**INFORMATION AND INSIGHT** FOR THE OFFSHORE MARINE CONSTRUCTION SECTOR

SSUE 72 | SEPTEMBER 2014

# Achieving competence

Is it the silver bullet we've been searching for?

**CORE** 

Lost time injury rate improves again

**EVENTS** 

PAGE 12

IMCA addresses corruption

**WORLD-WIDE** 

PAGE 15

A new subsea solution

**NEW GUIDANCE** 

**PAGE 19** 

Man and machine in unison





## Integrated Turnkey Subsea & Offshore Solutions



## **REQUIRE CLASSED CONTAINERISED DIVING SYSTEMS FOR YOUR DSV?**

- Air, Nitrox and Mixed Gas Diving Systems
- Built to latest IMCA, OGP & Class Requirements
- Modular Engineered Design, short delivery time
- eDMS 100 Dive Monitoring System
- Classed Single Basket, Twin Basket and Wet-bell **Launch and Recovery Systems**















## **IMCA-COMPLIANT LIFT BAGS** AND BUOYANCY MODULES.

- · Backed up with project engineering and onsite support
- FULLY compliant with IMCA D-016, and type-tested to prove 5:1 Factor of Safety
- 500t of capacity flat-packs into a single 20ft container with a net weight of less than 2% of that capacity
- Quick to rig, & safe & easy to vent & retrieve
- Available immediately for hire or sale from multiple global locations















# Welcome to Making Waves

## From the President

In this issue you'll read about new initiatives and solutions we are delivering for our industry. These are exciting times, but we must not forget that the members need to work together with the secretariat to maintain the momentum we have and achieve our goals.

In the past quarter we have made changes and have decided to do some things differently to deliver more value to our members. In June, for the first time, we hosted a seminar in Macaé, Brazil which focused on personnel shortages and competence issues and as *Making Waves* goes to press a similar event is taking place in Singapore. Although our industry relies on equipment and technology, at its heart, it is a people business – so it is no surprise that competence of the workforce continues to be a hot topic. Our focus article in this edition looks at competence: what is it; and why is there an increasing need to demonstrate its value?

Other changes we have made include a rethink on how we deliver our Safety and Environment Seminar, launching our own charitable foundation – IMCAre, and beginning work on a new communications strategy to ensure IMCA becomes more visible and is

recognised as the voice of the global marine contracting industry.

We must maintain the momentum we have and the continued support of members will be vital if we are to achieve our goals. Increasing the extent and level of our network across the globe remains an ambition which members are best placed to assist with.



## Meet the team



Chris Charman Chief Executive chris.charman@imca-int.com



Jane Bugler Technical Director jane.bugler@imca-int.com



Chris Freer
Making Waves Editor
chris.freer@imca-int.com

## Technical Team

Chris Baldwin Technical Adviser

Emily Comyn Technical Adviser – Regulatory Affairs

Genine da Cruz Harvey Certification Schemes Co-ordinator

Neil Evans Technical Adviser – Competence & Training

Mark Ford Technical Adviser – Marine

lan Giddings Technical Adviser – Marine

Meeta Gurtata Certification Schemes Administrator

Nicholas Hough Technical Adviser – Offshore Survey and Safety, Environment & Legislation

Bryan McGlinchy Technical Adviser – Diving

Peter Sieniewicz Technical Adviser – Diving

## **Support Services Team**

Kylie Griffiths Operations Support Manager

Ann Barnatt
Document Production
Co-ordinator

Karuna Bhana Membership Administrator

Claudine Bleza

Jean Carmichael Financial Administrator

Kayleigh Glasscock Publications Sales Co-ordinator

Gordon Kelly Database Administrator & Developer Michelle Killington Membership Co-ordinator (Currently on maternity leave)

Ruby Parker-Barcy Receptionist & Office Administrator

Parul Patel Events Co-ordinator

Michelle Salway Membership Administrator

Natasha Simmonds Documents Administrator

Kayleigh Tucker Accounts Assistant

Contact details for each of the IMCA team are available at: www.imca-int.com/about-imca/imca-secretariat.aspx



52 Grosvenor Gardens, London, SW1W 0AU

Tel:+44 (0)20 7824 5520 Fax: +44 (0)20 7824 5521 www.imca-int.com Printed by Pyramid Press Distributed by May Courier International & DH Airfreight Ltd Making Waves is published quarterly to promote knowledge of matters affecting the offshore, marine and underwater engineering industry.

Ideas for articles of potential interest to a wide cross section of our members are welcome. The views expressed on these pages are those of their respective authors and do not necessarily reflect the policies or positions of IMCA itself.

Send your contributions and ideas to chris.freer@imca-int.com

For details about advertising opportunities in Making Waves, please contact Paul Hopper at Ashridge Communications. Tel: +44 (0)1442 870143 Email: ph1@ashridgecommunications.com

## Flying start for IMCAre

IMCA members clubbed together to generate a fantastic £50,000 at the IMCA Midsummer Ball in Aberdeen in June. The money is the launch pad for IMCAre, a charitable foundation established to give something back to the industry. IMCA Chief Executive Chris Charman talks us through how some creative thinking led to the foundation's formation.

"Having recognised that our industry is a dangerous one in which, regrettably, incidents happen, we felt that the marine contracting sector should be providing support and assistance to those affected. We thought that rather than simply providing money, it would be more in keeping with the aims and goals of IMCA to provide funds to support education, adding longer term value to the families and communities affected by tragedy.

"From this idea IMCAre was born. The plan is for each of our sections around the world to identify deserving causes and submit proposals for an allocation of funds. IMCA Council and Overall Management Committee (OMC)



will award money on a case-by-case basis to be distributed by the section to the families, communities, schools, training centres etc where we feel we can provide the most impact. The intention is that the relevant section will remain involved with their projects to mentor, monitor and manage them, ensuring the best outcomes.

## **Shortcut to objective**

"IMCAre has been established thanks to the administrative and banking support provided by the Society for Underwater Technology, who already operate a charity. This creative bit of thinking has allowed us to achieve a goal we have long considered: how to give something

back to the industry without incurring the additional overheads and running costs of setting up our own charity.

"The first nominations have already been made for the allocation of funds and we hope to announce awards at our Annual Seminar in London in November. If you would like to propose a cause for IMCAre to support please email me at chris.charman@imca-int.com"

Contributions large and small are welcome. For more information about how to donate please email info@imca-int.com

## **Documents update**

You'll find details below of all the recent publications we've been working on. These have been published since the previous issue of *Making Waves*. We've also given a short overview of the safety flashes and highlighted just a few of the important information notes. The full listing is available on our website by navigating to the relevant divisional page or by using the search function.

### **PUBLICATIONS**

**IMCA SEL 025/M 202 Rev. 1** – Guidance on the transfer of personnel to and from offshore vessels and structures

**IMCA SEL 034** – Working in confined spaces (DVD)

**IMCA D 018 Rev. 1** – Code of practice for the initial and periodic examination, testing and certification of diving plant and equipment

**IMCA D 024 Rev. 2** – *DESIGN for saturation* (bell) diving systems

IMCA M 200/S 013 Rev. 1 – Deep water acoustic positioning

**IMCA R 001 Rev. 1** – Plastic spherical air-filled fishing buoys

#### **SAFETY FLASHES**

Since the last issue of Making Waves, IMCA has issued seven safety flashes covering 39 incidents. These included the failure of a lifeboat on-load release hook mechanism and a man overboard incident which resulted in a fatality. Engine room fires, incidents

involving loose gear and accidents resulting in hand injuries were also a recurring theme.

