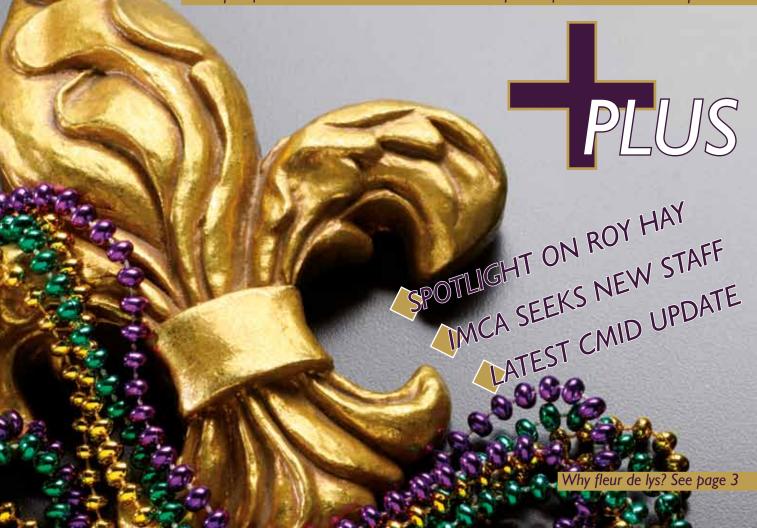


# STATESIDE SEMINAR SUCCESS

We report from our seminar in New Orleans on the future of marine and subsea operations





# making waves issue 61 CONTENTS





CORE





REGIONAL DIVING

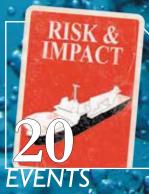












# From the **President**

Andy Woolgar, Subsea 7 IMCA President 2011



At the nineteenth IMCA annual seminar in New Orleans my keynote address was on how I see the future of marine and subsea operations. The future is rosy if the client base is confident enough to provide contractors with regular contracts and continuity. Confidence generates the investment necessary to assist the technological advances that are required in our challenging industry, and a buoyant industry attracts the manpower needed to utilise it. Each individual component is not guaranteed and we can be knocked off course as an industry.

Other keynote speakers covered the views of Chevron, NOIA, API, Louisiana State and BSEE. Naturally they focused on returning their region's activity to previous levels as well as future expansion. They also shared in the world-wide industry concern in communicating challenges and rewards to the next generation of workforce in readiness for the safe delivery of oil and gas from more remote and challenging locations.

A welcome common message from the speakers was that the conference gathered a significant representation of the marine contracting world, and that IMCA should be part of discussions about matters affecting this sector. This is an important responsibility for IMCA, and its members need to contribute both individually and collectively to the debates. They need to seek out opportunities and points of contact in relevant bodies to do this, and actively respond to calls for comment issued by the secretariat. Only in this way will IMCA's voice truly reflect members' wishes and be heard and respected by relevant bodies. Having earned this recognition we must use it wisely and be careful not to lose it.

# big talk in the big easy the IMCA annual seminar enjoys some southern hospitality









This issue's cover shows the fleur de lys – a symbol of New Orleans since its birth – and beads associated with the Mardi Gras that the city is so famous for.

New Orleans, USA hosted the nineteenth IMCA annual seminar from 9-10 November, with its theme on *The future of marine and subsea operations* attracting over 340 delegates. Endorsed by the Offshore Support Journal, IADC, OGP, MTS dynamic positioning committee, API, ADC International, OCIMF and OOC, there was a range of presentations, workshops, social events and an exhibition with stands from 19 different companies.

Hugh Williams welcomed delegates before Alan Allred of EMAS – Chairman, IMCA Central & North America Section – introduced the keynote speakers: IMCA President Andy Woolgar of Subsea 7, Mike Casey of Chevron E&P, Randall Luthi of the National Oceans Industries Association, Erik Milito of the American Petroleum Institute and Secretary Scott Angelle from the Louisiana Department of Natural Resources (DNR), who all spoke on this year's theme and were enthusiastically greeted by the delegates.

The morning plenary session included presentations on deep ocean seafloor extraction, a new reeling method for a state of the art multi-purpose vessel and better workability through DSV integration. The seminar then split into three parallel sessions on Marine, Diving and ROV & Survey. Presentations were given at all three followed by technical workshops covering blackout recovery for DP vessels, ROV installation, working in Arctic conditions, lifeboats and security issues. The day was pleasantly concluded with dinner on board the Steamboat Natchez while cruising down the Mississippi river. Delegates sampled the delicious local cuisine and viewed the steamboat's engine room.

Day two started with a keynote note address by Lars Herbst from the Bureau of Safety and Environmental Enforcement (BSEE) with Bruce Gresham, Heerema Marine Contractors – Vice-Chairman, IMCA Central & North America Section – introducing a plenary session. This included three presentations covering the use of video games in the offshore industry, marine accidents and their investigation, and the impact of fatigue on ships' watchkeeping officers. The technical session again split into three sections and included presentations in Marine, Diving and ROV & Survey. A final plenary session followed with two presentations, one covering process safety and the other the application of STCW 2010 and the Maritime Labour Convention 2006 to the offshore sector. The final workshop sessions covered the topics of the pitfalls of position references, the MLC and its impact on marine contractors, the diving industry for the 21st century, process safety and this year's delegates' choice on vessel assurance.

The workshop sessions and seminar were summarised by Hugh Williams who thanked all speakers, chairmen, attendees and staff involved in the seminar. The seminar was concluded with a lively drinks and buffet reception at Audubon Nature Institute, Aquarium of the Americas.

A CD of all presentations and summaries is being prepared and will be sent to all members and delegates in due course. PB

# around IMCA



## Hello to Meeta

Meeta Gurtata joined IMCA in November 2011 as our Certification Scheme Assistant. She supports the running of our internationally recognised diving

certification schemes that include IMCA certified diving supervisors and life support technicians. Meeta works with Genine – the Certification Scheme Co-ordinator – and assists with various aspects of the scheme including invoicing, marking exam papers, and issuing results and certificates.

Meeta graduated with a BA (Hons) in Business and Politics and studied for an MSc in Human Resource Management and Organisational Analysis at the University of London. She has experience in human resources from working at a London hotel. KG

## Pete Fougere – MTS Fellow

Pete Fougere of Transocean was honoured as a Fellow of the Marine Technology Society at the recent Oceans conference in Hawaii, USA. The designation of MTS Fellow is one of the highest MTS accolades an individual can achieve. Since 1975, this title has been awarded to MTS members who have made outstanding contributions to the advancement of the Society's objectives and who have distinguished accomplishments and experience in their professional fields. This is a well deserved award and IMCA is pleased to congratulate Pete. He has served on and been Vice-Chairman of IMCA's Marine Division Management Committee for a number of years, furthering IMCA's work programme, supporting our annual seminar and promoting the memorandum of understanding between MTS and IMCA (reported in the regional news section of Making Waves 56). HW

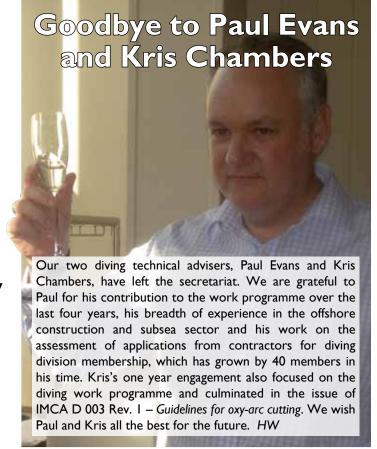
# **IMCA Seeking New Staff**

Technical Adviser roles available in both diving and marine divisions

IMCA is seeking two diving technical advisers to join the technical team supporting and implementing a wide-ranging work programme. The roles would suit a graduate engineer with 5-10 years' subsea diving/subsea experience, an offshore diving supervisor or someone with extensive offshore diving or related experience, wishing to be shore based. With responsibility for developing technical guidance, briefing members and coordinating committee work, the diving technical advisers will work closely with the Technical Director.

