

# WIRELINE

ISSUE 27 - SPRING 2014



## CLOSING THE LOOP

How industry players are advancing product development, stimulating R&D and addressing skills demand for continued growth  
*p13 to p20*

### **SHAPING THE FUTURE OF THE UKCS** *p22 to 30*

The lowdown on the Activity Survey 2014, the Wood Review and PILOT forum initiatives

### **ELECTED SAFETY REPRESENTATIVES** *p32*

A spotlight on the inspirational work of elected safety representatives ahead of the annual UK Oil and Gas Industry Safety Awards

### **ISLAND HOPPING** *p35*

William Pridgeon of Scopus Engineering talks about his journey from the Caribbean to the UK Continental Shelf

# THE OIL AND GAS INDUSTRY CONFERENCE

**BOOK NOW**

don't miss your chance  
to be part of this  
important industry event!  
[www.oilandgasuk.co.uk](http://www.oilandgasuk.co.uk)



**Maximising Economic Recovery –  
Towards a Sustainable Future for the UK Continental Shelf**

## This unique conference

offers you the opportunity to hear from government, regulators, industry leaders and specialists. Have your finger on the pulse of the key issues influencing the continued success of the UK offshore oil and gas industry today and in the decades ahead.



## The event's agenda will encompass:

- Commercial Issues and Access to Finance
- Data Management
- Energy Policy
- Environment
- Exploration
- Operations
- Process Safety
- Skills and Employment



[www.oilandgasuk.co.uk](http://www.oilandgasuk.co.uk)

**11 - 12 June 2014**

Aberdeen Exhibition  
and Conference Centre  
Bridge of Don  
Aberdeen  
AB23 8BL

Oil & Gas UK  
Member Rate:  
£552.50 + VAT

Non-Member Rate:  
£850.00 + VAT



@oilandgasuk  
#oilandgasukevents

### REGULARS

#### 5 News round-up from Oil & Gas UK

Includes news on the Civil Aviation Authority's review of helicopter operations, the release of the *UK Offshore Fabricators Directory*, the transposition of the EU Offshore Safety Directive, plus much more.

#### 9 Membership matters

Nearly 40 new companies have joined Oil & Gas UK's ever expanding professional network.

#### 11 Dates for your diary

Save the dates and book online for Oil & Gas UK's industry-leading events. You'll get the chance to network with colleagues and gain valuable insight into the sector's hot topics.

*"Until I started going offshore I had never imagined half the jobs there are. Installations are like mini villages with sparkies, plumbers, chefs and so on... There are few jobs in which you can command the salary levels you can achieve in the oil and gas sector and which also offer global opportunities." p35*



### FEATURES

#### 35 Island hopping – from the Caribbean to the UK

William Pridgeon's interest in the UK oil and gas sector was instilled from a young age. The dimensional control surveyor at Scopus Engineering talks about his voyage from the Caribbean to the UK Continental Shelf.

#### COVER STORIES

#### 13 Smart thinking

Industry's long-standing collaboration with academia proves that often 'two heads are better than one'. BP, ABB and Senergy discuss how their partnerships with UK universities are advancing research and development, addressing the skills shortages and raising the profile of oil and gas.

#### 18 Grand designs

A defining characteristic of the UK offshore oil and gas sector is the proven ability of industry players to innovate. AGR, AVEVA and Meta shed some light on their entrepreneurial and product development strategies.

#### 22 Activity Survey 2014

Presenting some of the key facts and figures from Oil & Gas UK's *Activity Survey 2014*.

#### 25 Wood Review

Sir Ian Wood talks to *Wireline* about his recommendations for Maximising Economic Recovery from the UKCS following his independent review.

#### 28 Mission control – PILOT forum drives forward

PILOT, the government-industry forum, is working on a number of initiatives to help secure the next phase of the UK Continental Shelf. *Wireline* reports

#### 32 Standing tall

*Wireline* celebrates the inspirational work of elected safety representatives ahead of the annual UK Oil and Gas Industry Safety Awards.





*“Ideally, the aim is to produce practical business plans for existing assets, discoveries and prospects capable of delivering more of the remaining potential within each area.”*  
p28

#### QUICK LINKS

Look out for this symbol in the magazine and scan the accompanying QR code with your handheld device for easy direct links to online material. Download the QR code reader from your app store.



It's been a seminal first quarter for our industry marked by the findings from Sir Ian Wood's review. The Wood Report (p25) provides a timely intervention when the industry is at a crossroad and needs fundamental change to secure its long-term future.

Whilst capital investment is at a record high, the full potential of the UK Continental Shelf (UKCS) will not be realised without significant improvement in productivity, greatly improved exploration success, and urgent implementation of a new and more dynamic approach to regulation and taxation. The figures reported in our *Activity Survey 2014* provide valuable insight into the challenges ahead (p6 and p22).

Sir Ian proposes a new, appropriately resourced, arm's length regulator

and recommends that the industry, the Department of Energy & Climate Change and HM Treasury adopt a tripartite approach to maximising economic recovery. There is very strong support for this new paradigm within industry.

Continued growth will not be possible unless we all pull together. It's therefore good to see the work being carried out by Oil & Gas UK and its members under PILOT, the government-industry forum, around exploration, production efficiency, enhanced oil recovery and improved stewardship (p28).

And in this issue of *Wireline* we also hear more about the collaboration between academia and industry to advance R&D and address skills shortages (p13), as well as how companies in the supply chain are approaching product development, reflecting the strong entrepreneurial

culture across the sector (p18).

Furthermore, Oil & Gas UK will work closely with the Civil Aviation Authority (CAA) and the Helicopter Safety Steering Group following the release of the CAA's review into helicopter operations (p5).

An ability to embrace change and the opportunities this brings has characterised the industry for over 45 years. We now need more of the same to secure the next phase and the immense benefits for the economy and energy security which success will bring.

Q&A  
WITH  
SIR IAN WOOD  
p25

**Malcolm Webb,**  
Chief Executive,  
Oil & Gas UK

**Wireline is published by Oil & Gas UK, the leading representative organisation for the UK offshore oil and gas industry.**

Contact the editorial team on [editorial@oilandgasuk.co.uk](mailto:editorial@oilandgasuk.co.uk). Find out more about advertising in *Wireline* at [www.oilandgasuk.co.uk/advertising.cfm](http://www.oilandgasuk.co.uk/advertising.cfm).

Copyright © 2014 The UK Oil and Gas Industry Association Limited trading as Oil & Gas UK.

Oil & Gas UK is not responsible for any loss, injury, damage or costs resulting from the use of products or services advertised or featured.

**Editorial Team**  
Rupal Mehta and Cymone Thomas

**Contributors**  
Bill Phillips, Elaine McClarence, Emily Taylor, Graeme Smith, Helen Jackson, Laura Ackland, Lucy Gordon and Trisha O'Reilly

**Designed by**  
The Design Team at Oil & Gas UK

**Cover image**  
Meta's morphing tool uses hydraulic fluid pressure to shape metal downhole to provide integrity solutions across the life of the well. Pictured is a casing reconnect.

**Printed by**  
The Print Centre (TPC), Berkhamsted

ISSN 2053-5392 (Print), ISSN 2053-5406 (Online)

**Oil & Gas UK**  
the voice of the offshore industry

**Oil & Gas UK**  
6th Floor East  
Portland House  
Bressenden Place  
London SW1E 5BH

020 7802 2400

[www.oilandgasuk.co.uk](http://www.oilandgasuk.co.uk)

**twitter**  
@oilandgasuk



## 1. CIVIL AVIATION AUTHORITY COMPLETES REVIEW OF UK OFFSHORE HELICOPTER OPERATIONS

On 20 February, the UK Civil Aviation Authority (CAA) released its findings following a strategic review of UK helicopter operations in the aftermath of the tragic accident on 23 August 2013 off Sumburgh Head. The CAA carried out its review in conjunction with the Norwegian CAA and the European Aviation Safety Agency (EASA), and gathered evidence by engaging with the trade unions, industry, helicopter operators and manufacturers, government, regulatory bodies, and other experts.

The review recommends a number of measures to increase the safety of offshore helicopter flights. These include:

- Prohibiting helicopter flights in the most severe sea conditions
- Passengers only being permitted to fly if they are seated next to an emergency window exit, pending further improvements to helicopters, unless helicopters are fitted with extra flotation devices or passengers are provided with better emergency breathing systems
- Requiring all passengers to have better emergency breathing equipment unless the helicopter is equipped with side floats
- Changes to the way pilots are trained and checked
- The CAA taking on the role of approving each offshore helideck, ensuring they meet strict safety standards
- The EASA establishing a review of offshore helicopter accidents and incidents with national aviation organisations to highlight safety issues and develop remedies, and standardising helicopter operating information for pilots
- The helicopter operators fitting side floats; improving life rafts and life jackets; implementing automatic flotation equipment; and adding hand holds next to push-out windows
- Improvements to survival training for offshore workers by OPITO

The CAA will establish a new safety forum that will actively promote delivery of the recommendations and publicly report on progress. Robert Paterson, Oil & Gas UK's health, safety and employment issues director, says: "The focus is now on managing the changes arising from the report in a considered and systematic way. We applaud the involvement of the Norwegian aviation authority together with an independent peer group in the review process and note the CAA review found no significant differences between UK and Norway operations. We have a constructive working relationship with the CAA and we will continue to work closely with the CAA and the Helicopter Safety Steering Group to ensure the recommendations made are acted on as appropriate."

### FOR MORE INFORMATION

Please visit [www.caa.co.uk](http://www.caa.co.uk) or contact Robert Paterson on [rpateron@oilandgasuk.co.uk](mailto:rpateron@oilandgasuk.co.uk).



[www.caa.co.uk](http://www.caa.co.uk)

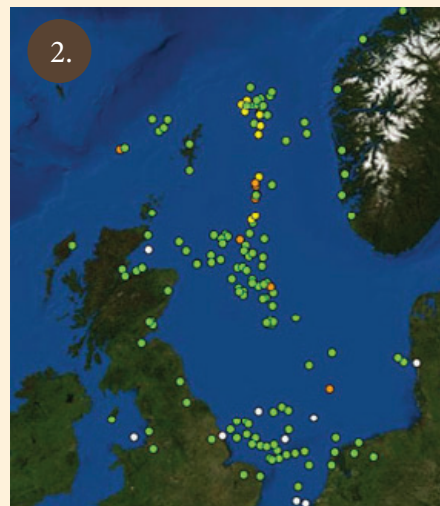
## 3. EU OFFSHORE SAFETY DIRECTIVE

Industry, the Health and Safety Executive (HSE) and the Department of Energy & Climate Change are working closely to transpose the EU Directive on offshore safety into UK legislation. As part of this activity, over 180 delegates attended a half-day seminar on 27 February in Aberdeen. The event, sponsored by ERM, provided a valuable insight into the prospective changes to UK legislation. Informal discussions continue with a view to producing a full stakeholder consultative document in June.

The presentations are available to download at [www.oilandgasuk.co.uk/events/archive.cfm](http://www.oilandgasuk.co.uk/events/archive.cfm). The HSE has also established an area on its website for up to date information on the EU Directive. Visit [www.hse.gov.uk/offshore/directive.htm](http://www.hse.gov.uk/offshore/directive.htm) for more details.



Robert Paterson, Oil & Gas UK's health, safety and employment issues director, at a seminar on 27 February on the EU Offshore Safety Directive



Helmet map of the UK Continental Shelf. It shows all the installations that record and send meteorological information. Colour coding is as follows: green – good weather conditions; yellow – wind speed above 40 knots; orange – visibility 4,000 metres, wave height five metres, wind speed above 45 knots, cloud less than 600 feet; red – visibility less than 1,500 metres, waves greater than seven metres, wind speed greater than 60 knots, cloud less than 300 feet; and white – no available cloud or visibility data

## 2. MET OFFICE AND INDUSTRY SHARE BRIGHT FORECAST

The Met Office has recognised the benefits of the industry-developed offshore helicopter weather monitoring network, Helmet, and is now using the data to enhance its own weather forecasting. Helmet, launched in 2011, allows more than 104 offshore installations to collect and display real-time weather data from North Sea platforms giving a detailed view of weather conditions. This helps to produce semi-automatic weather reports, in compliance with Civil Aviation Authority guidance, to be used by helicopter operators in their pre-flight planning. In the event of meteorological equipment failure on a platform, the system will automatically access data from nearby installations.

Met Office meteorological and oceanographic advisor, John Mitchell, says Helmet data is already making a significant contribution to experts' ability to monitor and provide accurate weather advice. He adds: "Accurate guidance is critical to the safe and efficient operation of not only the oil and gas industry but also offshore renewables, shipping and aviation activity."

For more information, please contact Rebecca Borresen on [rborresen@oilandgasuk.co.uk](mailto:rborresen@oilandgasuk.co.uk).

#### 4. WOOD REVIEW RELEASES FINAL REPORT ON MAXIMISING ECONOMIC RECOVERY

On 24 February, Sir Ian Wood published the findings of his independently-led review into the UK Continental Shelf (UKCS). Energy secretary Edward Davey MP had commissioned the review in June 2013. The central recommendation is for a new strategy, Maximising Economic Recovery from the UKCS (MER UK), which calls for more rigorous stewardship of the UK's remaining oil and gas resource through the creation of a new arm's length government regulator with additional powers and resources; strong tripartite co-operation between the regulator, HM Treasury and the industry; and greater collaboration between the oil and gas production companies (see p25 for a Q&A with Sir Ian Wood on the details of his recommendations).

