Course Facilitator:

E.J. (Ted) Lister PMP®, PMC
President & CEO
STO Navigator™ Inc.

- Over 30 years of combined hands-on & consulting experience in the planning & execution of plant shutdowns & turnarounds
- International experience in USA, Canada, Venezuela, Columbia, UAE, Qatar, Malaysia, Indonesia, Australia, South Africa
- Instructor & presenter of training workshops, seminars, conferences worldwide in the oil & gas, energy, manufacturing sectors
- Author of “Successful Change Management” (2005)

UNI training courses are thoroughly researched and carefully structured to provide practical and exclusive training applicable to your organization.

Benefits include:
- Thorough and customized programmes to address current market concerns
- Illustrations of real life case studies
- Comprehensive course documentation
- Strictly limited numbers

Testimonials

“I had the opportunity to be taught on Shutdown, Turnaround and Outage (STO) Projects by Ted and I can say he is an excellent training instructor.”
~ ENIAC

“Ted Lister’s depth of project experience and personable style enables him to create a very positive learning experience for staff and clients in training sessions and consulting engagements.”
~ CPM Solutions Ltd

“Ted has excellent experience in Maintenance, Turnaround and Capital Projects.”
~ PDVSA

“Good presentation, it was enjoyable and I benefited a lot.”
~ Petronas Carigali

Capitalise on expert knowledge to gain maximum value on these vital issues

- MASTER world class plant shutdown strategies and industry best practices
- OPTIMIZE all phases of plant shutdown & turnaround – from planning, scheduling, estimating, execution, to closure & review
- ENSURE the cost effective completion of the shutdown workload
- PREVENT production losses, unexpected delays, and cost overruns through a well executed and quality assured turnaround
- CONSIDER practical contingency plans to manage the unknown
- EMPOWER external contractors and in-house maintenance teams to ascertain safety, efficiency, and quality of workmanship
- ACHIEVE plant shutdown & turnaround excellence through practical checklists, tools, best practices, methodology processes and other workshop takeaways
- IMPROVE ongoing maintenance management to minimize future shutdown activities

Free Workshop Takeaway!
- Electronic checklists & tools to enhance shutdown procedures:
  - Action Items List
  - Capacity Form
  - Effective Closure Report
  - Milestone Schedule
  - Pre-Shutdown Checklist
  - Shutdown or Turnaround Readiness Program
  - SWOT Weekly Report
  - Work Scope & Budget Calculator
  - Worklist PJP Management Tool
  - Worklist Tracking Tool
  - …and many more
- Premium access to STONAVIGATOR™ website’s exclusive content for each delegate upon completion of the workshop

Proudly Organised by:

![Proudly Organised by: UNI](image)
Workshop Overview

Led by an experienced maintenance consultant, this course will equip you with world class strategies and industry best practices to optimize all phases of shutdown and turnaround activities at process/production plants – from planning, execution, to final review.

Success in shutdowns is predominantly connected to wise and proper planning before the actual execution. This course will address the key considerations of budget planning, scheduling, and contingency planning to achieve cost and schedule objectives.

Delegates will learn how to manage and empower contractors and maintenance teams to ensure efficiency, safety, and quality of delivery. Maintenance audits, checklists, contracts, and the materials & equipment supporting a turnaround process will also be examined.

Our expert course facilitator will share vital tips on ongoing maintenance management to minimize future shutdown & turnaround activities. Interactive discussions will allow delegates to develop their management skills and fully internalize the course content.

DAY 1 | 15th December 2013

- Establishing a World-Class Shutdown & Turnaround Management Process for your Organization
- Work Scope and Budget Optimization – determine what to work on to meet the Organization’s business needs
- The Shutdown & Turnaround Organization – empower external Contractors/Vendors and In-house Teams (One Integrated Team)
- Strategic Planning – determine how each Stakeholder plans to contribute to meet established KPI’s

OVERVIEW

- Shutdowns & Turnarounds: Definition & Purpose
  - Regulatory Inspection Requirements: Asset Integrity
  - Operational Requirements: Process Integrity
  - Maintenance Requirements: Reliability
  - Project Requirements: Capital / Overhauls
- Review Shutdown & Turnaround Management Process
  - Strategy Planning Phase / Milestone Schedule Management Phase
  - Work Scope / Budget Phase
  - Work Package Planning Phase
  - Work Execution Schedule Phase
  - Work Execution Resource Phase
  - Decommissioning Phase
  - Equipment Availability Phase
  - Project Phase
  - Inspection Phase
  - Maintenance & Repair Phase
  - Equipment Closure Phase
  - Commissioning Phase
  - Work Follow-Up / Critique Phase

WORK SCOPE & BUDGET OPTIMIZATION

- Work Scope Management & Control
  - Work Requests & Work Orders
  - Work List Tracking Tool
  - Establish Work List Priorities / Work Type
  - Establish & Control The Work List Cut-Off Date
- Establishing A Realistic Budget
  - How To Establish A Budget For Shutdown or Turnaround
  - Direct & Indirect Costs
  - Cost Management & Cost Control
  - How To Establish Contingency

