

## **BOSTONAIR TECHNICAL TRAINING LTD**

# **FUEL TANK SAFETY PHASE 1 & 2 COURSE SYLLABUS**

### **TRAINING OVERVIEW**

This training is aimed at equipping students in their everyday tasks to account for the challenges posed by the Fuel Tank System Safety issues, thereby ensuring the continued airworthiness of affected aircraft and maintain safety standards in the industry.

### **TRAINING OUTCOMES**

After completing the training, one will be able to:

- Understand background of historical FTS accidents and incidents
- Understand the concept of Fuel Tank Safety and CDCCL
- identify appropriate documentation relating to Fuel Tank Safety
- Identify typical FTS defects
- Understand the basics of maintenance instructions for inspection.

### **CHAPTER 1: Introduction and Background to Fuel Tank Safety**

History of Fuel Tank Design  
Fuel Tank Locations

Types of Jet Fuel  
Jet Fuel Characteristics

### **CHAPTER 2: Historical Incidents**

Historical Incidents  
Historical Incidents (Stats)  
TWA 800 Incident

- Introduction
- Background
- Investigation

- Findings

Research into Findings  
Other Notable Incidents  
Transmile B727 Incident  
TWA 800 Incident Response

### **CHAPTER 3: Resulting Legislation**

SFAR 88  
A Global Harmonisation  
TGL 47 & INT/POL/25/12  
INT/POL/25/12 and EASA

EASA Decisions  
Phase 1 Training  
Phase 2 Training

### **CHAPTER 4: TC and STC Corrective Actions**

Airworthiness Limitations  
Airworthiness Limitation Items  
CDCCL

Maintenance Specific Items  
Enhanced Zonal Analysis Procedure (EZAP)

### **CHAPTER 5: AWL Identification**

AWL Examples  
CDCCL Examples

ALI/CDCCL Maintenance Recording  
CDCCL in EWIS



Service Bulletins

## **CHAPTER 6: Fuel Tank Hazards**

Useful Terms

- Lower Flammability Limit
- Flammable Range
- Flash Point
- Intrinsically Safe
- Oxygen Deficiency

Fuel Tank Hazards

- Potential Hazards
- Fuel Tank Maintenance Considerations
- Chemical Hazards

## **CHAPTER 7: Component Compliance**

Spare Parts

- CDCCL Requirements

## **CHAPTER 8: Flammability Reduction**

SFAR 88 Recap

FAR25 / CS-25

Flammability Reduction and Ignition Prevention

- Physical Hazards

Maintenance Observers

Emergency Response Plans

Jet Fuel Hazards

Nitrates and Nitrites

Oxygen Levels

Aircraft Damage

Foreign Object Debris

Protective Clothing

General Practices Procedure

EASA Form 1

- Serviceable Tag

The Fire Triangle

Fuel Tank Inerting

NGS in Operation

ATA Chapter 47

## **FINAL EXAM**

**Estimated Duration: Approximately 150 minutes**

**END**

