

IMCA diving seminar gets technical

Expert audience talks DESIGN specifics and hears of latest industry approaches

NEWS PAGE 4

EGM supports IMCA governance update

EVENTS PAGE 12

Security seminar urges members' preparation

DIVISION PAGE 16

Renewable group focus on DPOs and W2W

SPOTLIGHT ON PAGE 19

IMCA diving TA, Bryan McGlinchy

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Allen Leatt
Chief Executive

Welcome

to the year-end edition of *Making Waves*. It has been a busy Q4 and, most significantly, the EGM on 9 November saw the completion of the formalities for putting new governance structures and processes in place from 1 January 2017 (see page 4-5). A big thank you to all the contributors to the debate and decision making, in particular those in the OMC who formed the oversight Steering Committee and reviewed the documentation associated with the change programme.

The overwhelming majority at the EGM in support of the changes reflects good engagement with members, and again many thanks for those who took part by voting in the EGM process.

Normal business within the technical committees and regional meetings has kept up a good pace, and our strategic review of the entire technical library is now over 70% complete and on-schedule for completion by the end of Q1, 2017.

Following our change of tack with the annual seminar, we arranged two successful mini-seminars – on diving, in Aberdeen (page 8-11) and security, in London (page 12) – which were well supported by our members, providing excellent input to the technical review programme.

Finally, we have achieved many of the key objectives we set for the Secretariat in 2016, and importantly reset the structure and cost base for what will be another challenging year ahead for your industry.

In this issue

IMCA NEWS 4-5

- EGM supports IMCA governance update

CORE NEWS 6-7

- MEPC 70 agrees sulphur cap

FOCUS 8-11

- IMCA diving seminar gets technical

EVENTS 12

- Security seminar urges members to be prepared

CYBER SECURITY 14

- Top tips from an expert

DIVING 15

- Exit strategies – D 025 revised

MARINE 16

- IMCA focuses on 'renewables' DPO and W2W guidance

ROV & SURVEY 17

- 4 ROV documents and 2015 statistics launched

MEMBER FEATURE 18

- Safety culture: taking the lead

SPOTLIGHT ON 19

- Bryan McGlinchy



Meet the team

Management

Allen Leatt
CEO

Richard Benzie
Technical Director

Regional

Denis Welch
Regional Director
Asia-Pacific

Technical

Mark Ford
Technical Manager

Chris Baldwin
Technical Adviser –
Marine, ROV,
Competence & Training
and Renewable Energy

Andy Goldsmith
Technical Adviser –
Marine

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

Bryan McGlinchy
Technical Adviser –
Diving

Peter Sieniewicz
Technical Adviser –
Diving

Ann Barnatt
Document Production
Co-ordinator

Policy & Regulatory Affairs

John Bradshaw
Policy & Regulatory
Affairs Manager

Eleni Antoniadou
Policy & Regulatory
Affairs Adviser

Emily Comyn
Technical Adviser –
Regulatory Affairs
(on maternity leave)

Events & Communications

Claudine Bleza
Travel & Events Planner

Chris Freer
Graphic Design &
Communications
Co-ordinator

Finance & IT

Jill Adamson
Accounts Assistant

Ryan Foley
IT Support Administrator

Membership Services Group

Michelle Killington
Membership Services
Group Supervisor

Chelsea Clarke
Membership Services
Co-ordinator

Elizabeth Gibbons
Receptionist & Office
Administrator

Kayleigh Glasscock
Membership Services
Co-ordinator
(on maternity leave)

Kayleigh Tucker
Membership Services
Co-ordinator
(on maternity leave)

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



52 Grosvenor Gardens,
London, SW1W 0AU
Tel: +44 (0)20 7824 5520
www.imca-int.com

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
our membership 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
makingwaves@imca-int.com

EGM supports IMCA governance update

IMCA's governance review programme, which started in April 2015, was brought to a conclusion at the EGM on 9 November; the resolutions for change were overwhelmingly approved by the membership with a majority of over 1 million votes. The implementation of the governance enhancements will officially commence on 1 January 2017.

By way of reminder, the association was formed in 1995 with 100 members and, despite our great success in terms of scale of membership and geographic scope, the governance structures and processes have not changed very much in the last 21 years. The subject of corporate governance has been a topical one in the commercial world for many years and has now caught up in the association world. This was recognised by our Council in 2015, and a thorough review was instigated with the assistance of The Compass Partnership, a consultant specialising in the

association sector.

The work programme was split into three phases: (1) a review of the secretariat, (2) the core governance of the legal and organisational structures, and (3) the effectiveness of our committees. Much of the work was devoted to phases 2 and 3 and involved selective interviews with members, surveys, questionnaires, and of course multiple meetings with the Overall Management Committee (OMC) and Council. A wide range of views and opinions was canvassed and consolidated into a series of presentations for



“The new arrangement is clear and simple.”

ALLEN LEATT
CEO, IMCA

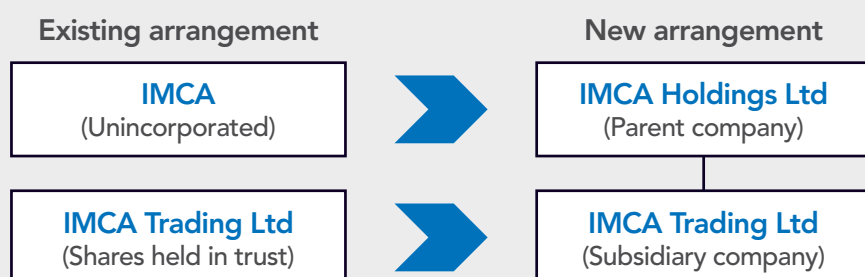
consideration and decision making.

The output can be considered in two main blocks: (1) the association's structures (legal and organisational) and (2) the association's operational processes (committee composition, rules, and performance etc.).

Legal entity revised

From a legal entity perspective, IMCA has hitherto consisted two bodies – the unincorporated association, and IMCA Trading Ltd. This is an unorthodox arrangement and we have therefore converted the unincorporated association into an incorporated limited liability company, called IMCA Holdings Ltd, and moved IMCA Trading Ltd to be its subsidiary. The holding company is limited by guarantee; this is by far the most common form of trade association legal entity in the UK, and requires no burdensome share ownership administration. This restructuring will have no impact on the

Legal structure changes



Documents update

The following documents have been revised and published since the previous issue of *Making Waves*. We've also highlighted recent safety flash trends and some key information notes.



