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Front Cover: Students at the Norwegian Commercial Diving School in Oslo preparing to dive using the 'VIC' helmet mounted Video System

# FROM THE CHAIRMAN



### Dear Members

I am always very pleased to begin my notes with a welcome to new Members of the Association, since the last issue we have four new Associate Members:

Middle East for Commercial Diving: Egypt: GT

Corporation SE: Estonia MZPlongee: Switzerland

TechnoSub: Mexico

Centre Activitiés Plongee (CAP): France were able to attend this meeting, and also use it as an opportunity to hold their own Meeting

In addition the Board has had two 'Skype Meetings, which have proved very successful, and economic!

A start has now (February 2015) been made on the move of the Administration to Delft – after two false starts, one when travel across Paris was blocked by Rail & Taxi strikes and the other by the terrorist



Finally, may I close by congratulating Alf Leadbitter from the Underwater Centre in Fort William on the recognition of his contributions to diver training over many years at the annual Subsea UK Awards Ceremony in Aberdeen, where he was presented with the award for his Outstanding Contribution to the Subsea Industry.





The Executive Board has attended as many meetings as possible since the last issue with the intention of spreading awareness of the Association and its aims, for example :

•The Annual Meeting of the Association of Diving Contractors UK (ADC UK) in November.

•The IMCA Annual Meeting in London, also in November.

•The Annual Meeting of the European Diving Technology Committee (EDTC) in Barcelona in October - Because of their other professional commitments, all members of the IDSA Executive Board

The IDSA Board Meeting, left to right : Dag Wroldsen , John Rabone, Jill Williams (Minute Secretary), Mark van der Esch, Alan Bax (Administrator), Leo Lagarde (Chairman)

# THE IDSA ANNUAL MEETING IN CORK

Wednesday 16<sup>th</sup> to Friday 18<sup>th</sup> September 2015





### The Hosts

The Flag Officer Commanding the Irish Naval Service, Commodore Hugh Tully has agreed that the Diving Section of the Irish Naval Service, headed by Lieutenant Commander Tony O'Regan NS, MCDO will host the 33<sup>rd</sup> Annual Meeting of the Association. The meeting will take place in the Main Irish Naval Base which is situated on the island of Haulbowline in Cork City Harbour, on the South West coast of Ireland. Cork is the 2nd largest city in the Republic of Ireland, and the deepest natural harbour in Ireland. The Diving Section formed in the late 1960's uses part of the island for its Operational, Training and Administrative requirements



### **ABOUT THE MEETING**

The meeting Hotel is the Imperial Hotel situated right in the heart of Cork city. The meeting itself will take place in a Lecture Room at the National Maritime College of Ireland (NMCI), a modern sophisticated establishment about 20 minutes from the Meeting Hotel and a kilometre from the Diving Section. The Institute has all the facilities necessary to train maritime personnel for all aspects of Offshore and Shipbourne routine and emergency operations

### Accommodation

The Meeting Hotel is: The Imperial Hotel South Mall Cork, Ireland Tel: +353 21 4274040 E Mail:eoleary@imperialhotelcork.ie Web: www.flynnhotels.com

A very special rate has been arranged for delegates from PM 15<sup>th</sup> to AM 18<sup>th</sup> Sep, which is: Bed and full Irish breakfast €115 per person per night – single occupancy, and €67.50 per person sharing per night – double/twin occupancy

Please Note:

All rooms must be booked and paid for by Individuals by E mailing

reservations@imperialhotelcork.ie quoting reference INS01.

A credit card number with expiry date, will be required to confirm bookings

Bookings at the Special rate will not be accepted after 31<sup>st</sup> July

There is no charge for cancellations made **before**1500 on the day of arrival. There will be a 100% 'non-arrival' charge after 1500



# Attendance & the Conference Fee

The meeting is open to both Members and non-members – the latter as observers. Thanks to the support of the Irish Naval Section, the Conference Fee for Members this year is €250 per delegate for Members and €300 for non-Members. Wives or Partners wishing to attend meals and other social occasions e.g. the Association Dinner may do so paying the amount relevant to the event.

