

Introduction to Positioning and Survey

4th September 2013
Salt Room, Ibis Hotel, Murray Street
Perth, Australia



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

9.50 Surface Positioning - Ken Eddy, Fugro Survey 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

10.35 Tea/Coffee

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 Underwater Positioning Technology - Bruce Baker, I Spatial Solutions

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

12.35 Lunch

13.20 Bathymetry - Bill Russell-Cargill, DOF Subsea

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

13.50 Survey Data Processing - Martin Watson, Fugro Survey Pty Ltd.

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

14.15 Geophysics - Andrew Lane, Woodside Energy Ltd.

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

14.45 Tea/Coffee

15.00 Alternative Technology - Peter Hausknecht, Woodside Energy Ltd.

- * Remote Sensing * Aerial Photography * Airborne Laser Systems * Laser Scanners

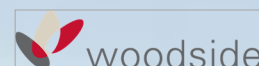
15.30 Case Study - Phil Wells, Neptune Geomatics
Pluto Development

16.00 Case Study - Pat Fournier, Neptune Geomatics
Equus Deepwater Pipeline Route

16.30 Day End

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:



Photos courtesy of Fugro Survey Pty Ltd.

Registration Information

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 \$350

SUT Members - \$636.36 + GST = \$700.00

Non Members - \$681.82 + GST = \$750.00

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

SUT Members - \$318.18 + GST = \$350.00

Non Members - \$363.64 + GST = \$400.00

All Fees include - All refreshments, printed handout notes & CD containing PDF's of the main presentations.

Preferred Payment Methods:

Credit Card: Mastercard, Visa 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.

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.

Joining Instructions Joining instructions will be e-mailed to each registered delegate.

Registration Form

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

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

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