### **INFORMATION NOTES**

MARINE: IMCA M 07/14 - Design of

multi-layer winch systems

**DIVING: IMCA D 10/14** – Verification of

diver qualification

DIVING: IMCA D 09/14 - Diver and diving

supervisor certification

All the latest documents from IMCA are available online at www.imca-int.com

# Fresh faces at IMCA

The secretariat continued to evolve this summer as two new recruits joined the support services team. We're delighted to introduce you to our newest team members.

Ruby Parker-Barcy (right) joined IMCA at the end of May and takes over the role of Receptionist & Office Administrator. You will most likely speak to her the next time you call us on the office main line. She'll also be assisting Kayleigh Glasscock with the sales and distribution of publications and logbooks to members. Ruby comes from a background in customer service and working front of house in a theatre.

Meanwhile, the membership team is dealing with a greater number of enquiries



and applications than ever as the list of IMCA members and the reach of the organisation continues to grow. To support Michelle Salway and ensure we continue to offer excellent service to our members while our Membership Coordinator, Michelle Killington, is on maternity leave, Karuna Bhana (left) has joined the team. Karuna, from New Zealand, has a background in

events and documents administration.

We are also delighted to announce that Michelle and her husband Anthony welcomed their baby girl, Emilia Maria Killington, into the world on 8 June. IMCA sends its warmest congratulations to Michelle and family.

Complete profiles of each of the IMCA team are available at: www.imca-int.com/about-imca/imca-secretariat.aspx

## Welcome to our new members

IMCA is pleased to welcome the following new members (from 26 March - 23 July 2014)

- Althamis Marine Sdn Bhd
- AMD Marine Consultants
- Atlas Professionals Do Brasil
- Breitlink Engineering Services Sdn Bhd
- Buzwair Industrial Gases Factories
- Caldive International Europe
- Centro Studi CEDIFOP
- Chambers Oceanics FZC
- Cooper Lomaz Recruitment Limited
- Costain Upstream Ltd
- Daniel Surveying FZC
- Deepwaters Offshore Energy & Consultants Ltd (DOECL)

- Disa International
- Dynamic Marine Services
- ERSG Ltd
- Falck Safety Services LLC
- First Priority Resources International Ltd
- Griffin Global Group Ltd
- Guidance Navigation Ltd
- HD Demolition Bv
- Hipertech
- Lloyd's Register EMEA
- Miko Marine AS
- Norsk Yrkesdykkerskole (Norwegian School of Commercial Diving)

- Offshore Specialty Fabricators LLC
- POSH Terasea Offshore Pte Ltd
- PT Aquaria Shipping
- SAFER Training (Scotland) Ltd
- Seamar Subsea BV
- Sigur Ros Sdn Bhd
- TechMar Service
- Thien Nam Positioning JSC
- Tidewater Subsea LLC
- TSMC
- Ugland Marine Services
- Vattenfall Europe Windkraft GmbH
- Wind and Water ApS

#### **Griffin Global Group Ltd**

Griffin provides specialist travel services to the energy sector, including marine, offshore and drilling companies. Griffin Door to Deck travel concept provides clients, whether corporate executives or crew personnel, with a complete end to end travel experience. All Door to Deck services and products are available in the online travel portal, by phone or email to experienced travel consultants and can be combined with additional port agency services for a complete Crew Rotation Management service.

You can find links to the websites of all our members, old and new, at www.imca-int.com/membership/membership-directory

## Houston... we have a solution



Delegates discuss a technical session at a the IMCA Annual Seminar in Singapore.

Establishing a strategy to make IMCA's brand more visible is a priority

CHRIS CHARMAN
Chief Executive, IMCA

Following feedback from our Safety and Environment Seminar in Houston in March, IMCA has made some changes – and more are on the way – to deliver the results called for by the members.

Although the technical programme at the seminar in Houston successfully raised important issues, generated food for thought and stimulated progress among IMCA's various workgroups, we left with the feeling that it could have been an even greater success. The feedback from members contained a number of 'bigger picture' suggestions for the association and these along with our post event analysis have led us to make some changes.

## Communication is key

The key suggestions made by IMCA members

- IMCA could do more to improve liaison with senior management within the membership
- Better communication of what IMCA is and the important work which is done by members is vital
- Raising the profile of IMCA at a regional level was a high priority

Modifications have already been made to IMCA's Vision & Strategy to address these issues and work has also begun on a formal communications strategy. The aim of this work is to generate a more visible presence for our brand and establish IMCA as the voice of the global marine contracting industry.

#### Starting with the seminar

We're also making an immediate change to ensure we deliver an events programme fit to engage with the leaders of the industry. It has been agreed that, rather than running a separate seminar focusing on safety and environmental issues, it would be more effective and inclusive to incorporate the topics in the IMCA Annual Seminar.

12 years ago, when the Safety Seminar started, the Annual Seminar was much more narrowly focused on marine and DP issues only. But over the years a wider range of topics have been addressed and the size of the event and the number of delegates and exhibitors has grown too. We have now arrived at the point where the event is a must attend event for members, covering issues and stimulating discussions across all four of our technical divisions, drawing attendees from around the world.

This year there will be a specific safety workshop on 'learning from incidents' and in future years we will ensure that safety and environmental issues are integrated in the programme appropriately. The IMCA Annual Seminar 2014 takes place on 19-20 November at the Landmark Hotel, London and will consider topics on the theme of: where next for the offshore marine industry?

Registration for the IMCA Annual Seminar 2014 is online, easy and available now at: www.imca-int. com/events/imca-annual-seminar

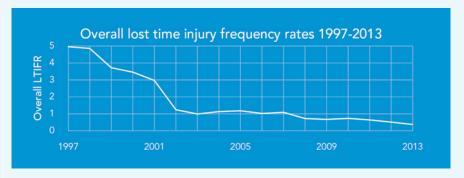
## Lost time injury rate improves again

In July IMCA released its report on members' safety and environment statistics for 2013, information note IMCA SEL 05/14, and it contained encouraging news.

245 IMCA contractor members, around 67%, submitted data enabling us to provide the report – a tool for members to benchmark their performance against our industry. One of the key statistics is the overall lost time injury frequency rate (LTIFR) and in 2013 it improved again, falling to 0.37, from 0.51 in 2012.



However, we would like to draw members' attention again to lost time injuries (LTIs) caused when individuals are 'struck by moving



or falling objects' or are injured by 'falls on the same level' which accounted for 23% and 20% of those reported respectively. Perhaps the most concerning result we saw in our statistics was that 21% of the reported LTIs did not have a

cause recorded. Of course, all LTIs must have a cause, and we encourage those submitting data in future to report them accurately so that we can share the findings and continue to highlight trends and dangers in the future.

# New helicopter restrictions



The UK Civil Aviation Authority (CAA) is introducing new restrictions to offshore helicopter operations. Although this applies to UK helicopter operations, there is also a chance the changes will be applied elsewhere – through contractual requirements or changes by other offshore regulators.

As a result of the CAP 1145 review into helicopter safety, the CAA is introducing new seating restrictions from 1 September 2014 for passengers without the new emergency breathing systems, and from 1 April 2015 anyone too big to fit through the push out window exits in an emergency will be prevented from flying.

Step Change in Safety has been working

with OPITO to get training in place for the new breathing systems. Step Change in Safety and Oil and Gas UK are carrying out studies into body size compatibility with push out window emergency exit size, to try to work with the CAA's new Offshore Helicopter Safety Action Group to ensure the 'shape and size' restrictions are managed sensibly. IMCA will be monitoring and communicating developments to members.