The fee will cover: Attendance, welcome drinks on Tuesday evening, refreshments throughout the meeting, Lunch Wednesday, Thursday and Friday, the Association dinner on Thursday evening and all transport.

### Travel

The nearest airport is Cork airport which hosts a number of European flights and is just 10km outside Cork city. There are regular buses and Taxis just outside the arrivals area, at a cost of Approx  $\leq 15 - \leq 18$  to the hotel. Please see www.corkaiport.com for information.

Transatlantic flights arriving into Shannon Airport- This airport is approx 2.5 hrs by road from

Cork City. Bus Eireann (Irish Bus) provide connections to and from all of Ireland's major cities.

### Visit www.shannonairport.ie

or www.aircoach.ie for information.

Dublin airport is located 10km North of Dublin City and served by a large number of buses coaches and taxis. The GObe bus serves cork city directly and takes approx 3.5 hrs with prices @ €28 return from the airport.

Please see www.dublinairport.com

### The Outline Programme

**TUESDAY 15<sup>th</sup> September** 1830 to 2030 Welcome Drinks at the Imperial Hotel and registration

#### WEDNESDAY 16th

0845	Transport leaves the Hotel for the Maritime College	
0930 to 1 230	Meeting Session One	
1230 to 1245	Group Photograph – Naval Photographer will print copies for all	
1245 to 1345	Lunch	
1345 to 1500	Tour of School – NMCI & Naval Base	
1500 to 1600	Meeting Session Two	
1630 to 1800	Guided tour of the Jameson Distillery.	

### **THURSDAY 17th**

0845	Transport leaves the Hotel for the Maritime College	
0930 to 1230	Meeting Session Three	
1230 to 1330	Lunch	
1400 to 1700	Tour/presentations/ demonstrations.	
1830	Transport leaves the Hotel for Dinner in the Officers Mess in the Naval Base	
1900	Pre-Dinner drinks	
1930	The Association Dinner	
Note : Transport back to the Hotel will be arranged as necessary.		

### FRIDAY 18th

0930 to 1200	Meeting Session Four		
1200	End of Meeting		



### **ABOUT THE CITY**

Since the City was founded by St Finbarr over 1,000 years ago it has grown from a trading merchant city to a cosmopolitan vibrant 21st century city of today.

The city, situated on the banks of the river Lee, is home to 123,000 people, spread over an area of 3,731 hectares, boasting the deepest natural harbour in Ireland with direct ferry crossings to UK and mainland Europe. Cork is a university city with a total student population in excess of 25,000 it has two main third level education institutes - University College Cork and Cork Institute of Technology. Cork city has a number of strategic advantages that continue to be translated into further opportunities for growth and development. The city has a thriving commercial, social and cultural sector, and it's well balanced economy has attracted many major companies to the area. Manufacturing, especially electronics, telecommunications, ICT and Health, Pharmaceutical (8 of the top 10 companies in the world) are located in the greater Cork area. The services sector is also well developed.

Cork city's commitment and contribution to the Arts and cultural life is well established. The city is home to several galleries, museums.

# Offshore diving operations management and training

- IMCA Diver Medic
- IMCA Trainee Air & Bell Diving Supervisor
- IMCA ALST
- IMCA & IDSA Diver Assessments
- HSE Offshore Medic
- Advanced Medical Skills
- First Aid & Emergency First Aid

- MCA Medical Courses
- RYA First Aid
- HSE Approved Courses
- Overseas Training
- In-House Training
- NPD Leadership
- DSV Audits
- Risk Assessments
- Personnel & Equipment













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INTERDIVE SERVICES LTD, STOKE DAMEREL BUSINESS CENTRE, STOKE, PLYMOUTH, DEVON, PL3 4DT. ENGLAND www.interdive.co.uk Rules and Regulations are always set within the historical context operating at the time they were developed. Thus, at the time when IMCA set out its process for the recognition of diver training qualifications, standards were variable, and there was no 'international' group attempting to fulfil this function. The best way to ensure quality and safety was clearly through the recognition of 'national' certification, assuring that individual countries both set standards and took the responsibility for ensuring that schools met them.

