Subsea Awareness Course
20th – 24th May 2013
Karri 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.

Subsea Sector
General Introduction to the Sector
Overview.

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, EVDT & VXT Installation & Tooling Overview
• EHXT Installation Animation
• EVDT/EVXT Installation Animation

12.00 – 12.45 Lunch

Manifolds and Pipeline System
HOST Template/Off Template/Cluster

Tea/coffee

Flexible Jumpers
• Introduction to flexible jumpers
• Typical System Components

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

12.15 – 13.15 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
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 - Flexible
• Flexible Types • Critical Success Factors • Installation methods

Pipelines – Rigid
• Rigid Spools • Flexible Jumpers
• Flying leads • Critical Success Factors

12.15 - 13.15 Lunch

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
12.45 Depart Hilton for workshop tour to Oceaneering DTS, Henderson, you will also have the opportunity to test your skills as an ROV Pilot on the ROV Simulator

16.00 Course end.

SUT reserves the right to change/amend the programme as it sees fit.

www.sut.org.au
Registration Information

For further information on this event please contact Jennifer Maninin on j.maninin@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

Subsea Awareness Course

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 available videos, and transport to site visits.

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, SUT, 5/5 Hasler Road, Osborne Park, Perth, 6017
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 ___________________________________________

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

Amount to be charged $ _______  Signature _________________________________