



Effective Plant Shutdown, Turnaround, and Outage (STO) Management

THIS 3-DAY TRUEWORKSHOP™ WILL SAVE YOU TIME AND MONEY DURING YOUR NEXT SHUTDOWN, TURNAROUND, OR OUTAGE (*STO)

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

Key Benefits of Attending this TrueWorkShop™

- **MASTER** world class plant shutdown strategies and industry best practices
- **IMPROVE** all phases of plant STO from long-range planning, pre-development, detailed development, final development, pre-execution, execution, to post-execution
- **IMPROVE** day-to-day planning/scheduling as a key first step
- **MAINTAIN** safety, quality, efficiency, and cost effectiveness of the turnaround procedure
- **PREVENT** production loss and unexpected delays
- **INCREASE** profitability and productivity of both in-house and contractor staff
- **ENSURE** safe and quality work execution

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.

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Lead Effectively: Attending this program will provide you a new and deeper understanding of how to effectively plan, manage/lead large maintenance jobs such as power plant outages, refinery refits and in situations where an operation has extensive deferred maintenance to be performed in a short period.

Plan Properly: It has been shown that success is concerned primarily with the planning process before the shutdown begins. This real challenge is roughly 85-90% of the work while the remaining 10-15% is the execution process to keep the project on course. This is the reason why this session is so important. Therefore poor prior planning often leads to cost overruns, delayed startups, production losses and profits. You can eliminate this by applying the principles from this session.

Current Practices: Also we will define how the day to day planning processes can also contribute more to shutdown planning via maintaining an accurate backlog of work that can be delayed until STO and then having accurate job plans available during the pre-shutdown period.

Many Useful Tools: This **TrueWorkShop™** includes specific checklists, procedures, strategies and important outside resources that will improve your current shutdown planning and execution. The **TrueWorkShop™** also includes examples to demonstrate the major points.

Importance of Logistics: We will also look at logistics and the supply chain that supports a shutdown and how the onsite storeroom operation and procurement staff can improve control of parts and materials.

NOTE: While some industries use the phrases shutdown, turnaround and outages (STO) interchangeably, other industries ascribe very specific and different meanings to the terms. However for this **TrueWorkShop™** we have will use the terms interchangeably.

Training Methodology

This interactive training constitutes:

- 60% interactive workshop and lectures
- 40% group learning and practical exercises for effective learning!

Who Should Attend

This **TrueWorkShop™** is for experienced professionals involved in the planning and execution of plant shutdowns and turnarounds, in particular Managers, Heads of Department, Supervisors, Coordinators, and Engineers from the following job areas:

- Maintenance
- Planning & Scheduling
- Plant
- Reliability
- Outage
- Asset Integrity
- Health & Safety
- Technical

Testimonials:

“Very useful for shutdown and outage planning...!”
~ Training Manager, Sinopec China

“There are very few people with his total asset management knowledge and the ability to teach like he does around the world.”
~ Managing Director, Nigerian Liquid Natural Gas

“[His] Reliable Maintenance Excellence Index is a terrific tool for us to finally measure the true value of maintenance.”
~ Maintenance Manager, BP Texas City Refinery

How to Get the Most from this TrueWorkShop™

Be ready to review and discuss your organization's performance in light of the modules presented. This includes::

- Benchmarks
- Current Production Capability
- Losses from Ideal State of Rotating Equipment

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Important Course Work

To wrap-up this **TrueWorkShop™** delegates will draw up specific improvement plans to address their Top 5 Areas for Improvements in power point format. The goal is to achieve implementation when they return to their organizations. Furthermore, after the workshop is over, complimentary follow-up support is provided from TMEII via phone, email or Go To Meeting virtual sessions when needed.

Very Important Pre-Course Work

Each company will be guided through a self assessment audit of their current operation using **The Scoreboard for Maintenance Excellence™**. This will become part of the course practical exercise and also becomes an important baseline as to where a company stands with today's best practices. It is equivalent to an ISO 55000 audit. Attendees will be guided through this self-assessment. Attendees are also asked to define their Top 5 Areas for Improvement.

Other TrueWorkShop™ Deliverables

TMEII provides more electronic references than any other course now being offered in the world. This workshop is based on Pete's books and we also provide many very important deliverables in an easy to use Excel format in addition to the program outlined below.

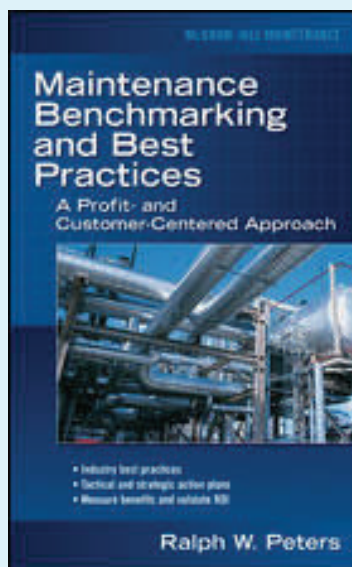
1. **The Scoreboard for Maintenance Excellence** - Today's most comprehensive benchmarking tool for each attendee's operation that benchmarks your site against today's best practices.
2. **The CMMS Benchmarking System** - For gaining maximum value from an existing CMMS
3. **The Reliability & Maintenance Excellence Index** - A powerful measurement process to validate shop level results.
4. Electronic copies of TMEII two major books; **Maintenance Benchmarking and Best Practices (McGraw-Hill-2006)** and **Reliable Maintenance Planning, Estimating and Scheduling (Elsevier-2015)**
5. **A Maintenance Toolbox:** Achieve results from your Maintenance Audit. A guide to Maintenance Excellence in your organization extensive material on the **TrueWorkShop™** CD that has been used in many consulting projects.