Although there have been variations in both quality and monitoring, in general this method of recognition has worked reasonably well and over the years both safety and training standards have steadily improved. However, over the last few years, not only have new nations become involved in diver training but the market has become more 'international' with divers moving across the world for work more than ever before; in turn, the variation between national needs and standards has become more difficult to monitor and what is acceptable in one part of the globe has not been so in another.



With this in mind, the International Diving Schools Association (IDSA) has developed international Standards for the recognition of diver training. There are four qualifications – SCUBA, Inshore Surface Supply, Offshore Surface Supply and Closed Bell, to be accepted to teach these qualifications schools must successfully complete an audit of their Staff, Equipment, Administration and all other relevant facilities required for the chosen qualification. In a number of countries IDSA standards have then become accepted as the appropriate level for National Certification. This, however, has led to an anomaly since, whilst IMCA may well recognise a National Certificate which is identical to the relevant IDSA level, there is still no mechanism by which IMCA can recognise directly IDSA certification, though the two authorities continue to explore options. In the absence of agreement, CEDIFOP offers the following as a possible solution to the impasse.

ITALY: Proposed Legislation 698 'Regulation for the Recognition of Profession and Discipline of Diver Training Standards to work as a Commercial Diver'

An Italian role model concerning Commercial Diver Training, which is exportable into other European countries. International Diving standards for the operation of Offshore diving can be sub-divided into three areas which, whilst distinct, are also complementary to each other. They are:

### 1. Training:

This occurs at various levels from Sport Diving (for example PADI, CMAS etc) to Professional Commercial Diving (such as that offered by IDSA schools). It is interesting that although there are other professional qualifications (such as those from the USA, Canada, UK etc) these are National certificates which can often be used in other countries; only IDSA offers an International certification.

### 2. Diving Work:

The second area relates to Standards and Procedures relevant to the working situations (IMCA) and also Regulations – for example the UNI 11366 'Safety and Health in commercial diving and hyperbaric activities

#### 3. Safety Standards:

The third area is Safety Standards. These control both the above and are set out by relevant national governments such as, for example, the HSE regulations in the UK

For offshore diving activities to be carried out to an acceptably high level all three of the above standards must co-exist.

IDSA Standards and Procedures offer four levels of training which build on each other to produce increasingly proficient divers. A similar process is set out in the ENI Spa document dated 5 August 2013 'HSE requirements for Diving Contractors'

In Italy, the Proposed Legislation 698 has adopted a similar approach to standards by including them in Section 3

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(professional qualifications). Meanwhile, in Section 4 (obligatory training standards), it emphasises that certificates issued

'...must agree with State and Regional regulation, subject to the

Course and to passing the final exams. Moreover, certifications must be approved by the competent offices of Region. Certifications issued by different Regions, or admissible, in agreement with the Directive 2005/36/CE must be compliant with parameters of control and approvals scheduled by the approved Regulation.'

The proposed Legislation 698 gives the right weight to those contents,

highlighting that 'Certifications must be in compliance with International Diver

Training standards with regard to in-water time and activities, as scheduled by IDSA for the specified level of training and, if

need be, must comply with international standards provided for prevention.

safety, and care of health and the environment.'

The main focus of the proposed Legislation 698 is

in the clause no.2 of section 6.

It specifies that those actions'...must be in compliance regarding training content, with international standards as recognised by IDSA; and with regard to working Operations (see clause 3, section2) must comply with that scheduled by Regulation UNI 11366 (Safety and Health in Hyperbaric and Commercial Diving Activities) Moreover, Offshore Diving Operations Must comply with the guidelines of IMCA.'

In this way, the Proposed Legislation 698 outlines the clear co-existence between the three standards: Training, Operational. And Safety,

Why does this matter?

In the IMCA document 'Training and Certification'

(See http://www.imca-int.com/ media/90582/imca-fs-logo.pdf) it is stated that there are only four training courses for which IMCA offers approval / recognition. They are: Trainee Air Diving Supervisor; Trainee Bell Diving Supervisor; Assistant Life Support Technician; and Diver Medic. Each requires that a Training Establishment must first apply for approval and then successfully undergo an audit of its documentation, facilities, and course. Once IMCA has confirmed its recognition/ approval. such establishments may use the wording 'IMCA Approved' or 'IMCA Recognised' in relation to those specific courses only.