Oil & Gas UK welcomes the final report. "This is a seminal moment in the history of the UKCS. The report is a game changer," says Malcolm Webb, Oil & Gas UK's chief executive. "We see this as the necessary catalyst for change, ensuring that the stewardship of the country's oil and gas resource is taken to a new level. The new tripartite approach is key and crucially important."

*For the full report, please visit [www.woodreview.co.uk](http://www.woodreview.co.uk) and see p25 for a Q&A with Sir Ian Wood.*



Oil & Gas UK staff presented at various events across the UK to launch the *Activity Survey 2014*. Chloe Smith MP for Norwich North (see second left), and former economic secretary to the Treasury, attended the lunch briefing in her constituency

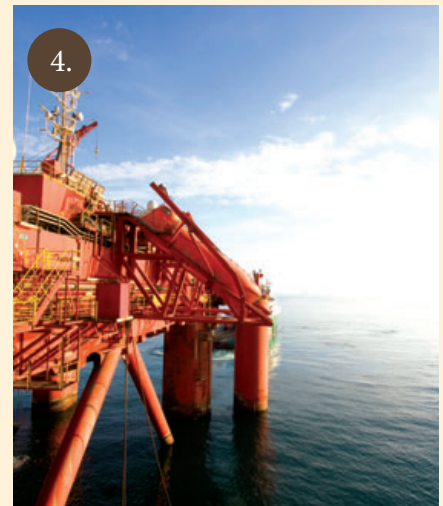
#### 5. ACTIVITY SURVEY 2014 HITS THE ROAD

Nearly 700 delegates heard first-hand the latest forecasts for the UK offshore oil and gas industry at a series of events held from 26 to 28 February. Oil & Gas UK took to the road with its newly released *Activity Survey 2014*, holding briefings in Aberdeen, London, Newcastle and Norwich.

The report, published on 25 February, highlights the contradictions currently at play in the industry. Following an all-time record of £14.4 billion capital investment on the UK Continental Shelf (UKCS) in 2013, the report predicts capital expenditure of around £13 billion in 2014, the second highest year on record. It also points to better than expected production last year with an average of 1.43 million barrels of oil equivalent per day; production is also expected to pick up further in 2014. This contrasts with exploration. Only 15 exploration wells were drilled in 2013 and exploration over the past three years has been at its lowest in the history of the UKCS. Meanwhile, operating expenditure rose by 15.5 per cent to a record of £8.9 billion in 2013 and is anticipated to rise further this year.

Oil & Gas UK's chief executive Malcolm Webb says: "It is crucial to address rising costs and improve our capital efficiency. However, without greatly increased exploration success, the conversion of more discoveries into production, a significant improvement in productivity and the deployment of enhanced oil recovery, we will not realise the basin's full potential. It is in this context that we fully support the timely recommendations made by Sir Ian Wood (see story above)."

*The full report is available to download at [www.oilandgasuk.co.uk/forecasts.cfm](http://www.oilandgasuk.co.uk/forecasts.cfm). See p22 of this issue for a summary of the key facts and figures in the report.*



#### 6. SUCCESSFUL EXPLORERS SHARE SOLUTIONS TO PITFALLS

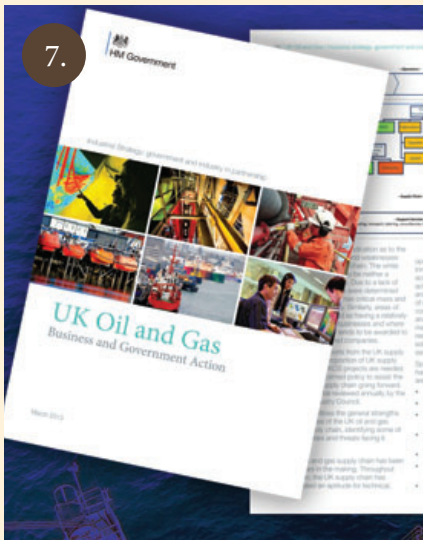
On 4 February, over 150 people attended the Pitfalls of Exploration Conference, organised by Oil & Gas UK in partnership with the Petroleum Exploration Society of Great Britain. The one-day conference focused on key lessons from exploration on the UK Continental Shelf (UKCS) with a view to boosting further success across the sector. The event reflects the urgent need to increase exploration activity. Data released by the Department of Energy & Climate Change and presented in Oil & Gas UK's *Activity Survey 2014* (see story left) clearly illustrate the parlous state of exploration on the UKCS.

*See p28 for information on the Exploration Task Force, part of the government-industry forum PILOT.*



Simon Toole of the Department of Energy & Climate Change gave the keynote address at the Pitfalls of Exploration conference on 4 February in London





## 7. ABERDEEN SHOWCASE REVEALS GAME-CHANGING TECHNOLOGIES

On 5 March, the Technology Showcase was held in Aberdeen. It provided a unique opportunity for industry innovators to discuss the latest technological development opportunities on the UK Continental Shelf. The nearly 400 attendees at the event, organised by ITF in partnership with Oil & Gas UK, were also given the chance to view cutting-edge innovations from the research and development community. The presentations explored enhanced oil recovery, increased oil recovery, materials and corrosion, and digital monitoring for production efficiency and integrity.

*See p13 for a feature on advances in R&D through collaboration between industry and academia and p18 to find out more about the entrepreneurial and product development strategies of companies within the supply chain.*



The Technology Showcase provided an excellent platform to discuss the technological opportunities available to maximise recovery from the UK Continental Shelf

## 7. INDUSTRIAL STRATEGY REACHES ONE-YEAR MILESTONE

One year on from the launch of the industry-government Oil and Gas Industrial Strategy in March 2013, considerable progress has been made across its key areas of focus to ensure growth of the domestic oil and gas sector. The highlights are as follows:

- Completion of the first project to map the supply chain's economic contribution (the findings are due to be released in April)
- Publication of the *UK Offshore Oil and Gas Fabricators Directory* to promote the capabilities of UK fabricators domestically and internationally (see story below)
- Collaboration with PILOT, the government-industry forum, to move towards producing a strategy for accelerating technology development
- A Technology Showcase in Aberdeen on 5 March, organised by the ITF, in collaboration with Oil & Gas UK (see story below, right)
- Two events in London and Aberdeen last year to address the challenges in accessing capital by raising awareness of the financial instruments available and to showcase the experiences of businesses securing finance
- OPITO running a Transition Training Programme (TTP) over 2013, which took a competence-based approach to up-skilling experienced workers from other industries
- Raising awareness of the industry at government level through a two-week exhibition last September in the lobby of the Department for Business, Innovation & Skills

The task ahead now is for the Oil and Gas Industry Council, which steers the strategy, to build on the existing activity.

*For more information, please contact Stephen Marcos Jones on [smarcosjones@oilandgasuk.co.uk](mailto:smarcosjones@oilandgasuk.co.uk). Also see an article on the strategy in the December 2013 Wireline at <http://bit.ly/lfHok1Z>.*



The *UK Offshore Oil and Gas Fabricators Directory 2014* contains comprehensive and fully verified information about 12 fabricators operating at 18 locations across Britain

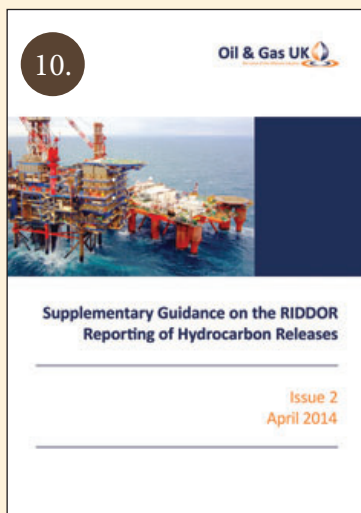
## 9. FABRICATORS DIRECTORY PROMOTES UK-WIDE CAPABILITIES

The *UK Offshore Oil and Gas Fabricators Directory 2014* was launched on 15 January at an event attended by fabricators, major contractors, operators and representatives from the Department of Energy & Climate Change. The publication showcases fabrication yards around the UK which design and build major facilities for both domestic and international energy markets, and aligns with the objectives of the Oil and Gas Industrial Strategy (see story above) to encourage growth of the domestic supply chain. The directory contains comprehensive and fully verified information about 12 fabricators operating at 18 locations across Britain.

Oonagh Werngren, Oil & Gas UK's operations director, says: "As a result of the substantial investment in major projects on the UK Continental Shelf in 2013, there is currently significant demand for fabrication services, especially those associated with fields developed as subsea tiebacks to existing production platforms."

*The directory is available to download at [www.oilandgasuk.co.uk/knowledgecentre/fabrication.cfm](http://www.oilandgasuk.co.uk/knowledgecentre/fabrication.cfm).*





## 10. REVISED SUPPLEMENTARY GUIDANCE ON REPORTING HYDROCARBON RELEASES

The revision of hydrocarbon release (HCR) guidance clarifies when small HCRs should be reported under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR). The *Revised Supplementary Guidance on the RIDDOR Reporting of Hydrocarbon Releases* intends to resolve inconsistency in reporting by helping duty holders to assess their obligations to report HCRs. The publication aims to do this in a manner that is unambiguous, easily understood and fully aligned with RIDDOR. HCRs remain a key major hazard management concern for the industry and robust measures must be in place to prevent, detect, control or mitigate such releases. It is important to note that the new guidance will typically only affect reporting of 'lower order' releases (that is other than major or significant releases) where there may be some doubt as to the requirement for statutory reporting.

*Having been subjected to industry and Health and Safety Executive review, these guidelines will be published on 1 April to come into immediate effect and will be available for download at [www.oilandgasuk.co.uk/publications/publications.cfm](http://www.oilandgasuk.co.uk/publications/publications.cfm).*

## 11. DECOMMISSIONING RELIEF DEEDS HELP COMPANIES FIRM UP INVESTMENT PLANS

Over 100 attendees turned out to hear Helen Dickinson, deputy director at HM Treasury, elaborate on the importance of Decommissioning Relief Deeds (DRDs) at Oil & Gas UK's breakfast briefing on 13 February in London. The DRDs are contracts between government and industry that provide certainty of tax relief on decommissioning costs, freeing up capital for investment. Peter Thomas, chief financial officer at TAQA Bratani, also spoke at the event and described the commercial benefits of fiscal certainty in this area, which make the UK Continental Shelf a more attractive destination for investment.

*The presentations can be downloaded at [www.oilandgasuk.co.uk/events/archive.cfm](http://www.oilandgasuk.co.uk/events/archive.cfm) and webcasts from the event can be viewed at [www.oilandgasuk.co.uk/news/The\\_Decommissioning\\_Relief\\_Deed.cfm](http://www.oilandgasuk.co.uk/news/The_Decommissioning_Relief_Deed.cfm).*



Helen Dickinson, deputy director at HM Treasury, and Mike Tholen, Oil & Gas UK's economics and commercial director, at the breakfast briefing on Decommissioning Relief Deeds



L-R: Prime Minister David Cameron, business secretary Vince Cable MP and chief secretary to the Treasury Danny Alexander MP visited industry sites on 24 February

## 12. UK CABINET MINISTERS VISIT INDUSTRY SITES

On 24 February, in the week that both the *Wood Report* and *Activity Survey* were published (see p6), the Prime Minister brought his Cabinet to Aberdeen. Before this regional Cabinet meeting, held at Shell's Altens headquarters, UK Ministers visited industry sites across Aberdeen. Prime Minister David Cameron toured a BP oil platform, while Deputy Prime Minister Nick Clegg, energy secretary Edward Davey MP and Scottish secretary Alistair Carmichael MP visited the Peterhead gas-fired power station operated by Scottish and Southern Energy. The power station is at the centre of the carbon capture and storage project steered by Shell. Business secretary Vince Cable MP toured Global Energy Group's Nigg Energy Park, looking around the dry dock and facilities, including its Skills Academy where he spoke with some of its trainees. And chief secretary to the Treasury Danny Alexander MP visited Transocean's new office and training centre in Kingswell. In addition to their discussions about the findings in the Wood Review, Mr Alexander tested the crane, marine and drilling simulators, successfully tripping a drill pipe in the latter.

*These visits are important to raise awareness of the vital economic contribution made by the UK offshore oil and gas sector. Oil & Gas UK is often approached by ministerial teams looking for companies to host such visits. If you are a member of Oil & Gas UK and interested in hosting a political site visit, please contact Jenny Stanning on [jstanning@oilandgasuk.co.uk](mailto:jstanning@oilandgasuk.co.uk) or Ashley Shackleton on [ashackleton@oilandgasuk.co.uk](mailto:ashackleton@oilandgasuk.co.uk).*

### 13. ANNUAL PARLIAMENTARY RECEPTION TO PROMOTE INDUSTRY

Over 140 parliamentarians, government officials, industry leaders, and political party and trade association representatives gathered on 22 January at the House of Commons for the annual reception for the British Offshore Oil and Gas Industry All Party Parliamentary Group (APPG). The event is an ideal platform for government and all political parties to hear the views of oil and gas sector representatives from across the spectrum.

