

## T-003 ROOT-CAUSE ANALYSIS WORKSHOP

**A comprehensive, hands-on workshop on root-cause analysis that explains the tools available and shows how to apply them in real-life scenarios**

The course utilises a mixture of lectures and workshops to develop the methodology applied in root-cause analysis. The lectures cover the structure of the root cause analysis process breaking it down into four sequential phases. Participants are then given workshop exercises to utilise their learning for each of the phases. During the workshops, participants are given the opportunity to develop their team-working and facilitation skills.

This workshop was presented around the world in over 36 countries, with more than 5,000 participants attending the classes over 31 years.

Comprehensive lecture notes are provided with the course.

### **Who should Attend?**

The course is suitable for the following:

- Plant maintenance engineers
- Reliability engineers and operators
- Project and design engineers

### **Duration**

5 days

### **Course structure and content**

A 5-day technical course aimed at responsible managers and engineers:

- Introduction
- Workshop: A Structured Approach
- **Phase 1** – Incident Capture
- **Phase 2** – Problem Analysis
- Workshop: Background history
- Review of Workshop & Learning
- **Phase 3** – Root Cause Analysis
- Workshop: Tools & Techniques
- Workshop: Piper Alpha
- Review of Workshop & Learning
- **Phase 4** – Solutions Development
- Workshop: Car Problems
- Review of Workshop & Learning
- Facilitation
- Workshop: Flight 1141
- Review of Workshop & Learning
- Application to Failure Diagnosis
- Course review

### **Training Outcome:**

On completion of the course, you should be able to:

- Apply a single methodology to analyse all varieties of undesirable incidents.
- Choose effective solutions to reduce the risk of causes recurring.
- Improve their questioning and facilitation skills for analysing incidents.

### **Course Presenter**

**Sid Radcliff:** Sid was employed by Shell for 35 years. He achieved positions of Principal UK Metallurgist; UK Regional Manager, Rotating Equipment; and Global Focal Point for Equipment Failure Diagnosis. Sid's major role was in Failure Diagnosis where he developed a specialist team carrying out a large number of equipment failure investigations, many with substantial financial implications. Sid is a recognised international expert on gas turbines, high-temperature corrosion and component failure diagnosis. He has written a substantial number of papers on these topics and was a regular guest speaker at international conferences and seminars. He has also acted as chairman of UK- and European-sponsored research programmes on high-temperature corrosion.