NO other courses are approved or recognised by IMCA and therefore NO establishments may use the wording 'IMCA Approved' or 'IMCA Recognised' in relation to any other course.

It is important to share with members

The Director of the IDSA School in Palermo – CEDIFOP – Manos Kouvakis, with the Governor of Sicily Rosario Crocetta

that, in a document from IMCA to CEDIFOP (11 September 2013) reference was made to a series of documents that IMCA has put out in recent years, the last being D11/13 where IMCA lists all countries with their own specific regulation concerning commercial diver training for offshore work. It should therefore be noted that, at the present time, it is difficult for IMCA to recognise IDSA without a significant change in its policy.

Italy could meet this condition through the approval of the Proposed Legislation 698, (Regulation for the recognition of the profession and discipline of Diver Training Standards to work as a Commercial Diver) once a register is established and held by the Sicilian Department of Work. Under this, every diver with a level ofIDSA would be able to join the register and work inshore and offshore, as provided by the Proposed Legislation 698.

The inclusion of IDSA Standards in the

Proposed Legislation 698 is crucial since it will permit the implementation of the Directive 2005/36/CE which allows divers who have joined this Register to work in all EU member states, on the grounds that the Member State can verify the content of training and that the training meets the standard of training in the country to which it is going to apply.

This is an important step for two reasons. Firstly it recognises that divers on the Regional register have been trained to an adequate standard; secondly it can ensure that divers whose training does not reach an acceptable standard will not gain access to the register. This will avoid the situation in which we found ourselves last

year when we were forced to accept certificates from some EU countries whose training was inadequate and could have had serious safety implications.

The political structure of Italy makes it a special case with regard to IMCA recognition – there is no such thing as national standards since responsibility is delegated to the Regions, ratified in Constitutional Law as set out in N2 dated 26 February 1948 ...Conversion in Constitutional Law of the Sicilian Region's statute

Authorised with the Legislative Decree n.455 dated May15 1946'

For this reason, in Italy, a Region's Legislation carries the same force as a National Recognition which also extends to EU regulation.

In the case of IMCA therefore, recognition by Sicily carries the same status as if it came directly from the Italian Government; since Sicily's standards are those of IDSA it seems to make a tacit admission that IDSA standards are acceptable to IMCA.

So, in conclusion, if IMCA has no direct way in which it can recognise IDSA certification, an alternative approach might be for recognition to be made via Regional recognition programmes such as exist in Sicily within the overall Italian state. One might see a similar pattern developing in other countries (for example Spain, Greece, Cyprus) where there is no National legislation for diving at the present time. Equally, a case for IMCA recognition might be made through greater collaboration by Full IDSA Member schools working through the IDSA Board. where the IDSA Standards taught in those schools is effectively already the National Standard.

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Design: Lloyds Register Rules for Offshore lifting

Certification: IMCA DO23 Design & IMCA DO18

Primary Basket / Cage Cylinders: 2 x 50 Litre @ 300 Bar

Weight: 6500kg

HPU Electrical Requirements: 380-440 V 3PH 50/60 Hz

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Main Lift Wire: 13 mm dia Length 80 metres Anti Rotational

Clump Weight Wire: 13 mm dia Length 160 metres Anti Rotational



# Dive Control Panels

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01

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(Course director); Michel Hugon, France; Pasquale Longobardi, Italy; Jack Meintjes, South Africa;

Roland vanden Eede, Belgium; Jürg Wendling, Switzerland; and others



Jurg Wendling Chairman of the 'European Diving Technology Committee (EDTC)







# The Digital Revolution



Diver: "Top site... Top site..." Sup: "...Yeah sorry mate, I was distracted by WhatsApp." Diver: "No worries, did you see how much play there is on this rudder?"

Just a short dialogue, nothing special, nothing to worry about, it only shows us what a great leap in communication we have made. It s the Internet and the mobile devices that keep us in touch with loved ones and friends nowadays and keep us entertained during the boring, yet sometimes much needed, down time. What I want to make clear is that something has changed. Something has changed a lot. Unfortunately, not everything has, because were still logging our dives ANALOG!

