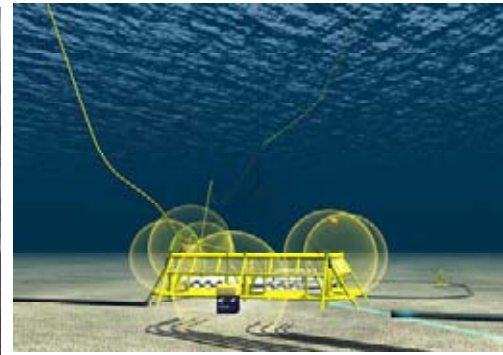
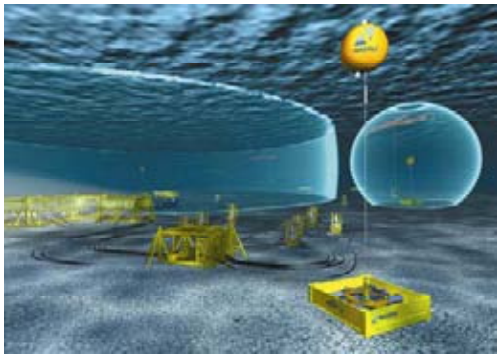


# INTRODUCTION TO SUBSEA POSITIONING

An Awareness Course for Offshore and Subsea Engineering & Support Staff



This is an intensive one-day course specifically designed for all offshore and subsea engineering and support staff who deal with the development and operation of subsea fields. It also offers the chance for anyone new to, or already within the subsea sector, the opportunity to participate in a short course to raise their awareness of subsea positioning data transmission and their applications.

The seminar is run by experienced personnel from the subsea industry. It will be held in a classroom environment, with the sessions being interactive, with every opportunity to ask questions and discuss the material presented. It has the added benefit of accompanying exhibits of vendors equipment and services.

Subsea positioning plays a critical role at every stage of a subsea field development, however an understanding of the available positioning systems, their applications and achievable accuracies, can be crucial to the successful outcome of a project and maintaining project budgets and schedules.

This course is aimed at creating an awareness of the applications of subsea positioning, the vulnerabilities to which they are susceptible, and the requirements to correctly install, calibrate and operate the positioning systems. Participants should complete the course with an understanding of underwater positioning and data transmission, the knowledge to ask informed questions of vendors, and provide practical specifications in tender documents.

## **WHO SHOULD ATTEND?**

- ◆ Project Personnel  
(Operators & Contractors )
- ◆ Vessel Owners & Vessel Operators
- ◆ ROV Crews
- ◆ FEED Contractors
- ◆ Contracts Staff
- ◆ Defence Staff
- ◆ Drilling Staff

## **ORGANISED BY**

Society for Underwater Technology

Innovation Centre, Aberdeen Science and Energy Park, Bridge of Don, Aberdeen AB23 8GX

Tel: +44 (0) 1224 823637 Fax: +44 (0) 1224 820236 Email: [events@sut.org](mailto:events@sut.org)

Head Office: 1 Fetter Lane, London EC4 1BR

Tel: +44 (0) 20 3440 5535 Fax: +44 (0) 20 3440 5980 Email: [info@sut.org](mailto:info@sut.org)

# INTRODUCTION TO SUBSEA POSITIONING

2 February 2012 - Palm Court Hotel, Seafield Road, Aberdeen

## PROGRAMME

08.30 Registration

### General Introduction to Subsea Positioning

- ◆ Background
- ◆ Applications
- ◆ Accuracies
- ◆ ROM costs

### GPS Basics, Accuracy, Offsets, Error Budgets

### Supporting Systems

- ◆ Gyros
- ◆ MRU's
- ◆ GPS gyros

12.00 Lunch (including supplier demos)

### Acoustic Systems

- ◆ Transmission methods, ray bending and its implications
- ◆ SBL/LBL/USBL techniques
- ◆ Data transmission (ping, chirp, broadband)
- ◆ Field positioning
- ◆ Seabed installations

### Metrology – Methodology, Technologies

- ◆ Acoustic, taut wire, laser

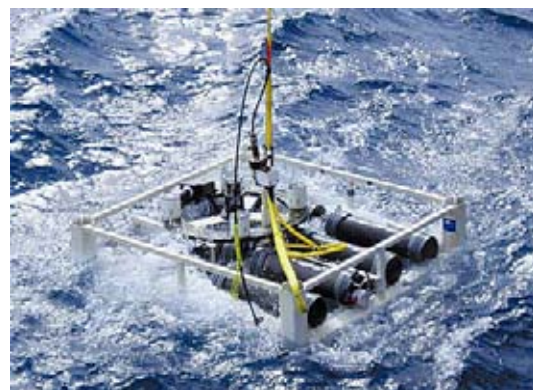
### Applications – Case Studies

- ◆ Positioning of subsea production system

### Supplier Demonstrations

17.45 Close

*SUT would like to thank the following companies for their support with material and guidance for this course:*



# REGISTRATION INFORMATION

To register please complete the registration form and sent to SUT's Aberdeen Office  
SUT, Innovation Centre, Exploration Drive, Aberdeen Science and Energy Park, Bridge of Don, Aberdeen AB23 8GX  
nicola.taylor@sut.org fax 44 (0)1224 820236 tel 44 (0) 1224 823637

## REGISTRATION FEES

SUT Member Rate:  
GBP £350.00 + VAT

Non-Member rate  
GBP £450.00 + VAT

Refreshments, lunch and course notes included in the fees

## PAYMENT METHODS

Bank Transfer *exclusive of transfer fees and currency exchange rates*  
Bank of Scotland

79 Ellon Road, Bridge of Don Aberdeen, AB23 8BY

Account Name: SUT Aberdeen Branch

Sort Code No: 80-05-11 Account No: 00865948

**Cheque:** Please make payable to 'Society for Underwater Technology'. Sterling only drawn on a UK Bank Account. An international cheque can be obtained from all major overseas banks. Please ensure any charges are met at source.

**Credit Card:** Please provide details below.

**We do not accept American Express Cards**

**VAT:** Our VAT No. is 242 3504 95. VAT must be paid on all registration fee, including those from overseas. All EC country registrations must provide their VAT Number in accordance with EC VAT regulations. A VAT receipted invoice will be sent in acknowledgement of all pre-paid registrations.

## JOINING INSTRUCTIONS

Will be sent direct to the registered delegate (unless otherwise advised) on receipt of their written confirmation of attendance

## ACCOMMODATION

Aberdeen has a wide range of accommodation - details of which will be provided on the Joining Instructions

## TRANSPORT

Delegates are responsible for their own travel arrangements

## CANCELLATIONS

Refunds will be made on written cancellations received up to 10 working days in advance of the event but will be subject to a 15% handling charge. 50% will be deducted 5 working dates 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.

## REGISTRATION FORM

### Introduction to Subsea Positioning Aberdeen - 2 February 2012

Please complete and return to  
nicola.taylor@sut.org  
f: +44 (0) 1224 820236

Name \_\_\_\_\_  
Company \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Email \_\_\_\_\_  
Tel No \_\_\_\_\_  
SUT Member No \_\_\_\_\_

Credit Card Payment (we do not accept American Express)

Amount £ \_\_\_\_\_  
Card No \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
Name on Card \_\_\_\_\_  
Expiry Date \_\_\_\_\_  
Security No \_\_\_\_\_  
Billing Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Please indicate your preferred payment method:

- Credit Card (details above)  
 Cheque enclosed, made payable to  
*Society for Underwater Technology*  
 Please invoice quoting PO No.