



Total Asset Integrity Management: Going Beyond PAS 55-2000

Maximizing the Value of Assets for Profit, Reliability & Maintenance Excellence
and Regulatory Compliance

On-Site Training Opportunities

Put TMEII's expertise in
maintenance and reliability
training to work in your
organization

TMEII is a results-oriented resource and provider of maintenance and reliability initiatives. You can benefit from our experience of presenting hundreds of on-site training and consulting sessions for large and small companies world-wide.

Contact Pete Peters at
919-270-1173 or

Pete@PRIDE-in-Maintenance.com for
more information!



100% Guarantee

A complete refund is provided if you
cannot achieve a 10 to 1 return on
investment from this training.

Ralph W. Peters
President, TMEII

Overview:

Mission-critical asset integrity management (AIM) topics from this **TrueWorkShop™** will help all operations optimize safety and profits, to mitigate challenges, improve reliability and maintenance and production performance. A successful upstream Asset Integrity Management program incorporates design, maintenance, inspection, process, operations, and management concepts. All these disciplines impact the integrity of infrastructure and equipment. You will review the best practices required to achieve a comprehensive, fully integrated system for asset integrity with a plant culture directed at gaining greater lifetime asset effectiveness, true value, safety, availability, and increased profitability from production and manufacturing assets.

You will take away key tools for improving Asset Integrity Management, including design considerations, process safety management (PSM), mechanical integrity, risk based inspection (RBI) and maintenance excellence, operational and process support, corrosion, metallurgy, risk analysis, root cause analysis (RCA) and principles of Continuous Reliability Improvement (CRI) and much more. The electronic references you receive will provide an unsurpassed knowledge base for application of session topics.

**This TRUEWORKSHOP™ is Tailored for Participants for
Manufacturing Plant and Fleet Maintenance, Pure
Facilities Maintenance and Healthcare Operations**

TMEII CONTACTS:

Pete at 919-270-1173 (Pete@PRIDE-in-Maintenance.com) or
Anne at 919-896-5368 (Anne@PRIDE-in-Maintenance.com)
to coordinate a custom in-house session.

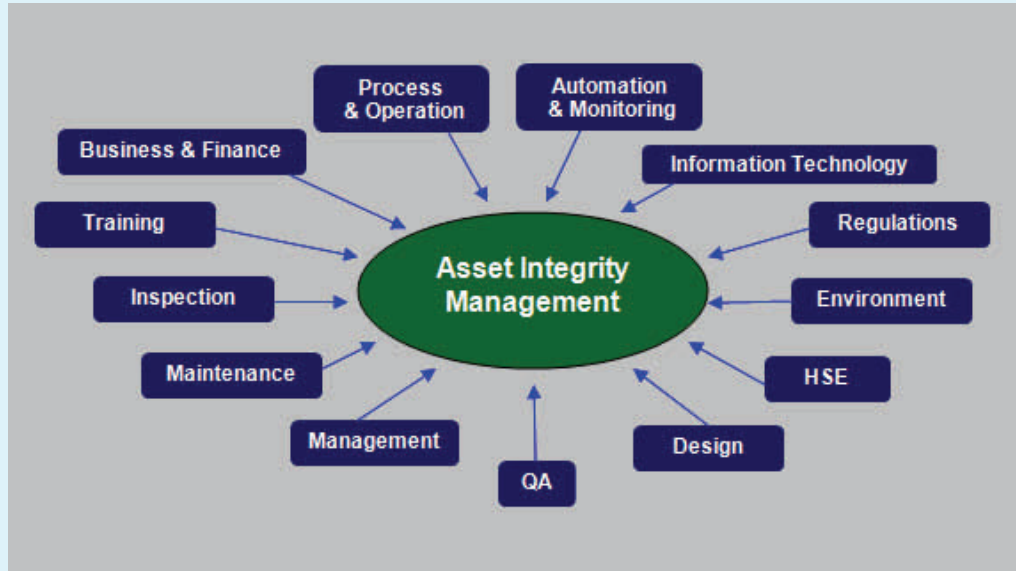
Contact Pete Peters at 919-270-1173 (Pete@PRIDE-in-Maintenance.com) or
Anne at 919-896-5368 (Anne@PRIDE-in-Maintenance.com) for more information!