IMCA is also looking for a marine technical adviser to join the team. The role would suit a graduate engineer with 5-10 years' experience of offshore operations, a master or DPO, or someone with extensive experience of offshore construction, wishing to be shore based. Again, with responsibility for developing technical guidance, briefing members and co-ordinating committee work, they will work closely with the Technical Director.

For more information on the above roles please see www.imca-int.com/news/latest or e-mail Jane.Bugler@imca-int.com



## **IOMOOF**

IMCA has helped establish a new forum of international associations involved in offshore marine operations to discuss work undertaken, areas of concern and areas of mutual interest. Meeting at least twice a year, and including similar associations such as IADC, IAGC, ICS, ISOA, OCIMF and OGP, the aim is to get a better understanding of partners' positions on various topics and enable further co-operation where appropriate, including regulation and guidance (for example from IMO).

The group has already met twice this year – at IMCA's London, UK office in March and in Stavanger, Norway in October. There was unanimous agreement on a need for a single informal forum to discuss matters of interest amongst all the organisations involved in offshore oil and gas marine operations world-wide. This forum has been named the International Offshore Marine Operations Organisations Forum, with an acronym that is almost as hard to say: IOMOOF. HW

# **Paul Butler Passes Away**

IMCA was saddened to learn of the unexpected death of Paul Butler, Executive Director of the Australian Diver Accreditation Service (ADAS). Paul's love of diving was born in 1962 when he joined the Victoria Police as a member of the Search

and Rescue Squad. Paul had been with ADAS since 1996, taking on the leadership role in 2003. He was instrumental in taking ADAS forward to provide the accreditation service for diving in Australia that is in place today. IB

# core activities

# **Annual Safety Statistics**

Each year IMCA produces a report of safety statistics supplied by members, covering fatalities and injuries, which for many years have provided a useful insight into the health, safety and environment performance of the industry. These statistics record the safety performance of IMCA contractor members each year, enabling IMCA members to benchmark their performance. Last year, statistics were provided by 172 companies and organisations, representing roughly half the marine contractor membership in January 2011.

As the number of contributors rises each year, IMCA's safety statistics become a more authoritative picture of safety in the offshore workplace. We would like to encourage every contractor member to take part in this important exercise in 2012, welcoming both contractors who have previously contributed statistics and contractor members who have not yet taken part.

IMCA will circulate a letter to the SEL representatives of every contractor member in January 2012, inviting the submission of statistics on an Excel template that can be completed in less than 15 minutes. Instructions will be available, but IMCA members are asked to send information from which the usual lagging indicators (TRIR, LTIFR

and FAR) can be calculated, as well as information for calculating a number of leading indicators, such as reporting activity level (RAL) and safety observation frequency rate (SOFR). Additionally, members are asked for basic information on causes of LTIs and any fatalities. This information has proved very useful in directing the work programme of the SEL committee, which has suggested that members also contribute information about numbers and types of near miss incidents.

All information received is treated in the strictest confidence. If members have any concerns or questions regarding the IMCA safety statistics programme, please contact Nick.Hough@imca-int.com



IMCA's range of logbooks provides a consistent format that can be recognised by a variety of employing contractors, with training and competence sections that cover all aspects required for assessments under the IMCA competence assurance and assessment framework. The SEL committee is adding to the range and finalising a logbook for an Offshore Safety Adviser. As with other IMCA logbooks, it can be used to record employment, qualifications, certificates and continuous professional development, as well as ongoing competence assessment. The book will soon be available for purchase through the usual channels. Additionally, plans are being developed for a logbook for an Offshore Safety Representative. NH

# **Key IMCA Publications Translated** into Portuguese and Spanish

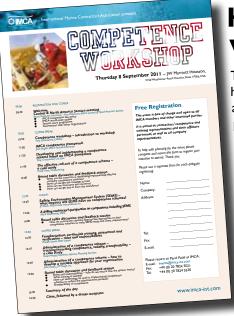
Eight key IMCA publications have been translated into both South American Portuguese and Spanish, reflecting the increasing internationalisation of IMCA and the growing number of members working in Central and South America. These documents can be downloaded via the IMCA website at www.imca-int.com/regions/southamerica/publications/

The first eight publications to be translated are: OIMC/

- IMCA SEL 014 Guidance on travel security;
- IMCA SEL 016 Guidance on the investigation and reporting of incidents;
- IMCA SEL 019 Guidelines for lifting operations (also available as IMCA M 187);
- IMCA D 014 IMCA international code of practice for offshore diving;
  - IMCA M 103 Guidelines for the design and operation of dynamically positioned vessels;
- IMCA M 117 The training and experience of key DP personnel;
- IMCA M 178 FMEA management
- IMCA S 003 Guidelines for the use of multibeam echosounders for offshore surveys.

KG

# core activities



# Houston Workshop

The IMCA competence workshop, held in Houston on 8 September 2011, attracted over 70 delegates. It included a presentation on the IMCA competence guidelines that provide a framework - which members can use to develop their company-specific competence schemes – as well as two presentations from members on their in-house competence schemes based on this framework. In the USA, with the US Bureau of Safety and Environmental Enforcement (BSEE) introducing the Safety and Environmental Management System (SEMS) requirements, knowledge and skills

assessment is now a focus for both oil companies and contractors, so the workshop included two presentations on the impact of SEMS on competence schemes. The seminar concluded that the SEMS requirement to verify the knowledge and skills of employees could be adequately met through a competence assurance programme that was active, verifiable and accredited. Delegates agreed that the workshop provided a timely discussion on the issue of competence, and in particular the regulatory impact of SEMS. JB

# 2012 Competence Workshop

IMCA has held a series of successful competence workshops around the world, the most recent taking place in Singapore and Houston. Planning is underway for the next one, which will take place in Aberdeen in February 2012. A workgroup is developing this event, with the aim of highlighting ways of raising the standard of competence amongst members' offshore personnel. Speakers and presentations on a range of topical issues are currently being identified. Anyone wishing to contribute to the event should contact Nick.Hough@imca-int.com

# **Pocket Safety Cards**

IMCA's pocket cards highlight important safety messages on a wide range of topics in a format that workers can keep at hand. The latest card (number 20) on safety coaching, which is about to go to the printer, covers nine key aspects of the role of a coach and outlines a number of ways that they can help someone willing to learn and develop. The card should be available for purchase (in sets of 100) or download from the IMCA website in the next few weeks. NH

# **IMCA Safety and Environment Seminar**

The 2012 IMCA safety and environment seminar will take place in Rio de Janeiro, Brazil on 21-22 March. The theme is Risk and impact in marine operations and many of the papers will focus on process safety/asset integrity challenges in marine construction. There will be keynote presentations from Rafael Neves Moura of the Brazilian regulator ANP and Jane Cutler, CEO of the Australian oil and gas regulator NOPSA. The programme will also include presentations on the legal consequences of a Macondo-style accident happening in Brazil, environmental compliance in Brazil, human reliability applied in emergency evacuation and management systems, and barrier failure root causes. As well as presentations, the seminar will include sessions on learning from incidents and round table discussions. IB





# core activities

# Project Personnel & the MLC

The ILO Maritime Labour Convention (MLC) will apply to anyone whose main place of work is on board a ship – not just the marine crew. The IMCA MLC workgroup has been comparing the different categories of on board personnel against the ILO guidance, and a workshop exercise at the IMCA annual seminar confirmed its conclusion that the MLC was likely to apply to the vast majority of on board project personnel.

