

Introduction to Positioning and Survey

13th May 2010

Fremantle Room, Parmelia Hilton Hotel,
Mill Street, Perth., Australia



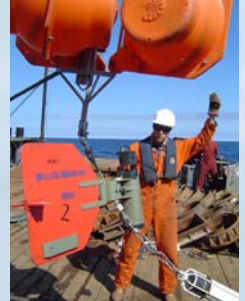
Programme

08.15 Registration

08.25 Introduction - Bob Quarrill, Woodside Energy Ltd.

08.45 SESSION 1 - GEODESY and POSITIONING PRINCIPLES
Geodesy - TBA

- * Coordinates - Geographical - Grid - Cartesian * Ellipsoids * Horizontal Datums
- * Datum Transformations * Vertical Datums * Geoid * Projections and Grids



09.45 Positioning Principles - TBA, EGS Survey

- * Range-Range * Angular * Range-Bearing * Pseudo Range * GPS principles * Precision
- * Reliability * Least Squares Adjustment

10.35 Tea/Coffee

10.50 SESSION 2 - POSITIONING TECHNOLOGY

Surface Positioning - Gareth Almond, OmniSTAR Pty Ltd.

- * History of Surface Positioning Radio Waves * Principles * Frequency and Range * Triangulation
- * GPS * GPS Error Sources * DGPS positioning (Code Phase/Carrier Phase)
- * Transmitting Corrections * WAS, SA, RTK * Correction & Subscription Service

11.45 Vessel Dynamics - Phil Griffin, Marine Management Consulting

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

12.45 Lunch

13.30 Underwater Positioning Technology - Bruce Baker, Neptune Geomatics

- * USBL * LBL * Metrology * ROV * INS

14.30 SESSION 3 - OVERVIEW OF OTHER SURVEY TECHNIQUES

Tides and Currents - Scott Noreika, RPS Metocean

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

15.15 Tea/Coffee

15.30 Bathymetry and Engineering Geophysics Systems - Andy Lane, Woodside Energy Ltd.

- * SBES * MBES * SSS * SBP * Magnetometer * ROV mounted vs AUV

16.00 Survey Data Processing - Erin Pyke, Fugro Survey Pty Ltd.

- * Validation * Tide Correction * Interpolation * Data Modeling - Gridding and Thinning and Countouring
- * Data Presentation/Visualization

16.30 SESSION 4 - CASE STUDY

Bayu Undan Installation - Ken Eddy, Fugro Survey Pty Ltd.

17.00 Day End

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



Registration Information

For further information on this event please contact Joyce Bremner on j.bremner@sut.org + 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

SUT Members - \$495.00 Inc. GST

Non Members - \$550.00 Inc. GST

Fee includes - A copy of the Handbook of Offshore Surveying - Book One - value \$200

All refreshments, 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, PO Box 7284 Cloisters Square, Perth WA 6850

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 details to Perthevents@sut.org or fax the completed form to 61 (0) 8 9446 9905

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Please tick to indicate your preferred payment method:

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