



Aviation Structures Technician Certification Competencies

Introduction to Aviation

- Critical Thinking Skills
- Human Factors in Aviation Maintenance
- Organizational Skills
- Quality Management Systems
- Terminology & Acronyms

Shop Math

- Application of Shop Math

Personal and Environmental Safety

- Accident/Incident Reporting
- Clean as you go
- FOD
- Lifting Techniques
- Lockout/Tagout
- MSDS's
- OSHA Regulations
- PPE
- Safe Work Habits
- Tool & Hardware Inventory (Shadowing, Tethering, Sponge Count)
- Work Hazards

Aircraft Materials and Fasteners

- Composites Fabrication Process
- Fasteners
- Heat Treatment
- Material Composition
- Non-Metallic Materials
- Sealing Materials
- Sheet Metals

Blueprints and Manuals

- Blueprint Reading
- Engineering Documentation
- Research

Federal Aviation Regulation (FAR's)

- ATA Codes
- FAR's

Documentation

- Component Specific (including Condition)
- Routine vs. Non-routine
- Sign Off
- Technical Writing
- Work Progress/Turnover

Precision Measuring Equipment

- Calibration
- Tools & Equipment (Assemble, Fabricate, Install, Repair)
- Torqueing Fasteners

Rivet Installation and Removal

- Countersinking
- Deburring
- Drilling
- Layout
- Reaming
- Rivet Removal

Fabrication

- Fabrication Materials & Processes
- Fabricate per Sample Part
- Polishing
- Tool/Equipment-Fabrication

Assembly

- Assembly Fixtures
- Assembly Procedures
- Fitment
- Tools & Equipment-Assembly

Repair

- Corrective Action
- Inspection/ Damage Assessment
- Repair Procedures
- Tools & Equipment-Repair
- Visual Inspection