PUBLICATIONS

New publications

IMCA D 057 – ADCI/IOPG/IMCA diving terms

IMCA SEL 041/M 232 – Standardised boat landing research report

IMCA M 233 – Dynamic positioning station keeping incidents reported for 2015

IMCA M 234 – Personal locator beacons

IMCA R 021 – ROV load testing and inspection

Revised publications

A number of documents have undergone revision, these include:

IMCA SEL 003, IMCA SEL 007, IMCA SEL 016, IMCA SEL 022/M 194, IMCA D 012, IMCA D 022, IMCA M 205/D 046, IMCA D 058, IMCA M 117, IMCA M 125, IMCA M 134, IMCA M 150, IMCA M 163, IMCA M 179, IMCA M 196, IMCA M 203, IMCA M 206.



SAFETY FLASHES

IMCA has distributed 30 safety flashes in 2016 so far, covering 120 incidents. Recent flashes drew attention to incidents involving: crew members falling into open and unprotected hatches on deck; hand or arm injuries; and cargo handling and dropped objects.



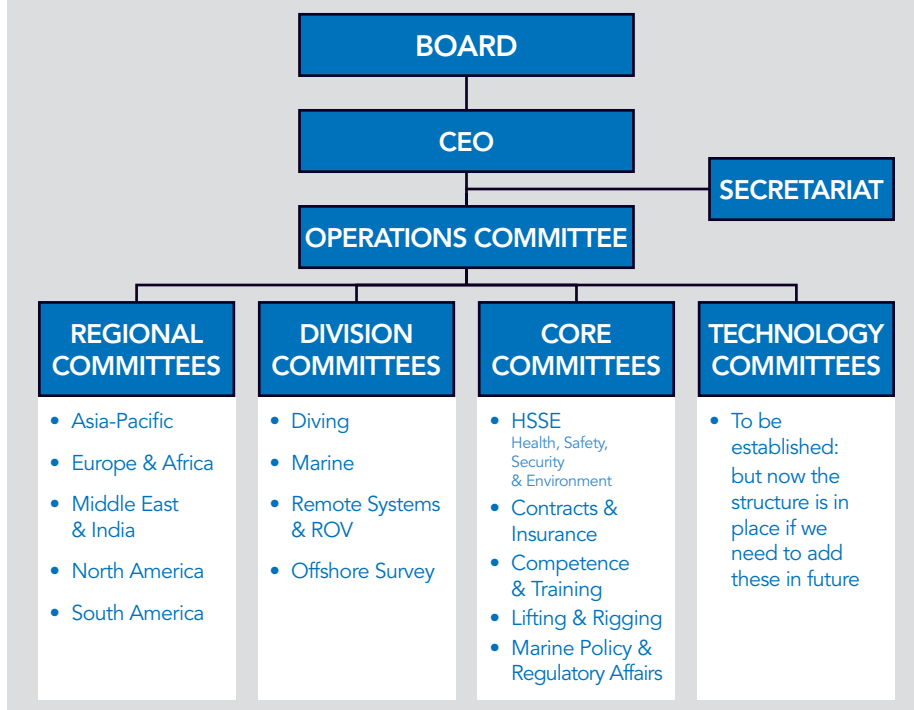
INFO NOTES

IMCA SEL 10/16 & M 14/16 – Ballast Water Management Convention to enter into force

IMCA D 14/16 – Service life for Kirby Morgan helmet fiberglass shells, frames and yokes

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

IMCA's new operational structure



public face of IMCA, its name or logo which have now been trademarked.

Organisation structure simplified

The new arrangement is clear and simple; the ruling body of IMCA is the board of IMCA Holdings Ltd. The new board will comprise 10-12 directors, represented by the existing Council of GCo members (6), an ICo member (1), the Chair and Vice Chair of the new Operations Committee (2), the CEO (1) and wildcard positions (2) for skill and/or diversity requirements the board may consider necessary.

The new operational structure can be seen in the diagram above. The new Operations

Committee is essentially a smaller version of the current OMC, and will comprise the Chairmen of all committees and IMCA's Technical Director. The role of this committee is largely the oversight of the work programme and output of the technical committees.

We have expanded our regional governance, with each region being able to elect its own committee to promote IMCA's work locally and nominate members onto technical committees.

The SEL committee has been renamed HSSE (Health, Safety, Security, & Environment), the legislative part of SEL has been moved to a new committee called Marine Policy & Regulatory Affairs. The existing Contracts & Insurance

Workgroup has been elevated to a committee status. In addition, we now have the flexibility to form Technology Committees when needed, to investigate technologies of interest to members if and when the need arises. The new board arrangement will provide us with much more flexibility in modifying the Bye-laws in future, as the need arises.

Processes reviewed

Many of the committee processes, such as: appointments, inductions, terms of reference, terms of office and performance expectations have been updated. In particular, we will reduce the number of elections by each committee electing their own chair and vice chair roles. Where appropriate, some of the IMCA terminology has also been refreshed, such as "Regions" instead of "Regional Sections" and "Core Committees" instead of "Core Activities".

All the detail of these changes are captured in our new constitution documents, together with the Articles of Association and the Bye-laws. A quick and easy read of the key points has been captured in a Governance Handbook. These documents can be found at the link below.

The changes in corporate structure will be implemented on 1 January 2017, whereas many of the committee changes will be implemented during 2017. A transition plan will be carried out in a progressive way so as to cause as little disruption as possible. Over the past 18 months the governance programme has been developed into a sound set of principles, and a structure which brings the association into the modern era of corporate governance.

For further details see: imca-int.com/about-imca/imca-governance

Welcome to our new members

IMCA is pleased to welcome the following new members

- Alf Lea AS
- Assodivers Ltd - Middle East & India
- Azerbaijan Caspian Shipping Company
- Beacon Offshore Ltd
- BrocoRankin
- Delphino Training Center
- Digital Horizon Co Ltd
- DPTC PIP Semarang
- ESVAGT AS
- Geosurvey Petroleum Services
- Godrej Memorial Hospital
- Petrolog Group
- Petrutech Oil & Gas - Europe & Africa
- Petrutech Oil & Gas - South America
- PT Aquamarine Divindo Inspection
- PT. International Offshore Services
- Satumarin Sdn Bhd
- Thien Nam Offshore Services JSC
- Tritex Power & Automation FZC
- Tritex Power & Automation Pte Ltd

Structure-flex Ltd

Structure-flex Ltd has been involved in the manufacture of PVC products for the transport, packaging and proof test industries for over 45 years. Having manufactured the world's first 100

tonne proof test bag and being well-established in this sector they are now manufacturing a range of high quality underwater lift bags and have recently joined IMCA.

You can find out more about our members, old and new, at: imca-int.com/membership/membership-directory

C&T team help deliver ROV training updates

Image: Seahorse Services Corporation



IMCA's Competence & Training (C&T) Core Committee has been busy in recent months, not only developing IMCA's C&T resources, but also using their expertise to make contributions to the work of other IMCA divisions. One such project has been the update of IMCA's guidance documents on the topic of ROV training courses.