## **New MLC insurance requirements**

In April, IMCA participated in an ILO meeting which agreed amendments to the liability provisions of the Maritime Labour Convention (MLC, 2006), to better protect abandoned seafarers and to provide financial security for compensation to seafarers and their families in cases of a seafarer's death

or long term disability. The amendments, adopted by the ILO International Labour Conference in June, will take effect by early 2017 and will mean that shipowners, and employers of on board personnel, will need to have additional insurance cover.



# UK vessel rules

The UK has published its revised offshore vessel policy, which applies to UK and non-UK ships working in UK waters.

Ships built from 1 July 2009 with more than 12 non-marine personnel on board must comply with the 2008 SPS Code or be assessed for compliance against an equivalent standard. This could require retrofitting. Ships built prior to 1 July 2009 will be able to continue under their existing certification, subject to a statement from their flag state. IMCA is trying to find a workable solution for post 1 July 2009 ships that do not comply, and is working with the MCA and flag states to develop standardised wording for the statement for existing ships.

## **IMO** update

## **Recovery plans**

From 1 July 2014 ships must have ship-specific plans and procedures for the recovery of persons from the water, taking into account the IMO guidelines (IMO MSC.1/Circular 1447). The plans and procedures must identify the equipment that will be used for the recovery of third party casualties and the measures to be taken to minimise the risk to shipboard personnel involved in any recovery operations.

## Lifeboat hooks

Existing on-load release hooks for lifeboats that do not comply with the new IMO design requirements must be replaced or modified no later than the next scheduled dry docking after 1 July 2014. However, modified hook designs should only be being approved by administrations if the function of the hook is safe without the use of additional operating mechanisms or devices, and companies planning to use modified designs are advised to confirm that the changes comply with the IMO requirements.

For more information on IMO and regulatory issues, contact emily.comyn@imca-int.com





## Third-party HIL testing

Modern ships and rigs have advanced computer systems for dynamic positioning, power generation & distribution and drilling operations. Software errors in these systems lead to delay, non-productive time and compromise safety. Marine Cybernetics performs third party testing and verification of control system software. We detect and eliminate such errors and weaknesses using Hardware-In-the-Loop (HIL) testing technology.

- · Reducing incidents and accidents
- · Reducing off-hire and non-productive time
- · Securing safe and reliable operations

Join our Marine Cybernetics seminars; Todays Software Challenge please check our website: www.marinecyb.com and sign up.

Safe software safe operations



contact@marinecyb.com | marinecyb.com

# ACHIEVING COMPETENCE

## Is it the silver bullet we've been searching for?

There is no doubt that the companies who have effective competence schemes in place have a foot very firmly on the ladder to improved safety culture and are better positioned for the allimportant transferability of personnel which is such a key factor in our industry.

A competent workforce is a productive one, operating with fewer risks, meaning fewer to become involved," says IMCA's Chief injuries and shorter downtimes - all steps Executive, Chris Charman. "There is no towards that much sought after industry 'holy grail' of zero incidents. Effective competence schemes established by companies of all sizes ensure confidence in the offshore industry, and that all appointed to safety critical positions can carry out their jobs in an effective manner. factor in our industry.

Could competence be the silver bullet the "Asset protection is core to all businesses, marine contracting industry has long been and there can be no greater asset than the people searching for? What is it? And why is there an working within an organisation. IMCA member increasing need to demonstrate its value? companies' demonstration of competence in Put simply, competence is the ability of an safety critical positions is absolutely crucial. It's all about managing risk - something I feel strongly about - to protect brand and reputation."

individual to do a job properly. Being able to demonstrate the competence of its workforce to clients and regulators and to adhere to standards such as ISO 9001 undoubtedly gives a company

the competitive edge.

"It is important to stress that there is no simple 'one size fits all' competence scheme. Every company needs its own scheme, and to doubt that the companies who have effective competence schemes in place have a foot very firmly on the ladder to improved safety culture and are better positioned for the all-important transferability of personnel which is such a key

## **Defining competence**

Gavin Smith, Offshore Learning and Development Manager of Subsea 7 and Chairman of IMCA's Competence and Training (C&T) Core Committee says, "For me the

**CHRIS CHARMAN** Chief Executive, IMCA

deeper question is what does 'competence' really mean? It appears to be a word as misunderstood as frequently as it is used. Can it be defined and distilled into one term that rings true for the entire offshore industry? To answer this, perhaps it is useful to view the subject through the eyes of different players across the supply chain as it's clear that everyone has a role to play."

In some parts of the world operators may require contractors to have a competence scheme in place. In the US there is a regulatory driver which must be met in order to operate - SEMS (Safety and Environmental Management

Continued on page 10

# ACHIEVING COMPETENCE

## **Continued**

Systems) as laid down by the Bureau of Safety and Environmental Enforcement (BSEE) is in place. Other companies may be driven by their own need to develop a robust competence management system (CMS) rather than the need to react rapidly to a contractual or regulatory trigger. These have been proven to create greater sense of ownership and a higher chance of long term success.

Whatever the trigger for putting the scheme in place, ensuring it does not sit in isolation from a company's many policies and procedures is key. If it is closely aligned to their business objectives, safety management systems and training plans it will result in better outcomes. In addition to improving safety, competence assessments can be used positively to identify training needs, provide capability assessments and increase performance in a given job role. They have the added benefit of giving a worker a clear path to promotion and career opportunities.

Training providers need to react to the training needs identified by the CMS developed, and equipment manufacturers and suppliers should also consider how they ensure the competence of their personnel.

The role of personnel agencies in the demonstration of competence has long been debated. Historically, each party in the freelance process looked to the other to be accountable. The freelance debate is interesting as, whilst contractors may look to the agencies to assure competence of their personnel, it has long been felt that the need and demand to demonstrate competence can recede when freelance personnel are required urgently.

#### **Building on beginnings**

Things have come a long way since IMCA first launched its competence assurance and assessment framework in the UK in 1999. Today IMCA sees encouraging evidence of a growing number of competence schemes using the framework being introduced by companies around the world.

From the start the IMCA guidance, set up by the C&T Core Committee, was – and remains – very definitely a framework, not a set of rules or standards. The framework, which is continually revised to keep it up to date, enables contractors to develop in house schemes

6 6 I have a great respect for the valuable work of IMCA and know that closer collaboration between us can only benefit the offshore survey industry. IMCA rightly acknowledges the competency of our members and ICES would welcome membership applications from those working to the high standards of professionalism and safety that IMCA embodies. 9 9

**BILL PRYKE** 

ICES, Chief Executive Officer

to demonstrate the competence of their safety critical personnel; these schemes are designed to improve operational practice throughout the industry, whilst encouraging both upward and lateral career progression.

## A wealth of information

IMCA has now produced guidance documents for the assessment of more than 50 positions and since 2012 has had downloadable portfolios in place for freelance use across all four of its technical divisions – Diving, Marine, Offshore Survey, and Remote Systems & ROV. There are also specialist logbooks, competence records and additional guidance on assessor training available.

Uncertain about the 'Why?', 'What?', 'When?', 'How?', 'Where?' and 'Who?' of competence? IMCA has produced a DVD available in ten languages which answers just those questions, and a colourful poster echoes the six key points.

The DVD, which is ideal for playing on vessels as part of familiarisation and induction exercises, stresses:

- competence assurance is a continual process, starting when you begin your career and continuing until your retirement;
- it includes your training, your day-to-day work and may involve formal assessment in the workplace;
- knowing your competence levels at any one time means you can demonstrate, maintain and further develop your proficiency through targeted training and ongoing education.

"That's a strong message aimed at encouraging the entire workforce at every level to embrace competence assessment with enthusiasm," says Chris Charman.

#### **Divisional trends**

The competence framework has been adopted by all four of IMCA's technical divisions. There is however, variance in the way they are implemented by each.