"What s wrong with that?, some of you might say. I say: "A whole lot!"

"DiverData is going to change our industry. It will happen. But we have to realize that it's the mind-set that needs the most change."

> It all started as a small project, a few years ago: 'a digital logbook'. I had some friends at the University of Delft in the Netherlands. I talked the idea through with two wiz kids, two students who were graduating at that time. I wanted the digital logbook to be obtainable. We started to map out an infrastructure, which was needed. It was basically like building a house. First, we needed the right planning to get a solid working structure that would become our foundation.

Meanwhile, their graduation gave way to my digital project. So I had to come up with a new plan to get things really going. And that's when I found Fourstack. A company started by three guys, who design digital projects for the Dutch government, Siemens, KPN and many more impressive customers. They had a wild plan of investing in start-ups with their knowledge. And so, they did. As far as I was concerned, they could let their own ideas loose on this digital logbook. Fast-forward three months from then and here it is: DiverData, a commercial diving platform based on three pillars, 'Digital Logbook', 'Divers Profile' and a 'Diver Search'.

So, from now on, when a diver comes out of the water, he can start logging his dive digitally! He jumps on to DiverData, opens his account and logs insights in his own diving skills?

Well, it does not only gives the diver information on his own diving skills; it also gives all the companies who are connected to DiverData insight in his qualities as diver.



his dives. Then, he sends his dive to the supervisor, the supervisor will receive a notification and he can accredit the dive.

But that's not the only thing that happens. Meanwhile, as the diver kicks back and relaxes or starts another job, we at DiverData start working. The dive that has just been logged and approved is now added to his resume on his Digital Profile.

His Digital Profile keeps track of the dive that has been made. It provides insight in his dives, via a bar chart. Thereby, it shows the job that's done underwater and the time spent underwater. Now, his digital profile is updated.

The supervisor who has accredited this dive will be doing nothing as well to keep his resume up to date. We update his resume the same way we do with the diver's resume.

All right, a diver's resume is connected to his Logbook. That's nice of course, but what does it do, except for giving him And that's where the Diver Search comes in to play. The companies have access to all of the freelance divers that are on the market and are connected to

"Basically, you only upload your resume and documents once and from then on DiverData keeps your resume updated. No more need to send resumes around!"

DiverData. Instead of the diver sending his resume around and keeping track of the companies, we changed it around. His Digital Profile with a fact-based resume contains not only that, but also all of his documents. So, when a company is looking for a diver, they enter the required skills in our Diver Search engine. The diver with the right skills and documents will pop-up on their screen with his details. Subsequently, the companies can than contact the diver.

Furthermore, we keep track of all certificates and their expiring date and warn the diver, so he'll have plenty of time to renew his certificates before the next job comes around.

We have created a digital platform: diverdata.nl. Companies can subscribe to this platform and divers are free to join. On this platform, a diver will have his own dashboard that holds his documents, his personal information, his resume, his Digital Logbook and a supervise logbook. Companies have access to that information and can, therefore, find a diver based on their skill and capacity. This complex-sounding system

"So, if a company looks for a welder who, at least, has welding experience, they fill in 'welder'. A name pops up and the company can check the resume and will know for sure that the welder has a certain amount of experience."

is surprisingly easy to use. If DiverData would be widely embraced there would be a transparent system to which the whole dive industry could log on to and find the right diver for the right job. Instead of being a segregated community, it will be unified.

This article will, most likely raise a lot of questions. This article has not yet shown all off the great potential of our diver platform but it has shown you the essentials. DiverData has endless opportunities for dive physicians, diver companies, divers, dive schools and government bodies are there. Do we, as an industry, have the guts to embrace a new way of logging dives, getting jobs and increasing our safety? Of course we do, but it will take time to get used to.

Want to get used to a more save, transparent and unified diving industry? Check: www.diverdata.nl.