The minister for business and energy, Michael Fallon MP, spoke at the reception and outlined the vital role of the industry in “driving the economy” and how the Wood Review (see p6) is the key vehicle for maximising economic recovery in the UK.



Minister for business and energy, Michael Fallon MP, addresses the audience at the annual APPG reception

#### MEMBERSHIP MATTERS



#### THE ESSENTIALS – A NEW TRAINING COURSE FOR MEMBERS

Oil & Gas UK is launching a new series of training modules in quarter 3 2014. The Essentials course is designed to build practical skills in key areas of business such as PR and communications, exporting and internationalisation, and negotiating skills, to name a few. These sessions, delivered by recognised experts, will focus on the practical challenges and solutions. Designed for people who are new to, or have limited knowledge of the subject areas, the course will be both interactive and engaging.

*Watch out for more details, but if you require any immediate information please contact Eddy Winters, membership manager, on [ewinters@oilandgasuk.co.uk](mailto:ewinters@oilandgasuk.co.uk).*

#### NEW MEMBERS JOIN OIL & GAS UK

We are pleased to welcome the following companies who have joined Oil & Gas UK since the last issue of *Wireline*:

AECOM, Aero Stanrew, Air Partner plc, Archer (UK) Ltd, Bender UK Ltd, brightsolid, Continuum Analysis Engineering Ltd, CCI, Dundas Consultants Ltd, EPSCO Ltd, G4S Secure Solutions, Hawkes Associates, Holoxica Ltd, Hunter Adams, Infield Systems, International Association of Drilling Contractors (IADC), Johnston Carmichael, LSC Group, Lytec Services Ltd, Marex Marine & Risk Consultancy, Mi-Case, MMX Communications Services Limited, MSIS Group,

NorSea Group (UK) Ltd, NuLab Limited, Oyster Petroleum, Petrodigital, PhotoSynergy Ltd, Power Jacks Ltd, Reactive Downhole Tools, REC Consultancy Services Limited, Redhall Engineering, RSS Marine Ltd, ScanTech Offshore Ltd, Schneider Electric, SeaEnergy Ltd, The Law Debenture Trust Corporation plc, Universal Marine Medical International LLC, XIC and Zenith Energy.

*Eddy Winters, membership manager, is committed to ensuring that our member benefits are tailored to members' needs. Please contact Eddy on [ewinters@oilandgasuk.co.uk](mailto:ewinters@oilandgasuk.co.uk).*



*Download the Membership Pack at [www.oilandgasuk.co.uk/aboutus/membership\\_pack.cfm](http://www.oilandgasuk.co.uk/aboutus/membership_pack.cfm).*



No Drydock .....Safely

**EM&I**

Delivering Integrity

# ODIN™ EM&I's Diverless UWILD

The Industry Challenge that the EM&I Group have successfully resolved

With an increasing number of Floating Offshore Installations (FOIs) now operating on station in deep waters for extended periods of 25 years or more, EM&I have developed a complete package of services that helps Operators stay out of drydock while optimising safety and complying with regulatory and class requirements. One such innovative solution is ODIN, a new approach to meeting the requirements of underwater hull inspections. ODIN™ is part of EM&I's 'No Drydock ...Safely' service package and allows the UWILD (Underwater Inspection in Lieu of Drydocking) requirement to be fulfilled without divers or work-class ROVs, benefitting Operators by major cost and risk reduction, while delivering compliance and high quality integrity data.

The EM&I diverless methodology, ODIN, has been implemented on two ABS classed FPSOs offshore Brazil and has been accepted by the other major Classification societies.

ODIN uses advanced methods to plan and carry out the required structural, isolation valves and other required inspections from inside the hull. Sea chests and isolation valves are inspected using camera insertion

equipment developed by EM&I. The ODIN approach reduces POB and diver intervention thereby improving safety, reducing costs and obtaining better quality data.

ODIN can be aligned with the Hull Continuous Survey programme which means that the UWILD costs are spread over a 5 year period, leading to reduced costs and minimal operational disruption.

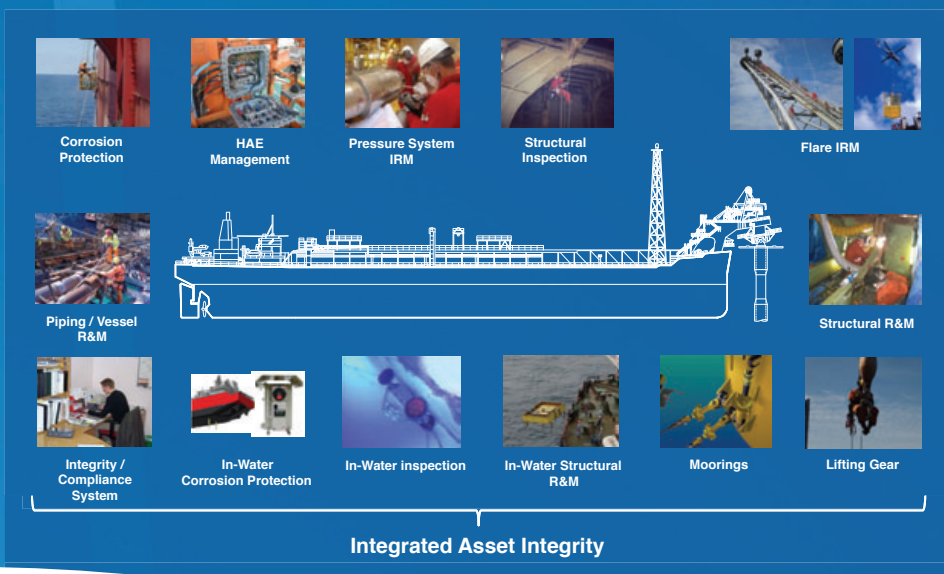


## ODIN™ delivers the following benefits;

- Reduced HSE risk
- Reduced cost
- Reduced POB
- Improved information quality
- Minimal weather dependency and operational disruption
- Extended time on station
- Applicable to FPSOs, FLNG units, MODUs, mooring systems, process plant, drill ships and trading ships



The EM&I 'No Drydock ...Safely' methodology is used fleet wide for major Operators improving their business by supporting effective asset integrity and applying innovative inspection, maintenance and repair methods. We provide meaningful asset condition information to help clients make informed decisions and avoid unplanned drydocking whilst reducing POB, safety and environmental risk and saving CAPEX and OPEX costs.



See us at  
[www.emialliance.com](http://www.emialliance.com)



# Dates for your diary

Raise your company's profile and be better informed about the important issues of the day by attending Oil & Gas UK's industry-leading events and training courses. For more information, please visit [www.oilandgasuk.co.uk/events](http://www.oilandgasuk.co.uk/events).

## BOOK ONLINE



## EVENTS

30 April  
**The UK Oil and Gas Industry Safety Awards**  
Aberdeen

Principal Sponsor



13 May  
**Open Doors – Meet the Oil & Gas UK Team**  
Aberdeen

2 to 20 June  
**Oil & Gas Technology Roadshow**  
Aberdeen and Great Yarmouth areas

11 to 12 June  
**The Oil and Gas Industry Conference:**  
Maximising Economic Recovery –Towards a Sustainable  
Future for the UK Continental Shelf  
Aberdeen

**Sponsorship packages available!**  
Contact the events team on [events@oilandgasuk.co.uk](mailto:events@oilandgasuk.co.uk)

5 November  
**PILOT Share Fair**  
Aberdeen

6 November  
**Oil & Gas UK Awards**  
Aberdeen

Principal Sponsor



## SEMINARS

23 April  
**Employment and Skills Seminar**  
Aberdeen

28 May  
**KP4 Seminar**  
Aberdeen

4 June  
**Aviation Seminar**  
Aberdeen



## MEMBERS-ONLY EVENTS

3 April  
**Making Sense of the  
Independence Referendum**  
London

23 September and 16 October  
**Members' Speed Networking**  
Aberdeen and London, respectively



## TRAINING COURSES

10 April  
**Infrastructure Code of Practice**  
London

22 April  
**Infrastructure Code of Practice**  
Aberdeen

24 April  
**Introduction to Industry Guidelines on  
Well Life Cycle Practices**  
Aberdeen

29 May  
**Oil and Gas Overview**  
London

17 June  
**Master Deed**  
London

30 September  
**Fundamentals in Oil and Gas**  
Aberdeen



## BREAKFAST BRIEFINGS

**Aberdeen Breakfast Briefings**

- 3 June
- 28 August
- 1 October
- 2 December

Sponsored by



**London Breakfast Briefings**

- 21 May
- 9 September
- 3 December

Sponsored by



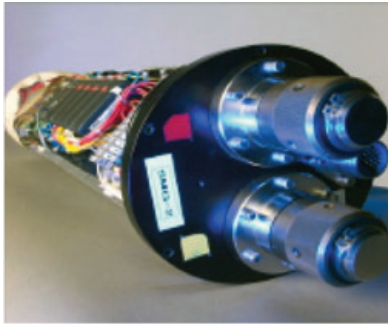
**Sponsorship packages available!**  
Contact the events team on [events@oilandgasuk.co.uk](mailto:events@oilandgasuk.co.uk)

For more information and to book, please visit [www.oilandgasuk.co.uk/events](http://www.oilandgasuk.co.uk/events).



### Subsea Electrical Test System (SETS)

- Enables Electrical Testing of umbilicals and structures Subsea.



### ITVIS (I Tube Visual Inspection System)

The state of the art cameras and LED lighting systems enable high quality video monitoring and recording of the bend stiffener installation and the riser inhaul process at the surface vessel.

This can help significantly to speed up the process, reduce the risk of mistakes and the cost of lost production.

- Modular construction for easy transportation and deployment



### Lifting Equipment Thorough Examinations

Imes' Thorough Examination services are being successfully delivered on many offshore platforms as well as onboard construction, pipe-laying and dive support vessels for a range of clients. We manage the complete independent inspection of fixed and loose Lifting Equipment through our bespoke online Lifting Equipment Safety Management System programme.



For further information please contact Peter Smith on 01224 533512 or peter.smith@imes-group.com

[www.imes-group.com](http://www.imes-group.com)

# REDUCING RISKS IN THE WORKPLACE

WE ARE SPECIALIST PROVIDERS OF PRINTED SAFETY MATERIAL TO THE OIL & GAS INDUSTRY

Our products include:

- TALLY BOOKS
- TOOLBOX TALK MATERIAL
- AWARENESS PACKS
- PROMPT / AT RISK CARDS



† 01224 878799  
e safety@xic.com

[xic.com](http://xic.com)



## Offshore operations planning

**BMT ARGOSS** is a leading provider of design support and operations planning, based on decades of experience in metocean, weather forecasting and vessel response.



Marknesse office,  
The Netherlands:  
+31 (0) 527 242 299

Fareham office,  
United Kingdom:  
+44 (0) 1489 889 260

Aberdeen office,  
United Kingdom:  
+44 (0) 1224 414 200



"Where will our knowledge take you?"

[www.bmtargoss.com](http://www.bmtargoss.com)



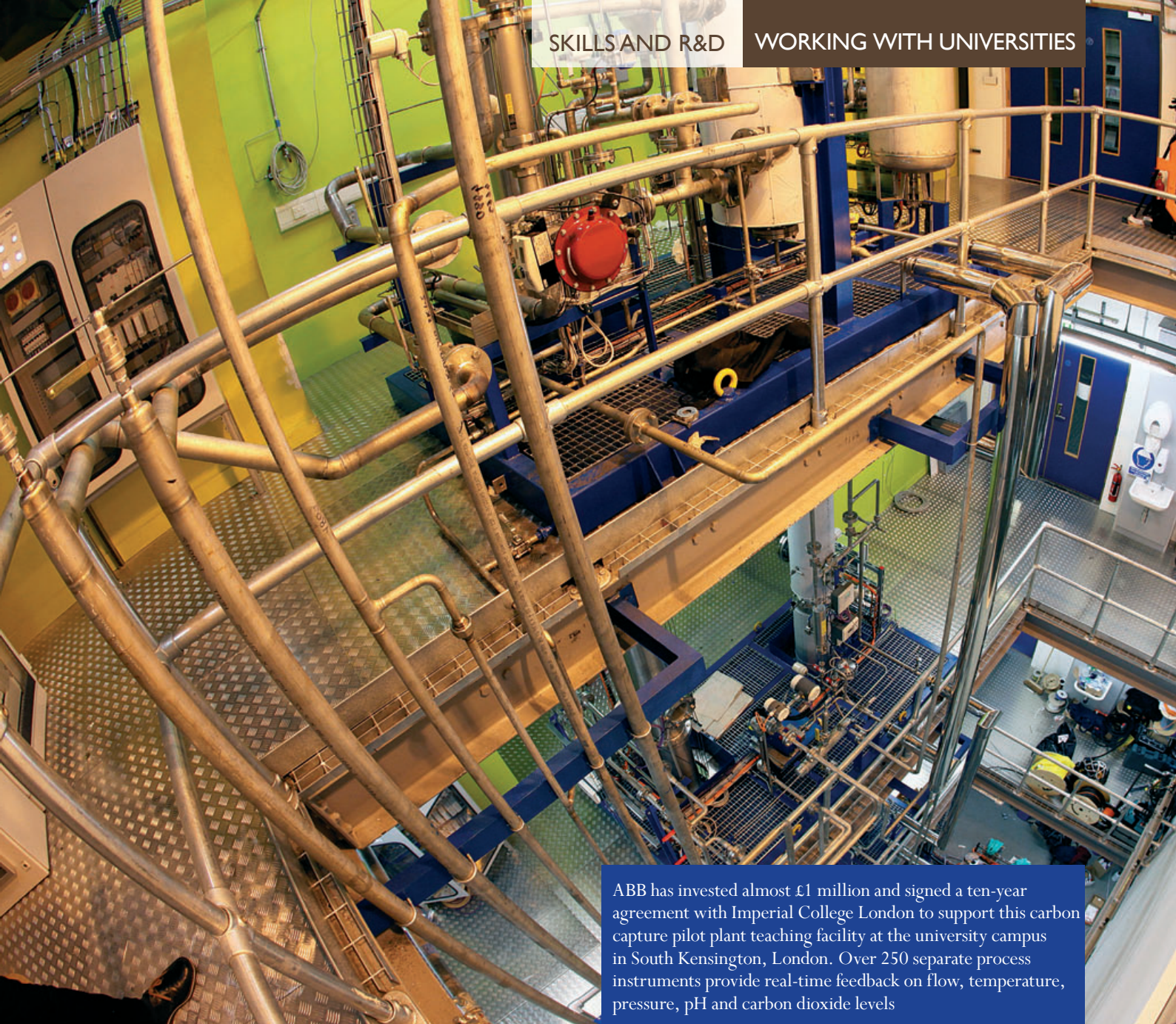


ABB has invested almost £1 million and signed a ten-year agreement with Imperial College London to support this carbon capture pilot plant teaching facility at the university campus in South Kensington, London. Over 250 separate process instruments provide real-time feedback on flow, temperature, pressure, pH and carbon dioxide levels