Traditional marine roles have always been heavily certificated by role, grade and technical criteria. Many companies manage the competence of their marine personnel simply by managing the certification required. But considerable time can pass before someone is assessed or their certification is checked: for example, STCW revalidation periods are only every five years. This has created the argument – does compliance with certification really equal competence?

The diving industry, whilst also heavily regulated, has displayed a higher level of engagement. But a large number of smaller companies exist who need support as the demand for demonstration of competence increases. Interestingly, the two technical areas which appear to be the most passionate in their engagement with competence are the Offshore Survey and Remote Systems and ROV divisions, where there is actually less regulation and structure, but arguably more committed and creative approaches to demonstrating competence.

### Offshore developments

"Working together to improve levels of competence, to ensure there are enough trained people to undertake vital projects, was a major factor in the signing of a recent memorandum of understanding between the Chartered



Institution of Civil Engineering Surveyors (ICES) and IMCA," explains IMCA's Technical Director, Jane Bugler. "Both organisations have committed to working more closely together and acknowledging the competence of their respective members.

"Offshore survey personnel working to the competence levels of the IMCA framework can use this as a demonstration of their competence for membership of ICES, whilst we at IMCA will recognise the competence of ICES members within our international competence framework for offshore survey work. Both organisations are committed to promotion of continuing professional development (CPD) and best practice, and have pledged to support the uptake and development of internationally recognised standards."

## **Events go global**

"We are seeing a promising increase in the number of countries eager to engage on the topic and host one of our competence seminars," says Jane Bugler. "Seminars have been held regularly in Aberdeen since the framework was introduced; and in 2011 we went worldwide, visiting every IMCA Section. We have now hosted events in Aberdeen, Singapore, Kuala Lumpur, Dubai, Macaé in Brazil where encouragingly over 60 delegates attended earlier this year; and Houston.

"The Houston seminar in September 2013 was particularly interesting. We needed to cover, and answer, many questions about the need to

demonstrate competences required by SEMS. We came away with clarity on all sides and an understanding that our framework is designed for use in the USA as well as elsewhere in the world."

Four events were held this year and IMCA is planning more for 2015. The seminars will be aimed at contractors' competence and training representatives and their offshore personnel, as well as oil company representatives. These one day events aim to deliver a programme which ensures core messages are consistent and understood around the world. IMCA links the internal processes by which a company delivers its competence programmes to both internal quality systems and external standards, such as ISO 9001.

A concern raised at one of the seminars we'd like to highlight, was the transferability of competence. The uniformity of assessments from one company to another was seen as a particular issue contributing to the problem. One of the next items on the agenda for IMCA's C&T Core Committee is to explore the feasibility of IMCA accrediting member company competence schemes. Updates will be given in due course.

#### Relevant to all

Competence assurance is for everyone whatever the offshore sector. Contractors are required by clients, regulators and others to demonstrate that the individuals working for them - particularly those in safety critical roles – are competent, whether experienced, new to the industry, freelance or agency personnel.

Importantly, schemes based on the IMCA framework ensure that no matter where, when or who they are working with, those deemed competent will be seen as a valued member of an efficient team. Good delivery relies on teamwork and trust. A team is as strong as its weakest link, and that link has to be encouraged to become stronger and thus more competent and more trustworthy for the good of the team.

Chris Charman says, "We urge you to grasp the concept with gusto and work together to build a globally competent workforce. It would be for the good of the industry as a whole and ensure even greater levels of safety, proving that as far as silver bullets go, competence is certainly a hot contender."

## **WANT TO FIND OUT MORE?**

All of IMCA's competence resources - guidance, frameworks, DVDs, posters, logbooks and freelance personnel materials – are available by exploring: www.imca-int.com/ competence-and-training



# IMCA sinks its teeth into bribery and corruption



François Vincke of the International Chamber of Commerce spoke about the 'domino' effect extortion and corruption could have in the industry.

46 One in four people around the world would accept a bribe. Interestingly the UK and USA were not at the foot of the league table. ??

### **ROBERT BARRINGTON**

Transparency International

Businesses must stay ahead of compliance developments in the rapidly evolving area of bribery and corruption law – any board that does not give due consideration to these issues is arguably failing in its duties. With this in mind IMCA's Contracts & Insurance Workgroup recently hosted a seminar to discuss and highlight the hot topics.

Bribery and corruption is a growing concern for businesses in all sectors and jurisdictions. Corruption is a problem not only from an ethical and competition-distorting perspective, but also because of the risk it creates to the reputation of affected businesses, the potential financial implications of a conviction, or even just the adverse publicity of an allegation or investigation.

The increase in enforcement of national and international bribery and corruption legislation means businesses must demonstrate compliance. IMCA's core purpose is improving performance in the marine contracting industry by championing better regulation and enhancing operational integrity: so helping our members understand something as fundamental to the reputation of their businesses as bribery and corruption is an important issue to us — and them.

In late May, IMCA's Contracts & Insurance Workgroup hosted an Anti-bribery and Corruption Seminar in London at No 4 Hamilton Place, the home of the Royal Aeronautical Society, followed by a networking reception on the roof terrace with its stunning views across Park Lane to Hyde Park. Chaired by Nathalie Louys of Subsea 7 S.A. the aim was to discuss bribery and corruption issues faced globally by the marine contracting industry, where anti-bribery clauses can be an integral part of contracts

## Working together is vital

"It is important that members and their clients work together establishing auditable and workable processes," explains Chris Charman, IMCA Chief Executive. "The seminar was designed to help mutual understanding on both sides of the client:contractor fence and to discuss ways and means of establishing solutions and developing open and transparent

communication throughout the supply chain.

"Indeed this was something Nathalie returned to in summing up the day, explaining how constructive she had found the two presentations from the oil companies' point of view and underlining the continuing importance of engaging in discussion with clients and of transparency.

"It is our intention to hold regular updates on this important theme and to keep the channel of communications well and truly open."

## Under the spotlight

- Raymond Bonci of Total E&P and Michele de Rosa of ENI both gave compelling presentations on 'Anti-bribery and corruption from an oil company's perspective: experiences and expectations of the contracting industry'
- In their 'Corruption Case Study'
   Simon Moore and Tony Concagh
   of Stephenson Harwood
   presented a fascinating scenario
   based on a true story of a vessel
   that had been detained due to
   drugs being attached to it
- 'Principles and procedures for managing bribery and corruption risks: a contractor's perspective' saw Andrew Hayward of Subsea 7 at the lectern
- Robert Barrington of Transparency International looked at 'Working to eradicate small bribes'

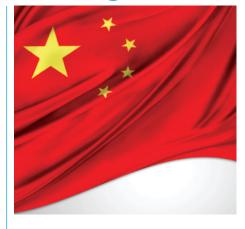
Want to know more? A press release on the news page of the IMCA website goes into more detail about the day here: http://www.imca-int.com/news

## Chinese progress targeted

One of the objectives laid out in IMCA's Vision & Strategy is to deliver our message and increase our influence and engagement levels across a wider geographical spread. And to that end, we have targeted China as an important area to focus on over the coming months.

At the time of *Making Waves* going to press IMCA Technical Adviser Nick Hough is preparing to travel to Shanghai, where he will chair the Offshore Survey stream of the Oceanology International China conference. Nick will also kick off the conference with the opening presentation.

IMCA will also be heavily involved with China International Diving, Salvage and Offshore summit in Dalian on 16-18 October. The event is hosted by the China Diving & Salvage Contractors Association in association with IMCA and ADCI. We are pleased to be involved in bringing together leaders from the



industry and providing an international platform for mutual exchange and learning.