In December IMCA will be participating in a meeting at ILO headquarters in Geneva, Switzerland to establish the ILO tripartite committee, made up of representatives from governments, shipowners and seafarers' unions. The committee will oversee the MLC, including providing expert advice on its interpretations and managing any amendments.

The MLC is expected to be in force by the end of 2013, and is likely to be applied by most of the key offshore flag states and the main coastal states with oil and gas interests, so companies should start preparing now. The IMCA MLC workgroup is developing guidance for members, and companies are encouraged to start comparing their procedures against the main MLC requirements.

For further details, please contact Emily.Comyn@imca-int.com

## **IRF Summit**

IMCA was invited to participate in the safety summit conference of the International Regulators Forum (IRF) in Stavanger, Norway on 4-5 October. Several IMCA members were also represented alongside other organisations who work with IMCA.



The IRF exists to discuss and co-ordinate work between ten regulators from the Americas, the North Sea, Australia and New Zealand, and this extraordinary meeting was to discuss regulation post Macondo and Montara.

Each country had focused on preventing, containing (if necessary) and stopping similar incidents through regulation, technology and worksite behaviour. However, less was visible in terms of the various parties working together to provide common regulations or solutions, to prevent different events or events from further up the decision tree than the worksite. The event's high-level attendees and format – including several round-table workshops – provided significant opportunities for feedback that can be taken forward by the IRF into its subsequent meetings. HW

## **STCW Convention Amendments**

Summarised in information note IMCA SEL 20/10 (C 05/10 & M 20/10)

A reminder that the 2010 amendments to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (the STCW Convention and Code) enter into force on 1 January 2012.

There will be a five year transition period for seafarers who started their training or seagoing service before I July 2013, but the new security training requirements for everyone on board will apply to existing personnel from I January 2014. *EC* 





# regional news

#### Central & North America

Alan Marriott of Technip is the new section Vice-Chairman, taking over from Bruce Gresham of Heerema Marine Contractors. We thank Bruce for his service and welcome Alan in his new role

The latest meeting was in New Orleans, USA on 8 November 2011 - the day before the annual seminar - with discussions on DP incident reporting and how to achieve workforce buy-in for competence schemes. The next meeting is planned for early March 2012 in Houston, USA to coincide with the Subsea Tiebacks conference.

IMCA has been keeping members up to date on developments on the US Safety and Environmental Management System (SEMS) requirements, including the 'SEMS II' proposals to expand the SEMS programme. There are concerns that the SEMS II amendments could cause regulatory confusion and possible overlap with existing US Coast Guard rules for ships. IMCA has helped co-ordinate members' response to SEMS Il and contributed to a joint industry submission, with the hope that the scope of the new requirements will be clarified. Members will be kept up to date.

#### South America

The latest section meeting was held on 21 September 2011 at the Windsor Guanabara Hotel, Rio de Janeiro, Brazil. Presentations were given on competence, skills shortages and two local parallel associations - ABESPetro and ABEAM. The section is also helping to formulate plans for IMCA's Safety & Environment Seminar which will take place on 21-22 March 2012 at the Sofitel Hotel in Rio

#### Asia-Pacific

The section has a new Vice-Chairman - Bill MacDonald of Mermaid Offshore Services taking over from Steve MacMillan of McDermott International Inc., who has moved into the Chairman position. We welcome Bill and Steve in their new roles. The latest meeting was held in Kuala Lumpur, Malaysia in September 2011, and included presentations on the optimisation and preservation of off-hire assets and dry underwater welding. The next meeting will take place in Bangkok, Thailand on 12 January 2012.

#### **NOPSA** review

second operational review of the Australian National Offshore Petroleum Safety Authority (NOPSA). IMCA acknowledged

the good working relationship between IMCA and NOPSA but stressed the need for better recognition of vessel standards and a more consistent approach to the implementation of the safety case regime. The review's draft report is expected before the end of this year.

#### Europe & Africa

Pascal Grosjean of Technip has taken over as section Chairman from Wim de Boer of Heerema Marine Contractors, with Jim Sommerville of Fugro continuing as Vice-Chairman. We welcome Pascal and Jim in their roles, and thank Wim.

#### **UK** pension reforms

IMCA has raised concerns about UK government plans to extend the automatic pension enrolment requirements to all personnel working on the UK continental shelf and to all seafarers on vessels leaving a UK port. This would apply irrespective of the employees' nationality or place of residence, or where the employing company is based or ship registered. While IMCA fully supports moves to ensure that offshore workers and seafarers have access to the same benefits afforded to shore-based workers, these proposals do not take account of the mobile and international nature of the

offshore

vessel workforce and would potentially apply to numbers of workers with no link to the UK. IMCA has therefore urged the UK government to limit the pension requirements to employees with a strong connection to the UK.

#### EU drilling safety proposals

At the end of October 2011, the European Commission published formal legislative proposals on EU drilling safety. The proposed regulation on EU-wide health, and environmental standards for offshore oil and gas activities is largely based on the regime already in place in the UK, but some industry players are concerned that the proposals would pave the way for E&P activities to be regulated by the EU, potentially undermining national competence.

#### Middle East & India

The next meeting will take place in lebel Ali, Dubai on 18 January 2012, followed by a workshop on the ILO Maritime Labour Convention.

IMCA has contributed to the



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# diving

# **Jetting Equipment**

AODC 049 – Code of practice on the use of high pressure jetting equipment by divers – is being updated. It has been extended to

**⊕IMCA** 

cover both high and ultra-high pressure ietting equipment and includes recent flashes safety high pressure water jetting equipment, identifying additional guidance as a result. The document is currently being finalised for publication. IB





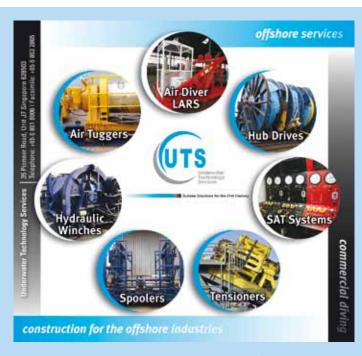
# **Acrylic Viewports**

Update to AODC 030 to be published soon Acrylic plastic viewports are used in many pressurised systems, under a variety of conditions world-wide, and this document was produced initially to provide general guidance.

The update provides additional guidance on the deterioration of viewports, as well as identifying a reference document providing technical criteria and guidelines for the inspection, care, testing and recertification of acrylic viewports. The revised document is being finalised and will be published shortly. *JB* 

IMCA has been working on updating the DESIGN CD – Diving equipment systems inspection guidance notes – covering air, saturation, surface supplied mixed gas diving and mobile/portable surface diving systems. Feedback on the current guidance has been on how it is interpreted by auditors and the possibilities for inconsistent approaches in undertaking audits using the DESIGN suite. The update is intended to provide clarifications on the requirements in the documents to reduce queries on interpretation. Areas specifically covered in the revised document are safety interlocks, winches and bell rope testing. The revision of DESIGN is now almost complete and will be sent to the DESIGN workgroup for review prior to being finalised for publication under the new title – Dive system assurance. In addition to the update of the DESIGN suite, IMCA D 011 – Annual auditing of diving systems – has been recently updated and published providing an internationally applicable document setting out guidance on the management of the DESIGN audits and the competence of auditors. JB





# marine

## **DP Trials**

Earlier this year IMCA published IMCA M 190 -Guidance for developing and conducting annual DP trials programmes for DP vessels, which contained an example of an annual DP trials report. IMCA has now published IMCA M 212 - Example of an annual DP trials report - that provides the example report as a separate document. This replaces IMCA M 139 -Standard report for DP vessels' annual trials - that has now been withdrawn. JB



# **CMID Update**

There are currently 300 vessel operators on the database representing 447 vessels, with 130 CMID reports uploaded. IMCA is keen to assist vessel operators, clients, inspectors and other industry

organisations in utilising the eCMID and the CMID database to its full potential.