Total Asset Integrity Management: Going Beyond PAS 55-2000

*Maximizing the Value of Assets for Profit, Reliability & Maintenance Excellence
and Regulatory Compliance*

Scope:

The scope of Asset Integrity Management program is very broad. To be successful it must incorporate asset design, maintenance, monitoring, inspection, process, operations, information technology and management concepts, since all these disciplines impact the integrity of infrastructure and equipment.



Your Benefits

Key Benefits Asset Integrity Management topics covered will help each delegate to:

- Optimize inspections with risk-based practices and Non Destructive Testing (NDT)
- Define reliability & maintenance excellence best practices and integrate with AIM strategies
- Extend intervals between planned outages and deduce forced outages
- Increase asset and over all plant availability and capacity
- Reduce critical asset life cycle cost and overall plant maintenance cost.
- Use in-service inspection with routine operator based and specialist surveillance
- Condition-based Maintenance including optimization studies and RCM
- Vibration Induced Fatigue Failure solutions
- Pipeline Integrity Management

Additional Benefits

- Maximizing reliability, availability and maintainability of equipment
- Improved understanding of asset condition
- Improving safety and reducing risk
- Improved efficiency of asset management
- Enhancing plant operations, performance and profit
- Optimizing maintenance and inspection costs
- Improving personnel safety and performance
- Optimizing sparing and MRO Materials Management
- Compliance with corporate and industry regulation and legislation
- Improving technical personnel's knowledge, know-how and hands on expertise

We Personally Guarantee This TrueWorkShop™!

We will give you the firepower and knowledge needed to reinforce your current maintenance needs to the Top Leaders in your organization. We can personally help you make a difference in the total operations success of your organization after you attend this event! Top Leaders must clearly understand your needs and the consequences of gambling with maintenance costs.

Contact Pete Peters at 919-270-1173 (Pete@PRIDE-in-Maintenance.com) or
Anne at 919-896-5368 (Anne@Pride-in-Maintenance.com) for more information!

Total Asset Integrity Management: Going Beyond PAS 55-2000

*Maximizing the Value of Assets for Profit, Reliability & Maintenance Excellence
and Regulatory Compliance*

Who Should Attend

- Storeroom Managers
- Storeroom Supervisors
- Maintenance Planners
- Maintenance Schedulers
- Storeroom Staff
- Maintenance Foremen
- Maintenance Supervisors
- Maintenance Coordinators
- Plant Directors
- Plant Engineers
- Facility Managers
- Property Managers
- MRO Purchasing Procurement Staff
- Maintenance Managers

Why You Should Attend this TrueWorkShop™

This is today's newest and most practical **TrueWorkShop™** for Asset Integrity Management (AIM) that brings together all elements and best practices that must be integrated into a successful AIM process. A **TrueWorkShop™** you must attend to stay abreast of international standards and best practices. Profit optimization requires effective physical asset management from design, selection, maintenance, inspection and renewal. In turn, asset integrity plays a key role in determining the operational performance, safety and profitability of your industry. Asset Integrity is the ability of an asset to perform its required function effectively and efficiently whilst safeguarding life and the environment.

The related management activities ensure that the people, systems, processes and resources which deliver integrity, are in place, in use and fit for purpose over the whole lifecycle of the asset. This **TrueWorkShop™** is about providing solutions that ensure the integrity of engineered systems (for instance, offshore structures, ships, pipelines and process systems within refineries, gas plants) is maintained throughout the anticipated service life.

What is a TrueWorkShop™?

The Maintenance Excellence Institute International believes the **principles** and **practices** covered can be taken back and put into practice for a true return on investment for the training we provide:

- Extensive practical exercises on key topics
- Extensive idea sharing and instructor's case studies from over 300 plant and facility sites.
- Each attendee with today's most comprehensive benchmarking tool; *The Scoreboard for Maintenance Excellence* to complete prior to start date. Results will be strategic, tactical and operational. "Do It Now" plans of action for the 27 best practice topics.
- A clear understanding of today's best practices is so important to successful implementation.