Jane Bugler, IMCA Technical Director, will make a keynote presentation introducing IMCA and its diving guidance to the Chinese market and Pete Sieniewicz, IMCA Technical Adviser, will provide a more in depth presentation on IMCA's essential diving guidance document, the international code of practice for offshore diving.

We are also in the process of producing Chinese versions of our exhibition stands, marketing materials and brochures to provide new ways to connect with and tap into this key area of potential membership.

## WORLD-WIDE EVENTS

The full listing of the events we are running and supporting can be seen at www.imca-int.com/events

 IMCA events are highlighted below

#### **SEPTEMBER**

15: South America
Section Meeting
Rio de Janeiro – Brazil •

**15-18:** Rio Oil & Gas Rio de Janeiro – Brazil

**23-24:** Americas OSJ Houston – USA

25: Central & North America Section Meeting Houston – USA ●

25-26: Myanmar Offshore Congress Yangon – Myanmar

#### **OCTOBER**

7: Middle East & India Section Meeting
Mumbai – India •

8: DMAC workshop Aberdeen, UK

**8-9:** Asian OSJ Singapore

**10:** Asian Dynamic Positioning Singapore

**14-15:** MTS DP Conference Houston – USA

**14-16:** Deep Offshore Technology Aberdeen – UK

16-18: Diving, Salvage & Offshore Summit
Dalian – China

28-30: Seatrade Middle East
Maritime
Dubai – UAE

**28-30: Hydro 14** Aberdeen – UK

29: Rope Forum Workshop
Amsterdam –
the Netherlands •

#### **NOVEMBER**

18: Europe & Africa
Section Meeting
London – UK

19-20: IMCA Annual Seminar 2014 London – UK •

## **IMCA** speaks at **EUOAG**

IMCA continues to liaise with the offshore regulators of EU member states, following the adoption of the new EU offshore drilling safety directive.

IMCA attends the plenary sessions of the quarterly EU Offshore Authorities Group (EUOAG), which oversees the implementation of the new directive. At the meeting in July, IMCA Technical Adviser for Regulatory Affairs, Emily Comyn gave a presentation on the IMCA safety flash system and the lessons learnt from incidents. IMCA also provided input to EUOAG's work on developing agreed definitions for the Common Reporting Format for major accidents, which include loss of station keeping in relation to a mobile offshore installation.





The technology innovator.



hytech@ihcmerwede.com

www.ihcmerwede.com / www.ihchytech.com



To learn more about how Interdive can help your offshore operations please call us on: Tel: +44 (0)1752 558080 or e-mail us on diving@interdive.co.uk

INTERDIVE SERVICES LTD, STOKE DAMEREL BUSINESS CENTRE, STOKE, PLYMOUTH, DEVON, PL3 4DT. ENGLAND www.interdive.co.uk

# **WORLD-WIDE**

## **CLOV:** a new subsea solution

This instalment of the *Making Waves* series which look at cutting edge and best practice projects around the world focuses on the CLOV project and the solution for extracting fluids of varying viscosities in a mature oil field.

Total's fourth operated deepwater development in Angola's bounteous block 17 sets another technological benchmark for the offshore industry by introducing subsea multiphase pumps. The pioneering CLOV project came onstream mid 2014 using multiphase subsea pumping to cope with different oil densities in the Cravo, Lirio, Orchidea and Violeta fields.

## The need for speed

Two Norwegian built pumps were integrated into a 220 tonne subsea module which delivers 1.8 megawatts of power and 45 bar of pressure to drive oil to the surface. "This installation will compensate for the gradual fall in pressure in the oil fields by helping to propel the more viscous oil up from the seabed to the production and storage unit on the sea's surface – the FPSO," explains François Bichon, Total's deputy director for the CLOV development.

Following development of the Girassol, Dalia and Pazlor fields in block 17 offshore Angola, the CLOV project involves deployment of deepwater helical-axial multiphase pumps - a first for Total - to boost natural recovery, particularly from the Orchidea and Violeta fields, which have more viscous oil. The system sets itself apart through its capacity to pump and tolerate multiphase fluid, a blend of fluids made up of oil, gas and water, from the four fields, without having to separate them beforehand. "The multiphase helical-axial structure is a high performance design which prevents any loss of load and enables the rotor to evacuate a mix of several, even highly variable, fluids at high speed," Bichon explains.

## Something in reserve

CLOV is located 140 kilometres (87.5 miles) offshore from Luanda and 40 kilometres (25 miles) north west of Dalia, in water depths



ranging from 1,100 to 1,400 metres (3,600-4,592 feet) and the four field cluster has proved and probable reserves estimated at 500 million barrels of oil. Because of the cost and difficulty of retrieving faulty equipment in deepwater, Total took the decision to install two multiphase pumps for the project mid 2013, with one intended as a reserve unit. In-situ pump performance tests were carried out earlier this year to verify their operability.

#### Local and global

Resources from across the globe have been drawn on to complete the project. Acergy, which later merged to become part of Subsea 7, won a US \$1.3 billion construction contract for CLOV in August 2010. This covered engineering, procurement, fabrication and installation services for CLOV and involved several vessels. FMC supplied a total of 36 subsea trees for the project, rated for 10,000 psi pressure service in 1,371 metres (4,500 ft) water depth.

Daewoo Shipbuilding and Marine
Engineering supplied the FPSO which made
a 75 day voyage from South Korea for the
project. Along with its impressive oil processing
and storage capacity, its design minimises its
environmental footprint: with zero flaring under
normal operating conditions and an "all electric"
concept, its onsite energy efficiency is increased
by producing only the quantity of electricity
required to operate the facilities.

But a significant part of the project development work was also carried out in Angola, boosting local industry and creating hundreds of jobs for locals. This work – more helical-axial structure
multiphase pumps will be the
essential solution of the future
for improving recovery rates in
mature oil fields. ??

FRANÇOIS BICHON

than 10 million man hours – included fabrication and assembly at Angolan yards along with the expansion of an existing quay so the FPSO, measuring 61x305 metres, could come alongside.

CLOV started production in June this year and will contribute to bringing the block's production to 700,000 barrels a day.

## **CLOV IN NUMBERS**

- CLOV is located 140 kilometres offshore from Luanda in depths of 1,100-1,400 metres
- The four field cluster has proved and probable reserves estimated at 500 million barrels of oil
- The CLOV FPSO has 160,000 barrels per day of oil processing capacity and 1.7 million barrels of storage
- FMC supplied a total of **36** subsea trees for the project

## Annual trials made clearer



who takes a proactive stance in developing and implementing robust and vessel specific trials programmes for their DP fleet based on the latest industry guidance available from all sources will be taking an important step towards assuring safe and incident free DP operations. ??

JOHN RAMSEY
DNV GL

Conducting annual dynamic positioning (DP) trials is a well established practice within the industry, but historically their scope and depth has varied significantly. We discussed the issue with John Ramsey of IMCA member DNV GL, who told us how new IMCA guidance currently in development will go one step further towards achieving consistent global standards in this important aspect of DP vessel assurance.

"The variation in DP trials being carried out could sometimes lead to clients requiring additional tests to give themselves confidence in a vessel's performance," says John Ramsey. "This shortfall was noted and as a result, in 2011, IMCA M 190 – *Guidance for developing and conducting annual DP trials programmes for DP vessels* was published. M 190 provided more detailed guidance than had previously been available on developing a vessel specific annual trials programme and was based on the three elements of any fault tolerant system: performance, protection and detection."