Another series of CMID database workshops was held in Doha, Qatar and Abu Dhabi, UAE in October 2011, and these provided useful feedback that IMCA and the CMID Steering Committee will be considering. Further workshops for the Asia-Pacific region are planned in Singapore during early 2012 and more details will be released soon.

Gordon Kelly – the CMID
Database Administrator –
was on hand at the IMCA
annual seminar to answer
any attendees' questions
regarding the database and
the eCMID. If you have
any feedback on the CMID
database, please contact him
Gordon.Kelly@imca-int.com

Reported problems with the use of the PDF electronic form version of CMID issue 8 are being addressed and it is anticipated an improved version of the PDF form will be available for download from the IMCA website in the near future.

The third issue of the CMID newsletter will soon be emailed to all database users and interested parties.

Anyone not currently receiving the newsletter who wants to should also contact Gordon. *GK/IG* 

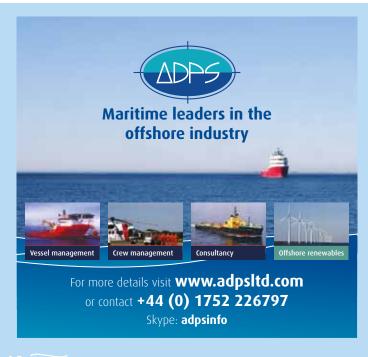
# **DP** Operator Training

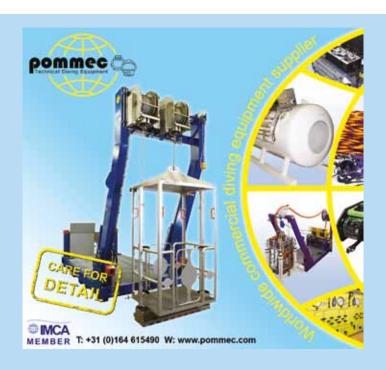
In recent years the subject of training DP operators and others involved in these operations has been under scrutiny by various groups, which has resulted in the inclusion of DPO training and experience in Part B of the STCW Convention and Code. Some maritime administrations and organisations, such as the US Coast Guard (USCG) and the Marine Technology Society's Dynamic Positioning Committee, have reviewed the subject and it is anticipated that further guidance and regulation on all aspects of DP will follow.

As custodians of the internationally recognised Dynamic Positioning Operator Training Scheme, the Nautical Institute recently held a DP Training Executive Group meeting, attended by the NIHQ personnel, representatives of the training centres and the industry organisations – including IMCA, IADC and OCIMF, who act as advisers to the group. Topics discussed were DP time verification, DPO certificate revalidation, DP time for those serving aboard vessels with automatic position mooring or thruster assist mooring systems, the UK Chamber of Shipping's proposals on DP training and certification for OSV personnel, and the training of cadets in DP.

IMCA is aware of the USCG's initial approach on the subject of DP that states it is interested in "training, roles and authority, proper operation of equipment as designed". At the moment the USCG is consulting with the industry and further developments are expected in due course.

Feedback can be sent to lan.Giddings@imca-int.com





# marine

## **IMO Update**

# Enclosed space entry – updated guidance and new drills requirement

IMCA participated in the review of the IMO recommendations for entering enclosed spaces aboard ships, which are due to be adopted by the IMO governing Assembly in November 2011.

IMO has agreed to introduce new requirements for enclosed space entry and rescue drills, and also to mandate the carriage and continuous use of oxygen meters. Members will have the chance to comment on the detail of the new requirements, before the new regulations are finalised sometime in 2012.

#### New towing and anchor handling stability guidance

The Norwegian government has submitted detailed proposals for new unified stability criteria and operational guidance for vessels engaged in towing and anchor handling operations. IMO has already agreed in principle to amend the 2008 International

Code on Intact Stability (IS Code), but the Norwegian submission has been circulated to IMCA marine contacts. Members are encouraged to review the details and help inform IMCA's position at the IMO working group, expected to develop the draft amendments in January 2012.

## **Damage stability**

Members' feedback is also being sought on proposals for IMO to upgrade the damage stability requirements for OSVs over 100 metres in length and OSVs carrying liquids in bulk.

#### Windfarm vessel standards

IMO has been asked to clarify standards for windfarm vessels. Some guidance may be helpful, as long as traditional offshore vessel classifications continue to be recognised.

#### Further guidance on armed guards

In September 2011, IMCA participated in a special IMO maritime security and piracy meeting, which developed further interim guidance on the use of privately contracted armed security personnel on board ships. IMO does not endorse the carriage of armed guards, but the guidance is to assist in cases where flag states have decided to permit the use of armed guards on their ships.

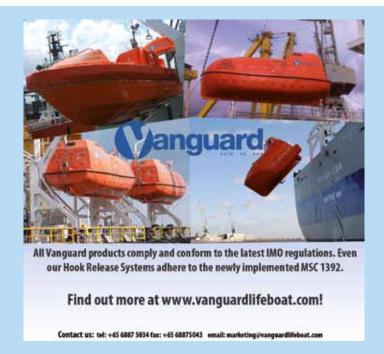
#### Antarctic fuel oil ban

As of I August 2011 the carriage or use of heavy grade fuel oils in the Antarctic area is prohibited. Ships trading to the area will need to switch to a different fuel type when transiting the Antarctic area, although an exception is envisaged for vessels engaged in securing the safety of ships or in a search-and-rescue operation.

For more details on IMO issues, please contact Emily.Comyn@imca-int.com



Images © IMO/UN





# offshore survey

# Offshore Survey Sensors

A workgroup will shortly be developing a document on shore-based calibration and offshore verification of offshore survey sensors. The intent is to set the basis for common client and contractor expectations in terms of the wide variety of sensors used in offshore surveying, promote agreement on set tests for verifying calibration of sensors, and work towards agreement on the frequency of sensor calibrations. Respected industry consultant Gordon Johnston will head the workgroup, looking at methodologies, influences on various systems, manufacturers' calibration and users' deployment checks. IMCA hopes to have the document ready for publication by mid 2012. *NH* 

## **Satellite Positioning**

IMCA continues to follow developments in satellite positioning. One has been the USA "LightSquared" proposals to build a wireless broadband communications network that could interfere with GPS receivers. Recent news suggests that the valid technical opposition to these plans has been taken seriously by the authorities in the USA.

During the Autumn, a number of IMCA members working in equatorial regions reported an increase in ionospheric effects on global navigation satellite systems (GNSS), leading to an increase in DP incidents. IMCA published information note S 05/11 about this, describing a number of factors that have been linked with increased ionospheric activity – elevated sunspot activity with the 11 year solar cycle (the present cycle is expected to peak in 2013), solar and magnetic storms, seasonal and diurnal variations in the atmosphere, and geographical location – and steps that may help to mitigate the effects. IMCA has a range of technical guidance on satellite positioning that can be downloaded from the IMCA website. NH

# Personnel Statistics

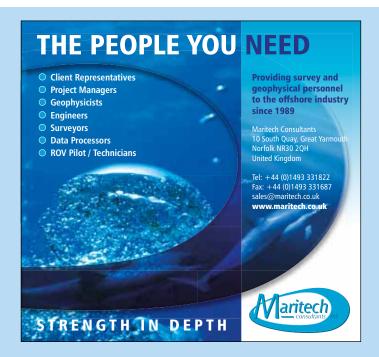
The Offshore Survey Division Management Committee, as part of its competence work for offshore personnel, is undertaking a survey of personnel employed by members world-wide. IMCA believes it would be beneficial to know where, and in what capacity, freelance survey personnel are employed by its members. The survey will establish numbers working in offshore survey related roles at a given point in time and whether they were permanent or freelance. This will be a useful indication of trends and other factors and will assist IMCA in targeting competence materials.