THE SHUTDOWN & TURNAROUND ORGANIZATION

- Determine & Assign The Sponsor
- Determine & Assign The Manager
- Create The Stakeholder Steering Committee Team
- Integrate Contractors/Vendors (One Integrated Team)
- The Vision & Mission Statement
- Roles & Responsibilities
- Meetings & Communication
- Stakeholder Steering Committee Binders
- Shutdown & Turnaround Organization SWOT & Action Item Tool

KEY PERFORMANCE INDICATORS (KPI’S) & TARGETS

- How To Establish Key Performance Indicators & Targets
  - Safety / Environment
  - Quality
  - Worker Performance (Wrench-Time)
  - Budget (Direct & Indirect)
  - Schedule (WBS/Phase)
- Review Industry Standard KPI’s & Learn How To Compare

STAKEHOLDER STRATEGIES TO ACHIEVE ESTABLISHED KPI’S & TARGETS

- Establish Stakeholder Strategies
  - Production, Safety, Engineering, Inspection, Technical, Procurement, Logistics, Contracts, Environment, Maintenance, Accounting, Materials Management, etc.
- How To Develop Functional Plans
  - Communication, Transportation, Housing, Storage & Lay-down Areas, Tools, Free-issue, Consumables, etc.
  - Learning How To Conduct Strategy Workshops
  - Using Strategy Documents
  - Managing Strategic Plans
  - Developing ‘What-If’ Scenarios

PRE-COURSE QUESTIONNAIRE

To ensure that you gain maximum value from this course, a detailed questionnaire will be forwarded to you upon registration to establish your exact training needs and issues of concern. Your completed questionnaire will be analysed by the course trainer prior to the event and addressed during the event. You will receive a comprehensive set of course documentation to enable you to digest the subject matter in your own time.

In-House Training

Cost effective In-house courses, tailored specifically to your organisation’s needs, can be arranged at your preferred location and time. If you would like to discuss further, please contact our In-house division at iht@unistrategic.com.
## DAY 2 | 16th December 2013

- Detailed Planning – develop detailed plans to enhance Safety, Quality and Efficiency
- Contingency Planning – how to use ‘What-If’ scenarios for Potential (Discovery) Work
- Manage Shutdown or Turnaround Contracts – establish best-practice contracts for projects with performance controls
- On Time/On Budget – how to schedule to control duration and costs

### DETAILED PLANNING
- Understanding What Planning Is, Versus Scheduling
- Using Field Estimating & Planning Sheets
- Creating & Installing Work Package Field Tags
- Understanding Estimating Standards & How To Gather Information
- Understanding Crew / Duration & Wrench-Hours
- Understanding Network Logic & Work Types
- Identifying Tools, Materials, Documents, Equipment, Resources, Permitting & Risk
- Understanding What Goes Into A Work Package

### CONTINGENCY PLANNING
- Establish Work Type Codes For Potential Work
- Understanding Risk Analysis & Probability
- Using RBI To Establish Potential Work
- Using Industry Standards, Benchmarks & Historical Data
- Adding Potential Work To Contracting Strategies

### MANAGING SHUTDOWN / TURNAROUND CONTRACTS
- Learn The Different Contract Types (Methodology)
- Understand When To Use The Different Contract Types
- Contractor Selection & Award Process
- Contract Terms & Conditions
- Managing Contracts (Workforce Rules & Regulations)
- Motivate & Empower Contractors / Vendors
- Contractor Claims Avoidance

### KEEPING ON TIME / ON BUDGET
- Using Phase Calendars And Milestones To Control Duration & Cost
- Establishing A Cost Management Strategy
- How To Gather & Enter Contractor LEM’s (Labour, Equipment, Materials)
- Performance Real-Time Dashboard & S-Curve Reporting
- Measuring Earned-Value Performance (CPI & SPI)
- Measuring Wrench-Time Performance
- Trending & Forecasting

## DAY 3 | 17th December 2013

- Pre-Work Phase / Logistics – how to manage Pre-Work and control Logistics (equipment & materials)
- Work Execution Phase – Learn to status activities, track Critical Path and run ‘What-If’ scenarios
- How to Audit – using a formal Assessment Tool and Audit Checklists to ensure readiness and compliance
- Closure Report – How to develop a Closure Report and implement Learned Opportunities Review

### PRE-WORK PHASE / LOGISTICS
- Logistics and Mobilization/De-Mobilization Strategy and Checklist
- Pre-Work Strategy & Checklists
- Establish effective Lay-down Areas
- What Work Should Be Planned For Pre-Work Phase
- Establishing Infrastructures

### WORK EXECUTION PHASE
- Contractor & Resource Coordination
- Avoiding Congestion & High-Risk Areas
- Management Of Change Strategies
- Using A Flange Management Strategy
- Establish An Effective LOTO Program (Lock-Out / Tag-Out)
- How To Get Back On Track Using Calendars And Leveling Capabilities
- What To Do If Work Is Behind Schedule