## Smart thinking

It's often said that 'two heads are better than one'. This has certainly been proven in the case of industry's long-standing collaboration with academia. BP, ABB and Senergy discuss how their partnerships with UK universities are advancing research and development, addressing skills shortages and raising the profile of oil and gas.

'Self-lubricating' and 'self-healing coatings'... if you don't know much about what these scientific terms mean, they might well seem like concepts that have a place in science fiction and have nothing to do with the work of the UK offshore oil and gas industry. The reality couldn't be more different.

Smart materials such as these, whose properties change in response to external stimuli, could prove to be game-changing technology for the sector.

Over the past 18 months, BP has invested in the BP International Centre for Advanced Materials (BP-ICAM). It is based at the University of Manchester

and the other partner members are the University of Cambridge, Imperial College London and the University of Illinois at Urbana-Champaign.

The objective is to steer research and development (R&D) that advances the fundamental understanding and use of materials in the energy sector. This is >



important when oil and gas producers are working at unprecedented depths, pressures and temperatures, and refineries, manufacturing plants and pipeline operators are seeking ever better ways to combat corrosion and improve their operations.

Within oil and gas the work streams of BP-ICAM include:

- Developing new materials for high pressure high temperature applications
- Creating hydrogen-resistant steel for subsea installations
- Designing coatings that protect from corrosive attack, prevent biofilm formation, self-lubricate and self-heal in response to a variety of damage modes
- Producing new membranes and separation techniques for low salinity enhanced oil recovery technologies

In total, the ten-year \$100 million programme is expected to support 25 new academic posts, 100 postgraduate researchers and 80 postdoctoral fellows.

### Joined forces

Collaboration and knowledge exchange with universities of this kind is well established in the industry. It is driven by the need to advance R&D, address skills shortages and raise the profile of oil and gas among students and researchers. The UK oil and gas sector's interaction with

academia is therefore broad and ranges from high-level joint research and support for masters programmes, to sponsorship of facilities and students.

Bob Sorrell, BP vice president of public partnerships, says: "Our partnerships with universities are a core part of our innovation system." He hopes that the company's involvement will help to ensure that BP-ICAM's innovative research delivers real-life applications and solutions.

Professor Phil Withers, director of BP-ICAM at the University of Manchester, adds: "The fantastic thing is that it brings together four universities with complementary skills...with BP staff being involved at a day-to-day level."

### In the driving seat

ABB is contributing to R&D and professional development at Imperial College London.

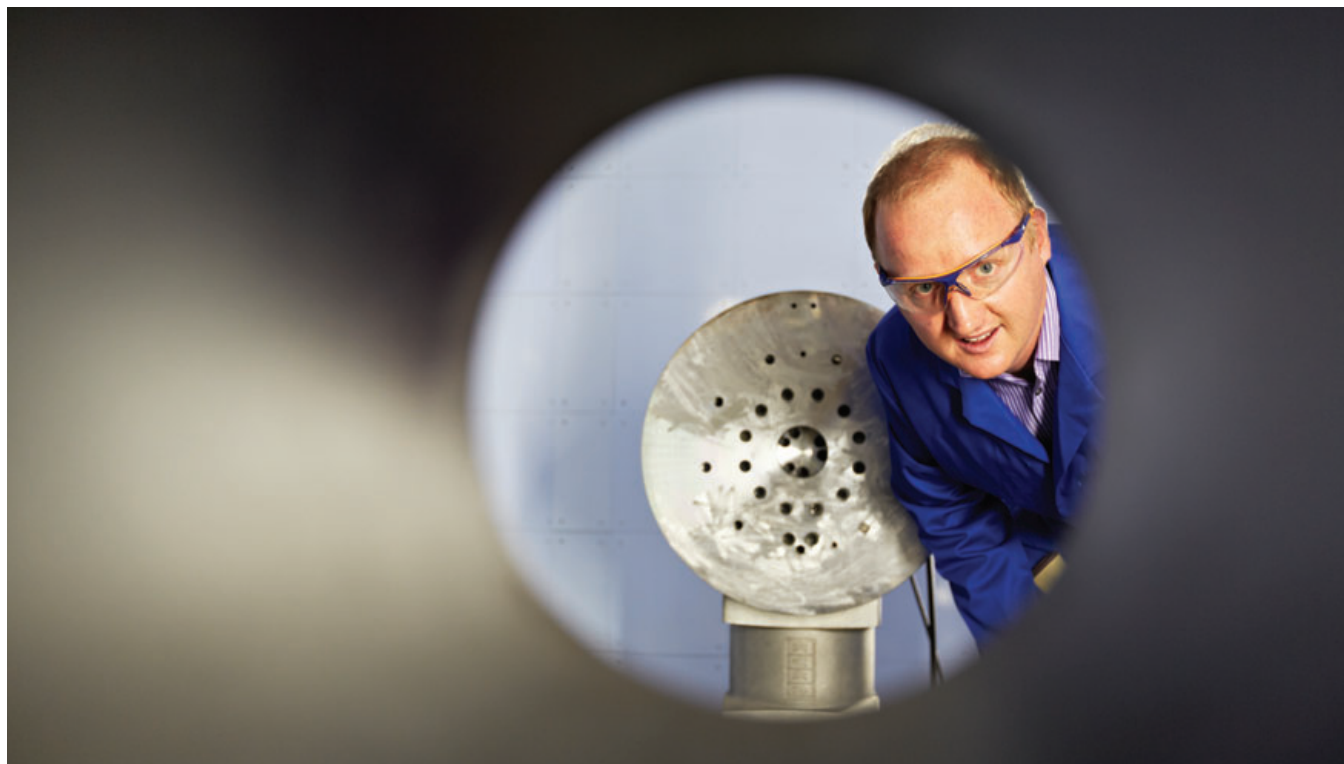
The international company, which specialises in power and automation technologies and supplies the oil and gas sector, has 20 sites around the UK, employing around 3,000 people. In 2012, it invested almost £1 million and signed a ten-year agreement with Imperial to support a carbon capture pilot plant teaching facility located at the university campus in South Kensington, London.

*"Our partnerships with universities are a core part of our innovation system."*

The investment gives undergraduates the chance to control the industrial-standard pilot plant, learning about instrumentation and process automation and gaining practical experience of plant operation.

Over 250 separate process instruments provide real-time feedback on flow, temperature, pressure, pH and carbon dioxide levels. These data are fed to the control and safety system for real-time process display. Using the latest iPad technology, the plant operators can also remotely monitor the facility.

This initiative is supplemented by ABB's sponsorship of chemical engineering undergraduates at Imperial to create the next generation of industrial engineers. "At the heart of our involvement is the opportunity that we get to raise awareness of the benefits of a career in control and instrumentation engineering," says



Dr John Francis with a fibre laser robotic remote cutting system for research into corrosion at the University of Manchester as part of the \$100 million BP International Centre for Advanced Materials. The centre steers research and development to advance the fundamental understanding and use of materials in the energy sector



Senergy has launched a masters programme with the University of Aberdeen in direct response to the growing demand for petrophysicists in the oil and gas industry

*“At the heart of our involvement is the opportunity that we get to raise awareness of the benefits of a career in control and instrumentation engineering. We cannot stress how important this is becoming in today’s fiercely competitive world where there is a high percentage of engineering undergraduates choosing finance and accounting.”*

Will Leonard, ABB UK marketing manager. “We cannot stress how important this is becoming in today’s fiercely competitive world where there is a high percentage of engineering undergraduates choosing finance and accounting. The challenge ahead is immense. If we are to compete on the world stage, we must address the skills gap urgently.”

He continues: “Last year, we recruited 25 graduates directly from UK universities into engineering roles, 20 of which are working in oil and gas. It has also been so encouraging to see many more female graduates in the application and recruitment process.”

Dr Daryl Williams, director of the Pilot Plant Project at Imperial, agrees that the scheme “provides an opportunity to influence the training and education of thousands of young chemical engineers”. The pilot plant will be used to run hundreds

of different scenarios and experiments in the coming years and ABB also uses the facility for client demonstrations and training, staff development, and product testing and software evaluation.

Will adds: “The increasingly global nature of the projects we are working on, particularly in the oil, gas and petrochemical sectors, means that engineers are being called on to work in many different regions worldwide. Our aim is to use the plant to create a lasting association between the real-life problems that students will encounter once they qualify and the technology and capabilities available.”

Some of the students have also completed work placements at ABB to get further experience on current projects. More widely, ABB has nurtured relationships with UK universities for over 30 years providing investment in equipment for teaching and sponsorship of research projects and

## SIZE AND SHAPE OF THE OFFSHORE WORKFORCE

### COLLECTING THE VITAL STATISTICS

A joint industry project is underway to measure the size and shape of the UKCS offshore workforce using a 3D portable scanner.

Working in collaboration, Oil & Gas UK and Robert Gordon University intend the data to be used to enhance safety, assisting in the design of future offshore equipment and facilities and informing emergency helicopter evacuation and survival suit design.

Since 1985, when the last such survey of the offshore workforce was carried out, the weight of male workers has risen by 19 per cent. The current study involves collecting data from a sample size of 600 offshore workers over a range of weight categories.

*If you would like to find out more about participating in this study, please contact Robert Ledingham on [r.ledingham1@rgu.ac.uk](mailto:r.ledingham1@rgu.ac.uk).*

professors, most recently at the University of Bristol as part of the company’s Research Grant Programme.

### Setting the standard

Global energy services company, Senergy, headquartered in Aberdeen, also recognises the value of close connections with universities to meet the growing demand for skilled personnel. In collaboration with the University of Aberdeen, Senergy launched a masters (MSc) programme last year in Petrophysics and Formation Evaluation in direct response to the shortfall in practitioners in this discipline.

The programme is believed to be a world first dedicated to petrophysics, which is a key integrating discipline within the geosciences for the finding and development of hydrocarbon resources. The course is designed as a modular programme to enable flexibility for those wishing to combine studies with their work.

“This is a great example of partnership in action which directly addresses the needs >

UKOILANDGASDATA.COM

## ADDING REAL VALUE TO EDUCATION

Helping UK universities advance geoscience education is a shared endeavour of the 60 plus oil companies behind CDA (Common Data Access Limited). As such, these institutions are granted free access to the wealth of oil and gas data available online through CDA's UKOilandGasData.com portal.

This allows students to gain experience using the same quality of data as industry. For example, the University of Aberdeen runs simulated licence rounds where students make bids based on the data for the first wells drilled in each block of a quad. They then use the information held in UKOilandGasData.com to check what fields and reserves they would have found. Aside from the conventional application of CDA's data, the University of Edinburgh uses it for its carbon capture and storage Masters programme and dissertation projects, in addition to supporting several PhD programmes.

An added benefit of this access by universities is to increase knowledge and understanding of the geology of the UK Continental Shelf (UKCS) among potential recruits to the industry. Whilst, advances in scientific understanding has significantly benefitted exploration as more subtle traps are located. This prolongs the life of a basin which still provides much of the UK's energy needs.

*For more information on CDA's support for tertiary education, please visit [www.cda.com/cda-documents](http://www.cda.com/cda-documents).*

*“The oil and gas industry changes rapidly and, as a result, it creates significant new career opportunities. Petrophysics is a prime example.”*

of industry,” says Professor Sir Ian Diamond, principal and vice-chancellor of the University of Aberdeen.

The team of lecturers have been hand-picked for their knowledge and experience to help individuals or companies achieve their goals.

