



Proudly partner with



ASSET MANAGEMENT BC

LIVE TRAINING WEBINAR SERIES

**FAILURE ANALYSIS AND
PROBLEM SOLVING**

Performance Through Knowledge



ASSET MANAGEMENT BC

AMBC is the greater community of any person, organization or agency engaged in, or has an interest in, asset management. Asset Management BC is governed by a Partnership Committee, comprised of 10 partners.

Our objective is to create and facilitate opportunities to share knowledge, tools, and information respecting integrated asset management.

Asset Management for Sustainable Service Delivery: A BC Framework

The Framework establishes a high-level, systematic approach that supports local governments in moving toward service, asset, and financial sustainability through an asset management process.

The Framework focuses on desired outcomes rather than prescribing specific methodologies that allows local governments to develop and implement an approach that can be both incremental and measured, tailored to the individual needs and capacity of each local government.



#OurAssetsMatter

Find out more about Asset Management BC:

On the web: assetmanagementbc.ca

On LinkedIn: [linkedin.com/company/asset-management-bc](https://www.linkedin.com/company/asset-management-bc)

The GlobalReady Academy Inc. (“GlobalReady”) provides a professional learning environment in asset management where individuals and organizations come together to build the knowledge, skills, and organizational capability required to achieve sustained high performance.

Led by recognized subject-matter experts, our competency development programs combine established world-class principles and practices with modern learning methods and digital tools — translating knowledge into practical application and measurable results.

We use a knowledge stream approach to capture all essential topics within that stream. These are grouped and aligned with each person’s role and responsibilities, providing a comprehensive training program focused on individual requirements and business performance needs.



Our five knowledge streams include:

- Team-Based Work Control Management
- Failure Analysis and Problem Solving
- Establishing a Proactive Maintenance Program
- Organizational Engineering
- Establishing an Asset Management Strategy

The groups are kept small, the material is broken down into manageable topics, and each topic is supported with hands-on exercises and practical case studies.

The training programs are based on published books and industry standards that can be referenced during and after the workshop.

We believe that it is important that each participant is empowered with the knowledge needed to meet the challenges of their organization and that they are competent and effective in doing so.

**We do not just teach knowledge;
We foster commitment for your future.**

Workshops can be held at your facilities, at an off-site location, or online.

Failure Analysis and Problem Solving

Progressive organizations recognize the impact of effective problem solving on the performance of their site and establish programs to develop these skills and techniques within their workforce.

There are two basic types of problem-solving techniques: Troubleshooting and Cause Resolution. These techniques are complementary.

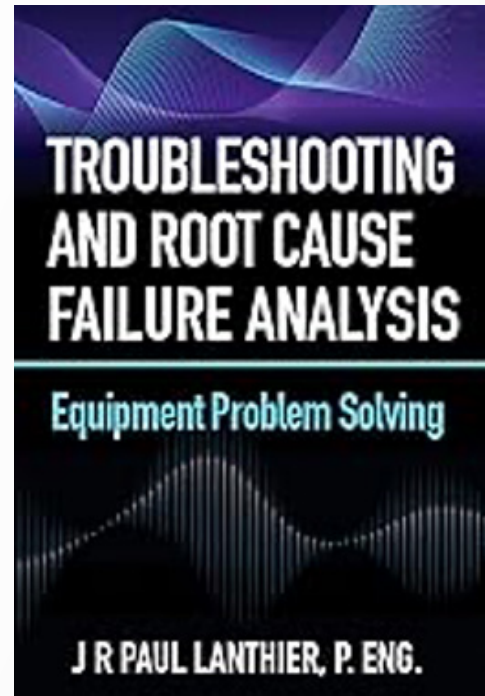
When properly applied, they provide value to the organization by maintaining or increasing asset and site performance.

Solving the issue rapidly, preventing its recurrence, or both has a direct impact on the asset's performance and the site's success.

Failure Analysis and Problem Solving

The training webinar is based on the book Troubleshooting and Root Cause Failure Analysis. The book is available from Amazon.

The book and Exercise Journals are used to support the training. The latter includes exercises, case studies and tests.



The following is an extract from the book:

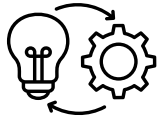
“In the field of asset management, good problem-solving practices are among the most important elements to maximizing equipment uptime, and by resolving the root cause of the failure, increasing equipment reliability. To be successful, an organization must be able to quickly resolve the effects of a failure so it can go back to normal and, in some cases, determine the cause of the failure so a permanent solution can be identified and implemented.

These are two distinct techniques (troubleshooting and root cause analysis), with distinctive requirements. Both are important, and one cannot exist without the other if we want to be efficient and effective in resolving asset failures.”

