BOSTONAIR
TECHNICAL TRAINING
EASA Pt 147 Approval UK.147.0085

BOSTONAIR TECHNICAL TRAINING LTD
ONLINE ROOT CAUSE ANALYSIS ESSENTIALS

- Outline of course purpose and contents.
  - Familiarise process owners/area managers with the basic principles of Root Cause Analysis.
  - Provide practical examples of RCA methods applications.
  - Improve safety awareness across all industries.

- History of Root Cause Analysis (RCA)
  - Sakichi Toyoda “king of Japanese Inventors”.
  - William Deming: Fourteen points.
  - Six Sigma.

- Why Do We Need Root Cause Analysis?
  - Complying with Regulations
  - Preventing repeat findings & Incidents
  - Understanding the problem
  - Contributing factors
  - Learning from the event.
  - Future Improvements

- Skepticism
  - Top Down Approach

- Correction(s) vs Corrective action
  - Article 2, Definitions, (7 & 8) of Commission Implementing Regulation (EU) No. 628/2013:

- Why do we need Root Cause Analysis?
  - Management.
  - Understanding Problems.
  - Proactive Mechanisms

- When can we use a Root Cause Analysis?
    - Maintenance Error
    - Occurrence Report
    - Safety Reports (SMS)
    - Customer's Complaint
    - Problem Solving

- Five crucial tips for Root Cause Analysis

- The Root Cause Analysis Process.
    - Define the Problem – Collect Data – Identify Causal Factors – Identify Root Cause – Recommend/Implement Solutions.
    - Forward Planning
    - Checklists

- Identifying the Root Cause
    - People.
    - Procedures.
    - Equipment.
    - An Environment of operation.
    - Five Whys
    - Fault Tree Analysis
    - Ishikawa Diagram
    - The Bowtie Method
    - Tripod Method
    - Failure Mode & Effects Analysis (FMEA)

- Identify & Implement Solutions.
    - Take a step back and look.
    - Short term and long term.
    - Pre-Mortem.
    - Use of Poka-Yoke.
    - Continuous Improvement.

- Error Management
    - Reason's Swiss Cheese Model

- A Risk Assessment Matrix
    - Probability x Severity = Risk Rating

- Preventative Action

- Example Audit Reports

- Example Corrective Action Plan

- Final Examination.