Graham Webber, principal petrophysicist at Senergy and part of the technical training team, says: “The oil and gas industry changes rapidly and, as a result, it creates significant new career opportunities. Petrophysics is a prime example, and there are many people who, whilst not necessarily trained as petrophysicists, possess the relevant skills and expertise which can be developed further.”

Graham initially worked as an academic in physics before moving into the oil and gas industry. He adds: “Diversifying into niche areas of expertise opens up exciting career prospects on a global scale, and I have certainly enjoyed not only consulting around the world for major clients but also teaching petrophysics to a large number of people with very diverse technical backgrounds, cultures and levels of experience.”


### Open doors

Lynne Staples-Scott, corporate responsibility manager at BP, notes that the company's relationship with four Scottish universities – Strathclyde, Heriot-Watt, Aberdeen and Robert Gordon “is key to our business”. The universities each have

a BP executive sponsor and a company campus team who work closely with them to develop projects and activities.

Lynne explains: “It raises the oil and gas career profile, allows us to ensure that science and engineering courses are relevant to industry, and supports the development of capability and talent.”

For example, BP is investing almost a quarter of a million pounds over the next three years in an ‘Energy Partnership’ with Robert Gordon University (RGU) and the University of Aberdeen. It will focus on geoscience, and petroleum and subsea engineering disciplines to help address some of the identified skills shortages. This includes an undergraduate sponsorship scheme, worth £20,000 per year to each university, and six work placements at BP annually for students from each institution.

Professor Ferdinand Von Prondzynski, principal of RGU, believes “the new initiatives will give significant support to the city and region and help to establish the north east [of Scotland] as a high value innovation and skills centre in the oil and gas industry”. 

*For more information, please visit [www.icam-online.org](http://www.icam-online.org), [www3.imperial.ac.uk/chemicalengineering/discovery/facilities/plant](http://www3.imperial.ac.uk/chemicalengineering/discovery/facilities/plant) and [www.abdn.ac.uk/study/courses/postgraduate/taught/Petrophysics](http://www.abdn.ac.uk/study/courses/postgraduate/taught/Petrophysics).*

*To discuss the Petrophysics and Formation Evaluation programme, contact Senergy on +44 (0)1330 826673 or email [Beth.Reid@senergyworld.com](mailto:Beth.Reid@senergyworld.com).*



The carbon capture pilot plant teaching facility at Imperial College London, with support from ABB, offers undergraduates the chance to learn about instrumentation and process automation and gain practical experience of plant operation





## A global leader in subsea well intervention

Helix Well Ops (Well Ops), a leading global provider of subsea well intervention, has recently moved to larger premises at Alba Gate on Stonewood Road, Dyce, Aberdeen. It has taken on a six-year lease of the 27,682 sq ft building which equates to double the space it previously occupied at Helix House.

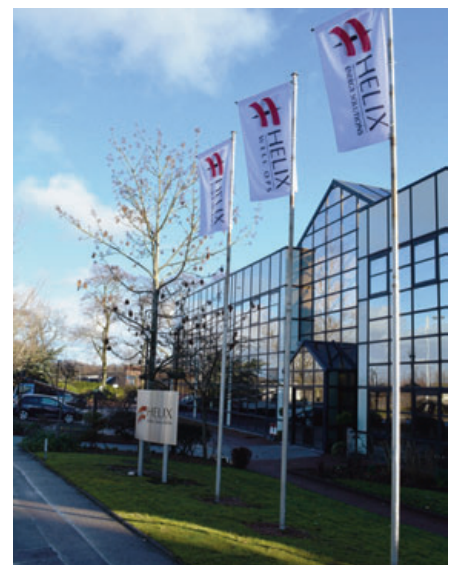
The move to larger premises represents a major investment for Well Ops and is a result of the growing workforce required to meet the increasing demand for its well operation and decommissioning services delivered from three mono-hull vessels.

Well Ops currently employs 115 staff onshore and a further 350 offshore onboard its well intervention vessels MSV Seawell, Well Enhancer and Skandi Constructor, which joined the fleet in 2013.

The addition of Skandi Constructor provides Well Ops' clients with a mono-hulled solution for deeper water wells and well intervention. Expanding its fleet and capabilities has led to an increase in business, with some of its vessels holding contracts until the end of 2015. Demand for the vessels is strong, with upcoming work west of Shetland, offshore Canada and Equatorial Guinea illustrative of the diversity of environments they are capable of operating in.

In the past five years Well Ops has invested heavily in its operations in Scotland, adding two mono-hull well intervention vessels to its fleet. The firm's move to larger premises illustrates the investment it continues to make in the business, underlining its commitment to further grow an already strong presence in the region.

For more information about Well Ops visit [www.helixesg.com](http://www.helixesg.com) or telephone 01224 351800.



[wellopsenquiries@helixesg.com](mailto:wellopsenquiries@helixesg.com)

[www.helixesg.com](http://www.helixesg.com)

PRODUCTION ENHANCEMENT • WELL MAINTENANCE • SATURATION DIVING • WELL ABANDONMENT/FIELD DECOMMISSIONING





Meta's morphing tool uses hydraulic fluid pressure to shape metal downhole to provide integrity solutions across the life of the well. Pictured is a casing reconnect

## Grand designs

A defining characteristic of the UK offshore oil and gas sector is the proven ability of industry players to innovate, ensuring future growth. AGR, AVEVA and Meta shed light on their entrepreneurial and product development strategies.

The relentless pursuit of smarter ways of working and enhanced front-line products has spawned an enterprise culture within the UK offshore oil and gas sector and its supply chain – one that inspires fresh thinking among organisations with designs on growing their businesses.

Cambridge-based software provider AVEVA promotes an “agile approach” to innovation. “Our approach isn’t based on

exhaustive specifications but rather upon broad directions from business leaders and the market,” says senior product business manager Simon Bennett. “Developers work from those directions and then routinely demonstrate what they have done so far. It means we’re able to seek immediate feedback against our developments and better align to market needs.”

Demand for software development and delivery within the oil and gas sector is

*“There's no point innovating something that no-one wants, but if it makes sense we'll go ahead and do it. You have to make sure, of course, that your product is either saving money for your clients or making them money.”*

also a key driver for AGR in Aberdeen. The company specialises in wells; health, safety, environment and quality; reservoir; and field management services, and, in doing so, has also developed software products in line with their experiences. The result is that AGR's previously specialist software solutions division

*"The feedback from clients, as well as from our engineers using the technology on projects worldwide, flows directly into our development agenda. That's extremely useful – you're getting real life usage first-hand from engineers."*

is now a core function in its global organisational structure.

"When it comes to development, we look at the market and analyse it," explains Chris Ferrier, director of software solutions at AGR. "It's all about spotting the gaps – what's the issue or problem involved, and how do we address it?"

For Kevin Stewart, chief executive of downhole isolation specialist Meta, based in Aberdeen, the focus is similarly upon applying the firm's entrepreneurial vision to the market. "There's no point innovating something that no-one wants, but if it makes sense we'll go ahead and do it," he says. "You have to make sure, of course, that your product is either saving money for your clients or making them money; it has to be commercially viable. We look to tick both boxes in that context."

### In it for the long-haul

Meta's origins lie in well logging and out of that grew an understanding of well integrity. In December 2013, Meta's Metalmorphology solution won the leading commercial application category at the Platts Global Energy Awards in New York.

The technology principle is to shape metal downhole using hydraulic fluid pressure. This creates a 'metal-to-metal isolation' that conforms and creates a seal to the shape of the casing or formation. The result is a range of high axial load-bearing products (liner tieback, internal clad, open hole barrier and casing reconnect) that are underpinned by Metalmorphology to ensure isolation integrity over the well's life cycle.

Research and development (R&D) was based on the company's technology know-how and direct industry experience which spans nearly three decades. The resulting suite of products exemplifies the 'long game' approach that innovating companies often have to take. Meta spent eight years developing, testing up to V0 gas-tight standard, and field trialling the technology, with R&D

focused on metallurgical, drilling and well engineering disciplines, as well as on recreating authentic downhole conditions in-house.

"It's not easy to do these things and it takes time," Kevin says. "In our case it was crucial that we had the know-how coupled with facilities that allowed us to do the work safely and securely."

The deployment of practices such as peer group reviews and third party witnessing are, Kevin believes, also key, enabling the company to gain an independent perspective on its activities whilst lending extra credibility to the process.

Aligning technical and growth-focused strategic road maps in this way is essential. Kevin adds: "We look for ways to improve existing products but we do train a fair bit of our revenue towards 'blue sky' R&D. We structure our company in such a way that we are a 'product' business."

### Field perspective

Also influenced by 'on the field' experience, AGR's culture of innovation is founded in part by moving away from a 'stick your finger in the air' approach, says Chris. He notes that the feedback received from users is pivotal to sustaining that culture.

"The feedback from clients, as well as from our engineers using the technology on projects worldwide, flows directly into our development agenda," Chris adds. "That's extremely useful – you're getting real-life usage first-hand from engineers." >



AGR's logistics and materials management programme – M<sup>2</sup> – is based on the company's own 'on the field' experience





AVEVA E3D Insight was developed in response to the evolving use of technology, enabling project decision makers to view and approve plant designs on a mobile tablet device

Over the past 18 months, the team at AGR has launched version 4 of its software to reduce risk and maximise performance in well construction projects (P1) and a new logistics and materials management program called M<sup>2</sup>. The latter provides an integrated system to continually track the movement of equipment from the moment of selection, through the supply chain to its eventual return.

M<sup>2</sup> took three years from concept to launch after careful scrutiny of market alternatives. It was originally designed to relocate 11,000 tonnes of equipment from Aberdeen to the Falkland Islands for a 22 well drilling campaign and was used internally for two years before becoming commercially available. The program represents a £500,000 investment from AGR.

P1 meanwhile has its development roots in the late 1990s, when it was first introduced as a “probabilistic” approach to capturing the various factors that impact on well development.

Chris notes that usability and user-friendliness are key to software development. The updates to P1 are therefore designed to make it more functional and interactive. It also provides information to help users understand the financial implications of any project changes. “As well as seeking input from AGR’s own well engineering experts, we involved our clients in the research phase of this new launch and many of their suggestions have been incorporated into the front-end design,” explains Chris.

*“Our approach isn't based on exhaustive specifications but rather upon broad directions from business leaders and the market. Developers work from those directions and then routinely demonstrate what they have done so far. It means we're able to seek immediate feedback against our developments and better align to market needs.”*

### Launch pad

In response to the evolving perceptions of technology and the new means of interacting with it, AVEVA has also introduced a ‘user experience capability’ to its work. It has hired design experts to ensure new products are as user-friendly as possible, while still being effective in their core function. Customers are also introduced to the development process to secure their feedback. By making products relevant to the customer, developers are “adding value”, explains Simon.

“Our experience is that the customer likes being involved...it presents an opportunity for them to see progress in action and take part in that conversation. It helps them to see our vision and even direct some of our thinking.”

The company’s most recent market launch is in line with this; AVEVA E3D Insight enhances the existing AVEVA Everything3D (AVEVA E3D) software by enabling project decision makers to view and approve plant designs on a mobile tablet device. The aim is to streamline the design review process.

Significant organisational resources are devoted directly to introducing new products or new versions of existing products, with technology leadership driven from the company’s UK base and complemented by centres abroad. The activity features a research programme comprising a small team of ‘blue sky thinkers’ with a loose remit to generate and develop new ideas. And Simon believes that the blend of disciplines, ranging from computer scientists to practising engineers, is essential.

“They understand our business and our customer base, but at the same time they’re allowed to think outside the box and test case their ideas,” Simon enthuses.

Ultimately, those who keep innovating keep moving; the UK’s burgeoning world class oil and gas supply chain is testament to this. “Innovation isn’t always successful, but it’s crucial to keep trying,” insists Chris. <sup>Ⓜ</sup>

*For more information, please visit [www.agr.com](http://www.agr.com), [www.aveva.com](http://www.aveva.com) and [www.metadownhole.com](http://www.metadownhole.com).*



Knowledge  
to perform





# Activity Survey 2014

Wireline presents some of the key facts and figures from Oil & Gas UK's *Activity Survey 2014*.

## POLITICAL SUPPORT

### WHAT THE MINISTERS SAID.....

#### UK Business and Energy Minister Michael Fallon MP

"The *Activity Survey* is very timely. The launch of the Wood Review (see p25) made clear that there are still vast reserves of unexploited oil and gas in the North Sea which can be harnessed for the benefit of the whole country.

"Oil & Gas UK's *Activity Survey* shows that while the industry is facing key challenges such as exploration we are seeing high levels of capital investment in the UK offshore oil and gas industry. I want the industry to build on this and that is why I launched the 28th round of offshore petroleum licensing [in January]. This round forms part of our long-term economic plan that will enable the exploration necessary to ensure we fully realise our remaining reserves. This will boost growth, energy security, and jobs."

#### Scottish Energy Minister Fergus Ewing MSP

"This *Activity Survey* demonstrates the range of opportunities and challenges facing the North Sea oil and gas industry at this time. On one hand we are currently experiencing an investment boom with an estimated £14.4 billion of capital investment in 2013, almost double 2010 levels. However, at the same time, exploration activity in the North Sea remains below trend. I strongly agree with the conclusions of the *Activity Survey* that while the North Sea still holds significant potential – maximising the return from our oil and gas resources will require the appropriate business conditions for investment in exploration, appraisal and development. The good news is that we now have Sir Ian Wood's key recommendations on how to take the regulation of the industry forward. These should be implemented as soon as possible.