Results from over 20 contractors allow some preliminary observations to be drawn. In some parts of the world freelance personnel are in the majority, with fewer agency personnel elsewhere. The spread of agency personnel differs with discipline, with geophysicists having the highest percentage

of freelancers. A clear trend is that that the industry employs a greater number of freelance personnel during the northern hemisphere summer. *NH* 

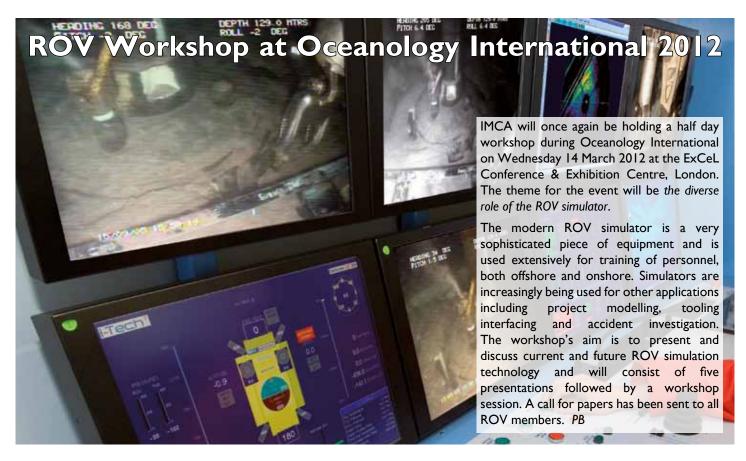
# Inertial Navigation Systems

INS technology, relatively new to the offshore industry, is becoming increasingly available and widely used by members. It is generally used offshore in conjunction with other positioning systems in a hybrid or aided form, where data input from existing positioning systems is used to augment INS data, providing a more robust and accurate overall positioning solution than with a single system. A workgroup of members of the Offshore Survey Division Management Committee is preparing a review of available INS technology, which will look at the various ways in which INS systems can be augmented by other positioning systems, and the strengths and weaknesses of each technique. NH





# remote systems & rov

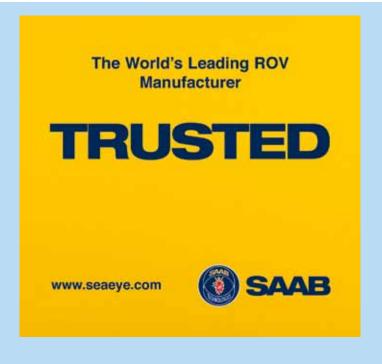


# **Update of IMCA R004**

At the recent ROV Division Management Committee meeting the need to revise IMCA R 004 – Code of practice for the safe and efficient operation of remotely operated vehicles – was discussed. It was agreed that the document is in need of an update and a number of topics have been identified for review. The committee put together a small task force to undertake the work and the revision process will begin soon. PB

## **Last Call for ROV Stats**

As the year is nearly at an end it is time for a final check that ROV statistics have been submitted to IMCA. We will start to process the statistics early in 2012 and the report will be issued towards the end of Q1. If you have lost your report form a new one can be obtained from Paul.Bayliss@imca-int.com, which is also the address to send the completed forms to. PB







# SPOTLIGHT ON ROY HAY

Roy Hay is Director of Offshore Personnel Services within Technip Marine Operations Services and serves as Vice-Chairman of IMCA's Competence & Training Core Activity Management Committee. In this article he discusses his 'day job' and provides a personal insight into the work his committee is currently undertaking on behalf of members in his division.

# Please tell us about your company and what it does

I work for Technip, a world leader in project management, engineering and construction for the energy industry. From the deepest subsea oil and gas developments to the largest and most complex on and offshore infrastructures, our 25,000 staff are constantly offering the best solutions and most innovative technologies to meet the world's energy challenges. Present in 48 countries, Technip has state-of-theart industrial assets on all continents and operates a fleet of specialised vessels for pipeline installation and subsea construction.

We need to re-energise the focus on attracting young people into the industry

#### What is your current job?

I am Director of Offshore Personnel Services within Technip Marine Operations Services, which is responsible for the provision of vessels, equipment and offshore personnel delivering Technip's world-wide subsea project commitments. I have worked for Technip for seven years — the past five in this role.

# How did you get to where you are in your career today?

Following a degree in English and modern history, I commenced work with the Construction Industry Training Board in a training role, before moving on to the Tarmac Group, where I worked for almost 15 years, progressing from Personnel Officer to HR Manager of the Building, Social Housing and Mechanical and Electrical Services divisions, completing my HR qualifications along the way.

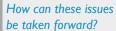
I see constraints
around the industry's
ability to crew the increasing
number of vessels
available

What do you see as the key areas affecting the industry at the moment?

The precarious state of the world economy, the recovery of the markets we serve and the implications of this on the industry's ability to respond - particularly in crewing terms. During the last 'boom' we were constrained by the vessel tonnage available; this time I see constraints around the industry's ability to crew the increasing number of vessels available with competent, suitably experienced personnel.



I can see IMCA's role and influence increasing



From an industry perspective, I believe we need to re-energise the focus on attracting young people and other new starts into the industry. At company level it is about developing strategies and allocating budgets to enable sufficient recruitment, training and familiarisation of new personnel, and in greater numbers than before. This will require us to think differently and make better use of new technology, for example e-learning and simulation techniques.

# How do you think IMCA makes a difference?

By supporting and encouraging common standards and, as a consequence, increasing professionalism in the industry amongst the membership and beyond. The input of the industry through the various

committees and working groups, supported and guided by the IMCA secretariat, makes for a very powerful group that really influences the way we work to reduce incidents and improve safety in all areas. I can see IMCA's role and influence increasing further in the future as clients and jurisdictions increase their expectations of the contractors working for them.

66

I am positive about the future of the industry

## How do you see the future?

I am positive about the future of the industry, which — despite the many and various challenges — remains a great place to work with tremendous opportunities for those involved in it, both on and offshore.



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# makingwaves

Making Waves is published quarterly to promote knowledge of matters affecting the offshore, marine and underwater engineering

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# MEETA GURTATA CERTIFICATION SCHEME ASSISTANT Meeta.Gurtata@imca-int.com Once you have finished with this magazine please recycle it.

## Welcome to the IMCA Directory!

The following pages contain details of IMCA's recent publications, safety flashes and information notes, as well as the members of IMCA's various management committees and a list of current members

More details and links to the websites of some of our members can be found at www.imca-int.com/members

The directory is compiled in advance of Making Waves going to print and is correct as at the date stated.

#### **NEW PUBLICATIONS**

- Guidelines for oxy-arc cutting, Rev. I
- Diver and ROV based concrete matress handling, deployment, installation, repositioning and decommissioning (IMCA D 042, IMCA R 016)
- Example of an annual DP trials report (IMCA M 212)

#### SAFETY FLASHES

- Safety flash 10/11 covering seven incidents: Oxygen regulator explodes causing injury; Lifeboat drill near casualty; Gimballed frying pan handle assembly failure; Serious injury as a result of a fall from height; Fatality during rope access work; Collision between vessel and installation resulting in damage to both; Mooring line operational safety Safety flash 11/11 covering eight incidents: Failure of pressure washer; Equipment damage dropped ROV/ Tether Management System (TMS); Grinding disc with defects; Gas detector safety alert; Collision between OSV and barge: Oil spill in port whilst discharging waste oil; Fire extinguisher recall faulty equipment; Pilot ladder failure Safety flash 12/11 covering eight incidents: Offshore tank container rigging failure; Near miss: Dropped object: 6kg sledge hammer head; Near miss: Crane winch wire damaged crane cab during heavy seas; Near miss: Diver working under suspended load; Fast rescue boat dropped 18m into sea injuring crew; Dynamic positioning (DP)
- Working under suspended load; Fast rescue boat dropped 18m into sea injuring crew; Dynamic positioning (DP) system failure; Engine room CO<sub>2</sub>isolating valve; Engine room fire on offshore vessel