We have helped very large organizations develop a client specific **Scoreboard for Maintenance Excellence**. We have found that best practice training is necessary so an organization truly understands the full potential of our assessment results.

Understanding the True Value of Maintenance:

Regardless of the type of operation, Top Leaders must understand the "true value of maintenance."

Maintenance Leaders must develop and nurture an organizational culture that clearly supports long-term continuous maintenance improvement.

Training for Maintenance Excellence supports our belief in the basics and building upon basic best practices as the foundation for advanced maintenance practices that achieve reliability and maintenance excellence.

If results from this TrueWorkShop™ do not provide at least a 10-to-1 Return-on-Investment, to cover your time and training costs, you will receive a complete refund.

Ralph W. Peters
Founder-President-Coach for TMEI

Contact Pete Peters at 919-270-1173 (Pete@PRIDE-in-Maintenance.com) or
Anne at 919-896-5368 (Anne@Pride-in-Maintenance.com) for more information!

Total Asset Integrity Management: Going Beyond PAS 55-2000

*Maximizing the Value of Assets for Profit, Reliability & Maintenance Excellence
and Regulatory Compliance*

On-site TrueWorkShops™ are customized to meet your specific goals and objectives. Below is a sample outline which can be modified as needed to ensure the results you are looking for.

Day One:

Introduction and Team Assignments for AIM Presentation

- Teams Formed & Top 5 Areas for AIM Improvement Established
- Teams Work Next 2 Days
- Why Team Work Works?

Modern Approaches to Asset Integrity Management (AIM)

- Sad Lessons Learned from Case Studies Around the World
- Delegate Discussion of Actual Examples
- Overview Key International Standards; ISO, PAS 55, API, NACE, NFPA, ASME etc.
- Asset Integrity Management: Make it “Total Asset Integrity Management” TAIM
- Management versus Leadership: Become a Physical Asset Integrity Leader.
- Continuous Reliability Improvement (CRI) and How It Supports TAIM

Basics of Asset Management and Asset Integrity

- Asset Management versus Asset Integrity
- Defining Asset Criticality
- Risk Assessment Techniques
- Life Cycle Costing
- Delegate Exercise and Case Study: BP Texas City Refinery Explosion

Reliability Centered Maintenance (RCM)

- Principles of RCM
- The Seven Key Elements of RCM
- Delegate Exercise: Gas turbine exhaust stack
- Reliability Analysis
- Summary Proven Tools that support AIM
- Root Cause Analysis (RCA)
- Failure Mode and Effect Analysis (FMEA)
- Delegate Exercise: Conduct a RCA and FMEA

Reliability Analysis

- Summary Proven Tools that support AIM
- Root Cause Analysis (RCA)
- Failure Mode and Effect Analysis (FMEA)
- Delegate Exercise: Conduct a RCA and FMEA

Day Two:

Reliable Maintenance Planning, Estimating & Scheduling of AIM Resources

- Benefits of Effective Planning/Scheduling to Asset Management
- How to Measure and Improve Asset Productivity
- How to Measure and Improves Craft Labor Productivity
- Delegate Exercise: Determining possible Gained Value of
- Craft Productivity
- Asset Productivity

Maintenance and Asset Information Systems

- Asset Integrity Monitoring Systems
- Using CMMS/EAM for AIM and Maintenance Excellence
- Software Tools for Continuous Monitoring and Condition Based Maintenance (CBM)
- Delegate Exercise: Complete the CMMS Benchmarking System spreadsheet for their current CMMS

Measurement of Asset Integrity Performance

- Keys Metrics (KPI's) for AIM and Overall Maintenance Excellence
- Develop Your Reliable Maintenance Excellence Index
- Delegate Exercise: Develop KPI's for Asset Integrity

Day Three:

Maintenance Optimization Starts With “Where You Are Right Now”

- Benchmarking Current Maintenance and Reliability Performance
- The Scoreboard for Maintenance Excellence
- The CMMS Benchmarking System
- Develop a Successful Asset Integrity Strategy
- Implementing a Total Asset Integrity Management Process
- Key elements of AIM Strategy
- Design and maintenance,
- Monitoring and Inspection
- Process and Operations
- Information Technology and Leadership Requirements

Contact Pete Peters at 919-270-1173 (Pete@PRIDE-in-Maintenance.com) or Anne at 919-896-5368 (Anne@Pride-in-Maintenance.com) for more information!