## Going a step further

But the subject of annual trials is complex. M 190 was followed up with M 190 A, a user friendly executive summary containing highlights and key points of the full document, and IMCA's Marine Division Management Committee since decided that another piece of guidance to accompany M 190, featuring worked examples, would help elucidate further on the topic. The new document, with a working title *Example redundancy concept & annual DP trials for a DP class 3 construction vessel*, is in

the final stages of production now.

"This supplemental guidance goes a step further," explains Ramsey. "It provides a practical example which illustrates how a vessel specific programme could be developed. A detailed description of the DP redundancy concept of the hypothetical DP vessel is given so that the reader can understand the logic and methodology behind each test. The example also shows how some tests can be satisfactorily covered by a robust and well documented, planned maintenance scheme and which tests could be done alongside or on passage. Guidance is also given on which tests could be done on a rotating basis – not needing to be done every year.

## **Template for success**

"It is important to understand that the example trials and layout in this document and in M 190 are not standard templates to be slavishly followed. Every vessel should have a well thought out trials programme developed using the methodology provided which is specific to that vessel and reflects the redundancy concept of the DP system.

"The task of developing an annual DP trials programme is often delegated to third party consultants but the responsibility for developing and indeed carrying out annual DP trials is that of the vessel operator. A third party should be engaged where they can add value but the competence of the trials programme itself is the most important thing."

#### Valuable resource

The complete set of IMCA's guidance will prove a valuable resource, enabling vessel owners and operators to effectively develop and conduct annual DP trials to their own and their client's satisfaction. The work, however, doesn't stop here. Revision of IMCA M 166 – *Guidance on failure modes and effects analyses (FMEAs)* is already underway and will cast further light on the subject. IMCA's guidance is also written with the intention of complementing that produced by the Marine Technology Society (MTS) in the USA.

There will soon be a comprehensive library of documents giving guidance on DP trials and tests available to members and others.

Making use of them to establish an annual DP trials programme could play a vital part in demonstrating the performance and fault tolerance of your DP vessels.

IMCA's guidance on annual DP trials is available to all and free to download at www.imca-int.com/marine-division

## **Marine** roundup

## 645 set for review

IMO has agreed to review MSC/Circ.645 Guidelines for vessels with Dynamic Positioning (DP) systems, which is the basis of the Classification Society DP rules. IMCA was instrumental in developing 645 through one of its predecessor organisations, DPVOA. However, much has changed since 645 was published in 1994, and IMCA joined the United States government and the International Association of Drilling Contractors (IADC) in asking IMO to carry out a review in order to take account of developments in technology and operations.

This is likely to be a major review so we are setting up an IMCA workgroup through the Marine Division Management Committee to develop a submission to IMO recommending changes. We will also be working with interested governments and industry organisations, and hope to have a first draft ready for circulation to the wider IMCA membership by the end of September. The 645 review is due to get underway at an IMO meeting in March 2015 for completion by 2016.

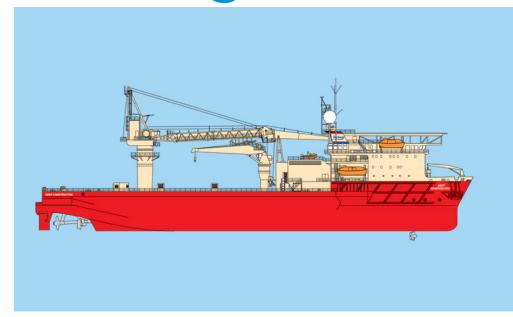
## New logbook imminent



Inspired by requests from our Renewable Energy Workgroup, IMCA is in the final stages of developing a Workboat Crew Logbook to add to the list of the 15 we currently offer.

The book is intended for the use by any workboat crew who wish to maintain a record of their work experience including the transfer of personnel offshore, stand-by time on site, repair periods and general workboat operations. The format will allow information to be kept chronologically under distinct headings and to be verified where appropriate.

## Keeping up with **DP** design



IMCA M 103 - Guidelines for the design and operation of dynamically positioned vessels is widely considered the cornerstone of the marine guidance produced by IMCA over the years. Developments in the field have led us to revisit this seminal document to bring it up to date and ensure it meets the industry's need.

Ian Giddings, IMCA's resident DP specialist, summarises the changes. "Following a tender process the work to update M 103 has now been contracted out to a well known consultancy. What changes can IMCA members expect to see in the finished document? Well, in addition to the general section, the vessel specific sections will be updated and new vessel types added. It will recognise and refer to other guidance available on the topic, in particular that from the Marine Technology Society (MTS) in the USA.

"Dynamic positioning is a constantly evolving field and this update will cover all the latest advancements in technology and new concepts which have arrived since M 103's previous revision. These will include activity specific operating guidelines (ASOG), critical activity mode of operation (CAMO) and task appropriate mode (TAM).

A draft version of the document will be circulated within the industry for feedback before the final version is produced. I expect it will continue to be a core document, benefiting vessel owners and operators, their clients, shipbuilders and DP equipment manufacturers in the industry for years to come."

## Vessels covered in the new document

- Diving support
- **Pipelay**
- **ROV** support
- Crane
- Float-over
- Accommodation
- Drilling
- **FPSO**
- Shuttle tanker
- Trenching
- Cable lay and repair
- Jack up
- Offshore supply
- Anchor handling
- Well stimulation
- Rock placement
- Dredging

## Global boost for exam consistency

IMCA has begun work to overhaul and modernise its offshore air and bell diving supervisor and life support technician (LST) schemes. The work will bring the schemes up to date and ensure consistently high quality individuals are filling the roles, resulting in a safer future for the diving industry.

In 1987 one of IMCA's predecessors, the AODC, launched a supervisor scheme with the aim of ensuring that all offshore air and bell diving supervisors were trained and examined to the same standard. Today this scheme is not only recognised by industry but also by a number of national governments as well. Similar schemes, recognised by IMCA, have now also been developed by Canada and Australia. Recently, however, it became clear that the examinations needed to be reviewed, modernised and brought in line with current practices and guidance.

66 The work IMCA is doing to develop their schemes to help ensure a consistently high standard of supervisors and LSTs in the industry will be of paramount importance for members in building a more sustainable future – particularly within the context of providing professional and safe platforms both to our clients and those that work for us. ??

**GLYN JONES** Hallin Marine



## Setting a standard

In October 2012 a workgroup was formed involving IMCA's technical team and representatives from the Diver Certification Board of Canada (DCBC) and the Australian Diver Accreditation Scheme (ADAS). An agreement was reached that the core exam for trainee diving supervisors and LSTs would originate from the same source material. This question database, no matter who administered it, would be used to establish a world-wide consistency – the same standard exam for the three disciplines almost anywhere in the world.

Work started with the review of the existing air diving supervisor exam.

- Key areas were identified in which trainees would need to be assessed and a structure was developed for the exam
- A contractor was appointed to design and build the exam database
- The existing question set was then reviewed, amended and new questions were developed to reflect the changes in practices since the initial exam was written
- All the questions were then independently

reviewed for accuracy, appropriate language and educational validity before being entered in the database.

## **Unique improvements**

The exam will focus on the three key areas of physics, physiology and diving practices and will look at the issues from a practical standpoint. Initially, the exam bank will hold over 500 questions from which 100 will be randomly selected to create a unique test for each candidate. The possibility of two candidates generating exactly the same exam is less than one in a million, a significant step to improve the security of the exam. As part of the overhaul IMCA has also taken the opportunity to streamline the administration of the exam to speed up and improve the process.

Work on the offshore air diving supervisor question database is almost complete and trials of the initial exam are about to be run. It is envisaged that the exam will go live sometime during the final quarter of 2014 with work then starting on the next phase of the project, the life support technician exam.