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# **IDSA PEOPLE**

have noticed over the last few years that members ask me, more and more often, about the backgrounds of other members of IDSA. This is not really surprising - firstly because we are increasingly seeing ourselves as members of a mutually supportive group and it is thus important to know where to go for information, or how to identify people who may have experience of things which are concerning us; secondly, in a group as diverse as IDSA members, it is easy to feel isolated simply because the way in which we came into diving or diver training seems to be different from everyone else! Of course, a third reason might just be that we are all curious about other people - or is that just me as a female member of the species?

With this in view I thought that it might be interesting and useful to have a series of articles in IDSA News about individual members which would include their backgrounds, how they came into diver training, their special interests and areas of expertise and, if they wish, how they see the future of IDSA and the contribution they feel they could make to it.

The title 'IDSA People' seems to describe what I am trying to do and, as a start, I am hoping to introduce (or re-introduce) you to three individuals - the original founders (in 1979) of IDSA: Jim Joiner and Alan Bax; followed by our chairman, Leo Lagarde. In the meantime, please contact me with the names of any members about whom you would like to know more, and I would also welcome offers from members to be interviewed for the series.

Thank you in anticipation of your support



Jill Williams, Joint Editor

## **ECOLE NATIONALE DES SCAPHANDRIERS (ENS)** EXHIBITS AT THE PARIS DIVE SHOW 9-12 JANUARY 2015







ECOLE NATIONALE

his was a great way to start the new year, with heavy traffic at the ENS Stand where the general public and SCUBA enthusiasts were able to discover the fascinating world of the professional commercial diver.

More than 80 people showed a firm interest in following up training opportunities for commercial diving.

Proudly wearing IDSA colours, ENS was supported this year by Francesco Constantino from CEDIFOP (IDSA Full Member in Sicily) and Giuseppe Basile, who presented a fascinating paper on his new, innovative Communications Package for Divers at the recent IDSA Conference in Oslo.

This mutual support is typical of the collaborative way in which IDSA schools are encouraged to work to the benefit of training in commercial diving and industrial development and mutual support between schools.

### OCEANOS COMBERCIAL DIVIG DIVIG SCHOOL HOSTS THE FIRST SPANISH COMMERCIAL DIVERS' MEETING

Freecent trends in professional diving in Spain have focussed on two main areas – safety in diving operations and improved efficiency for contractors. The use of Surface Supply and attention to safety standards have both contributed to these achievements. During 2014 most accidents and fatalities can be attributed to two main areas – the inappropriate use of SCUBA and inadequate risk assessment.

As a result of this situation, professional divers in Spain decided spontaneously to meet and exchange professional opinions about what needs to be done to improve



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safety conditions. The meeting was held at the Oceanos Commercial Diving School in Barcelona, from 27-28 December 2014, and attended by participants from diving contractors such as ANEBP, divers' trade unions, hyperbaric doctors, members of GEAS (underwater police), security specialists, and professional diving schools. During the meeting visitors were given to opportunity to inspect the up-to-date, wide range of equipment and safety gear which the school provides for its training of professional divers.

Four important focal points for the improvement of professional diving in Spain were agreed. They are to:

- modify the Safety Rules for underwater activity, dating from October 1997
- update decompression tables
- establish standards and safety procedures in diving companies
- improve and enhance the training of divers.

ANEBP and the diving trade unions are already in talks with the Spanish central government to update diving legislation and expect the new rules and decompression tables to be produced and published in 2015. In turn, the underwater companies may establish quality standards similar to those of ISO and OSHAS to set standards and safety procedures. This would enable working practice, equipment, and divers to be evaluated and assessed continuously.

With regard to training, it is essential that both public and private centres are well equipped with up-to-date facilities and plant. Schools must conform to international diving standards and use these as their reference for quality training rather than the preferences of local professional vested interests.

The next meeting of the group will be held at the end of 2015, by which time it is hoped that the four focal points, set out above, will have been achieved or, at least, that visible progress has been made in that direction.



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### Welcome!

The Diver Certification Board of Canada certifies occupational divers, accredits schools which train occupational divers and presents the annual Canadian Underwater Conference and Exhibition. For more details on the conference please click here.