Total Asset Integrity Management: Going Beyond PAS 55-2000

*Maximizing the Value of Assets for Profit, Reliability & Maintenance Excellence
and Regulatory Compliance*

Day Three (cont'd):

Overview of Risk Based Maintenance (RBM)

- How RBM Expands Scope of RCM
- AIM and RBM

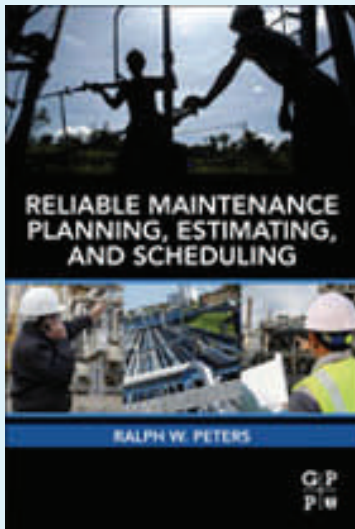
Team Presentations:

- Delegate Exercise: Delegates will define their Top 5 Areas for Improvement as a Team (of 3-4) they will review all individual issues and identify action plans to present to the class and their management.
- Objective is to implement TrueWorkShop™ topics from this AIM TrueWorkShop™

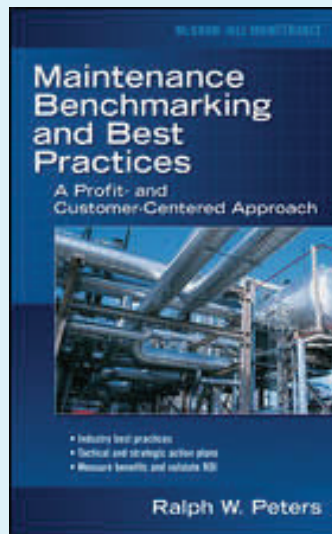
MANY CASE STUDIES AND EXERCISES!!!

Extensive Knowledge base of References to Take Home:

This workshop is based on Pete's two books:



*Reliable Maintenance Planning,
Estimating and Scheduling*



*Maintenance Benchmarking and
Best Practices*

Take An Important First Step:

This training process is for application and not theory and is for both the public and private sector in plant maintenance and pure facilities maintenance.

Remember, we guarantee this TrueWorkShop™ will help provide you with the important steps to improve the maintenance process and the business side of the maintenance in your operation.

Even in Good Economic Times Maintenance is Forever!

TMEII provides more electronic references for all TrueWorkShops™ than any other series of courses now being offered from around the world.

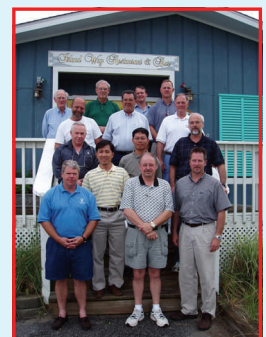
Each attendee will receive e-book copies of these two major books plus many, many more valuable topic references on CD. The electronic versions are included to allow easy application and duplication of all course materials. Attendees receive all PowerPoint's used and "one of the largest Maintenance, Reliability and MRO Materials Management Glossary" currently available.

TMEII believes in providing each attendee an extensive knowledge base to support professional development well beyond actual class time.

Training is Not Over When it's Over!

Your company will benefit most if you attend with a 3 or 4 person company team which will work together. You return to your organization with the new knowledge and team support for PM and PdM along with your new plans for reliability and maintenance excellence. We invite your Top Leaders, Maintenance Leaders and Craft Leaders to attend as a team. The workshop "is definitely not over when it's over." **Yogi Berra once said, "It ain't over until it's over!"**

Your session is definitely not over when it's over! Following completion of this TrueWork-Shop™ a personalized follow-up will be scheduled for each attending organization. Our one-on-one coaching is to help you apply the key topics and to implement your plan of action. Implementation is your key to results and we want to help you make that happen!



Contact Pete Peters at 919-270-1173 (Pete@PRIDE-in-Maintenance.com) or
Anne at 919-896-5368 (Anne@Pride-in-Maintenance.com) for more information!