"To encourage the investment, exploration and innovation required to maximise the return from the North Sea, it is important that industry has confidence that government can provide the certainty it requires. That is why the Scottish Government appointed an Independent Expert Commission on Oil and Gas in September 2013, chaired by Melfort Campbell. The Commission will make specific proposals in relation to the North Sea fiscal regime with a view to providing long-term stability and predictability for the industry."



### DOWNLOAD THE FULL REPORT



**£13**  
billion

The UK Continental Shelf is seeing record capital investment with £13 billion to be invested in 2014, following £14.4 billion in 2013

**25**

25 new fields are expected to come on-stream over the next two years







Oil & Gas UK presented the key findings of its *Activity Survey 2014* at events in London, Aberdeen, Newcastle and Norwich

**Above £10 billion until 2015**



Investment may fall to around **£7 billion** by 2016 to 2017, unless the rate of maturing new developments increases

**£39 billion**



£39 billion of total investment is currently approved on the UK Continental Shelf

**1.43 million barrels of oil equivalent per day**

Production was better than expected at 1.43 million barrels of oil equivalent per day (boepd) last year

**£9.6 billion**

**£8.9 billion**

**Operating costs**

Operating expenditure rose by 15.5 per cent to an all-time record of £8.9 billion in 2013 and is anticipated to rise further to around £9.6 billion in 2014

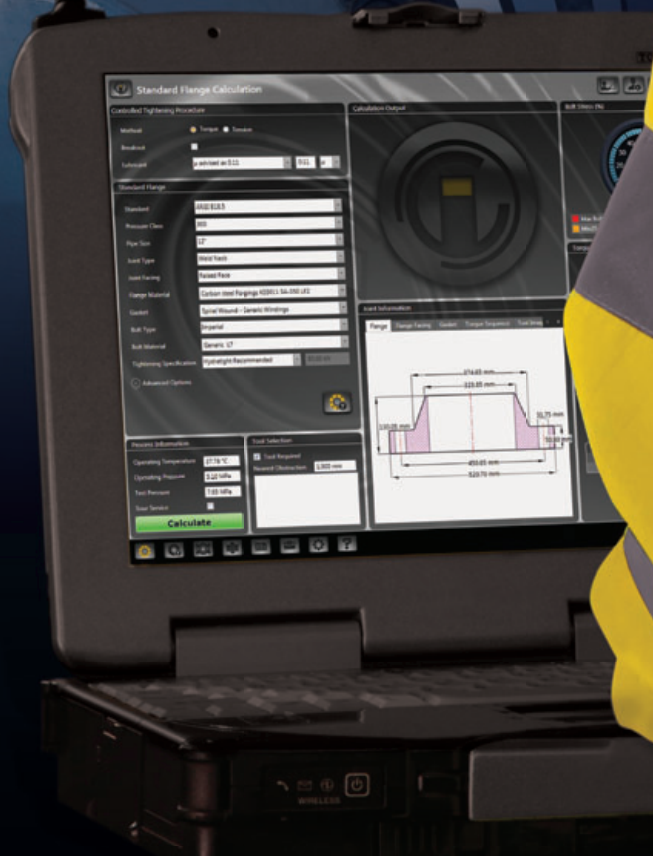
**40%**

of production will come from new field developments by 2018

**15**

Only 15 exploration wells were drilled in 2013, compared with 2008 when 44 exploration wells were drilled

Because ensuring  
a leak-free solution  
is critical.



## It has to be Hydratight

A leaking flange joint can be time-consuming and costly to repair. As specialists in joint integrity, we help you avoid leaks altogether. We eliminate leaks through an unrivalled range of engineered products, advanced software, and industry-leading services delivered on-site by continuously trained and certified technicians. To find out more contact [solutions@hydratight.com](mailto:solutions@hydratight.com).

[hydratight.com](http://hydratight.com)

**hydratight**<sup>®</sup>



# Wood Review

The publication last month of the Wood Report at the end of an eight-month review of maximising oil and gas recovery from the UK Continental Shelf was a seminal moment for the industry. *Wireline* talks to its author, Sir Ian Wood, who was commissioned by Edward Davey MP, the secretary of state for energy and climate change, to lead the work.



## Q. What are the report's core recommendations?

A. If the UK is to maximise the huge economic and energy security opportunity that lies off our shores, both the government and industry need to commit to a new shared strategy which I have called MER UK (Maximising Economic Recovery from the UK Continental Shelf (UKCS)). This is at the core of the report's recommendations along with the creation of a new arm's length regulatory body to oversee and develop this programme of change and growth.

Second, it recommends that the new regulator, HM Treasury and industry adopt a cohesive tripartite approach to ensure the UK Government's fiscal and regulatory policies take account of the late-life challenges and opportunities of maturity, as well as encouraging the new frontier areas and new plays.

Third, the strategy requires industry to collaborate much more effectively in key areas such as the development of regional hubs, the sharing of infrastructure, the sharing of geophysical information, and a reduction in

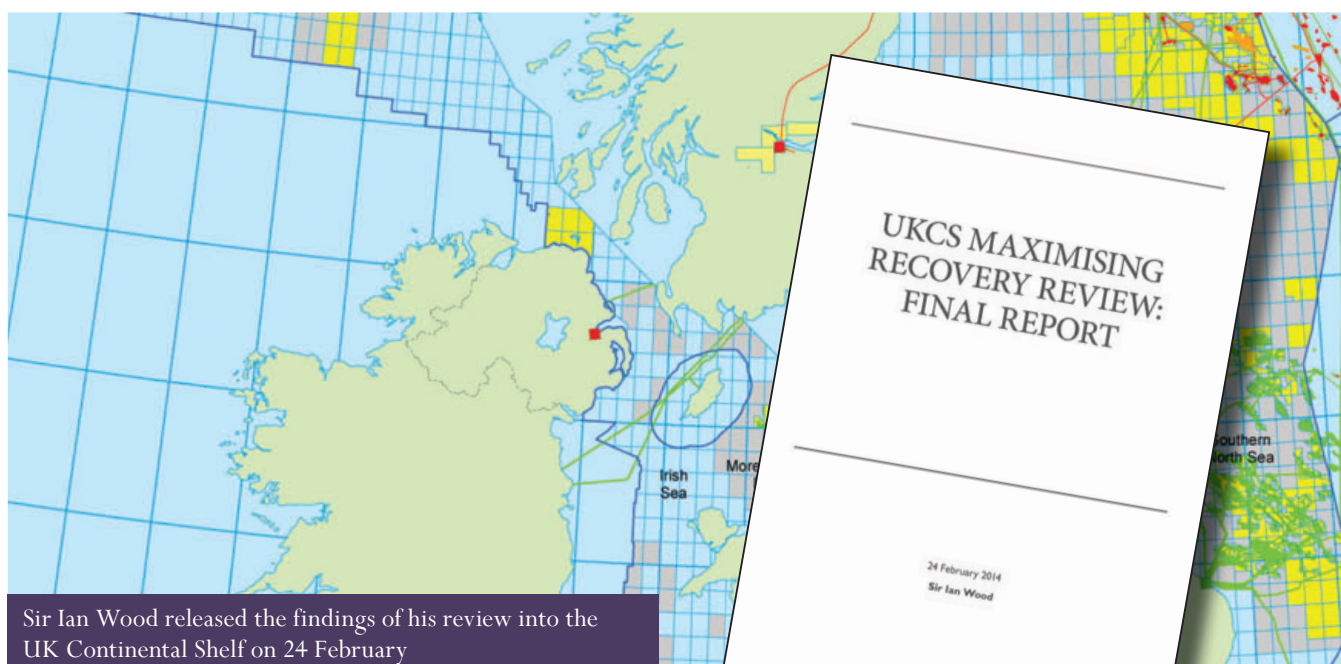
the complexity and delays in current legal and commercial processes. In addition, the report outlines six sector strategies as key to the success of MER UK. These cover exploration, asset stewardship, regional development, infrastructure, technology and decommissioning.

## Q. Can you tell us more about your vision for the new regulator?

A. Firstly, I believe that the current regulatory model in the UK is the right one. But it is still structured and staffed for the light touch regulation requirement of earlier years. As the basin has matured, offshore activity has fragmented into a patchwork of inter-dependent fields in the hands of an increasingly diverse range of operators. Ninety per cent of these fields produce under 15,000 barrels of oil equivalent per day and the average discovery field size is below 25 million barrels.

To effectively supervise and steward our mature basin, we need a stronger regulator with broader skills and capabilities. It must have the experience and capacity to act as the catalyst to promote >

*"If the UK is to maximise the huge economic and energy security opportunity that lies off our shores, both the government and industry need to commit to a new shared strategy which I have called MER UK (Maximising Economic Recovery from the UKCS)."*



Sir Ian Wood released the findings of his review into the UK Continental Shelf on 24 February



greater co-ordination and collaboration across the industry and between industry and government. I see the new regulator largely working in the role as facilitator and mediator, actively removing barriers and encouraging more efficient exploration, development and production. Its role will be to influence and guide investment decisions towards achieving the MER UK strategy.

**Q: Does this mean heavier regulation for the industry?**

A: The proposals are not about heavier, stricter regulation. They are about more proactive, effective stewardship focused on achieving collaboration. We have many very fine operators on the UKCS and we want to encourage them to stay and attract even more to the basin. The development of the UKCS must continue to be led by these operators. They provide the significant investment of funds, expertise and experience and must be allowed a fair return for that investment. The regulator must work with industry to try and re-stimulate exploration activity, achieve regional collaboration for cluster developments, and work to achieve the key objectives and activities outlined in the six strategies. The ultimate objective is to maximise recovery of our oil and gas resource, attract more players and investment, and this will be to the benefit of all parties.

**Q: Both the government and industry have given their backing to the proposals, including the setting up of the new regulator. What are the priorities now?**

A. The good news is that the government has accepted the main recommendations from the review and given the go ahead for fast track implementation. This is now very much in the hands of the Department of Energy & Climate Change (DECC), and

the secretary of state (Edward Davey MP) has indicated that he wishes to see the new regulator, at least in shadow form, up and running later this year with the chief executive appointed hopefully during the summer. The new regulator will then set its own priorities but in my view these should include significantly enhancing the exploration effort; improving production performance and increasing reservoir recovery; tackling the rampant cost escalation in the basin; facilitating both better deployment of current technology and the development of new technology; and establishing a strong relationship with HM Treasury.

**Q: What has most surprised you over the last eight months whilst conducting this review?**

A: There was significant industry insight into the UKCS challenges and consistent backing for a stronger, more proactive and effective regulator to facilitate much more industry collaboration.

*“To effectively supervise and steward our mature basin, we need a stronger regulator with broader skills and capabilities. It must have the experience and capacity to act as the catalyst to promote greater co-ordination and collaboration across the industry and between industry and government.”*

Secondly, the UK is not just a mature region. There are some interesting frontier areas and new plays and additional exploration incentives are essential.

Thirdly, there is a significant interest and commitment from government, particularly DECC and Treasury, to maximise recovery of our offshore resources. <sup>(v)</sup>

For more information and to download the full report, visit [www.woodreview.co.uk](http://www.woodreview.co.uk).





# Simplifying Safety



**PALLAS – REDUCING OPERATIONAL DOWNTIME**

## Process Alarm Live Logging & Analysis Software

A platform event logger with cause and effect matrix viewer

Our on-site data historian and live cause and effect viewing application, running on a windows based PC has the following features:

- Historical event playback
- Confirmation of physical actions
- Valve timing function
- Connects to any OPC enabled PLC



**ProcessSafety**  
Solutions



Process Safety Management Suite

T: +44 (0) 1224 586288  
F: +44 (0) 1224 588747  
E: [info@pssuk.co.uk](mailto:info@pssuk.co.uk)  
W: [www.pssuk.co.uk](http://www.pssuk.co.uk)

Process Safety Solutions  
Process House  
341 Great Western Road  
Aberdeen AB10 6NW

PALLAS - Part of the Process Safety Management Suite

Engineering • Support • Consultancy • Software





Workstreams within PILOT, the government-industry forum, are focusing on exploration, production efficiency, enhanced oil recovery and improved area stewardship. The aim is to secure the long-term health of the UK offshore oil and gas sector

## Mission control – PILOT forum drives forward

One of the most active offshore operating regions in the world, the UK Continental Shelf encompasses mature regions that have been extensively developed as well as frontier plays. Achieving optimal recovery from these widely diverse areas is demanding. PILOT, the government-industry forum, is working on a number of initiatives to help secure the next phase of development. *Wireline* reports

Over the past 45 years, 42 billion barrels of oil equivalent (boe) have been recovered from the UK Continental Shelf (UKCS). But there are challenges ahead for this mature basin as we now have a ‘two speed North Sea’. On one hand, investment was at a record high last year at £14.4 billion, with

tremendously strong development from a small number of large, highly robust projects, plus a greater number of smaller fields. On the other hand, exploration activity has fallen sharply in recent years with just 15 wells drilled in 2013 compared with 44 in 2008 (see p22 for the latest figures from Oil & Gas UK’s *Activity Survey 2014*).