  Safety flash 13/11 covering seven incidents: Near miss:

  Dropped taut wire clump weight; LTI: Thumb injury; Near miss: Winch wire parted and crane block dropped; Fall protection product recall; Failure of rescue boat release mechanism; Person injured by parts ejected under pressure; Fatal diving incident

#### **INFORMATION NOTES**

#### **COMPETENCE & TRAINING**

IMCA C 10/11 Compulsory online application for the Nautical Institute dynamic positioning operator certification
II/II Dynamic Positioning Training Executive Group (DPTEG)
Meeting

#### SAFETY, ENVIRONMENT & LEGISLATION

IMCA SEL 13/11 Best management practices for protection against

Somalia based piracy 14/11 Lifeboat hooks – new design requirements and industry guidance

#### **DIVING DIVISION**

IMCA D 08/11 Non-destructive evaluation (NDE) testing of gas cylinders

#### MARINE DIVISION

IMCA M 16/11 Best management practices for protection against Somalia based piracy
17/11 The Nautical Institute Dynamic Positioning Operator

Certificates

18/11 Dynamic Positioning Training Executive Group (DPTEG)

Meeting
19/11 Dynamic Positioning System Failure

20/11 Lifeboat hooks - new design requirements and industry guidance 21/11 Heightened ionospheric activity in equatorial/polar regions

#### OFFSHORE SURVEY DIVISION

IMCA S 05/11 Heightened ionospheric activity in equatorial/polar

regions 06/11 OGP Geospatial Integrity of Geoscience Software (GIGS) initiative

# COMMITTEE MEMBERS

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Survey:

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Middle East & India:

South America:

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ROV:

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Espen Ingebretsen, Oceaneering International

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Hugh Williams lane Bugler

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Alan Marriott, Technip USA Pascal Grosjean, Technip lim Sommerville, Fugro Christopher Rodricks, SEAMEC

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Hilary Cliffe/Julian Nelson, Fugro Survey George Robertson, Fugro Frank Klein, Oceaneering International

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Espen Ingebretsen, Oceaneering International

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- **♦** Amron International
- **BSA Offshore AS**
- ◆ DeepOcean Holding AS (Asia-Pacific)
- ◆ Diamond Offshore Drilling Inc
- **EF Consult Asia Pte Ltd**

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- ♦ Interoil Angola
- ♦ iRov Underwater Services
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- ♦ ROV Resources (M) Sdn Bhd
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#### RECENT NAME CHANGES

Aker Marine Contractors AS is now EMAS-AMC AS Aker Marine Contractors is now EMAS-AMC Inc

Five Oceans Services GmbH is now Siem Offshore Contractors GmbH

Marathon Petroleum Norge is now Marathon Oil Norge AS Noordhoek Survey BV is now N-Sea

NOR Offshore Pte Ltd is now Solstad Offshore Asia Pacific Ltd

TSMarine Pty Ltd is now Fugro-TSM Pty Ltd

Allseas Group SA Global Industries **Heerema Marine Contractors** Helix Energy Solutions Group, Inc.

McDermott International Inc.

Saipem Subsea 7

Technip

Abel

Abyss International Benthic Exploration

ACSM.

Adams Offshore WII

Adsun Offshore Diving Contractors Pvt Ltd Advanced Energy Systems (ADES)

Advanced Offshore Contractors Pvt Ltd

Ajang Shipping Sdn Bhd Aker Oilfield Services

Alam Subsea Pte Ltd

All-Sea Deepwater Solutions Limited

Alliance Seaworks Sdn Bhd Allied Marine & Equipment Sdn Bhd

AlMansoori Production Services LLC

Aqua Diving Services

**Arab Tanker Services** 

Archirodon Construction (Overseas) Co SA

Arctia Shipping Ltd Arena Sub srl

Argus Remote Systems AS

Asian Geos Sdn Bhd

ATCO Ports Management & Marine Services

Atlantic Towing Ltd

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Canship Ugland Ltd

Cape Diving

Caspian Sea Oil Fleet (CSOF) CCCC International Shipping Corp

CDS Subsea Pte Ltd

Celtic Africa Ltd

CH Offshore Ltd

Clough Oil & Gas

CNS International srl

Companhia Brasileira de Offshore - CBO

CCC (Underwater Engineering) SAL Copetech-SM

Coral Alliance Sdn Bhd Core-IRM Pte Ltd

COSL Drilling Europe AS

CS Offshore DMCCO

CUEL Ltd

Dalgidj Private Company Damas Oil & Marine Services Ltd

DCN Diving BV

DCN Global LLC

Deep Sea Supply Mgmnt (Singapore) Pte Ltd

DeepOcean Group Holding AS DeepOcean Holding AS (Asia-Pacific) Diamond Offshore Drilling Inc

Disa Maritime BVBA

DOF Management AS

DOF Subsea (Australia & Asia Pacific)

DOF Subsea Brasil Serviços Ltda

DOF Subsea Norway AS DOF Subsea UK Ltd

DOF UK Ltd

Dolphin Drilling Ltd

Dolphin Offshore Enterprises (India) Ltd

Drexel Oilfield Equipment Dulam International Ltd

Dunnimaa Engineers & Divers Ent. Pvt Ltd

EDT Marine Construction Ltd

EDT Shipmanagement Ltd

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Eidesvik AS EMAS Offshore Pte Ltd

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Fairmount Marine by

Far Eastern Shipping Company

Farstad Shipping ASA Fendercare Marine and Diving Services

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Fugro SAE Fugro Subsea Services (Australia) Pty Ltd

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Hull Support Services Ltd

Huta Marine Works Ltd

HydroDive Nigeria Ltd HydroDive Offshore International Ltd

IDMC srl

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Impresub International LLC Inspectahire Instrument Co Ltd