## **Emergency diver** recovery group

IMCA's DDMC has set up a new workgroup which aims to develop guidance on emergency diver recovery issues such as:

- Diver recovery back to the bell/into the bell
- The removal of helmets and bail-out
- Medical aspects of recovery and intervention in the bell
- The transfer of divers into the system
- Equipment and emergency recovery exercises.

## **DMAC** workshop

The Diving Medical Advisory Committee (DMAC) is holding a workshop on 'Improving diver safety – current medical issues' in Aberdeen on Wednesday 8 October. Topics identified for discussion include:

- Standardisation of diving methods and depth ranges for air, nitrox and saturation diving
- Standardisation of compression and decompression procedures
- Diving in contaminated environments

- Saturation diving excursion limits and practices
- Medical contingency planning and preparedness.

If you would like to be involved in the emergency diver recovery workgroup, attend or suggest a topic for the DMAC workshop, please contact: jane.bugler@imca-int.com

## Man and machine team

"There was a time," Jim Mann, Chairman of IMCA's ROV & Remote Systems Management Committee, tells us, "when the diver and ROV would work together only when the human was forced to 'accept' the robot on his shoulder". Much has changed and now man and machine often form a formidable subsea team. But new, complex scenarios mean new risks, which also means fresh quidance is needed.

Since AODC 032 - Remotely operated vehicle intervention during diving operations was reviewed in 1996 the proliferation of ROV systems world-wide has been phenomenal. The number of work class ROVs has expanded to around the 700-800 mark in IMCA member fleets alone. These can range from the shoebox sized observation, video only, Class 1s to massive, multi-function Class 3 and 4 machines, not to mention those under development in Class 5.

However, this has not meant the end of the use of divers - and this is unlikely to change as there will probably always be situations where an ROV alone will be unsuitable for completing tasks. In fact, IMCA foresees more situations where the use of both divers and ROVs at the same time, or in support of each other, will be necessary to complete a task.

## Managing risks

Clearly these kinds of operations have important safety and logistical challenges which must be understood, resolved and catered for in planning and executing the specified task, project or programme objectives. The interaction between divers and ROVs has to be carefully risk managed to avoid the potential for the rather obvious hazards becoming safety incidents. IMCA is preparing revised guidance, which has been written with the help and input of diving and ROV stakeholder groups within our organisation, as a tool to help those in the industry minimise the risks.



As Jim Mann describes, "Today there is a need for divers and ROVs, and no longer just simple observation class ROVs, to work together in close proximity to complete an increasing range of complex tasks. An update to the guidance under the IMCA framework is essential to ensure we operate at the highest levels of awareness of the potential risks that this can bring."

### **Primary objectives**

The guidance contains recommendations on how diving and ROV operations are controlled and who should have responsibility for the different elements of them. It deals with the hazards which may arise from the combined use of divers and ROVs in the same underwater space. The most obvious of these are entanglement, entrapment, obstruction of and collisions between divers and ROVs - the prevention of these are the primary objective

underlying desire to deliver world leading guidance and advice to the industry. ??

#### JIM MANN

Fugro Subsea Services

of the guidance. Other hazards are considered such as electrocution, degradation of underwater visibility, injury from manipulators and equipment fitted to ROVs, high noise levels and disorientation.

The document is designed to provide general guidance for the kinds of operations described so they may be conducted effectively and efficiently and with minimum operating safety risk. This risk includes that to the divers but also to surface support teams involved in the operation from both the diving and ROV element aspects.











·Qualified ROV Team speaks English, Spanish and French.

•Modern Simulators from Observer to Workclass ROVs, used to develop Offshore simulation applications.

rovtraining@qstar.es Tel: +34-619686473 or +34616604778

OSTAR SL

MCA Member

Contact us to find out more about our training courses

•Extensive fleet of ROVs used in the Training.



- New work class ROV training in a contextual experience environment.
- Industry leading diver and ROV training, focussed on customer needs.
- Extensive trials and training facilities replicating offshore conditions.
- Over 40 years experience in high quality subsea trials and training.

#### Discuss your training requirements now on:

+44 (0) 1397 703786, fortwilliam@theunderwatercentre.com www.theunderwatercentre.com or scan the code for more info





www.rovs.eu

# CONFINED SPACES can be deadly

Bad planning and losing sight of basic safety procedures can cost lives. Work in confined and enclosed spaces has a greater likelihood of causing fatalities, severe injuries and illness than any other type of work on board a ship or marine installation.

66 Is the work essential?

Can it be done in another way? ??

**JANE BUGLER** 

Technical Director, IMCA

More people die or are injured in enclosed spaces than through any other related onboard work activity – this despite numerous guidelines, safety regimes, operational procedures, manuals and assurance surveys.

One of the most public 'confined space' disasters was that of the Apollo 1 capsule on 27 January 1967. At 1pm astronauts Gus Grissom, Ed White and Roger Chaffee crawled into the confined space of their tiny capsule. The test was considered non-hazardous as no dangerous fuels or pyrotechnics were on board the craft or its launch rocket. At 6.30pm that evening one of the astronauts reported a fire in the cockpit. All three were dead in less than 20 seconds.

Or, take the incident when an employee of an oil facility climbed down a ladder into an innocent looking water tank that in reality contained a mixture of water and nitrogen and, starved of oxygen, the worker soon collapsed. His initial rescuers similarly succumbed resulting in three men declared dead soon after arriving at a nearby medical facility. Shockingly, figures show that for everyone who dies in a confined space accident, two more die trying to rescue them.

These, and other, incidents that need never have happened feature in IMCA SEL 034 – *Working in Confined Spaces*, a DVD just released by IMCA to champion improved awareness of the dangers. The marine industry is in need of a culture change in everyday work practice at all levels to eradicate the needless deaths and injuries arising from entry into enclosed spaces. The DVD is supported by a useful pocket safety card on the subject.



## **Identifying dangers**

Recognising a confined space and the danger it represents is key to ensuring that essential work can be completed safely. So, what is a confined space? IMCA's Technical Director, Jane Bugler explains: "It is usually defined as any area that is enclosed or partially enclosed above or below ground, where there will be a foreseeable risk of serious injury from hazardous substances or conditions within the space, or nearby.

"It might have limited openings for entry and exit, and an internal layout that could trap someone working in it. It might have unfavourable natural ventilation where a lack of oxygen could present a risk of asphyxiation; it could contain toxic gases or dust, perhaps explosive or flammable gases, or even loose powders or liquids that could overcome a worker.

"Our video looks at the risks and at the variety of confined spaces in which people may be asked to work. They are dangerous places, especially if safety procedures and risk assessments are ignored," she adds. "Before any work is carried out in one, you need to check: Is the work essential? Can it be done in another way?"

#### Planning is key

Anyone who is required to enter a confined space should be physically and mentally able for that entry. The restricted nature of some manholes on certain vessels must be considered at the planning stage before committing workers of a larger physique. The risk assessment must be specific to the space being entered and

findings must be mitigated in the rescue plan.

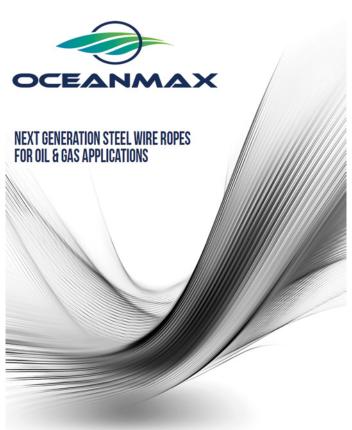
Establishing set drills and procedures for entry into confined spaces, and rescue from them, is not enough to bring about the culture change in everyday work practice that is needed. It has to be second nature for everyone to stop, think and act safely. That means workers must be properly trained in the risks, and the employer must demonstrate due diligence and safety leadership when planning and assigning tasks.

