fees.

Instructor Bios

Travis L. Dahna is the Principal member and Electrical Systems and Equipment DER for TD Aerospace, LLC, a professional aerospace engineering design and certification company based in Kansas. He started his career over 25 years ago as an avionics technician and troubleshooter in the United States Navy where he served with distinction and was honorably discharged. As a Gulf War Veteran, Mr. Dahna joined the civilian aviation sector where he has worked on, designed, and certified a wide variety of new products and articles for the last 20 years. He has held positions as a senior electrical engineer for a large aircraft manufacturer and served as the Certification Coordinator for all the factory owned service / modification centers in the United States providing all interface with the geographic FAA Aircraft Certification Offices for all standard certification STC projects. Following his time at the aircraft manufacturer, he assisted in the development of an STC ODA for a consulting company and held the position as the Principal Certification Engineer, while also training as an alternate ODA administrator. Travis has been actively involved in several hundred certification projects, ranging from TC, STC, PMA, and Major Alterations. In addition to duties as a consultant DER (14 CFR Part 23 and 25), including major alterations, he holds positions as a unit member on several TC and STC Organization Designation Authorizations (ODA).

Scott West is the principal engineer for Aeronautix, a professional aerospace engineering and aircraft certification company that holds multiple Federal Aviation Administration (FAA) Supplemental Type Certificates (STC) as well as FAA Parts Manufacturer Approvals (PMA). Mr. West spent eight years with the FAA Wichita Aircraft Certification Office as a program manager, flight test engineer and propulsion engineer. Since 2004, he has been active as an FAA Designated Engineering Representative (DER) utilizing multiple delegated authorizations as a Management, Powerplant Installations and Flight Analyst DER for both Part 23 and Part 25 aircraft. Between his experience with the FAA and his roles as an FAA DER since then, Mr. West has successfully managed and technically supported hundreds of FAA Type Certificate (TC), amended TC, STC and PMA programs.

He holds a Bachelor of Science in Aerospace Engineering as well as a private pilot certificate.

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