This Failure Analysis and Problem Solving live webinar series introduces a structured, practical approach to resolving asset failures effectively and permanently. Participants will learn two basic types of problem-solving techniques: Troubleshooting and Cause Resolution; recognize causes of failure and different failure types; collect and organize relevant information, and apply proven analysis techniques.



Failure Analysis and Problem Solving



Why Participate



- **SAE-LICENSED TRAINING PROVIDER**

Officially licensed by SAE International to deliver training on their globally recognized RCM standards.

- **WORLD-LEADING SUBJECT MATTER EXPERTS**

Workshops led by world-leading physical asset management experts and based on published books and industry standards. Learn not just what to do, but why it works in real operations.

- **LIVE TRAINING WEBINAR**

This is not pre-recorded content. Participate in live, instructor-led sessions with structured learning, examples, and opportunities for interaction and clarification.

- **REAL-WORLD APPLICATIONS**

The training webinar series helps participants move beyond theory to consistent problem-solving practices.

- **LEARN WITH PEERS ACROSS BRITISH COLUMBIA**

Engage with asset, maintenance, reliability professionals from across BC.



Who Should Participate

- Asset Management and Infrastructure Leaders
- Maintenance, Facilities, and Operations Managers
- Engineering, Reliability, and Maintenance Engineers
- Maintenance and Operations Supervisors
- EHS and Quality Managers/Officers
- Continuous Improvement professionals
- Maintenance Technicians and Operators



Failure Analysis and Problem Solving

SESSION 1: INTRODUCTION TO PROBLEM SOLVING

Problem-solving is the act of recognizing a problem, determining its cause(s), and identifying and implementing the appropriate solution(s) to resolve (or at least mitigate) its consequences. There are two basic types of problem-solving techniques:

- Troubleshooting: focused on resolving the effects quickly so that we can go back to normal, or near-normal, operations.
- Cause Resolution: focused on determining the cause of the failure so that a permanent solution can be identified and, if approved, implemented.

Agenda:

- Quantifying the Benefits
- Troubleshooting Overview
- Root Cause Failure Analysis Overview

SESSION 2: UNDERSTANDING FAILURES

The starting point is the failure itself. The ability to properly diagnose the problem is a key factor in resolving the issue and enabling the organization to meet operational demands safely, respect the environment, and do so at the lowest cost.

Agenda:

- Causes of Failure
 - Physical Causes
 - Human Causes
 - Latent Causes
- Types of Failures
 - Sporadic Failures
 - Chronic Failures
- Collecting and Organizing the Information
 - Interviews and Reports
 - Data Collection and Classification
 - Brainstorming Exercises

Failure Analysis and Problem Solving

SESSION 3: ANALYZING THE FAILURE AND CONDUCTING AN RCFA

For the RCFA to be successful, it must follow a structured process and be facilitated. This includes information preservation, collection and organization, analysis of the information, and the development of an action plan to resolve.

Agenda:

- Analyzing the Failure
 - 5-Whys
 - Logic Tree
 - Solution-Focused Logic Tree
- A Framework for Conducting RCFA
 - Pre-Analysis
 - The 8D Process
 - The Final Report
 - Evaluating the Results

Instructor Profile



Jim Mair, MMP

A Maintenance & Reliability Professional, MMP, and RCM2 Practitioner, Jim is a long-standing advocate and practitioner of reliability-driven performance improvement.

With over 30 years of experience in maintenance and reliability, Jim combines best-in-class technical expertise with practical, real-world application to support the people and organizations he works with.

As a Senior Consultant at GlobalReady/Summit Reliability, Jim actively engages with key clients, serving as a technical resource in the design and development of asset performance improvement strategies. His experience spans a wide range of industries and systems, including metal processing equipment, water and wastewater systems, SAGD operations, mobile equipment, and stationary plant assets, as well as the implementation of condition-based monitoring programs.

Jim is also a strong proponent of the Theory of Constraints, drawing on the teachings of W. Edwards Deming and Eli Goldratt. He has applied this theory in facilities requiring significant operational improvement, using the enhanced methodologies of the Decalogue™ by Dr. Domenico Lepore.

Schedule

| Activity | Date | Time | Duration |
|-----------|---------------------|-------------------|----------|
| SESSION 1 | Wednesday, April 1 | 1 pm — 3 pm (PST) | 2 hours |
| SESSION 2 | Wednesday, April 8 | 1 pm — 3 pm (PST) | 2 hours |
| SESSION 3 | Wednesday, April 15 | 1 pm — 3 pm (PST) | 2 hours |



globalready.academy

+1 905 467 7918

info@globalready.academy

1011 Upper Middle Rd., Suite 1423
Oakville, ON L6H 5Z9
Canada