Steve Benzie of i-Tech⁷, Chairman of the C&T committee, was, along with the other C&T committee members, instrumental in the revision IMCA's ROV training course guidance.

In 2014 IMCA's Remote Systems & ROV division formed an ROV Training Steering Group (TSG) – led by Steve – with the ultimate goal of facilitating a global approach to the development of ROV course syllabi. One task tackled by the TSG has been the update of IMCA R 002 – *Entry level requirements and basic introductory course outline for new remotely operated vehicle personnel* and IMCA R 010 – *Outline syllabi for ROV-related training courses*. It is the revision of these documents to which the C&T committee members volunteered their expertise. Pan-divisional contributions of this kind have enabled productive sharing of practices and procedures.

What has been revised?

Both R 002 and R 010 required revision to improve their structure and ensure the guidance within each was complementary to the other.

R 002 remains the definitive guidance for new ROV technicians and still highlights the preference for a background in engineering whether mechanical, electrical or electronic.

R 010 is designed to take the new man or woman through to the more advanced skills expected in the industry. R 010 is now more focused and features clearer training objectives for each module. The modularisation of the course structure enables training to be completed in stages and avoid duplication where an individual already has the necessary skills.

Members can see the new guidance online at: imca-int.com/rov



Lifting guidelines set for refresh

With work on one important lifting guidance document complete, IMCA's Lifting & Rigging (L&R) committee turns its attention to the next. Committee chairman, Sandy Steven of Subsea 7, explains what is planned next.

“As promised in the previous issue of *Making Waves*, the L&R committee has now published the major revision of IMCA M 179 – *Guidance on the manufacture and safe use of cable-laid slings and grommets*. Many IMCA members will be familiar with this document as it is a globally recognised piece of guidance. By keeping this guidance up to date, we aim to ensure that all slings are manufactured to a uniform standard and are safe to use, with adequate factors of safety.

“The next challenge for the committee will be to give a similar revision to another IMCA document used throughout the industry: M 187 – *Guidelines for lifting operations*. A workgroup of experts has been established to complete the revision, which will include major changes to the section on lift planning and the inclusion of a section covering diving operations.”

Members can view the revised version of M 179 online at: imca-int.com/media/73434/imcam179.pdf

Image: Heerema Marine Contractors

Familiarisation, safety and induction guidance revisions

Image: Flickr – Norsk olje og gass



IMCA's guidance documents on the initial and refresher familiarisation of vessel crews (SEL 003) and on basic safety training and vessel induction for non-marine personnel working offshore (SEL 007) have been republished after thorough review by IMCA's technical team and members of the SEL Core Committee. Minor editorial and technical revisions have been made to both following recent regulatory changes – reflecting in particular, the STCW ‘Manila

Amendments’ of 2010. The changes to SEL 007 have been more comprehensive, and it has now been published as SEL 007 Rev. 2.

Our guidance on the investigation and reporting of incidents (SEL 016) has also had a thorough review.

Members can see the new guidance online at: imca-int.com/sel

IMO Update



MEPC 70 agrees sulphur cap

The 70th session of the IMO Marine Environment Protection Committee (MEPC 70) was held in October. The main outcome of this meeting was the agreement that a global sulphur cap of 0.5% for marine fuel will take effect on 1 January 2020.

IMCA welcomes this development, which provides the industry with the certainty it needs to plan and invest on sulphur cap compliance. It also aligns with the EU regime, which sets out a 0.5% percent sulphur requirement in 2020 within 200 nautical miles of EU Member States' coasts.

NECAs and GHG roadmap

MEPC 70 also agreed to designate the Baltic and North Sea as Emissions Control Areas for Nitrogen Oxides (NECAs) with effect from 1 January 2021. When the NECA takes effect, marine engines of 130kW or greater will need to meet the Tier III NO_x emission limit.

In addition, the committee approved a roadmap for developing a 'Comprehensive IMO strategy on reduction of GHG emissions from ships'. According to the roadmap, the following timeline was agreed:

- 2018: Initial IMO strategy and roadmap for developing a comprehensive IMO strategy

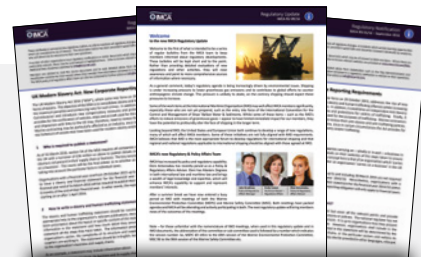
on reduction of GHG emissions from ships adopted at MEPC 72 (tentatively scheduled in the spring of 2018).

- 2019-2021: Data collection of fuel consumption.
- 2020-2022: Data analysis.
- 2022: Decision making on further measures.
- 2023: Revised IMO strategy adoption.

Ballast water into force

The Ballast Water Management (BWM) Convention has finally been ratified by the required number of signatories to enter into force (on 8 September 2017). IMCA has issued a 12-point information note on the convention to its members (IMCA M 09/16).

MEPC 70 agreed amendments to the G8 type approval guidelines for ballast water treatment systems, which it is hoped will address concerns raised by IMCA and others regarding shortcomings in these type approval requirements.



New IMCA resources

IMCA's expanded policy and regulatory affairs team has been tasked with raising the focus upon regulatory affairs within IMCA and enhancing IMCA's influence at external regulatory forums. To help achieve these aims and support members, the team will be producing a new range of material including:

Regulatory notifications (live)

Providing a high level, concise overview of recent key regulatory developments and informing members of key regulatory changes.

Regulatory updates (live)

Providing a summary of the latest regulatory developments in a single 'newsletter'.

Regulatory guidance documents (coming soon)

Detailed, in-depth guidance on specific subjects, such as the Ballast Water Management Convention, Maritime Labour Convention and emissions to air.

Regulatory database (coming soon)

A repository of the main international, regional and national regulatory initiatives for the offshore industry.

Regulatory tool kit (coming soon)

Consisting of IMCA documents along with links to original source materials and useful third party resources.

For more information about any of the resources mentioned, please contact us on: info@imca-int.com



Entering into force soon...

International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW)

The Manila amendments on STCW certificates revalidation are expected to enter into force on 1 January 2017, see information note IMCA M 03/16.

Polar Code

The Polar Code will enter into force on 1 January 2017.

Maritime Labour Convention

An amendment concerning financial security arrangements/insurance for abandoned seafarers takes effect on 18 January 2017 (see IMCA regulatory notification 02/16).

For more info on regulatory and IMO issues, contact: info@imca-int.com



IMCA DIVING SEMINAR GETS TECHNICAL

Expert audience talks DESIGN specifics and hears of latest industry approaches



“Because of the technical nature of this topic, the devil is in the detail.”