### AUDITS & READINESS ASSESSMENT
- Turnaround Readiness Assessment
- Contractual Terms & Conditions Audit
- Safety, Health & Environment Management Audit
- Quality Program Audit
- Workforce Performance Audit
- Planning Management & Co-ordination Audit

### CLOSURE REPORT & LEARNED OPPORTUNITIES REVIEW
- Use An Effective Closure Report
- Create A Learned Opportunities Review And Use It To Start The Next Milestone Schedule
- Clean-Up Work Packages With Actual Values
- Storing Blinds Securely For Subsequent Shutdowns or Turnarounds
- Re-Stocking Materials
- Updating Libraries, As-Built Drawings, Operating Parameters And Document Control.
- Storing Data For Subsequent Shutdowns or Turnarounds

### EXAMPLE CASE STUDIES TO BE DISCUSSED THROUGHOUT THE WORKSHOP:
- Nexen’s Balzac Gas Plant: The Challenge Of Turnaround & Capital Project Integration
- Implementation of Nexen’s Best Practices in Yemen
- PDVSA: The Successful Implementation Of Turnaround Best Practices
- Grissik Gas Plant, Palembang: Developing A World-Class Shutdown & Turnaround Management Process

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### Program Schedule

**(Day 1 - Day 3)**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>08:30</td>
<td>Registration</td>
</tr>
<tr>
<td>09:00</td>
<td>Morning Session Begins</td>
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<tr>
<td>10:40 - 11:00</td>
<td>Refreshments &amp; Networking Break</td>
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<tr>
<td>12:45</td>
<td>Luncheon</td>
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<tr>
<td>14:00</td>
<td>Afternoon Session begins</td>
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<tr>
<td>15:30 - 15:50</td>
<td>Refreshments &amp; Networking Break</td>
</tr>
<tr>
<td>17:00</td>
<td>Course Ends</td>
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ABOUT YOUR COURSE FACILITATOR

E.J. (Ted) Lister is the President and CEO of STO Navigator™ (Canada).

E.J. is a well known innovative leader with over 30 years of combined hands-on and consulting experience in the planning and execution of plant shutdowns and turnarounds. His expertise include Routine Plant Maintenance, Plant Turnaround (planning, scheduling and execution), Plant Operations and Commissioning, Computerized Maintenance Management Systems (CMMS), and Primavera™ P6.

E.J. is a turnaround management consultant where he assists with planning, scheduling and execution of plant turnaround activities on several locations such as USA, Canada, Venezuela, Columbia, UAE, Qatar, Malaysia, Indonesia, Australia, and South Africa. He recently completed a 2-year stint in Madagascar where he was the STO Planning Manager for the commissioning of a $5.2B Nickel Mine and establishment of the Shutdown, Turnaround & Outage process and best practices, teaching locals how to execute world class STO projects.

His ability to lead a team through successful implementation is highlighted in his book “Successful Change Management”, published in 2005. He is currently completing a high-performance organization book titled “Lead, Manage or Dig”. He is also the Editor of the learning blog www.stonavigator.com, where he contributes weekly to share knowledge and experience to more than 5000 monthly visitors.

E.J. has instructed numerous training workshops and seminars around the world for companies in the oil & gas, energy, and manufacturing sectors. He has been featured as keynote and session speakers in conferences worldwide, and his consistent high ranking is an indication of his experience, speaking capabilities and excellent command of the shutdown & turnaround subject matter.

Partial list of companies that have benefited from his expertise:

- Gulf Canada (Indonesia)
- Hibernia Offshore Oil
- Husky Oil
- Jacobs Engineering
- Mobil Oil
- Petróleos de Venezuela, S.A.
- PetroCanada
- Petronas Carigali
- Shell
- Terra Nova
- Ulster Petroleum
- West Coast Energy

WHO SHOULD ATTEND?

This workshop 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
- Reliability
- Plant
- Asset Integrity
- Health & Safety

WHY YOU SHOULD ATTEND

Plant shutdown and turnaround is a complex and challenging maintenance process that significantly impacts a facility’s budget, production, and reliability. Due to its expensive and time-consuming nature, it is critical for process & manufacturing plants to implement proper planning before shutdown begins, in order to minimize loss of production and maximize equipment reliability.

Apart from saving you time and money for the next shutdown, this course will also discuss the more subtle art of personnel management in order to lay the foundations for a more smooth sailing turnaround process, giving you an immediate return on investment when you return to the workplace.

This course will provide you with practical checklists, tools, best practices, and methodology processes to validate and measure positive results in your shutdown success from planning, scheduling, estimating, and execution to closure.

Take advantage of the opportunity and bring shutdown schedules/programs from your plant to discuss during the workshop. At the end of the course, you will walk away equipped with the tools and confidence to plan, lead, and execute turnarounds that are on-time, on-budget, and quality assured.