*“With renewed commitment from industry and government, the Production Efficiency Task Force is focused on driving improvements in overall performance.”*



Discoveries are also generally smaller and more expensive to exploit; production efficiency has declined from an average of 80 per cent in 2004 to 60 per cent by 2012; and the challenge of maintaining existing infrastructure and encouraging investment in new infrastructure continues.

To address these areas and help secure the long-term health of the UK offshore oil and gas sector, PILOT, the government-industry forum, is working on a number of major initiatives. These are consistent with Sir Ian Wood's recommendations from his independent review of the UKCS which has implications for the industry's future direction (see p25 for more on the 'Wood Review' and see box-out overleaf for more information on PILOT).

### Sizing up the exploration challenge

In October 2012, the PILOT Exploration Task Force (ETF) was established to examine how to increase the number of exploration wells drilled and improve the commercial success rate of such activity. Key to achieving these goals is to ensure that the industry has a greater understanding of the basin and its subsurface geology. The task force is therefore assessing the level of current knowledge of the basin and is also investigating the potential for advanced seismic acquisition technology to improve results. Other factors that will encourage exploration success include increased drilling rig availability and enabling smaller companies to secure equity capital.

Nick Fretwell, geoscience director at TOTAL E&P UK who heads up the ETF, explains: "There is an urgent need for the industry to discover additional reserves as some infrastructure is reaching the end of its economic life and if decommissioned could leave prospective exploration areas stranded and undeveloped. The industry needs to share its knowledge to move forward quickly to drill the most promising prospects and capitalise on the infrastructure networks that are currently still in place."

The ETF is driving a number of initiatives, which include the recent Pitfalls of Exploration conference on 4 February in London (see p6 for more details). Another project under development is the 21st Century Exploration Road Map, a digitally updatable version of the Millennium Atlas, a major atlas of the petroleum geology of the UKCS. The aim of the road map is to promote the UKCS to new and



*"There is an urgent need for the industry to discover additional reserves as some infrastructure is reaching the end of its economic life and if decommissioned could leave prospective exploration areas stranded and undeveloped."*

existing players and improve geological understanding, with a focus on new plays in unexplored areas and neglected plays in explored areas.

### Pushing forward on production efficiency

Production efficiency is a percentage measure of an asset's actual production compared with its maximum capability. The Production Efficiency Task Force (PETF), chaired by Jim House, regional vice president and managing director of Apache North Sea, is taking on the PILOT challenge of bringing production efficiency back up from 60 per cent to 80 per cent by 2016.

Over the last six months, the task force has carried out root cause analysis of the main factors impacting production efficiency. The PETF is now targeting the 50 asset clusters in all regions of the UKCS which contribute 80 per cent of production, addressing the key mechanisms that will help realise the assets' potential and ensuring that adequate investment levels are being directed towards achieving a step change in production.

All stakeholders responsible for operations across the UKCS will need to take responsibility for a number of key actions for which PETF has set specific objectives.

One workstream is addressing planned shutdowns to promote more efficient

management and execution. Industry will share best practice in this area. Another group is investigating how to improve 'wrench time' (a measure of offshore employee efficiency) across the industry, by reducing unplanned compressor outages and coordinating planned maintenance schedules across assets with shared infrastructure. And another workstream is reviewing other oil and gas basins and industries for areas of transferable best practice.

Jim says: "Since May 2013, the PETF has gained considerable traction from supporting members, as well as recognition from the broader industry. While a serious challenge exists, there are distinct opportunities for improvement. With renewed commitment from industry and government, the PETF is focused on driving improvements in overall performance."

### Enhancing oil recovery

Much of the UKCS' remaining potential lies in existing oil and gas producing fields (brownfields). The challenge is to increase the recovery rate from such fields, which is typically running at around 46 per cent in oil fields. The industry's ability to increase production from brownfields using state-of-the-art technology is therefore critical.

PILOT's EOR (enhanced oil recovery) Work Group is investigating the potential >

of applying miscible gas (carbon dioxide) and chemical EOR (for example polymer injection), as well as low salinity water-flood, to improve the efficiency of hydrocarbon recovery across four areas, namely, pore scale displacement, sweep, drainage and time. The aim is to bring average recovery levels up to over 50 per cent.

Industry understanding of EOR techniques has been enhanced through a number of workshops attended by senior industry representatives and subsurface specialists in the UK supply chain. Studies have also been carried out to

examine the potential for applying EOR basin-wide.

Trevor Garlick, BP's regional president North Sea, is leading the work. He says: "We are looking forward to the application of EOR (low salinity water-flooding) on the Clair field. For smaller fields, or assets that require EOR equipment to be retrofitted onto existing infrastructure, getting EOR going will be more challenging. I am pleased that industry is coming together with the Department of Energy & Climate Change (DECC) to look at EOR potential, and very importantly, to explore synergies between fields."

*"I am pleased that industry is coming together with the Department of Energy & Climate Change to look at enhanced oil recovery (EOR) potential, and very importantly, to explore synergies between fields."*

#### FACT FILE

### PRESENTING PILOT

#### When did PILOT originate?

PILOT, the joint government-industry forum, was formed in 2000 to take forward a strategy for maximising economic recovery of the UK's hydrocarbon resource and securing a sustainable, long-term future for the UK Continental Shelf. Its creation was one of the recommendations from a report published in 1999 by a government-industry Oil and Gas Industry Task Force, which was set up the previous year to address the impact of the low oil price at that time.

#### What is PILOT's remit?

PILOT advances initiatives directed at reducing costs, eliminating barriers and maximising the effectiveness of resources to bring about a future which could still see the UK oil and gas industry meeting half the country's oil and gas needs in 2020. PILOT covers matters relating to all phases of the oil and gas life cycle, from exploration, development and production through to decommissioning.

#### Who participates in PILOT?

PILOT meets twice a year and is chaired by Edward Davey MP, the secretary of state for energy and climate change, and vice chaired by Michael Fallon MP, the minister for energy. Industry membership of PILOT comprises representatives from the operator and contractor communities who represent a broad spectrum of views. This includes eight members of the Oil & Gas UK board, and around five independent members – all industry leaders at a managing director/chief executive level.

Also involved are representatives from key UK Government departments as well as the Scottish Government; Alistair Carmichael MP, the secretary of state for Scotland; officials from HM Treasury; and trade union representatives. Membership is reviewed every two years.

The Department of Energy & Climate Change's Oil and Gas Industry Development team provides the Secretariat to PILOT. The Secretariat works to ensure the success of the initiatives and work areas driven from PILOT, which aim to maximise recovery of the nation's indigenous hydrocarbon reserves and also improve competitiveness of the supply chain.

*For more information, please visit [www.gov.uk/government/policy-advisory-groups/pilot#role-of-the-group](http://www.gov.uk/government/policy-advisory-groups/pilot#role-of-the-group).*

### Improved area stewardship


In 2012, the PILOT Infrastructure Access Work Group (IAG) sought to ensure that UKCS infrastructure would be both accessible and fit for purpose for the long-term future of the industry. Following the IAG's research, Infrastructure Rejuvenation Work Groups were established to focus on 'areas of special economic interest' around critical hubs within the central North Sea (CNS) and northern North Sea (NNS).

Taking into account the differences in each area, the individual work groups are working towards maximising economic recovery through greater collaboration and enhanced area stewardship.

Calum McGregor MBE, joint ventures manager for TAQA's UK business who leads the NNS work group, comments: "Since they were established in 2013, each work group has had good and consistent representation from operators active in the areas, together with representatives from DECC and Oil & Gas UK. Ideas have been generated and plans developed to address the unique characteristics and requirements of each area of special economic interest."

*"The aim is to produce practical business plans for existing assets, discoveries and prospects capable of delivering more of the remaining potential within each area."*

He adds: "Ideally, the aim is to produce practical business plans for existing assets, discoveries and prospects capable of delivering more of the remaining potential within each area. There is a clear need for the industry to deliver on these collaborative efforts to ensure we are moving in the right direction."

A third work group focused on the southern North Sea (SNS) has recently been formed to expand this study. 

*For more information, please contact [operations@oilandgasuk.co.uk](mailto:operations@oilandgasuk.co.uk).*

*Also see webcasts from a breakfast briefing on PILOT's initiatives at [www.oilandgasuk.co.uk/news/Maximising\\_Economic\\_Recovery.cfm](http://www.oilandgasuk.co.uk/news/Maximising_Economic_Recovery.cfm).*





@oilandgasuk | #safetyawards  
@StepChangeInfo | #playourpart

# SAFETY AWARDS

Join us in April to celebrate the people and companies helping to make the UK oil and gas industry one of the safest in the world



Principal Sponsor



**MAERSK**  
OIL

Wednesday  
30 April 2014

12 noon – 3.30 pm

AECC  
Bridge of Don  
Aberdeen  
AB23 8BL



**BOOK NOW AT [WWW.OILANDGASUK.CO.UK/EVENTS](http://WWW.OILANDGASUK.CO.UK/EVENTS)**

Jointly organised by



and



Award Sponsors



BG GROUP



Petrofac





William Watt, of Aker Solutions, reflects on the inspirational role elected safety representatives play in the industry

## Standing tall

Being an elected safety representative on an offshore installation requires being able to think beyond yourself and make a positive impact on safety for the benefit of the wider workforce. *Wireline* celebrates these inspirational individuals ahead of the annual UK Oil and Gas Industry Safety Awards.

“**T**he encouragement of my peers has made me embrace the role of the safety rep and through a balance of my main role (electrician) and the role of the rep I feel I am able to make safety meetings open, down to earth and fun,” says William Watt on being an elected safety representative in the UK offshore oil and gas industry.

This inspirational attitude is the hallmark of a great safety representative. William in fact was the 2011 winner of the UK Oil and Gas Industry Safety Awards’ Safety Representative of the Year category while he worked for Petrofac, where one of his achievements included a programme to “audit the mitigations” designed to protect the workforce from major accident

hazards. Now working for Aker Solutions as a responsible person electrical (RPE), William remains committed to his safety representative role.

### Leading by example

Elected safety representatives (ESRs) were first introduced in the UK offshore oil and gas industry in 1989, learning from the



lessons of the Piper Alpha disaster on 6 July 1988. Lord Cullen's report into the tragedy in 1991 included recommendations on safety committees and safety representatives.

The role of ESRs are outlined in Step Change in Safety's SI971 guidelines which offer a prescriptive and absolute requirement to have a safety committee on every installation – as emphasised by

*“We are in a position where we can make positive changes. But you can't just wish it or want it, you have to embrace it and do it.”*

Lord Cullen. Today, the daily routine of ESRs differs between companies, platforms and individuals but the key factor binding them together is that ESRs are highly motivated individuals willing to give their time and effort to engage with the wider workforce on safety.

Supported by ongoing training, ESRs provide two-way communication between the workforce and management; build relationships with onshore and platform management, first-line supervision and inspectors from the Health and Safety

Executive; and represent their platform and constituency at open days, forums and special meetings.

William believes that “regardless of how things have always been done, if you believe they can be done better then nothing should dilute your potential”.

He adds: “We often convince ourselves that things cannot be changed...that is simply


not true. As ESRs, we are in a position where we can make positive changes. But you can't just wish it or want it, you have to embrace it and do it.”

### Moving forward together

Development training opportunities for ESRs are available with four two-day modules run by Det Norske Veritas (DNV). With a strong emphasis on practical learning, the course focuses on the understanding, interpretation and review of safety cases with modules on major accident hazards, risk analysis,

incident investigation and independent inspections.

A group of 18 ESRs are also fully engaged with the Step Change agenda by participating in its Leadership Team meetings. And the Health and Safety Executive's OIAC WIG (Offshore Industry Advisory Committee Workforce Involvement Group) has joined with Step Change to create a Workforce Engagement Support Team where safety representatives can come together and address shared issues.

Ultimately, ESRs shape the safety agenda offshore. The UK Oil and Gas Industry Safety Awards, organised by Oil & Gas UK and Step Change in Safety, recognise this fundamental role safety representatives play offshore and the work they do to the best of their potential. 

*For more information, please visit [www.stepchangeinsafety.net](http://www.stepchangeinsafety.net) and [www.dnv.com](http://www.dnv.com).*

*Bookings are open for the UK Oil and Gas Industry Safety Awards ceremony on 30 April. Visit [www.oilandgasuk.co.uk/events/uk\\_oil\\_and\\_gas\\_industry\\_safety\\_awards.cfm](http://www.oilandgasuk.co.uk/events/uk_oil_and_gas_industry_safety_awards.cfm).*



The UK Oil and Gas Industry Safety Awards are held annually, with this year's ceremony on 30 April in Aberdeen. About 500 people attended last year's event

# PRACTICAL SOLUTIONS TO ADDRESS THE RESOURCE CHALLENGE

**If there is one single challenge that could prove far tougher to solve than anything the deep seas will throw at the oil and gas industry it will be the issue of attracting skilled people into the sector and bridging the skills gap itself.**



Provided that we see the level of investment going into the sector that we expect then the oil and gas industry will require a significant number of skilled people in the various different disciplines over the coming years. A large proportion of engineers and other skilled crafts people are now nearing retirement age therefore it is imperative to attract new blood into the industry; but this isn't such an easy task.