PETER SIENIEWICZ
IMCA Technical Adviser – Diving

On 9-10 November, a global mix of nearly 100 specialists from across the offshore diving industry came together at an IMCA seminar in Aberdeen. They heard about important changes to IMCA's industry-recognised diving equipment systems inspections guidance note (DESIGN) documents; had their say on the technical detail of the documents; and gained an insight into some of the new approaches being taken in the field of diving.

For many years IMCA has run a large annual seminar, but this year – reacting to the market environment, and the need expressed by our members and committee leadership team – we have changed our approach.

Allen Leatt, IMCA CEO explains: “Our smaller, niche events, tailored to specific requirements, such as our Contracts & Insurance Seminar in London and Wire Rope Seminar in Amsterdam, have proven very effective. They were well supported and very successful in addressing specific, challenging industry

issues with top industry specialists, as well as providing good networking opportunities.

“This model of seminar fits the current market very well and will reach far more people during the course of a year than a single annual event. We decided to develop this series to cover all our technical divisions and core activities. The diving seminar in Aberdeen and the maritime security seminar in London (see page 12) are the first examples of this new, more inclusive programme.”

Continued on page 10



Image: Hughes Sub Surface Engineering

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IMCA DIVING SEMINAR GETS TECHNICAL

Continued

Allen continues: “The concentration of expertise in the room was exceptional, and doesn’t happen very often. With our new range of mini-seminars, our ambition is to ensure that it *does* happen more often. We made progress with an enormous range of topics over the course of the two days: I’d like to extend our thanks to everybody who came along and contributed.”

Why tackle DESIGN?

Over the course of the past five years, IMCA’s Diving Division Management Committee (DDMC) has revised almost the entire suite of IMCA DESIGN documents. These changes were carried out to align DESIGN with the latest technological advances and industry best practice. There were however, a number of technical specifics on which DDMC wanted to hear the views and experience of IMCA’s expert membership, before finalising the wording of the documents. IMCA’s two diving specialist Technical Advisers, Peter Sieniewicz and Bryan McGlinchy (who features as our ‘Spotlight On’ interviewee this issue, on page 19) organised the seminar, with the intent of garnering this input as an ‘advisory feed to DDMC’.

As Peter explained in his introductory comments, “DESIGN isn’t broken, it just needs tweaking... and because of the technical nature of this topic, the devil is in the detail.” This view was echoed by Brendan Kearns, of KB Associates Europe, who, in his presentation *The use of DESIGN – experience from the field*, set

the scene for the seminar. He drew attention to the fact that – especially in the context of diving system audits – any ambiguity in the detail of written text could be misinterpreted, potentially making DESIGN either ‘a sword or a shield’.

Inclusive interactive format

The seminar saw a unique range of delegates converge on Aberdeen from all over the world, including from Europe, the USA, the Far East, Africa and the Middle East. They represented an impressive variety of organisations – from contractors to oil companies and class societies to equipment manufacturers and suppliers.

After the introductions, each topic under the microscope followed a similar format: Peter and Bryan gave background information on the section of the DESIGN document the audience was to consider; a suggested amendment to the wording of that section was put forward; delegates put their knowledge to use discussing factors affecting that wording. The designated seating table plan ensured that each discussion group featured individuals from a mix of backgrounds, which further stimulated discussion. The issues explored included:

- Testing of bell/basket hoist wire ropes – delegates focused on the proposed amended wording to be used in DESIGN to reflect the latest IMCA guidance on monitoring deterioration in hoist wire rope breaking force;
- Life support packages (LSPs) and the need for heating and cooling system redundancy



- discussions concentrated on ensuring that the system comprising the LSP and the hyperbaric rescue unit (HRU) should have sufficient backup for heating and cooling arrangements, but it was recognised that this could be achieved by a variety of means;
- The weight of a fully kitted diver – delegates discussed, for the purposes of the calculations required by DESIGN, if it would be useful for IMCA to specify the weight of a fully kitted diver. Given regional differences between the average size of divers (for example, Filipino versus Dutch) and the need for the DESIGN documents to be suitable for international use, this topic provoked some interesting feedback!

Productive forum

With such a range of topics covered in fine detail, the overwhelming feeling amongst delegates was that the seminar had served as a very productive forum. In most cases, the suggested revisions to the DESIGN documents were well received; and in the cases where there wasn’t a consensus in the room, there was certainly additional and useful ‘food for thought’ for DDMC as it continues refining the guidance.

A comprehensive review of proceedings and the technical content covered at the event will be available to IMCA members shortly.

Leadership and looking ahead

The day two morning programme saw the final DESIGN interactive discussion and feedback session concluded. After lunch, there was a change of pace as delegates’ attention was turned to that of the future of the market, new operational approaches and the latest technologies available.



“The content and format were very good, and the pre read material helped us hit the ground running and make progress.”

ANDY BUTLER

TMOS Deputy Group Diving Manager & Dive System Operations TA, Technip



“The concentration of expertise in the room was exceptional, and doesn't happen very often. With our new range of mini-seminars, our ambition is to ensure that it does happen more often.”

ALLEN LEATT
IMCA CEO

Allen Leatt opened the afternoon session by explaining how IMCA has prepared itself for the future with an overhaul of its corporate governance (see page 4 for further detail). He was followed at the lectern by Mark Richardson, Group Projects Manager of Apache North Sea, who gave a thought-provoking presentation titled *The earth is not flat*. He explained that he had chosen this title as he felt that our industry is at a point where the usual and accepted way of doing or thinking about something must completely change.

After setting the scene with some sobering statistics about the number of projects on the UKCS which suffer overruns, schedule delays and are delivered over budget, he went on to address the way in which projects are managed

in the industry today; many use project systems which were developed in the 1950s and 60s, and he questioned the relevance of these systems to today's speed of communication. Mark explained his view that a 'fear of failure' has contributed to a risk averse culture of 'defer, delay and do nothing', which is not delivering good results. He went on to explain how his company's approach is to focus on 'leadership not management' and to set out to team members what they are expected to achieve – rather than prescriptively, micro-manage *how* they should achieve it.

Getting technical & adding value

Having delivered Mark's example of a cutting edge approach in terms of behaviour and

“A very positive step in discussing diving safety and the development of IMCA's DESIGN documents. I felt it was a success, which was due to not only the hard work of IMCA but also the level of personnel who attended, bringing years of expertise. It was good to progress on specific issues, discussing operational and technical issues with such a large group in a relaxed forum.”

SANDY HARPER
Director, Namaka Subsea

project management, the seminar's focus then switched to the latest technologies. A series of quick-fire presentations was given covering: e-learning solutions for diving using nitrox and diver medical courses; a brand new maritime (and space) research and training facility; a new range of SPHLs; and compact bail-out rebreathing apparatus.

