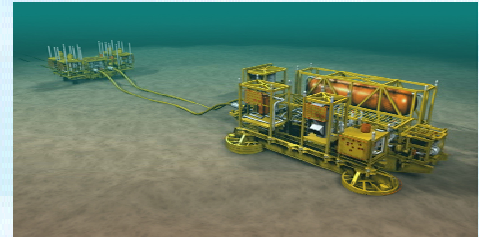
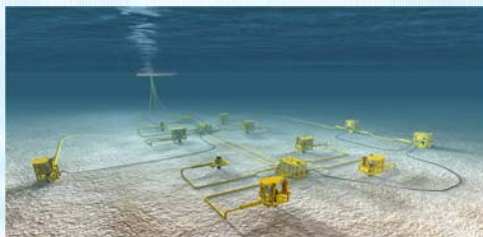
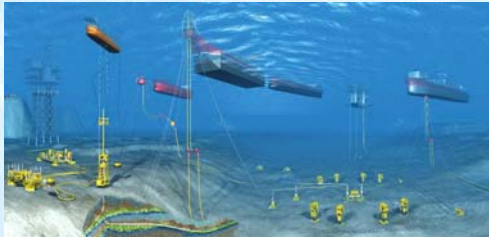


Operating Subsea Oil & Gas Production Systems

29th August 2012

Ibis Hotel, (Pepper Room), Murray Street, Perth

Subsea production is not a new concept; however, advances in subsea technologies continue to enhance the economic development of offshore exploration discoveries in all water depths. Crucial to the economic success of such developments is the need to understand the consequences of one's actions. This one-day course is aimed at creating an awareness of the applications of subsea equipment and plant, how subsea equipment is operated, the vulnerabilities to which it is susceptible, the requirements to continuously inspect, maintain and repair and the consequences of equipment downtime and lost production.



Pictures courtesy of FMC Technologies Australia

PROGRAMME

08.30 Registration

08.40 **General Introduction to Subsea Production systems**

Presented by: Roland Fricke, Woodside Ltd.

Components of subsea systems, the "building blocks"
The purpose of each element and how they fit into the overall system.

09.30 **Managing Subsea Assets**

Presented by: Roland Fricke Woodside Ltd.

Examples of existing subsea infrastructure.
The extent of production from subsea wells
Indicative subsea maintenance costs
Examples of engineering, operations and maintenance roles & team structure.

10.30 Tea/Coffee

10.45 **Operating Strategies/practices**

Presented by: James Holbeach/Paul Oakley, MSI Kenny

Operation of subsea tie-backs on typical oil & large gas/
condensate developments
Pressure, Temperature & compositional operating
developments
Flow control and liquid management
Hydrate & Wax mitigation strategies
Hydrate remediation strategies
Planned and Unplanned field start-ups/shut downs
Pigging operations

12.00 **Lunch**

12.30 **Operating Subsea Systems**

Presented by: David Thain, Woodside Energy Ltd.

A short overview of operating a subsea system, from well start up through the operating phase to well shutdown. What information is readily available, how to interpret it, to ensure a safe, smooth and efficient operation.

13.15 **Vulnerabilities - What could go wrong?**

Presented by: Ewan Rowell, Chevron Australia Pty Ltd.

Explanations of the vulnerability of subsea hardware to the following:

Hydrates, waxes & scale, causes & remedies

Control Fluid Cleanliness; Incompatible Fluids

Insulation Resistance; Gas Ingress & condensing water

Technology Obsolescence

Reliability, redundancy & flexibility

Dragged & dropped objects - Fishing activity

Corrosion/erosion

Marine environmental influences - temperature, internal water motions, marine growth.

14.15 Tea/Coffee

14.30 **Inspection, Repair and Maintenance**

Presented by: Bill Russell-Cargill, DoF Subsea

The need for IRM and how it is carried out, exploring:
Diver intervention; ROV & Survey Capabilities; IRM Vessels;
Inspection and survey systems; Integrity management:
Planning, Timing, Permits & Isolations; Platform liaison;
Procedure development; Case study examples

15.30 **Advanced Systems**

Presented by: Tim Stuart, GE Oil & Gas

Production modelling & Operator Simulators

Subsea Separation

Subsea Compression

Direct Seawater injection

16.30 Certification & Course Conclusion

Presenting Companies Include:

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



GE Oil & Gas



Registration Information – Operating Subsea Oil & Gas Production Systems

(Aug 2012)

Should you require 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 8 9446 9905

Registration Fees

SUT Members \$363.64 + GST = \$400

Non Members \$409.09 + GST = \$450

Fee includes - All refreshments, handout notes of the presentations & CD containing PDF versions of the presentations .

Preferred Payment Methods:

Credit Card: Mastercard, Visa, or AMEX* only. We cannot accept payment by any other card.

* Please note if paying by AMEX there will be a 2.75% surcharge.

Cheque: Australian Dollar only, made payable to The Society for Underwater Technology

Send to, SUT, PO Box 7284 Cloisters Square, Perth, WA 6850

Please make sure you reserve a place by e-mail or fax before sending payment.

Joining Instructions:

Joining instructions will be e-mailed to the registered delegate (as shown on the registration form). All details of presenters and updates to the programme will be included in the 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 to and from the Ibis Hotel.

Registration Form

Please e-mail details to Perthevents@sut.org or fax the completed form to +61 8 9446.9905

Please tick to indicate your preferred payment method: _____ SUT Member No. _____

Credit Card _____ (Visa or 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 for credit card payment should be sent _____

Amount to be charged \$ _____ Signature _____