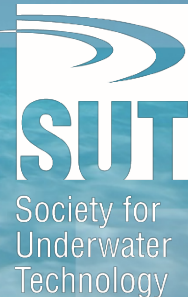


Introduction to Positioning & Survey

20th & 21st February 2019

CBD Venue – To Be Confirmed



Wednesday Programme:

08.30 Registration

09.00 SUT Introduction

09.10 Introduction & Overview

Peter Wademan, Woodside Energy Ltd.

09.30 Mapping the Indian Ocean - Phase 1 of the search for MH370

Scott Miller, Fugro Survey Pty Ltd.

10.00 Morning tea

10.15 Geodesy & Positioning Principles

Don Abbey, Woodside Energy Ltd.

- * Datums & Coordinate Systems
- * Coordinate Reference Systems
- * Coordinate Conversions
- * Coordinate Transformations
- * MSL, Geoids & Mean Sea Surface Models

11.15 Surface Positioning

TBC, Neptune Geomatics.

- * History of Surface Positioning
- * Transmitting Corrections
- * Radio Waves
- * WAS SA RTK
- * GPS principles
- * Correction & Subscription
- * GPS Error Sources
- * DGPS Positioning (Code Phase/Carrier Phase)

12.15 Lunch

13.15 Vessel Dynamics

Capt. Phil Griffin, London Offshore Consultants

- * Centre of Gravity
- * Magnetic Compass
- * Stability
- * Gyro Compass
- * Pressure Point
- * Attitude Sensors
- * Turning of Vessels
- * Attitude Sensor Calibration
- * Squat
- * Inertial Navigation Sensor

14.15 Tides and Currents

Scott Noreika, RPS Metocean

- * Tide Measurement
- * Prediction
- * Current Profiling
- * Temp Salinity
- * Sound Velocity Profiling
- * Solitons

15.15 Afternoon tea

15.30 Positioning Technology

TBC

- * Ultra Short Base Line
- * ROV
- * Long Base Line
- * INS
- * Metrology
- * NASNet

16.45 Course day end

17.30 Course dinner

Thursday Programme:

09.00 Case Studies

Phil Wells, Neptune Geomatics

- * Pluto Development
- * Equus Deepwater Pipeline Route

10.00 Bathymetry

Ray Smith, DOF Subsea

- * Single Beam Echo Sounder
- * Multi Beam Echo Sounder
- * ROV
- * Side Scan Sonar
- * AUV
- * Validation
- * Tide Correction

10.45 Morning tea

11.00 Survey Data Processing

Martin Watson, Fugro Survey Pty Ltd.

- * Interpolation
- * Data Presentation/Visualization
- * Data Modeling - Gridding and Thinning and Countouring
- * Subsea Data Modelling

11.45 Geophysics

Fiona Fitzpatrick, RPS Australia Asia Pacific

- * Reflection
- * Refraction
- * Resistivity & Magnetometer
- * Geotechnical Correlation

12.45 Lunch

13.45 Remote Sensing Technologies

Glenn Morrison, AAM Group

- * Earth Observation: Satellites & Airborne
- * Laser scanners & Photogrammetry
- * RADAR, LIDAR & Hyperspectral
- * New systems and Application examples

14.30 The Search for MH370

TBC, Fugro Survey Pty Ltd.

- * Search area
- * Logistics
- * The Deep Tow system
- * Challenges
- * Monitoring the Deep Tow fish
- * Sea floor contacts

15.30 Certification and Course Conclusion

Course programme is subject to change.

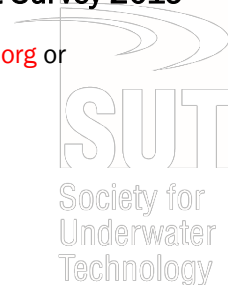
Thank you to our presenting companies:



Registration Information

Introduction to Positioning & Survey 2019

Should you require further information on this course, or to register, please contact Patricia Slapp on p.slapp@sut.org or Tel +61 8 9481 0999.



Registration Fees

SUT Members Early Bird (register and pay before 17th January)

\$904.54 + GST = \$995.00

SUT Members (registration from 18th January)

\$1,122.72 + GST = \$1,235.00

Non Members Early Bird (register and pay before 17th January)

\$1,072.72 + GST = \$1,180.00

Non Members (registration from 18th January)

\$1,336.36 + GST = \$1,470.00

SUT Student Member

\$363.63 + GST = \$400 – limited places available

Fee includes - All refreshments including dinner on the first night and an electronic copy of the available presentations and videos are provided.

Not included - Hard copy presentations are not provided. Should these be required there is an additional fee of \$85.

Handbook of Offshore Surveying (3 volumes)

These are available to purchase from the SkillTrade website bookstore in the Netherlands - www.skilltrade.nl

Preferred Payment Methods:

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

* Payment by Visa or MasterCard will carry a 1.5% surcharge / AMEX will carry a 2.75% surcharge.

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. Please bring along a laptop to view the presentations.

Course Dinner:

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

Transport During the Course:

Delegates are responsible for their own travel arrangements at the beginning and end of each day.

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.

CPD Hours: CPD hours can be claimed for this course, please keep flyer and receipt for auditing purposes.

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

Registration Form

Please e-mail completed form to p.slapp@sut.org

Please tick to indicate your preferred payment method:

SUT Member No. _____

Credit Card _____ (Visa, MasterCard or AMEX only)*

Invoice (PO No.) _____

Name _____ Please tick here if personally funding course ☐

Company _____

Address _____

E-mail address _____ Tel No. _____

Credit Card No: VISA, MASTERCARD or AMEX ONLY * _____/_____/_____/_____

Exp. _____ / _____ Security no _____ (3 digit number for visa & m/c, 4 digit number for amex)

Name on the card _____

Billing Address if not as above _____

E-mail address where receipt should be sent for credit card payment _____

Amount to be charged \$ _____ Signature _____