



**Course:** Aircraft Battery Fundamentals

**Course Number:** CGTCACBTRFND01

**Course length:** 8 hours

**Prerequisite:** None

**Instructor to student ratio:** 10:1

**Training Syllabus:** Aircraft Battery Fundamentals (CGTCACBTRFND01)

## **Course Description**

The Aircraft Battery Fundamentals course provides instruction in the maintenance and repair of aircraft lead-acid and nickel-cadmium storage batteries. Topics include battery design, safety, storage, facilities requirements, inspection, servicing, and testing of aircraft batteries. Students will be introduced to various aspects of battery shop operation such as workflow, technical orders, and the documentation required for return to service.

### **Battery Shop Fundamentals**

- Facilities Requirements
  - Distinct spaces for lead-acid and Ni-Cad batteries
  - Temperature control
  - Ventilation requirements
  - Prevention of cross-contamination
- Safety, PPE, and emergency equipment
- HAZMAT considerations and disposal
- Applicable Technical Orders, AFI's, and COTS manuals

### **Lead-Acid Batteries**

- Theory and design
- General maintenance requirements
- Cleaning, visual inspection, and servicing
- Battery testing (includes limitations)
- Charging and capacitance check

### **Ni-Cad Batteries**

- Theory and design
- General maintenance requirements
- Cleaning, visual inspection, and servicing
- Battery testing (includes limitations)
- Charging and capacitance Check

#### **402 CMXG Battery Shop Gated Work-flow**

- Induction of batteries into the work-center
- Inspection & operational/functional testing
- Return to service and documentation
- Storage of serviceable batteries
- Disposition of unserviceable batteries