Richard Benzie, IMCA Technical Director, summarises the event: “IMCA set out to deliver a value added opportunity for our member community through this seminar; and from the feedback I have heard, it has succeeded on that front. I think many of the attendees left with a clearer understanding of the challenges faced when putting together technical guidance of this kind. Due consideration will be given to all of the views and opinions put forward at the event and we would like to thank everybody who attended and supported it.”

For information about forthcoming IMCA seminars and other events, please see: imca-int.com/events



Mark Richardson describes the 'fear of failure' prevalent in project management today



Bryan McGlinchy talks technical detail with one of the groups in an interactive discussion session

Security seminar urges members to be prepared

One of the key points to come out of IMCA's latest seminar was that, in both the areas of cyber security and global risk exposure, understanding the risks and being prepared is essential.

IMCA hosted a seminar focusing on modern maritime security issues at the Millennium Gloucester Hotel in London, on 10 November 2016. Sponsored by Subsea 7, this event was one of IMCA's new series of mini-seminars – niche events tailored to tackle specific topics. The seminar saw 48 delegates, from IMCA members and guests from international and UK national authorities, flag administrations, oil companies and security specialists, come together to debate and explore topical subjects.

The event concentrated on the human factors at play in maritime security and was designed to raise awareness of the current and future sources of threat in this key area. Nicolas Krmic, Group Security Manager at Subsea 7 – the Chairman of IMCA's Security Workgroup – welcomed delegates and Chris Baldwin, IMCA Technical Adviser for maritime security, co-ordinated the day's programme.

The opening presentation was given by Javier Yasnikouski, Head of Maritime Security at the IMO's Maritime Safety Division, who gave an insight into the general state of maritime security, including cyber developments from the IMO's perspective. In the context of the apparent resurgence in acts of piracy off the coast of Somalia and the events around the Bab Al Mandeb Straits, the seminar was particularly timely.

Cyber threat from inside

Cyber security was the theme of the morning session, which began with a 25 minute scene setting presentation on current issues by Alan Calder of IT Governance Limited. This included details of some recent attacks, but – most importantly – stressed that the biggest cyber threat was from within; in other words, a company's own employees, both senior and junior.

Following the presentation, Alan and Rob Acker of Lloyd's Register Quality Assurance led the delegates into the syndicate discussion phase,



during which 'incident' scenarios were used to generate discussion and debate. Facilitators from Thomas Miller Specialty and International Transport Intermediaries Club (ITIC) provided support to the syndicates, as they tackled the issues. A mixture of generic, individual experience and marine-specific cases and topics were examined by the groups in an intense session which saw some fascinating conclusions.

Global risk exposure examined

The afternoon session was devoted to a very topical subject in this ever more destabilised world: 'Global risk exposure: the changing face of employers' duty of care'. Rob Taylor of Special Contingency Risks/Alert 24 kicked off the session with a presentation which considered duty of care concerns in the modern security environment. Scenario based syndicate discussions, to draw out and further explore the key aspects of the topic, were led by Rob (with the support of Tom Holmer of the Maritime Piracy Humanitarian Response Programme) and addressed questions such as:

- How is the duty of care affected by the modern security environment?
- What can companies do to contain, mitigate and defend their people?

At the time of press, the output from the discussions and active contributions of all those who attended is being collated into a report, which IMCA will share with members in due course. However, in summary, the top 'take-aways' from this event can be seen on the right.

IMCA is intending to run its next security seminar during London International Shipping Week – which takes place from 11-15 September 2017. Further details will be announced nearer the time.

TOP 7 EVENT TAKE-AWAYS

- 1 Members must accept that a cyber breach is inevitable
- 2 The General Data Protection Regulations have penalties designed to encourage the implementation of proper defences
- 3 Plan and practise cyber incident responses *before* the point of crisis
- 4 IMCA should consider developing guidance on cyber security assurance for members
- 5 Crisis management plans (covering scenarios such as kidnap and ransom) need to be developed and practised *before* the point of crisis
- 6 Companies must ensure that their employees follow company procedures
- 7 Both areas covered in the seminar can have a significant impact on corporate reputation if not adequately addressed by senior management



For information about forthcoming IMCA seminars and events visit:
imca-int.com/events

Productive WindEurope

IMCA was present at a meeting of safety organisations at the WindEurope Summit in Hamburg. The aim of the meeting was to discuss safety performance in the wind industry and identify how best to integrate all organisations with an interest in operational safety matters in the sector.



Image: © WindEurope

Chris Baldwin, IMCA Technical Adviser, attended the meeting along with representatives of the Wind Industry Steering Committee, of which IMCA is a founding member. The other committee members are the G+ group (formerly the G9), the Global Wind Organisation (GWO), the Energy Institute and RenewableUK. Work is ongoing to develop this collaboration in order to avoid duplication, promote safety, share best practice and lessons from incidents.

The WindEurope event took place from 27-

29 September and was extremely well attended. A number of IMCA members were present including A2Sea, Boskalis, Briggs Marine, DeepOcean, Fugro, Helix, Siem Offshore, Seaway Heavy Lifting, Vattenfall, VBMS to name a few, which afforded the opportunity to hold a Renewable Energy Workgroup meeting and an eCMID workshop all in the same location. Our thanks go to Ekkehard Stade for hosting both IMCA events at Global Maritime's office in Hamburg.

Trials issue raised at Asian DP Conference

The competency of individuals performing FMEAs and DP trials was a hot topic at the Asian DP Conference on 21 September. IMCA's Technical Adviser – Marine, Andy Goldsmith, who chaired the afternoon session of the event, gives this brief summary.



My objective for attending the conference was to stress the importance of reporting DP station keeping incidents, undesired events and observations. The IMCA DP Focused Workgroup has concentrated on this effort for most of 2016 and upgraded its DP reporting form and methods of feedback to encourage greater participation from the DP industry in our scheme. This conference was a successful opportunity for me to interact with DP vessel operators in the region.

DP & FMEA trial concerns

One of the concerns raised at the conference was the variance in quality of FMEAs and conduct of DP trials.

The industry has taken steps to verify that surveyors completing CMID and OVID inspections are competent to do their job. Companies employing these surveyors may have training and competency assessment within their own management systems. However, as an industry, there is no way of ensuring personnel performing annual DP trials, DP FMEA proving trials or DP assurance activities are competent to perform these tasks to a defined standard or acceptance criteria. It was stated at the conference that, as an industry, we urgently need an accreditation process for personnel performing activities of this kind. This subject will be debated at the next meeting of the DP Focused Workgroup.

