

Introduction to Positioning and Survey

3rd September 2014

Parmelia Hilton Hotel,
Mill Street, Perth



Programme

- 08:15 Registration
- 08:25 Introduction & Overview - Peter Wademan, Woodside Energy Ltd.
- 08:50 Geodesy & Positioning Principles - Roger Loweth, Q Sea Pty Ltd.
* Coordinates - Geographical - Grid - Cartesian * Ellipsoids * Horizontal Datums
* Datum Transformations * Vertical Datums * Geoid * Projections and Grids
* Precision * Reliability
- 09:50 Coffee/Tea
- 10:05 Surface Positioning - Mark Hardman, Fugro Satellite Positioning Pty. Ltd.
* History of Surface Positioning Radio Waves, * GPS principles * GPS Error Sources
* DGPS Positioning (Code Phase/Carrier Phase) * Transmitting Corrections * WAS SA RTK
* Correction & Subscription
- 10:50 Vessel Dynamics - Capt. Phil Griffin, London Offshore Consultants
* Centre of Gravity * Stability * Pressure Point * Turning of Vessels * Squat
* Magnetic Compass * Gyro Compass * Attitude Sensors * Attitude Sensor Calibration
* Inertial Navigation Sensor
- 11:35 Tides and Currents - Scott Noreika, RPS Metocean
* Tide Measurement * Current Profiling * Sound Velocity Profiling * Prediction
* Temp Salinity * Solitons
- 12:15 Lunch
- 13:00 Positioning Technology - Bruce Baker, I Spatial Solutions
* Ultra Short Base Line * Long Base Line * Metrology * ROV * INS * NASNet
- 14:00 Bathymetry - Norman Mackay, DOF Subsea
* Single Beam Echo Sounder * Multi Beam Echo Sounder * ROV
* Side Scan Sonar * AUV * Validation * Tide Correction
- 14:30 Survey Data Processing - Martin Watson, Fugro Survey Pty Ltd.
* Interpolation * Data Modeling - Gridding and Thinning and Countouring
* Data Presentation/Visualization * Subsea Data Modelling
- 15:00 Coffee/Tea
- 15:15 Geophysics - Fiona Fitzpatrick, RPS Australia Asia Pacific
* Reflection * Refraction * Resistivity & Magnetometer
* Geotechnical Correlation
- 15:45 Remote Sensing Technologies - Peter Hausknecht, Woodside Energy Ltd.
* Earth Observation: Satellites & Airborne * RADAR, LIDAR & Hyperspectral
* Laser scanners & Photogrammetry * New systems and Application examples
- 16:15 Case Study - Phil Wells, Neptune Geomatics
Pluto Development
- 16:45 Certification and Course Conclusion



Photos courtesy of
Fugro Survey Pty Ltd.

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

SUT would like to thank the following companies for their support of this course:



Registration Information

Introduction to Positioning & Survey Sept 2014

For further information on this event please contact Jennifer Maninin on j.maninin@sut.org Tel + 61 (0) 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 (0) 8 9446 9905

Registration Fees

Option 1: To include volumes 1, 2 & 3 of the Handbook of Offshore Surveying valued at \$460

SUT Members - \$400 + GST + \$460 publication = \$900.00

Non Members - \$450 + GST + \$460 publication = \$955.00

Option 2: Does not include volumes 1, 2 & 3 of the Handbook of Offshore Surveying

SUT Members - \$400.00 + GST = \$440.00

Non Members - \$450.00 + GST = \$495.00

Fee includes - All refreshments, handout notes of the presentations & CD 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 payments made by AMEX will attract 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 each registered delegate prior to the course.

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 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.

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

Registration Form

Please e-mail completed form to Perthevents@sut.org or fax the completed form to +61 (0) 8 9446 9905

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

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

Please tick to indicate your registration option (see above) Option 1 _____ Option 2 _____

Name _____

Company _____

Address _____

Email address _____ Tel No. _____

Credit Card No: VISA, MASTER CARD 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 should be sent for credit card payment _____

Amount to be charged \$ _____ Signature _____