

FAA Certification Process Overview

Training Course Objective:

This 4 hour course provides a top-level overview of the Federal Aviation Administration's (FAA) design, production and airworthiness certification processes. Students will gain a familiarity of product and production approval requirements as well as airworthiness certification requirements. FAA regulations, policies, and procedures are integral to these approval processes. The instructor will include case studies when explaining aspects of the processes. The training serves as an introduction to the processes necessary to design, produce, and maintain a safe aircraft to meet the FAA mission of a safe and efficient aerospace system.

Major topics include:

- Certification and Flight Standards organizational structure
- Product approval – primarily type certification
- Production approval
- Airworthiness approvals
- FAA guide to product certification
- Designees
- Continued Operational Safety
- Airworthiness Directives
- Important documents in the certification processes
- Key regulations
- Advisory Circulars, Orders, and Policy
- Regulatory process (special conditions, exemptions, equivalent levels of safety, etc.)
- Working with Authorities of other countries

Instructor and Biography

Marv Nuss is the owner of Nuss Sustainment Solutions, an aircraft engineering consulting and training business. He has consulted and/or trained on certification, continued airworthiness, and aircraft research on four continents.

Marv has 44 years of experience in aircraft fatigue, damage tolerance and continued airworthiness. He has worked FAA Part 23, 25 and 27 and Army, Navy and Air Force projects. Nuss retired from the FAA in December 2011 after serving more than 20 years in a variety of engineering and management roles at the Small Airplane Certification Directorate. He was involved in a broad spectrum of continued airworthiness issues for all sizes and classes of aircraft.

Prior to joining the FAA, Nuss worked for 18 years as a structural fatigue analyst at Bell Helicopter and McDonnell Aircraft companies. He was involved in several design, in-service, and fatigue test projects on several helicopter models and F-15, F-18, AV-8B, and classified fighter aircraft. Through McDonnell Douglas, he lived in Madrid, Spain over a year as part of damage tolerance design team to certify the CASA - Spain small transport airplanes to FAA part 25 requirements.