

# Non Destructive Inspection Techniques

## 5 DAY COURSE

### COMPOSITES

FlightSafety International is pleased to offer a wide variety of Composite Training Options for today's Aircraft Maintenance Technicians. These programs include: Engineering / Design, Manufacturing, and Repair classes to meet your composites education requirements.

This course is designed to introduce the student to specific aspects involved in inspecting composite structures using non-destructive inspection methods and techniques employed by the aerospace industry.

The course contains a balance of theory and practical application performed by an ASNT certified level III instructor. Visual inspection, tap testing, resonance bond testing, and ultrasonic inspection are the four most commonly used NDI techniques that will be discussed and practiced in the workshop.

Upon completion of this course, the client will have a thorough understanding of which methods of inspection are most applicable to a specific structure.

### THEORY COURSE MODULES

- Overview of composite materials and processes
- Solid laminate vs sandwich panel construction
- Types of defects and potential causes
- Challenges in inspecting composites vs metals
- Damage detection and area assessment
- Inspecting for hidden damage
- Considerations for inspecting known damage
- Applicable NDI methods and techniques
- Ultrasonic theory – principles and variables
- Inspection of repaired composite structures

### PRACTICAL COURSE MODULES

- Visual inspection of panels
- Manual tap testing
- Digital tap testing
- Grid layout and documentation of inspection
- Ultrasonic inspection of various flaws in simulated and actual composite panels
- Resonance bond testing on composite panels
- Inspection of secondary bonded joints
- Inspection or repairs

**Total Days ..... 5.0**

### APPROVALS AND LIMITATIONS

#### FAA IA renewal Accepted

Accredited for IA refresher training under Title 14 CFR part 65, § 65.93(a)(4)

**FOR MORE INFORMATION, CONTACT:** +1 201.528.0170 or [sales@flightsafety.com](mailto:sales@flightsafety.com)

Internal Use Only:  
304245

### TRAINING LOCATIONS

Wichita, Kansas