Subsea Awareness Course
18th – 22nd June 2012
Fremantle Room, Parmelia Hilton Hotel
Mill Street, Perth, Australia

This five-day Course has been designed to be suitable for contractors, engineers, operators and those new to the offshore industry, those transferring from other disciplines within the industry and those who have worked in subsea previously but would benefit from a refresher course and exposure to the latest technology.

Whilst most of the course will be presented in a ‘classroom’ environment, the sessions will be interactive, with the opportunity to ask questions and discuss what has been learnt. In particular, hands-on and visual components have been included wherever possible to enable delegates to view software models and products destined for subsea service.

PROGRAMME

Day 1. A.M. 09.00 – 16.45
General Introduction to the Subsea Sector
Overview:
• Why subsea?
• What other options are available, including option evaluation and selection?
• Examples of different systems used on existing fields.
• What are the current design philosophies and the technology drivers?

Subsea development options
• Single well tieback.
• Template.
• Cluster manifold etc.

Tea/Coffee

Components of subsea systems ‘building blocks’
• What is the purpose of each and how do they fit into the overall system?

Development areas:
• Deep water/ultra deep water
• Complete subsea solutions

12.15 Lunch
13.15 – 16.45
Flow Assurance
• Understanding the nature of fluids
• Thermal management of subsea systems
• Deep and Ultra deepwater development.
• Seabed Processing.

16.45 Day end

17.30 Course Dinner

Day 2. 09.00 – 17.00
Subsea Wellheads/Trees
Introduction.
3D Interactive Subsea Systems Overview

Getting to know the Technology and Terminology
• Drilling Vessels
• The basics of Drilling a Well
• An overview of Key components and their methods of operation
• Subsea Tree Applications
• Completion risers

Tea/Coffee

Wellhead Systems
• UWD-15 Wellhead System Overview
• UWD-15 Wellhead Installation Animation

Tree systems
• EHXT, EVDT and EVXT Tree System Overview
• EHXT Installation Animation
• EVXT Installation Animation

12.00 – 12.45 Lunch

Manifolds and Pipeline Systems
HOST Template/Off Template/Cluster

Tea/Coffee

14.15pm - Depart Hilton for FMC’s base at Henderson
17.00 Back at Hilton - Day end

Day 3. 09.00 – 16.45
Subsea Control Systems
Introduction.
• Overview, what does the control system do?

Types of Control System
• Advantages/disadvantages of each type.

Tea/Coffee

Typical Equipment
• Hydraulic Power Unit, Electrical Power Unit, Master Control Station, Subsea Control Modules.

Subsea Options
• Hydraulics, Electrics, Umbilicals, Sensors.

Operator Interface
• Master Control Station, functionality and options.

Future
• Technology Drivers

12.30 – 13.30 Lunch

Subsea Control Fluids
• The control fluid as a component of the system.
• Anatomy of a control fluid.
• Environmental impact.

Tea/Coffee

Umbilicals
• Design • Manufacture
• Project Uses

16.45 Day end

Day 4. A.M. 09.00 – 16.45
Installation
Introduction.

Field Architecture Overview:
• Subsea Tieback • Subsea Floater

Installation Vessels
• Vessel Types • Positioning
• Critical Success Factors

Structures
• Structure Types & Installation
• Foundations, Types & Installation
• Critical Success Factor

Pipelines - Flexibles
• Flexible Types • Critical Success Factors • Installation methods

Pipelines – Rigid
• Flexible Types • Critical Success Factors • Installation methods

12.00 Lunch

13.00 – 16.45 Remote Intervention
Introduction
• Safety • Current Environment
• Technology Drivers.
• Water Depth.

Remote Intervention Systems
• Tooling Standards.
• Interfacing.
• Component Replacement systems
• Connection systems.
• Diverless Pipeline Repair.

ROV Technology
• Introduction • System Types.
• Typical System Components
• Operational systems and capabilities.
• Launch and Recovery systems.

Tea/Coffee

AUV Technology
• Introduction
• System Components
• Capabilities • Sensors
• Trials and Testing.

Diver Intervention
• Air and Saturation Diving • Safety
• Diver Tasks • Support Vessels.
16.45 Day end.

Day 5. A.M. 09.00 – 16.00

Risks, Reliability & Availability
• Basic background
• Predictions and Modelling
• Design Techniques
• Practical Reliability

Tea/Coffee

Angel Case Study

12.15 Lunch
12.45 - 16.00

Site Visit to:
Aker Solutions Facility
Anderson Place, Perth Airport

16.00 Course end.
Registration Information

For further information on this event please contact Joyce Bremner on j.bremner@sut.org
To register, either e-mail the information required on the registration form to perthevents@sut.org
or fax the completed form to + 61 (0) 8 9446 9905 Tel. + 61 (0) 8 9446 9903

Registration Fees
SUT Members $2625 + GST = A$ 2887.50
Non Member $3150 + GST = A$ 3465.00
Included in the Fees: All refreshments during the Course, including dinner on the first night, and a copy of the Course notes and a DVD containing PDF copies of the presentations and available videos.

Preferred Payment Methods:
Credit Card: Mastercard, Visa or AMEX* ONLY. We cannot accept payment by any other card.
* Payment by AMEX will carry a 2.75% surcharge.
Cheque: Australian Dollar only, made payable to The Society for Underwater Technology
Send to, Post Office Box 7284 Cloisters Square, Perth, WA 6850
Please make sure you reserve a place by e-mail or fax before posting your cheque.

Joining Instructions:
Joining instructions will be e-mailed to the registered delegate (as shown on the registration form). All details of locations, host companies, lecturers and updates to the programme will be included in the joining instructions.

Course Dinner:
An informal dinner will be held in a local restaurant on the first night of the course (details with joining instructions)

Cancellations:
Refunds will be made on written cancellation received up to ten working days in advance of the event, but will be subject to a 15% handling charge. 50% will be deducted up to three working days in advance and 100% thereafter up to the start of the event. No refund will be given for non-attendance. Delegates may wish to nominate a substitute in their place.

Transport During the Course:
Delegates are responsible for their own travel arrangements at the beginning and end of each day. Transport will be arranged by SUT from the Parmelia Hilton Hotel, for the site visits.

Registration Form
Please e-mail details to perthevents@sut.org or fax the completed form to 61 (0) 8 9446 9905

Please tick to indicate your preferred course date and payment method:

SUT Member No.____________________

Credit Card ________ (Visa, MasterCard or AMEX*)    Cheque ________ Invoice (PO No.) ________________________

Name __________________________________________________________________________________

Company _________________________________________________________________________________

Address _________________________________________________________________________________

E-mail address ____________________________  Tel No. _________________________

Credit Card No: Visa, MasterCard or AMEX*. _________________________________/_____________________/_____________________/_____________________

Exp. ________/_______  Security no __________ (last 3 digits on the back of your card)

Name on the card _________________________________________________________________________

Billing Address if not as above _____________________________________________________________

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E-mail address where receipt to be sent for credit card payment ________________________________

Amount to be charged $ ____________  Signature__________________________________________