The lack of understanding of what engineering actually is can be a contributor to young people entering other industries; this needs to be addressed urgently. In addition work needs to be done to really showcase how dynamic an industry oil and gas really is and how it can provide a lifelong career path with excellent prospects. Various initiatives are currently underway to look at the skills issues and how we can we can all work together to create solutions.

## MILITARY2ENERGY

Although NOF Energy's primary focus is on business development where we work with our 450 members across the oil & gas and related energy sectors, we also

work with other organisations to help address the resource challenges. Our Military2Energy programme works to encourage those leaving the forces with the relevant transferrable skills to enter the energy industry. We have had some great successes to date on this but we need to press forward and make sure we are successful in attracting this valuable new pool of people to join us in such a buoyant sector.

Continuing the momentum NOF Energy is organising a **Military2Energy Careers Fair** in Catterick, North Yorkshire on **4th September 2014** where employers and training providers will have the opportunity to meet circa 400 forces personnel actively looking for a career in the industry.

## GRADUATE INDUSTRY DAYS WITHIN SUPPLY CHAIN COMPANIES

Recently activities have also seen us working with various operators and contractors to help them place their new graduates into industry for short spells of time, basically industry days. The aim of this is to help the graduates gain a better

understanding of how the wider supply chain and sub contract companies operate; the challenges they face; to understand exactly what the supply chain offers in terms of products and services and importantly see the new technologies that are being developed. These graduates gain experience across the board within disciplines such as fabrication, pipeline engineering, subsea, sub-contract to name but a few. It really is about bridging the knowledge between the different tiers of industry.

If we can play even a small role in helping to further educate new entrants to the industry and set them in good stead for their career we will consider this an achievement.

As our members are more than willing to take graduates for a half or full day we encourage operators and contractors to contact us now to discuss how we can help. For more information contact **Joanne Leng MBE, Deputy Chief Executive, NOF Energy** [jleng@nofenergy.co.uk](mailto:jleng@nofenergy.co.uk) or **tel: +44 (0)191 3846464.**



## MILITARY2ENERGY

# CAREERS FAIR

Catterick, North Yorkshire  
4th September 2014, 8am-1pm

Hosted by

*'From protecting to powering the nation.  
Access the skills and resources of the British Armed Forces'*

- Over 200 Military personnel in attendance
- Exhibition space available
- Job board to display vacancies
- Interview rooms







The transformation from a land surveyor to working in the Forties Field on the UK Continental Shelf took less than five weeks. Intensive training at Scopus Engineering's in-house academy was the key stepping stone to William Pridgeon's new career offshore

## Island hopping – from the Caribbean to the UK

Working in the Caribbean wasn't enough to dispel William Pridgeon's interest in the UK oil and gas sector. The dimensional control surveyor at Scopus Engineering talks to *Wireline* about his voyage to the UK Continental Shelf.

**H**ad it not been for his former school geography teacher and his godfather, William Pridgeon might still be enjoying life surveying million pound mansions in the sunshine of the British Virgin Islands in the Caribbean. Instead, he is working in the Forties Field on the UK Continental Shelf (UKCS).

At 24, William admits he has taken some "ribbing" from friends for giving up what seemed like an idyllic lifestyle in the Caribbean but he believes the switch was well worthwhile.

### Sun, sea and surveying

William's interest in oil and gas in fact developed from an early age. "My godfather

works in the oil and gas industry and has travelled the world with his work on rig movements and positioning; he had obviously mentioned the opportunities available in the sector," recalls William.

And while a pupil at King Edward VI Grammar School in Louth, Lincolnshire, his geography teacher, who encouraged >



William Pridgeon left his role as a land surveyor in the Caribbean to forge a career in the UK oil and gas sector. He may have left a life filled with permanent sunny days but the opportunities and rewards he receives as a dimensional control surveyor have made the move worthwhile

*“I think there is a perception amongst young people that in spite of the skills shortages it is a pretty tough industry to enter. That’s probably because everyone seems to be looking for employees with experience; Scopus has tackled the skills shortage in another way. The company is linking with universities to attract people and its academy is providing the bridge into the industry.”*

him to study surveying and mapping science further, talked about his son who also works in oil and gas. “From what my teacher had said, it sounded a pretty good fit for my interests,” explains William.

Initially though, the lure of the Caribbean proved too great when he was made an unexpected offer on completion of his BSc Honours in Surveying and Mapping Science at Newcastle University in 2011. “We had an alumni newsletter at Newcastle and I read an article in it about a past student and his land surveying business in the British Virgin Islands. He

wasn’t offering a job but I thought I would send an email asking if he had some short-term summer work and he asked if I would like a job; I very quickly said ‘yes!’

He describes: “I was land surveying multi-million pound villas and worked on a jetty in a mega yacht harbour. The Caribbean lifestyle is very chilled out but the hills on the British Virgin Islands meant it was more physically than mentally challenging and I felt I had more in me. I felt I could develop my career further with a move to oil and gas.”

William applied and interviewed for a job with Scopus Engineering in Aberdeen in 2012 and was offered a position as a dimensional control surveyor. The transformation from working in the sunshine of the Caribbean to working in the Forties Field took less than five weeks.

### **Big platform**

Scopus provides dimensional control survey services to the global oil and gas industry and William’s first stop on joining was the in-house training academy (see box-out right).

“I had three weeks in the academy being taught by a senior surveyor which was a very steep learning curve,” describes William. “I then completed my offshore survival training before flying to the Forties Bravo platform just seven days later, accompanying a senior surveyor. There were seven repair order jobs on that trip and I was able to do some work myself.”

William measures and designs equipment to fit offshore, undertaking dimensional control surveys using an electronic/optical instrument, supported by Scopus’ in-house suite of mathematical software.



## SCOPUS ENGINEERING'S ACADEMY

**TRAINING CENTRE TACKLES SKILLS SHORTAGE**

Since opening its training facility in Aberdeen in 2008, Scopus Engineering has significantly increased its turnover. The company believes its academy plays a key role in this success by tackling the shortage of skilled dimensional control surveyors head on, which was previously preventing the company from growing.

Scopus also launched similar centres in Malaysia and Azerbaijan three years ago and, in November 2013, the company unveiled a new and larger bespoke training facility in Aberdeen following a large investment. The new site features a split level offshore scenario for practical training.

One of the founders and directors, Tom Bryce, says: "Many of our recruits come from a civil engineering background but there is no further education course available in the UK to train people for the type of work we do offshore. The latest investment in the academy allows us to increase the number of Scopus people we can train, and, therefore, continue with the strategy to develop the business."

The company currently employs 325 people, including surveyors, engineers and 2D and 3D draughtsmen, with the majority of the team based in Aberdeen. More than 100 engineering staff have already been trained at the Aberdeen site since 2008 and 95 per cent of those have remained with the company.



Developing an in-house training academy was crucial for Scopus Engineering's growth, helping the firm to proactively address the shortage in skilled dimensional control surveyors

He notes: "One of my highlights so far was working for BP on the Bruce platform after about four months. BP was installing two new exhausts about 30 metres high and I carried out all the measurements, design and engineering work for the first exhaust; when it was dropped into place perfectly it was very rewarding to see something I had surveyed and designed fit as it should."

**Plotting your course**

William believes that Scopus' training academy was key to a successful start to his career.

"The training was focused and well structured. We had an experienced senior surveyor leading the training and in the academy there is a mini platform with pipes, gratings and stairwells; it gives you


offshore experience but with the security that you can just nip next door and ask for advice."

William suggests that the academy provides a blueprint which other organisations should follow.

He says: "I think there is a perception amongst young people that in spite of the skills shortages it is a pretty tough industry to enter. That's probably because everyone seems to be looking for employees with experience; Scopus has tackled the skills shortage another way. The company is linking with universities to attract people and the academy is providing the bridge into the industry. It is a false economy to only employ experienced people because it is not sustainable."

Furthermore, he notes that "outwith the north east of Scotland few young people realise the opportunities the oil and gas industry offers. Until I started going offshore I had never imagined half the jobs there are. Offshore installations are like mini villages with sparkies, plumbers, chefs, and so on".

It seems William has no regrets about leaving the Caribbean. This is certainly a resounding endorsement of the satisfaction he gets from his new career on the UKCS.

He enthuses: "I love my job and the move to Scopus has exceeded my expectations. There are few jobs in which you can command the salary levels you can achieve in the oil and gas sector and which also offer global opportunities. I have travelled to help deliver projects in South Africa and Singapore and my ongoing training is supporting my professional development. One day I might return to the Caribbean, but that's a long way off just now!" 

For more information, please visit [www.scopuseng.com/training-centre.htm](http://www.scopuseng.com/training-centre.htm).

*"Until I started going offshore I had never imagined half the jobs there are. Installations are like mini villages with sparkies, plumbers, chefs and so on... There are few jobs in which you can command the salary levels you can achieve in the oil and gas sector and which also offer global opportunities."*

# Beyond Safety Culture

Improving behaviours in your organisation

Tuesday 3 June 2014  
Central Aberdeen venue



1 day practical and interactive seminar delivered by highly experienced psychologists and human factors specialists.

Learn how to influence behaviour by

- getting the context right
- getting your workforce to think
- acting on subconscious drivers
- making changes and acting now



For more information or to book visit  
[www.hsl.gov.uk/training](http://www.hsl.gov.uk/training)  
or email [training@hsl.gsi.gov.uk](mailto:training@hsl.gsi.gov.uk)  
and quote REF: BCS/14/03

An agency of the Health and Safety Executive



Join the UK offshore oil and gas industry's most active, effective and respected professional network to the maximum benefit of your business

We have over 410 members that, together, ensure the breadth and diversity of our industry is represented and supported to achieve its full potential

- Be better informed
- Grow your network
- Raise your company's profile



Join us today and have your voice heard

Our membership is open to companies of all types that are active on the UK Continental Shelf

[www.oilandgasuk.co.uk](http://www.oilandgasuk.co.uk)  
@oilandgasuk



## ON THE ROAD AGAIN ...



# THE 2014 OIL & GAS TECHNOLOGY ROADSHOW

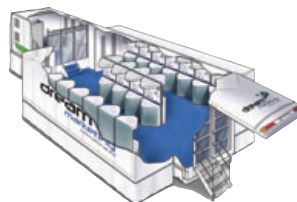
In association with



The Oil & Gas Technology Roadshow hits the road in June 2014 visiting major subcontractor and OEM organisations across the UK hubs of Aberdeen and Great Yarmouth. This represents an amazing opportunity to come and present your products, services and technologies on board our unique exhibition vehicle directly inside the customers' premises.

We will provide you with your exhibition stand with graphic display, power, lighting and cupboard storage and the opportunity to have two of your personnel on the vehicle at each location on the route.

So if you would like to come and meet the design/development/R&D purchasing and senior management personnel at some of the most strategic oil & gas organisations then please contact us and we will send you a full information pack by return.



**dream marketing** International Ltd  
**Contact John Aldridge**  
 Tel: +44 (0) 1189 886823  
 Email: [john@dream-marketing.co.uk](mailto:john@dream-marketing.co.uk)  
[www.dream-marketing.co.uk](http://www.dream-marketing.co.uk)

CONTACT US TODAY TO BOOK YOUR STAND



# YOUR CREW YOUR PASSENGERS PROTECTED



## Now with AIS

Upgrade your Sea Marshall AU9-HT to our new **SMRT** AU10-HT with 121.5MHz & AIS Technologies.

Meets flight approval requirements, tracks all MOB casualties via AIS up to 75 miles away.



ENQUIRY HOTLINE  
**+44 (0)1482 679 300**

[www.mrtsos.com](http://www.mrtsos.com)



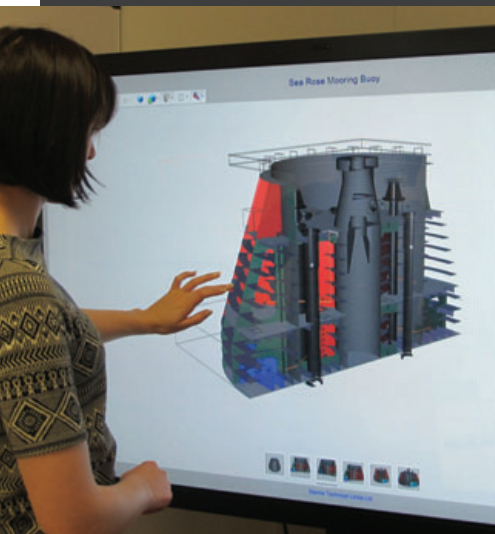
We take the **SEARCH** out of search and rescue





# Marine Technical Limits

## The specialist FPSO integrity and repair management company



### Integrity Management

Marine Technical Limits is the specialist FPSO integrity and repair company. With unrivalled experience in FPSO structural and marine issues, MTL can guide you through the development, adaptation and implementation of bespoke integrity management strategies for the hull and marine systems.

### On-Station FPSO Repair

Our proven methods and unique equipment set-up enable high quality repairs to be conducted efficiently and safely whilst your FPSO is on-station and producing. MTL plan every aspect of a project in meticulous detail prior to offshore mobilisation creating an environment for exceptional offshore performance.

*For more information contact:*

**e:** [info@technical-limits.com](mailto:info@technical-limits.com)

**t:** +44(0)1467 424000

**w:** [www.technical-limits.com](http://www.technical-limits.com)