"Confined space entry (CSE) is an everpresent danger in our industry," explains Mark Bosson, HSE Manager of Technip Marine Operations Services. "If the points above are not considered it can be a 'silent killer'. The DVD that IMCA has produced in association with its membership is greatly appreciated and will significantly raise the awareness of CSE and better inform IMCA members of the less obvious hazards and risks associated with CSE operations either on or offshore."

Watching and sharing the IMCA DVD, which is available in a choice of ten languages, will be 19 minutes that could save lives. It's on the IMCA website – watch it today, and order copies for internal briefings too.

See the DVD at: www.imca-int.com/ safety-environment-and-legislation/ safety-environment-and-legislationvideos/sel-034

IMCA thanks Mark Bosson and Don Davies of Technip Marine Operations Services (T-MOS) for their contributions to this article.



Brunton**Shaw** 







Tel: +44 (0)1909 537624

Communications.

Tel: +44 (0)1442 870143

Email: sales@brunton-shaw.co.uk Website: www.brunton-shaw.co.uk Website: www.oceanmax.eu

Watch this space...

For details about advertising opportunities in

Email: ph1@ashridgecommunications.com

Making Waves, please contact Paul Hopper at Ashridge

# SPOTLIGHT ON DES POWER

Des Power, who heads up Ezra Holdings' HSSEQ efforts, is one of IMCA's most prolific committee members and has been a dedicated contributor since the 'early days' of AODC. His career has seen him perform a variety of roles in offshore diving, management and health and safety. We asked him about tackling the issues he sees for the industry, how we got to where we are now and, most importantly, where he thinks we are heading next. Here is what he had to say.

66 As Henry Ford said: 'Coming together is a beginning; keeping together is progress; working together is success.' ??



"When I left the military I started my offshore career as a diver in the North Sea and I worked at many different sites including onshore, coastal, OSVs, barges, MODUs, platforms, HLVs, DSVs. I worked my way up to Air/Bell Diving Supervisor and eventually to Offshore Manager where I worked for eight years on various diving related projects. I also spent a year as a Client Marine and Diving Representative overseeing many types of offshore operations. In 1999 the company I had worked with for many years asked me to become their Safety Manager.

## Hanging up my fins

"Having spent most of my life roaming the world and being away from home I thought the time was right to 'hang up my fins' and spend more time at home with my wife Susan and our three daughters. I accepted the kind offer and so started my new career in health and safety. After three years based in Aberdeen I moved to Asia-Pacific as the regional HSEQ Senior Manager and Diving Technical Authority, moving home between Singapore, Perth and Kuala Lumpur. In 2011 I started work with EMAS AMC as their VP Global HSSEQ based in Singapore.

"To be given such an opportunity with a new Division with great vision for the future, great people leading it and a big injection of passion was very refreshing and something I was proud to be asked to join. My remit now covers the various EMAS Divisions to lead and drive HSSE excellence as well as the standardisation of quality management across the Group.

### **Ups and downs**

"During my 34 years in the industry I have witnessed a number of downturns and growth periods: companies with the foresight and leadership to invest not only in technology but in people usually rode out the difficult times. We all heard the 'doom and gloom' that the 'experts'

predicted over the years. I recall back in the late eighties being told how we divers would soon be a thing of the past, how new technology, particularly remote systems, would remove the cost and risks involved with deploying us to the depths. A few weeks later I was diving to recover a multimillion dollar, latest spec ROV which had got fouled on a piece of polyprop!

#### **Issues and solutions**

"There are many, continually changing challenges within our industry, and areas that we are all no doubt concerned about are the political, economic and security instability which will have major influence on world markets. But whatever issues are thrown at our industry, the solutions remain the same as in the past: the continued development of people and technology, having the right people in the right place and the willingness and ability to change and adapt to our industry and clients' needs.

### Paving the way

"I have been the Vice-Chairman of IMCA Asia-Pacific (AP) Section three times over the years and the AP Safety, Environment & Legislation (SEL) Representative several times too. In the early days I was invited to the AODC meetings and got involved in workgroups as well as being involved in some DMAC review work.

"I believe the people involved in those early days paved the way to a technically much improved and safer work environment for the whole industry, particularly for commercial diving. We should be grateful to all those who stood tall, held their heads above the parapets and voiced their opinions and concerns based on their valuable experience and gave their time to AODC and later to IMCA.

"There are many individuals still committed and passionate about ensuring the momentum of continual improvement to help our industry through the work of IMCA and I feel honoured to be chosen by the members to represent them.



"I would love to see more alignment between IMCA members and our clients, government and international bodies in such things as offshore medicals, BOSIET and similar 'best practice' being accepted across the board. It's time consuming and not very cost effective for us all when clients and government departments demand such differing standards or have such differing opinions as to the interpretation and application of certain requirements.

"I feel IMCA is moving in the right direction with its recently unveiled Vision & Strategy, the expansion of its secretariat and the continuing increase in its membership. The fact IMCA is engaging with IMO, EU Offshore Authorities Group, International Regulators Forum (IRF), OGP, Oil Companies International Marine Forum (OCIMF) and the like is helpful. Ours is a huge industry and I see great opportunities for continuing improvements but it will require IMCA members' proactive input and involvement.

"How can they be involved? Well, a good starting point would be attending the IMCA Annual Seminar in London in November, it's a great opportunity to contribute to the important discussions that drive the technical divisions. Your input is needed, and I look forward to seeing you there."

EMAS – a leading global contracting group providing offshore/subsea construction, marine, production and well intervention services – is Ezra's operating brand. With offices across five continents, it delivers best value solutions to the oil and gas industry by combining its global footprint and proven engineering skills with a diverse offering of premium assets and services designed to fully meet clients' needs.



## **YOUR INDEPENDENT CONSULTANCY & TRAINING PROVIDER**

## **TRAINING**

### **Health & Safety**

- NEBOSH WSH Qualification to International Diploma levels
- NEBOSH ITC in Oil & Gas Operational Safety
- IOSH Training
- CIEH Training (Environment, Fire, Food, Health & Safety, First Aid)

#### **IMCA Diving Courses**

- Assistant Life Support Technician
- Trainee AIR/BELL Diving Supervisor
- Diver Medic Technician/Refresher

## **Commercial Diving Courses**

- Diving System Assurance
- OGP Client Representative
- Failure Mode & Effect Analysis
- KMB Helmet Technician

## **CONSULTANCY**

**Safety Management** 

**Technical Authorship** 

Supply of Specialist Personnel (Diving, ROV representatives)

#### **AUDITS and ASSURANCE**

- Diving / ROV/ Marine Systems
- Diving System FMEA/FMECA











## **NEW COMPETENCY TRAINING**



## Dive Technician Course – Modular Programme

A three-week training programme that aims to develop the all-round competence of Dive Technicians in support of the diving system maintenance and equipment. The course comprises of three modules and covers

- 'Soft skills' knowledge and understanding specifically with respect to IMCA 'Dive Technician Competence and Training, IMCA D001 Rev 2' as well as industry documentation, management of change process and more.
- 'Hard skills' practical training includes working at height, oxygen clean systems, high pressure regulator service, cylinder inspections, KMB DSI Helmet technician training and more.



Commercial Diving Association (Singapore)
/ Ministry of Manpower (Singapore)

- Commercial Diver Training
- Inland/Inshore Diving Supervisor











#### **KB Associates (Europe)**

T:+44 1224 872741

E : enquiries@kbaeurope.org W : www.kbaeurope.org

#### **KBA Training Centre**

T:+65 6542 4984

E: training@kbassociates.org
W: www.kbatraining.org