WORLD-WIDE EVENTS

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

Key to events shown below:

- **IMCA events**
- **IMCA is supporting & attending**
- **IMCA is supporting**

DECEMBER

6-7: Offshore Renewables Wind
London, UK ●

JANUARY 2017

23-24: RenewableUK Annual Health & Safety 2017
Edinburgh – UK ●

25-26: Vessel Efficiency & Fuel Management Summit
London – UK ●

25 TBC: South America Section Meeting
Rio de Janeiro – Brazil ●

FEBRUARY

1-3: Subsea Expo 2017
Aberdeen – UK ●

7: European DP Conference
London – UK ●

8-9: Annual OSJ Conference, Awards & Exhibition
London – UK ●

14-16: Oceanology International North America
San Diego – USA ●

15-16: Central & North America Section & Sub-group Meetings
Houston – USA ●

21-23: Underwater Intervention
New Orleans – USA ●

MARCH

2 TBC: Middle East & India Section Meeting
Jebel Ali – UAE ●

7 TBC: Europe & Africa Section Meeting
Stavanger, Norway ●

8 TBC: IMCA ROV Seminar
Stavanger, Norway ●

9 TBC: eCMID Workshop
Stavanger, Norway ●

CYBER SECURITY

TOP TIPS FROM AN EXPERT

Mike Hawthorne OBE is a cyber security expert whose career has included time as a Captain, Royal Navy and working for the UK Government in the field of security. He is currently an associate with Cyber Security Associates. Mike met recently with IMCA Technical Adviser for maritime security, Chris Baldwin, and they discussed some of the key current cyber security issues with the potential to have an effect on IMCA members.

The meeting was particularly timely, given the recent focus on cyber security in the US: in addition to the US Coast Guard (USCG) initiatives, the Department of Homeland Security recently declared October as National Cyber Security Awareness Month.

At the meeting Mike offered the following advice for *Making Waves* readers: "Cyber security is much more than data protection. As IMCA members will be aware, more and more physical processes are being controlled by computer technologies. With these increased efficiencies, new cyber vulnerabilities are emerging. Whilst there is no 'silver bullet', successful companies have struck the right balance between effective business processes and appropriate resilience controls to mitigate the most dangerous cyber threats. These improvements to cyber resilience are informed and being driven by a more robust cyber risk management process." Mike has provided a number of useful tips for IMCA members to consider, regarding their own cyber security arrangements (right).

Preparation will pay dividends

The International Maritime Organization's (IMO) Facilitation and Safety Committees have been addressing the management of cyber security issues in the maritime sector. IMO's intent is to improve the protection and resilience of cyber enabled systems, with the development of appropriate guidelines on cyber security practices.

The interim IMO guidelines on cyber



“Exercise your key decision makers on how to manage a cyber event and amend your business continuity and disaster recovery processes as required. You will experience some sort of cyber event.”

MIKE HAWTHORNE, OBE
Cyber Security Associates

EXPERT CYBER SECURITY TIPS FOR IMCA MEMBERS

- Develop and implement a maritime cyber security strategy that covers the totality of your enterprise and not just the IT department. This strategy should reflect the IMO and BIMCO guidelines and be shaped by relevant developments in cyber security, including the emergence of the 'internet of things', increasing use of cloud technologies, further reliance on big data and artificial intelligence, the dynamic cyber threat environment and how they might impact upon your cyber risks.
- As part of your holistic risk management process, mitigate the cyber risks to your business by the selection of prioritised and appropriate controls, whilst maintaining the operational and business efficiencies that increased digitisation brings.
- Determine the frequency and scope of cyber security audits that meet the tempo of your business and your appetite for risk. These audits should be: based upon appropriate international standards; the requirements of national and international regulation and industry best practice; and be informed by an analysis of future threats.
- Develop and embed a cyber security culture at every level across your enterprise, in the same way that you have embraced the ISPS Code and health and safety at work considerations.
- Recruit, train and retain cyber skilled personnel within your organisation, with support as required by specialised cyber security experts.

risk management, the BIMCO cyber security guidelines and the recent USCG initiatives are all helping to shape improvements to maritime cyber security. A measured approach, to prepare

for forthcoming regulatory changes in the US, European Union and elsewhere, is likely to pay dividends for members, rather than a last minute rush to implement internal processes.

Exit strategies – D 025 revised



IMCA's long-standing guidance on the evacuation of divers from installations has been revised and re-issued as IMCA D 025 Rev 1.

The original IMCA D 025, published in 2001, concentrated on providing guidance on evacuation arrangements for installation based divers (both surface supplied and saturation). That guidance has now been brought up to date to reflect modern approaches to the subject of hyperbaric evacuation. There is also new material in the section covering the evacuation of surface supplied divers.

In addition, IMCA D 025 Rev. 1 has been expanded to include advice on planning and executing installation based diving operations. The document recognises that the positioning

and use of surface supplied or saturation diving systems on offshore installations presents a number of atypical challenges for diving contractors and installation operators to jointly consider and manage. A useful list of matters for IMCA members to take into account when planning installation based diving operations is set out in the revised guidance.

Members can view D 025 online at:
imca-int.com/media/70964/imcad025.pdf



D 016 – lift off!

Following an exhaustive review, IMCA's guidance on open parachute type underwater air lift bags (D 016 Rev. 4) was published earlier this year. The updated document contains major revisions to diagrams and to operational guidance – especially those sections dealing with the use of inverter lines and hold-back rigging.

IMCA is grateful to all members who took part in the review, and in particular to Unique Seaflex and the National Hyperbaric Centre for their invaluable assistance with the trials that were undertaken.

Members can view D 016 online at:
imca-int.com/media/70860/imcad016.pdf

Image: JW Automarine

Now we're talking

As previewed in the previous issue of *Making Waves*, the ADCI/IOGP/IMCA diving terms glossary (IMCA D 057) has now been published.

Prepared as a joint industry project (JIP) involving representatives from IMCA, the Association of Diving Contractors International, and the IOGP Diving Industry Work Group, the document aims to provide harmonised world-wide guidance for terminology used in the offshore diving industry.

The publication is a live document, and the JIP encourages input through the IMCA feedback button on the inside cover of the online publication. The alphabetical glossary of terms within the document currently contains nearly 200 terms, as well as a 256-strong list of diving acronyms.

The diving industry can now say with confidence that everyone knows exactly what they are talking about!



See D 057 online at:
imca-int.com/media/264469/imcad057.pdf

Image: Hughes Sub Surface Engineering

IMCA renewable group focus on DPO & W2W guidance



Image: Siemens AG

“One of our aims is to provide coherent and globally accepted guidance on personnel transfers for all sectors of the offshore energy industry in one complete document.”

CHRIS BALDWIN

IMCA Technical Adviser

Offshore renewable energy is a rapidly developing sector in terms of its geography and technology. IMCA's Renewable Energy Workgroup (REW) has been focusing on keeping up with the sector's evolution, providing guidance to answer contractors' needs in two key areas: dynamic positioning operator (DPO) schemes and walk to work (W2W) transfers of personnel.

A good example of the REW's recent progress is in the field of the sector's DP vessel operators. Current DPO schemes are geared towards the operational needs of the oil & gas sector and not to the requirements for wind farm construction, operation and maintenance. The REW has begun consultation with the Nautical Institute (NI) to develop a DPO scheme for the renewable sector.