Integrated Subsea Engineering & Services LLC
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Maersk Supply Service
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Maridive & Oil Services (SAE)
Maridive Offshore Projects
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Maritime & LIndonuctor Security C Zakher Marine International
Zamil Offshore Services Company SB Submarine Systems Ltd SBM Offshore NV Rovsco Asia Pte Ltd SC Shark SRL Scaldis Salvage & Marine Contractors NV Sea Trucks Group – Asia-Pacific Sea Trucks Group – Europe & Africa Sea Trucks Group FZE Saab Seaeye Ltd Samson Rope Technologies ABB AS, Marine Division SBM Offshore NV ABB Ltd Schilling Robotics, Inc. ABB Pte Ltd Sea and Land Technologies Pte Ltd Sea Software Packages & Technologies Ltd Sea Trucks Group FZE Seabed AS AC Plus Marine Inc. ACE Winches Maritime & Underwater Security Consultants Seacor Marine (International) Ltd Maritime Asset Security and Training Ltd Seacor Offshore Dubai LLC Advanced Marine Pte Ltd Seaflex Ltd Master Tech Diving Services MENAS – Middle East Navigation Aids Serv Mermaid Marine Australia Ltd Seadrill Americas Inc Air Liquide America Specialty Gases LLC Seadrill Management AS SeaHold GeoShips Limited Sealion Shipping Ltd Air Liquide UK Ltd Seanetics Asia Works Pte Ltd Seaswift Subsea Engineering LLC Seatools BV Air Products Middle East FZE Mermaid Offshore Services Ltd Miclyn Express Offshore Pte Ltd Seahorse Services Co Ltd Air Products Middle East FZE
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Alfa Petroleum Services Subtech Qatar Diving and Marine Svcs LLC Offshore Technology Solutions Ltd Olympic Shipping AS Supreme Hydro Engineering Pvt Ltd SURF Subsea Inc Alliance Marine Services Orogenic GeoExpro Sdn Bhd OSM Offshore AS GMC Ltd Anglo-Eastern Group Swiber Offshore Construction Pte Ltd Swire Pacific Offshore Operations Pte Ltd Target Engineering Construction Co Technip Oceania Pty Ltd Technip USA, Inc. Great Offshore Ltd Anglo-Eastern Group (Asia-Pacific Region) Overseas AST Co LLC Applied Research International Pvt. Ltd ASP Rope Access Greatship Subsea Solutions (Australia & AP) P&O Maritime Services Ltd Guidance Navigation Ltd Auto Dynamic Positioning Services Ltd
Babcock Int Group Marine & Technology Div P&O Maritime Services Pty Ltd Huse Engineering AS Pacific Crest Pte Ltd Hydrasun IHC Hytech BV Pacific Drilling Services Inc Pacific Richfield Marine Pte Ltd PBJV Group Sdn Bhd Pearl River Offshore Limited Pelican Offshore Services Pte Ltd Bahrain Ship Repairing and Engineering Co Baker Marine Solutions Technocean AS Tecnosub Teekay Norway AS Intron Plus IUC Group Inc Blade Offshore Services Ltd Tidewater Inc.
Tidewater Marine North Sea Ltd Blue Water Engineering (M) Sdn Bhd BOATLABS AS IUC Technologies Inc IXSEA Joint-Stock Company 'Oceanos' Joint-Stock Company Tetis Pro Petroleum Marine Services Company PetroUsaha Engineering Services Sdn Bhd Tideway Offshore Contractors Braemar Falconer Bruce Offshore Ltd Timsah Shipbuilding Company PFCE Ocean Engineering Sdn Bhd TL Geohydrographics Sdn Bhd BSA Offshore AS W Automarine Phoenix International
PRONAV Ship Mgment GmbH & Co KG
Prosafe Offshore Ltd
PT Advanced Offshore Services Topaz Marine Kenz Figee BV C-MAR Group Topaz Marine – Azerbaijan Kirby Morgan Dive Systems CAPE Group Pte Ltd Topaz Marine – Kazakhstan Topaz Marine MENA Total Marine Technology Pty Ltd Kongsberg Maritime AS Cescor srl Kongsberg Maritime do Brazil SA Kongsberg Maritime Ltd KTL Offshore Pte Ltd Kystdesign AS Consortium Underwater Engineers Ltd Construction Specialists Ltd (CSL) PT Bahtera Niaga Internasional PT Ekanuri Indra Pratama TPSMI Group Ltd Cosalt PT Jaya Salvage Indonesia Transocean Deep Diving Consultancy Ltd (DDC Ltd) Deep Diving Consultancy Ltd (
Deep Down Inc.
Delta Marine Technologies Inc
Derrick Services (UK) Ltd
Derrick Services (UK) Pte Ltd
Diving and Offshore Works
Consultance (COMC) PT Lancar Rejeki Berkat Jaya Transoceanic Cable Ship Company Inc. L-3 Communications PT Patra Dinamika Troms Offshore AS Lexmar Engineering Pte Ltd PT Prima Mitranata PT Samudera Biru Nusantara UMC International plc Liebherr Sunderland Works Ltd Mako Technologies LLC Underwater Services Company Ltd Marine & Diving Services Ltd MCA Electric Co Ltd PT Wintermar Unicom Management Services (Cyprus) Ltd PTSC Geos & Subsea Services Co Ltd Unidive Offshore Pte Ltd Queiroz Galvão Óleo e Gás Consultancy (DOWC) Unimar Ltd MCS Free Zone

Measurement Devices Ltd

DMC Offshore UK Ltd

Rana Diving spa

URS nv

DOF UK Ltd **DRC** Dive Systems Dynamic Surveys Echelon Claims Consultants Ltd Egyptian Company for Oil Services (ECOS) Emirates Industrial Laboratory ETPM Ltd Explorer Marine SBoSS ApS Fearnley Offshore Supply Fender & Spill Response Services First Marine Solutions Ltd Flinders EMA Pte Ltd Franklin Offshore Europe BV Franklin Offshore International Pte Ltd GL Noble Denton GL Noble Denton - Asia-Pacific GL Noble Denton - Cen & North America GL Noble Denton – Middle East & India GL Noble Denton - South America Global Maritime Global Maritime Singapore GMC Ltd GW & Associates Ltd Hill International (UK) Limited Houlder Insurance Services Ltd IHC Offshore & Marine BV Imes Ltd Inchcape Shipping Services
Inchcape Shipping Services Ltd – S America Independent Risk Solutions BV Inter Mar Technology Ltd InterMoor Marine Services Ltd Interocean Marine Services Ltd Italian Maritime Academy Technologies ITIC JSL International (Trinidad) Ltd K2 Specialist Services Pte Ltd KB Associates Pte Ltd KDU Worldwide Technical Services (FZC) Kennedy Marr Ltd Kestrel Maritime Asia Pte Ltd Lexmar Engineering Pte Ltd London Offshore Consultants Ltd M3 Marine Group Pte Ltd Marex Marine Services Ltd Marine Cybernetics Marine Q AS Marine Solutions (Pty) Ltd Maritime Assurance & Consulting Ltd Maritime Management Services Inc MatthewsDaniel
MCA Electric Co Ltd MCS Free Zone Medea srl MJR Controls Ltd Modus Seabed Intervention Ltd MOS Marine Offshore Services Pte Ltd National Hyperbaric Centre Nautronix Ltd Navigare International Inc. NUI AS ODS-Petrodata Pte Ltd Offshore Commissioning Solutions Offshore Technical Management Solutions International OK Welding Marine Ltd Orwell Offshore Ltd PAE Singapore Pte Ltd PEM Offshore Ltd Perry Slingsby Systems Ltd Peterson SBS Den Helder BV Petrofac Marine Services Positioneering Ltd Primo Marine PRO Marine Solutions Pvt Ltd PT Rigspek Perkasa PT Sirius Maritimindo Services QinetiQ Reel Group Ltd Rolls-Royce Power Engineering plc Romona Inc Saturation Services LLC Scanmudring Scanmuaring Schilling Robotics, Inc. Schulte Energy Services Ltd Seacroft Marine Consultants Ltd Seanetics Asia Works Pte Ltd Sebastian AS Sigma Offshore Ltd Skan-El AS Skuld AS

Soil Machine Dynamics Ltd

Southern Marine Consult AS

Solstad Offshore Ltda

Spica Marine Inspections Ltd STAT Marine SAS Sub-Tech Systems Ltd SubNet Services Ltd Subsea Vision Ltd Survey Association The Tritanium Company by Thome Offshore Management Pte Ltd Tristein AS Underwater Technology Services (S) Pte Ltd United Subsea Engineering Pvt Ltd V.Ships Ltd Veripos . VideoRay LLC Viking Moorings Ltd VNSafety Ltd Vroon Offshore Services Ltd Wartsila Electrical & Automation Services Wavespec Ltd Westcon Power & Automation AS Xing Wei Pte Ltd Abyss AS Adarsh Institute of Maritime Studies AdriaMare Maritime Training Center Advanced Offshore Training Centre Pvt. Ltd Ålesund University College AMC Search Ltd ASET International Oil & Gas Training Academy Banff & Buchan College Bergen University College – Diver Education Bibby Ship Management Group Ltd – E&A Bibby Ship Management Group Ltd - ME&I Bonifacio Srl **BS** Divers Centre for Marine Simulation CMPP CFO - Centro Formazione Offshore Code Blue Nurses London Pty Ltd Commercial Diving Academy Daniels Maritime Group De Moura Shipping Ltda Divers Academy International Divers Institute of Technology Divers University Esporte Aquático Ltda Diving Diseases Research Centre Ecole Nationale Supérieure Maritime Falck Nutec by First Ukrainian Maritime Institute Force Technology Fundação Homem do Mar GL Noble Denton Global Marine Systems Ltd - Subsea Training Holland College – Marine Training Centre Hydro Oil & Gas Training Hydrolab-HydroCAT i-UTecH IDESS Maritime Centre (Subic) Inc. Interdive Services Ltd **ISFORM** KBA Training Centre Pte Ltd Kirby Morgan Dive Systems Marine Solutions (Pty) Ltd Maritech Group Maritime Institute Willem Barentsz Maritime State Uni named after G.I. Nevelskoy Maritime Training & Competence Sol Ltd MOG Industry Training Co Ltd MSTS Asia Sdn Bhd National Hyperbaric Centre National Oceanography Centre Netherlands Diving Centre North Sea Lifting Ltd NZ School of Commercial Diver Training Occupational Training Centre Pte Ltd Offshore Marine Academy Ltd
Offshore Skills Training Centre (OSTRAC)
Pan Arab E-Navigation DP Training Center Perry Slingsby Systems Inc. PNI Training Centre AS Polaris Learning Ltd Power & Generation Services Professional Diving Academy Professional Diving Centre PT Barron International PT ISBI PVD Technical Training and Cert Joint Stock Co Satakunta University of Applied Sciences SBS Intl Ltd SEADOG Seahorse Services Co Ltd Seahorse Services Co Ltd - Training Seneca College – Underwater Skills Program

