Are you surprised by how often we experience unexpected subsea failures? Are you striving for higher subsea production system reliability? If so, then this is the course for you!

What the Course will Deliver:
- Overview of Subsea Reliability
- Framework for achieving reliability targets
- Interfaces with Subsea Integrity and Project Management
- Contracting Strategies for Reliability
- Key Decisions to be made
- Tools and Methods
- Industry Best Practice (New codes/standards)
- What happens if you get it wrong
- Economic Benefits of getting it right
- Turning Lessons Learned into Improvements

Who would benefit from attending this course: Project Managers, Quality/Integrity Personnel, Reliability Specialists, Subsea Systems Engineers, Subsea Discipline/Package Engineers, Subsea Pipeline Engineers, Subsea Operations Personnel, Subsea Equipment Vendors

Pictures courtesy of FMC Technologies
08:00 Registration

08:15 SUT & delegate introduction

08:30 Welcome, Introduction Reliability Aims and Importance
   Alex Ham, Wood Group Kenny
   • What do we mean by Subsea Systems Reliability and why is it important?
   • What causes Subsea Unreliability and where do we need to focus?
   • How will this course help you improve Subsea Reliability?

08:50 Framework for Subsea Reliability and Technical Management
   Karl Woods, Woodside Energy Ltd.
   • Key terms and definitions
   • Objectives of a reliability strategy
   • Overview of API RP 17N Reliability Management Framework
   • Organisational models to enhance reliability management capability

10:00 Coffee/Tea

10:15 Economics of Reliability and Operability
   Ross Hendricks, FMC Technologies
   • Project Failure Statistics
   • Economic Impact of Reliability & Availability
   • Operability—Impact on Production Availability
   • System Design to achieve desired Operability/Availability
   • Impact of System Design - successful & not so successful examples
   • The significance of contracting strategies in achieving reliable cost effective project outcomes

12:45 Lunch

13:45 Tools and Techniques
   Iain Moir, Vanguard Solutions Pty Ltd
   • Reliability Tools and the Design Stages
   • FMEA & FMECAS
   • Event Trees (ETA) - Fault Tree Analysis (FTA)

14:30 Workshop
   Kevin Mullen, INTECSEA & Iain Moir, Vanguard Solutions Pty Ltd
   The class will be given a simple subsea system to actuate a valve. They will be then split into groups, each group will tackle a specific task to analyse using different reliability tools eg, Fault Tree and RBD.

15:15 Coffee/Tea

15:30 Workshop presentations

16:00 Reality of Reliability
   Ewan Rowell, Chevron
   • Data collection, reduction and validity.
   • Systemic failures. Failure when everything is done ‘well’
   • Effects of low reliability - examples
   • Inertia of organisations, Hidden benefits of reliability,
   • What is typically achieved, system
   • Design—accommodation of Reality

17:00 Certification and Course Conclusion

SUT reserves the right to change/amend the programme as it see fit.
Registration Information

Achieving Reliable Subsea Systems Aug 2015

Should you require further information on this event, please contact Jennifer Maninin on j.maninin@sut.org or fax the completed form to +61 8 9446 9903

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

<table>
<thead>
<tr>
<th>Category</th>
<th>Fee (before 8th July)</th>
<th>Fee (after 8th July)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUT Members Early Bird</td>
<td>$320.00 + GST = $352</td>
<td>$400.00 + GST = $440</td>
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<tr>
<td>SUT Members</td>
<td>$400.00 + GST = $440</td>
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<tr>
<td>Non Members Early Bird</td>
<td>$360.00 + GST = $396</td>
<td>$450.00 + GST = $495</td>
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Fee includes - All refreshments, handout notes of the presentations & USB containing PDF versions of the presentations.

Preferred Payment Methods:

Credit Card: Visa, Mastercard, 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, 5/5 Hasler Road, Osborne Park, Perth, WA 6017

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

Invoice: Please tick here to be invoiced

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.

Transport During the Course:

Delegates are responsible for their own travel arrangements to and from the Parmelia Hilton Hotel.

Cancellations:

Refunds will be made on written cancellation received up to ten working days prior to the event, but will be subject to a 15% administration charge. Cancellations received 9—4 working days prior to the event will be charged a 50% cancellation fee. Cancellations received 3—0 working days prior to the event will not be refunded. Delegates may wish to nominate a substitute in their place at no charge.

Please tick box if you do not wish to receive further SUT information

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, MasterCard or AMEX*) Cheque ____________ Invoice (PO No.) ____________

Name ___________________________________________________ Please tick here if personally funding course

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