Total Asset Integrity Management: Going Beyond PAS 55-2000

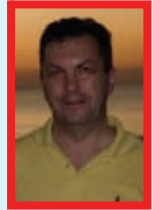
*Maximizing the Value of Assets for Profit, Reliability & Maintenance Excellence
and Regulatory Compliance*

Your Instructors and Coaching Team



Ralph W. (Pete) Peters the Founder/President of The Maintenance Excellence Institute International is your primary instructor. His experience of over 40 years has included being a manufacturing plant manager at two sites; director of facilities management. He has had extensive maintenance experience within the US Army beginning in Vietnam (1970) and with the US Army Corps of Engineers building what is now called, the National Highway. He consults and provides maintenance best practice training in over 30 countries, written maintenance chapters in four books as well as a book on *Maximizing the Value of Your CMMS*. In 2006, he wrote and published *Maintenance Benchmarking & Best Practices* for McGraw-Hill's professional book division. In 2015 he completed *Reliable Maintenance Planning, Estimating and Scheduling* for Elsevier's Gulf Publishing Division. Pete's positive approach and his experience from consulting, allows him to be an excellent coach for today's top leaders, maintenance leaders and craft leaders. His worldwide **PRIDE-in-Maintenance** initiative will be highlighted in his next book with key topics from this universal book included in all of his worldwide **TrueWorkShops™**.

* * * * *



Dr. Arkady Cherepanov brings a diverse professional background of technical experience to TMEII. And he has a very practical solutions based approach to challenging technical problems. He has an extensive background in construction, commissioning and reconstruction of chemical, food manufacturing and power plants as a project manager. With Wimm-Bill Dann/PepsiCo, he has served as Maintenance and Utilities Manager in Moscow, a dairy and beverage company with 37 plants for the execution of Supply Chain Excellence in Maintenance and Utilities area for all company plants. He has been Chief Engineer for other large operations such as Heineken Russia's ten breweries. Engineering infrastructure projects have included construction of electrical substations; 110 kV in the center of Saint Petersburg, 10 kV in Novosibirsk, steam power boilers in TEC-7 (SPb) and in Amur-Pivo Brewery, Patra Brewery, PIT Kaliningrad Brewery and the construction of a water treatment plant in Khabarovsk and waste water plants for Henkel in Leningrad region, for PIT Brewery in Novotroitsk and for Heineken Brewery in Ekaterinburg. In addition, he has managed numerous other projects with experience in repair and maintenance and contracting of maintenance for Lenenergo power plants and transmission networks. Arkady has more than 30 published articles and patents that deal with energy and other resources conservation in chemical manufacturing and practical experience in management SHE systems in Heineken, Henkel and other companies. His career includes practical experience in managing technical engineering services in large multi-plant operations. He received his PhD from the Research Institute of Rubber Industry (Moscow) and post graduate Chemical Engineering degree from Moscow Institute of Fine Chemical Technology and his Marketing Management Degree from University of Fine Mechanic and Optic (Saint-Petersburg). He holds the Professional Project Manager Certification from the Project Management Institute (Moscow charter).

* * * * *



Prof. Diego Galar has a Msc in Telecommunications and a PhD degree in Manufacturing from the University of Saragossa. He has been Professor in several universities, including the University of Saragossa or the European University of Madrid, a researcher in the department of design and manufacturing engineering from the University of Saragossa, a researcher in I3A, Institute for engineering research in Aragon, director of academic innovation and subsequently pro-vice-chancellor. He has also been visiting Professor in the University of Valencia, Polytechnic of Braganza (Portugal), Valley University (Mexico) and NIU (USA). In industry, he has been also technological director and CBM manager. He has authored more than hundred journal and conference papers, books and technical reports in the field of maintenance. Currently, he is working in the Division of Operation and Maintenance in LTU, Luleå University of Technology, where he is coordinating several EU-FP7 projects related to different maintenance aspects and is also involved in the SKF UTC centre located in Lulea focused in SMART bearings.

Contact Pete Peters at 919-270-1173 (Pete@PRIDE-in-Maintenance.com) or
Anne at 919-896-5368 (Anne@Pride-in-Maintenance.com) for more information!