Sparrows Offshore Services Ltd

Specialist Marine Consultants Ltd

Skilltrade BV SMTC Global Inc. Sogn og Fjordane Tech College, Maritime Dept Måløy STC-Group Stord/Haugesund University College STORM Ltd SubNet Services Ltd SubNet Services Ltd – Asia-Pacific Survie Mer Formation TGH AP Pte Ltd The Dynamic Positioning Centre Ltd The Faraday Centre Ltd The Ocean Corporation
The Underwater Centre (Tasmania) Pty Ltd The Underwater Centre Fort William Ltd The Underwater Centre Fremantle Pty Ltd The Underwater Training Centre – S Aus Underwater Engineering Ltd Videotel Marine International Ltd WA Maritime Training Centre – Fremantle YAK Diving Academy YellowOffshore

Ship Manoeuvring Simulator Centre AS

Ace Diving Services CC Alfa Petroleum Services Atlas Services Group Atlas Services Group Australia Pty Ltd Bibby Ship Management Group Ltd – E&A Bibby Ship Management Group Ltd – ME&I Compass Personnel Services Inc Connect Energy Services Pte Ltd Dave Oliver Hydrographic Services Ltd De Moura Shipping Ltda EF Consult Asia Pte Ltd Hydrosub Ltd
IOS (International Offshore Services) Lerus Ltd Maritech Group MCL Medics Naurex Resources Nautech Services Ltd Offshore Marine Services UK Ltd OilExec International Oilfield Medics UK Ltd OSM Crew Management Aberdeen Ltd Petrolis Pharos Offshore Group Ltd PR Offshore Services Ltd ROVin Marine Ltd Saturation Services LLC Seatek India Sheffield Offshore Services Pte Ltd SubNet Services Ltd SubNet Services Ltd – Asia-Pacific SubServPro Team Trident LLC The Underwater Centre Fremantle Pty Ltd Total Marine Services UKPS Offshore Underwater Engineering Ltd Verret Marine Services

Irish Naval Service Royal Saudi Navy Forces Salvage & Marine Operations IPT ABS Europe Ltd Abu Dhabi Marine Operating Company Agip Kazakhstan N Caspian Op Co NV AISI Azerbaijan International Operating Company Bahamas Maritime Authority Bapco – The Bahrain Petroleum Company BG Americas and Global LNG – C&N America BG Americas and Global LNG - S America BG Group BHP Billiton **BP America Production Company** BP Berau BP Exploration Operating Company Ltd Brunei Shell Petroleum Co Sendirian Berhad Cairn Energy India Pty Ltd Chevron Brasil Petroleo Ltda Chevron Energy Technology Co Subsea Chevron Nigeria/Mid-Africa Chevron Shipping Co Chevron Thailand Exploration & Prod Ltd CNR International UK Ltd ConocoPhillips ConocoPhillips (UK) Ltd ConocoPhillips China Inc Dana Petroleum Netherlands BV

Dana Petroleum plc

Department of Labour (South Africa)

Det Norske Veritas Dolphin Energy Ltd DONG E&P AS Equion Energia Limited Esso Australia Pty Ltd ExxonMobil Development Company GDF Suez E&P Nederland by Germanischer Lloyd SE Gulf of Suez Petroleum Company (GUPCO)
Health & Safety Authority Husky Energy International Diving Schools Association Kuwait Oil Company Maersk Oil Danish Operations Maersk Oil North Sea Ltd Maersk Oil Qatar AS Marathon Oil Norge AS Mobil North Sea LLC Murphy Sarawak Oil Co Ltd National Offshore Petroleum Safety Authority Nautilus Minerals Nederlandse Aardolie Maatschappij BV Newfield Peninsular Malaysia, Inc Nexen Petroleum UK Ltd Noble Energy OGP Offshore Operators Committee (OOC)
Oil & Natural Gas Corporation Ltd Perenco UK Ltd Petrobras Premier Oil Natuna Sea Premier Oil ONS Ltd PT Pertamina Hulu Energi ONWJ PTT Exploration & Production plc Qatar Petroleum Ras Laffan Industrial City RasGas Company Limited Sarawak Shell Berhad Shell International Exploration & Prod by Shell Petroleum Dev Company of Nigeria Ltd Shell Todd Oil Services Ltd Sonangol Pesquisa & Produção Statoil ASA Suncor Energy Inc. Talisman Energy (UK) Talisman Malaysia Ltd The Crown Estate
Total Austral (Argentina) Total E&P Indonesie Total E&P Nederland BV Total E&P UK Ltd Total Exploration & Production Wintershall Noordzee BV Woodside Energy Ltd Zakum Development Company (ZADCO)

Det Norske Oljeselskap ASA



# **IMCA**

## FORTHCOMING EVENTS

12 January 2012 Asia-Pacific Section Bangkok, Thailand

18 January 2012 Middle East & India Section Jebel Ali, Dubai, UAE

8-11 February 2012 Oceantex 2012 Mumbai, India

15 February 2012 Competence Workshop Aberdeen, UK

6-8 March 2012
Subsea Tieback Forum & Exhibition
Texas, USA

7 March 2012 Central & North America Section Houston, USA

13-15 March 2012 Oceanology International London, UK

14 March 2012 Europe & Africa Section London, UK

20 March 2012 South America Section Rio de Janeiro, Brazil

21-22 March 2012 IMCA Safety & Environment Seminar Risk & Impact in Marine Operations Rio de Janeiro, Brazil

24-26 April 2012 Offshore Cranes & Lifting Aberdeen, UK

25-27 April 2012 Seatrade Offshore Marine Asia Singapore

30 April-3 May 2012 Offshore Technology Conference Houston, USA

23-24 May 2012 All Energy Aberdeen, UK

23-25 May 2012 Offshore Technology, Equipment Exhibition and Conference Nanjing, China

# Safety & Environment Seminar 2012 RISK & INPACT IN MARINE OPERATIONS

# PRESENTATIONS INCLUDING:

What would be the legal consequences if the Macondo accident happened in Brazil?

Adequacy of vessels for importation to work in Brazil Corporate social responsibility

Design a facility rather than a vessel Process safety challenges in marine operations

## WORKSHOPS

The legal consequences of the Macondo incident Process safety/asset integrity

## SAFETY SHARE FAIR

Delegates are encouraged to bring a display of their company's safety promotional materials to the event, enabling those present to review and discuss successful safety initiatives with each other.

Sofitel Rio de Janeiro Copacabana, Brazil

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