A sub-workgroup has been formed to take this work forward and includes representation from the NI, renewable energy DP vessel owners and IMCA technical advisers. The scheme will: take account of the operating practices and procedures for wind farms, and possibly also tidal energy systems; work out the gaps in the existing NI DPO schemes; and provide expertise to the NI for the development of a scheme configured to the sector's needs. Work is pressing ahead with an ambitious timeframe; it is hoped that a draft proposal will be developed for the REW members to consider by the beginning of 2017.

IMCA to build W2W database

The REW is also developing a W2W vessel decision tool and establishing an IMCA database of information surrounding personnel

transfers. Both these initiatives have become ever more important as offshore renewable energy generation fields move further offshore. The industry has already undertaken millions of personnel transfer operations and many companies keep records on their own activities; however, the REW recognises that for IMCA to engage more effectively with regulators and national authorities on operating safety issues, the industry would benefit greatly from a comprehensive dataset.

Related to these two topics, the revision to IMCA's guidance on the transfer of personnel to and from offshore vessels and structures (M 202) is currently underway. Coincidentally, the offshore survey community is also looking at developing guidance on the topic, and Chris Baldwin is working with an International Association of Geophysical Contractors (IAGC) and International Oil and Gas Producers (IOGP) workgroup on developing the IMCA guidance document. The aim is to provide coherent and globally accepted guidance on personnel transfers for all sectors of the offshore energy industry in one complete document.



From 1 January 2017, the CMID system will be 'rebranded' the eCMID system.

CMID change of concept

IMCA announced in the summer that there were changes afoot with the Common Marine Inspection Document (CMID) process and the development of this safety management system assurance tool continues apace.

To mark the forthcoming change to the concept of operation the name/brand of the system will be updated: from 1 January 2017, the constituent elements of eCMID and eMISW reports and the AVI scheme, managed by the International Institute of Marine Surveyors, will as a whole be known as the 'eCMID system'.

From 1 January 2018 IMCA will only recognise eCMID (electronic CMID) reports as an authorised IMCA report. This, together with the policy change of only allowing Accredited Vessel Inspectors (AVIs) to use the eCMID database, will make a significant difference to the integrity and credibility of the system.

4 ROV documents & 2015 stats launched



Image: Saab Seateye

IMCA members of the Remote Systems & ROV division have benefited in the past few months from the publication of one new guidance document, three revisions and the ROV statistics for 2015. IMCA Technical Adviser, Chris Baldwin, summarises the new resources.

High voltage clarified

IMCA's guidance on ROV High Voltage (HV) systems (R 005) has been reviewed. The document required some fine tuning as a result of discussions IMCA had with the UK Health and Safety Executive over its guidance on 'proving dead' for HV systems. When this topic was incorporated into R 005, it caused some confusion for members outside the UK. Consequently, the decision was taken to remove any reference to low voltage electricity management procedures from the revised IMCA document.

LARS & frame testing resources

In November new guidance was published on the testing, inspection and certification of ROVs (R 021). The document has been written in conjunction with a revision of guidance on the testing, inspection and certification of ROV launch and recovery systems (LARS) (R 011) which will soon be published. The two documents provide complementary guidance for the both LARS and the ROV frame. These documents have undergone review by both the

ROV Division Management Committee and the Lifting & Rigging Core Committee to ensure their accuracy and suitability across IMCA disciplines. The duty cycles of ROV deployment systems are highly specialised and the physics of lifting ROVs into and out of the water needed to be correctly addressed in the guidance.

Training & statistics

As mentioned earlier in this issue of *Making Waves*, the ROV Training Steering Group revised both R 002 and R 010, IMCA's guidance documents on training frameworks for the ROV community (see page 6 for details).

IMCA's annual statistics on ROV personnel and vehicles were also published in November as information note R 04/16. Predictably, the downturn in the industry has been reflected in the figures, with both the number of personnel and vehicles in action seeing a reduction.

Our thanks go to those who submitted figures for the statistics and all concerned for their efforts in producing the important changes to existing guidance and the development of new material for the ROV community.



Image: Flickr – Brendan Campbell – bobfantastic

Survey synergy emphasised

The ongoing review of IMCA's Offshore Survey documents has highlighted the importance of the synergy between survey and DP positioning operations in particular.

As a result, a number of IMCA guidance documents will be republished as both Offshore Survey and Marine documents. Doing so will make them available to the technical communities involved in both offshore surveying and DP. IMCA's soon to be published, revised guidance on the selection, installation and maintenance of satellite-based positioning systems for offshore applications – which will replace IMCA M 199/S 012 and IMCA S 018, and incorporate text from IMCA M 141 – is one such example.

Also coming soon

A number of other guidance documents are also currently under revision. These include IMCA's guidance on:

- Deepwater acoustics (IMCA S 013);
- Vessel USBL systems (IMCA S 017);
- Mobilisation guidance for offshore survey operations (S 016);
- Subsea metrology (S 019);
- The management of survey and inspection data (S 020);
- The management of peripheral survey sensors (S 021).

We anticipate that this ambitious programme will be complete before the end of Q4 2016.

Links to all of IMCA's Offshore Survey documents can be found at: imca-int.com/offshore-survey-division

Members can view the one new and three revised documents at: imca-int.com/remote-systems-and-rov-division

The 2015 ROV statistics can be seen at: imca-int.com/remote-systems-and-rov-division/information-notes

SAFETY CULTURE

TAKING THE LEAD

Building a strong safety culture takes concerted effort, but IMCA Global Contractor, McDermott International, Inc. has produced impressive results across its major fabrication yards and marine assets in the Middle East, Asia and the Americas. In this feature, provided by McDermott, they give an insight into how they've achieved such impressive figures for lost time incidents (LTIs) and total recordable incident rates (TRIRs).

McDermott's "Taking the Lead" programme proactively develops and supports employee behaviours and attitudes that lead to a robust culture of excellence in quality, health, safety, environment and security performance. McDermott encourages its partners, sub-contractors and clients to break through the barriers of contracts, geography and past practices to pursue outstanding QHSES performance.

To support the Taking the Lead programme, McDermott implemented a unique logo and identity, operational values and produced several videos in its pursuit to achieve zero accidents and incidents. McDermott challenges employees to take ownership and responsibility for the tasks and roles assigned to them. Supervisors and leaders engage with employees daily and actively highlight people *taking the lead*; those who are proactive in the workplace, producing positive results.

The company has implemented McDermott Operational Values as shown in the chart. Choosing to refer to these key activities as



“McDermott is an industry leader in safety. Injury rates are at an all-time low, but there are always opportunities to further improve our strong processes, systems and behaviours of employees and sub-contractors.”

