

# AERO Minor and Major Incident Investigation Workshops Overview

## Minor Incident Cause Analysis Workshop (2-days)

### Objectives

Our Minor Incident Cause Analysis Workshop improves the capability of organizations to perform effective investigations for moderately significant problems, thereby improving safety, quality and productivity. The course equips highly experienced analysts, individuals seeking initial training as analysts, and managers responsible for incident investigations with knowledge and skills that facilitate performing better investigations and identifying stronger corrective action plans.

### **Topics include**

- AERO and Human performance fundamentals from a cause analysis perspective
- Proven cause analysis processes, tools, and techniques
- Structured approaches for determining the Extent of Condition
- Analyzing prior occurrences for relevance to the incident under investigation
- Identifying and correcting all of the causes behind the human behaviors and equipment failures that produced the incident
- Identifying and correcting contributing factors that allowed the incident to be more consequential than it otherwise would have been
- Elements of lean and effective corrective action plans

#### Attendees will participate in numerous hands-on experiential learning activities, such as:

- Determining Human Error Types
- Interviewing
- Barrier Analysis
- Event and Causal Factors Charting
- Fault Tree Analysis
- Why Analysis
- Extent of Condition Determination
- Identifying Optimal Corrective Actions

#### Duration & Delivery Format: 2 Days - Classroom







# Major Incident (Root Cause) Analysis Workshop (4-days)

#### Abstract

This 4-day session mixes AERO and human performance fundamentals with causal analysis and practice of techniques. *Unlike many courses that use proprietary techniques, there is no "one right way" so attendees are taught how to perform the analytical techniques and how use of those techniques lead them to the root causes of events, resulting in effective recurrence control actions.* 

## Objectives

- Improve the capability of an organization to solve complex or highly significant problems and develop actions that provide recurrence control
- Improve the understanding of the analyst in human performance fundamentals
- Improve the capability of the analyst to solve complex problems
- Prepare the Root Cause analysts to perform quality causal analysis
- Practice some of the commonly used techniques of root cause analysis
- Improve the understanding of common pitfalls in root cause analysis, and how to overcome these pitfalls
- Provide tools for performing quality root cause analysis

## **Course Contents**

- AERO and Human Performance fundamentals and basics from a cause analysis perspective
  - Definitions & Human Error Basics
  - Performance modes
  - Traps, Triggers & Tools<sup>©</sup>
  - Procedure Error Traps
  - Deviation Potential and Violations
  - Inappropriate Action Analysis
- Problem Solving Basics
- Level of Effort and Graded Approach to Causal Analysis
  - Condition Evaluations
  - Apparent Cause Analysis
  - Root Cause Analysis
- RCA Big-Picture Approach
- RCA Flow Path

- Conduct of a Previous Similar Event and Extent of Condition Analysis
- Extent of Cause Analysis
- Organizational and Programmatic Analysis
- Root Cause Analysis Techniques (workshop and experiential learning)
  - Task Analysis
  - Barrier Analysis
  - Change Analysis
  - Event & Causal Factors Charting
  - Why Analysis
- Constructing a Failure Scenario
- Developing Corrective Actions
- Minimum Report Standards
- Typical root cause failures
- Management support of root cause