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

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.

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TrueWorkShop™ Agenda

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:

- **Introductions (Facilitator and Attendees)**
 - Attendees Define Top 5 Areas for Improvement with STO
 - Teams Set Up to Define Plan of Action (final day presentation)
- **A Look at Overall Craft Effectiveness (OCE) and Productivity of STO People Resources**
 - Manpower Management: Key to Execution and Cost Compliance
 - In-house Staff
 - Contractor staff
 - Savings via Greater STO Manpower Resource Productivity
- **Differences Between Projects and Turnarounds/STO**
- **Summary of the 5 Key Phases of a Shutdown/Turnaround/Outage**
 - Definition/Scoping: Long Range Planning (and Design)
 - Preparation/Pre Planning and Final Planning
 - Execution
 - Startup/Turnover
 - Evaluation/Closeout
- **Maximizing Day-to-Day Planning to Support STO and Scope of Work**
- **Overcoming Business Processes Which Do Not Support the Needs of the STO**
 - The Scoreboard for Maintenance Excellence: Evaluate Current Practices to Support STO
 - The CMMS Benchmarking System: Ensure Current CMMS and the Work Order System Tracks All Work During STO
 - **Establishing Metrics/KPIs for the Shutdown to Validate Your Results**
 - **Establishing an Effective management Team for the STO**
 - **Review of Day 1 and Top 5 Areas for Improvement for Each Attendee**

Day Two:

- **Pre-Shutdown Planning & Scheduling**
 - Scope of Work: How to Find and Pick Jobs Based Upon Asset Criticality
 - Using The Critical Asset Management Tool
 - Work Validation and Preparation for Planning
 - Individual Job Planning
 - Risk Management and the Concept of Risk-Based Maintenance
 - HSSE-Health, Safety, Security and Environmental Issues
- **Areas of Responsibility for Establishing a Good STO Team**
- **Competencies Needed for a Successful STO Team**
- **Guidelines for Selection of Contractors and Establishing Performance Based Contracts**
- **Shutdown Management System Checklists and Other STO Tools**
- **Shutdown Communications: Before, During and After**
- **Management of Contractors and Ensuring Competency of Their Staff**
- **Logistics Planning: A Key Driver for Schedule and Cost Compliance**
 - Materials and Equipment Lead Time Considerations
 - In House Storeroom Operations
 - In House Procurement Staff
 - Overall STO Parts and Materials Control
- **End of Day 2: Questions and Review of Attendee Top 5 Areas for Improvement**

**Even in Good Economic Times
Maintenance is Forever!**

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Day Three:

- Execution of the STO Plan
- Cost Management and Execution Performance Reporting Methods
- Schedule Analysis, Monitoring & Reporting of Progress
- Handling Scope Increase and Added Requests for Work: How to say no!
- Ensure HSSE & Risk Management Requirements Followed During Execution
- Quality Assurance During Execution: Who Should Approve Work Accomplished?
- Startup and Turnover
 - Operational Requirements
 - In House Maintenance Requirement
- Evaluation and Closing Out STO's
 - Maintenance and Contractor Audits
 - Turnover Documents for New Equipment
 - Maintenance Contracts
- Measurement & Improvement of STO Performance
- Post Shutdown
 - Review Lessons Learned
 - Define Future Improvements
 - Address Problems,
 - Planning The Next Shutdown
- End of Day 3: Summary and Presentation of Top 5 Recommendations for their Organizations
- Presentation of Certificates

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:

- Pre course work:-self assessment of attendee's operation
- Extensive knowledge base for each topic
- Extensive practical exercises on key topics
- Extensive idea sharing and instructor's case studies from over 300 plant and facility sites
- Plan of action for attendee's Top 5 Areas for Improvement
- Personal TMEII follow up *after* each session

We Personally Guarantee this TrueWorkShop™!

We will give you the firepower and knowledge needed to implement a successful PM program, to use the Predictive Maintenance and Conditioned-Based maintenance technologies that apply to your operation. We will reinforce your current maintenance needs to the top leaders in your organization. We will help you be "the maintenance messenger" to get action from Top Leaders.

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 and a bad PM and PdM program.

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.

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 TMEII

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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™**.

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Thomas Stuenkel - Bratislava, Slovakia & Munich, Germany (ATM): Thomas brings outstanding knowledge to support our *Effective Shutdown, Turnaround, Outage Management (STO)* session with over 20 years of work experience in different fields of plant engineering; in commissioning and start-up of water treatment plants (industrial and municipal waste water & drinking water), polypropylene plants, propane dehydrogenation plants, solar-grade silicon production facilities; in document management; in material management and in project management and he has extensive knowledge of different control systems. As an Alliance Team Member, Thomas provides you with an excellent commissioning & start-up training, at the place of your choice, worldwide. His business as [The Commissioning Coach](#) brings great practical experience to this new course for TMEII.

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 **TrueWorkShop™** 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!