JOHN MACPHERSON

Senior Director QHSES,
McDermott International, Inc.

values and not rules was designed to further embed them into the cultural DNA of the company. McDermott continually endeavours to make the connection between quality and HSE to ensure continual improvement across all areas and disciplines; improvements in quality influence safety and vice versa.

Safety becomes second nature

“McDermott is an industry leader in safety. Injury rates are at an all-time low, but there are always opportunities to further improve our strong processes, systems and behaviours of employees and sub-contractors,” said John MacPherson, Senior Director QHSES for McDermott. The goal is to continually reduce high potential incidents that could result in serious consequences, and McDermott has made real progress in recent years in reducing these incidents.

Across all its facilities, McDermott has achieved impressive LTI and TRIR rates compared with the industry benchmarks for the past decade. Among the company's notable achievements have been its Middle East Area achievement of

more than 43 million man-hours, and in Asia, the Batam Yard achievement of 37 million man-hours without a LTI – impressive records when you consider the volume of work these yards produce. In addition, the Altamira Fabrication Yard in Mexico has more than 10 million man-hours without an LTI and the Ichthys project recently celebrated 15 million man-hours LTI free.

Besides the low LTI and TRIR numbers, there is a lot more to ensuring your people act safely. Safety must be a part of your DNA where people instinctively choose the safer approach in any task; it literally becomes second nature. Safe procedures and work habits are seen simply as “how it's done” around here.

Focus on quality too

However, *taking the lead* is not only focused on HSE but equally advocates a strong quality focus. This was most recently demonstrated when McDermott completed the design, build, certification and delivery of its new DLV 2000 vessel. The 400 bed vessel, capable of deepwater pipelay to 3,048 meters, and with a lifting capacity of 2,000 tonnes was not only executed with a .02 TRIR, but also successfully mobilised to its first project directly after delivery, underlining the focus on delivering quality safely.

Taking the Lead has been focused on rallying employees, adoption/embracing of the “brand”, bringing the “It's in our DNA” message to life and truly embedding it in the company culture. In 2017, McDermott plans to further raise awareness of *taking the lead* externally with its clients, vendors, partners, etc. around the world.



A safety conversation on McDermott Operational Values taking place on the Internac 406.

SPOTLIGHT ON BRYAN McGLINCHY

Bryan McGlinchy is an IMCA Technical Adviser who specialises in the field of diving. His wealth of experience in the offshore diving industry and as a safety professional makes him a highly valued member of the IMCA technical team. He puts his considerable expertise to use focusing on the work programme of IMCA's diving, SMTT and DMAC committees.



Starting with SCUBA

Although I was born in Scotland my family moved to West Wales when I was six years old. During my youth my friends and I went white water canoeing on the rivers; sailed and canoed off the coast; potholed and climbed in the hills. One memorable day in 1975 my father said to me that he'd had enough of just watching Monsieur Cousteau, and he bought us each a set of SCUBA diving kit. We spent much of that winter training at Fishguard sub-aqua club and took to the waters of Cardigan Bay in the spring. I was fifteen when I did my first sea dive and I have been intimately involved with the diving industry in one way or another ever since.

Graduating to commercial diving

After graduating with a degree in English Language and Literature from Brasenose College, Oxford in 1982, I took the logical step of training as a commercial diver. I soon found commercial diving to be an intoxicating career,



Bryan explains the importance of IMCA's diving guidance to a delegate at an industry event.

especially when breathing compressed air at 50 metres! Over the next 15 years I worked on a bewildering array of diving projects for a number of respected offshore diving and marine construction companies – most of which are IMCA members today – in the Middle East, India, North Sea and West Africa. I dived in both inshore and offshore settings, using air, mixed gas, transfer under pressure and saturation diving techniques.

The academic side of my personality led me to undertake and complete a BSc with the Open University while working offshore. I well remember staggering below decks after finishing yet another 12-hour shift at the height of an Arabian summer, only to begin pulling out my textbooks to plunge into S330 Oceanography or some other module.

Serious challenges

Those were heady but challenging times. I suppose my diving career began in the immediate 'post-pioneer' era, but the truth is, we were still learning to work effectively and safely underwater in those days. I certainly have my fair share of 'war stories', but despite being directly involved in tens of thousands of offshore dives, I can honestly say that I never personally saw a single serious injury to a commercial diver.

Nevertheless, very serious accidents did happen. During my time as an active commercial diver I met and worked with hundreds of other divers. By the time family circumstances led me to reluctantly hang up my fins in 1997, I was able to count nine young men I had worked with who had been killed while diving at work.

A passion for safety

Undoubtedly my experiences in the offshore diving industry caused me to develop a strong interest in safety. It was this that led

“We must continue to control the safety and commercial risks arising from diving projects by adhering to the established good practice in IMCA's unsurpassed technical guidance.”

me to apply to work with the UK Health and Safety Executive. I completed a Postgraduate Diploma in Occupational Health and Safety with the Executive and worked as a Diving Specialist Inspector for more than 12 years. During that period I was responsible for the inspection of all sectors of the diving industry in Great Britain and for the investigation of accidents, incidents and complaints related to diving at work, both onshore and offshore. In addition, I supervised a number of diving research projects and developed diving industry guidance on behalf of the Executive.

Although I was very happy at the HSE, when the opportunity arose for me to work as one of IMCA's Diving Technical Advisers, I simply had to apply. AODC/IMCA diving guidance has been a fundamental part of my entire working life. It is an indispensable tool in constant use by diving contractors and their staff. It plays a major part in helping to ensure that thousands of commercial divers across the globe (not just in certain jurisdictions) are able to work safely and efficiently every day.

D 014 unsurpassed

For me, the 'D 014 way' of diving is genuinely a thing of beauty. It is a stand-out achievement for our industry that is the fruit of a lot of very hard-won lessons. At a time when the entire offshore oil and gas industry may be facing a paradigm shift, in the diving sector there is something that cannot change. We must continue to control the safety and commercial risks arising from diving projects by adhering to the established good practice enshrined in IMCA's unsurpassed technical guidance. We must work to maintain the excellence of that guidance, and we must always continue to dive the D 014 way.



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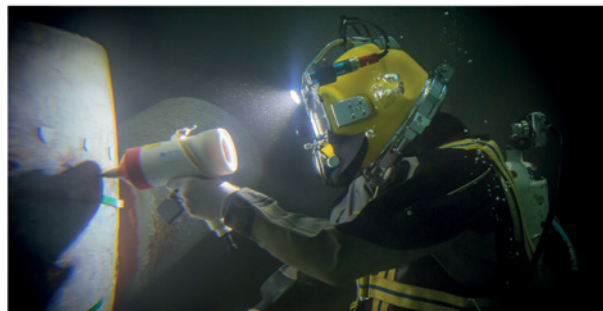


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