The Diver Certification Board of Canada (DCBC) is a federally incorporated not-for-profit body which was originally set up to replace the offshore diver certification regime of the National Energy Board and the offshore petroleum boards. DCBC is the only national body which certifies offshore and inshore occuptional (commercial) divers in Canada.



David Parkes, Executive Director of DCBC"

he DCBC offers certification to commercial divers and supervisors who can demonstrate that they have sufficient training and experience to enable them to meet the competency requirements of the appropriate section of the Canadian Standards Association (CSA) Competency Standard for Diving, Hyperbaric Chamber, and Remotely Operated Vehicle Operations (CSA Standard Z275.4).

Certificates issued by the DCBC are recognized by Australia (ADAS), France, Norway, South Africa, the United Kingdom (HSE) and the International Marine Contractors Association (IMCA).

The Diver Certification Board of Canada accredits commercial diver training organizations which train to the competency levels described in CSA Standard Z275.4. Accredited occupational diver training organizations can also assess the competency of experienced occupational divers who were not trained at an accredited school.

New Regulatory (Legislation) Module for Offshore Supervisors and Diving Safety Specialists was implemented on January 1, 2014. The module includes a description of the module, a copy of the Canada Oil and Gas Diving Regulations and an exam. In the example available HERE the exam has been removed. The exam may be written anywhere where there is a proctor acceptable to the DCBC.

The first Canadian Underwater Conference and Exhibition (CUCE) was held in Halifax, NS in October 2008. After holding the second conference in Halifax in 2009 the Diver Certification Board of Canada (DCBC) decided that the conference would be held in a different region of the country each year. Since then the conference has been held in Toronto, Vancouver and St. John's, Newfoundland. After a one-year hiatus in 2013 to allow the timing to be changed from the autumn to the spring, the 2014 conference was again held in Toronto. In March 2015 the conference will return to the West coast, to Victoria, BC. The city of Victoria is one of Canada's gems. Framed by ocean views and mountain vistas Victoria offers heritage charm, scenic backdrops and modern city amenities. Victoria boasts the mildest climate in Canada and offers limitless activities from afternoon tea at the Empress Hotel to outdoor adventures across Vancouver Island. The CUCE will be held at the renowned Fairmont Empress Hotel and adjoining Victoria Conference Centre.

The CUCE is attended by occupational divers, diving contractors, military, police & fire service divers, diving equipment manufacturers & suppliers, ROV manufacturers & service providers, diver/ROV training school personnel, marine, scientific & engineering students & personnel, diving regulators, ROV pilot/technicians, ROV contractors, Health & Safety professionals, Offshore Oil & Gas Operators, Port/Harbour Authorities, General & Marine Contractors & Local Authorities.

Every year the conference is supported by numerous sponsors and exhibitors; in 2014 all exhibitor booths were sold and in 2015 up to 30 exhibitors are expected. The opening reception on Sunday evening is held among the exhibits as are the daily breakfasts, luncheons and coffee breaks. A highlight of the conference is always the Monday-evening Awards Banquet and the presentation of the 2015 Lifetime Achievement Award to an individual who has made significant contributions to the Canadian diving industry.

Throughout the two days of technical presentations, twenty-two speakers from Canada, the USA, the UK, Norway and Australia will speak on topics relating to commercial diving and ROV/ AUV operations and advances, undoubtedly captivating all in attendance. There will also be presentations on the North East Pacific Time Underwater Networked Experiment (NEPTUNE) and the historic finding, in the Canadian Arctic, of HMS Erebus, one of Franklin's two lost ships.

The CUCE maintains a dynamic website which provides details of the 2015 conference as well as a photo gallery of previous events to give visitors a sense of what to expect when attending Canada's premier underwater conference. Visit at www. cuce.ca.



### CAVITCLEANER INNOVATIVE UNDERWATER CAVITATION CLEANING TECHNOLOGY DEVELOPED BY DIVERS, FOR DIVERS

BY MARCO MONTANARI, R&D TEST DIVER

t 's been a little over a year since I reported on these pages about my experiences in providing underwater cleaning treatments and about my difficulties in finding the right equipment to respond to customer requests: excellent performance, convenient cost, reduced time. To these needs I had to add the essential necessity for all divers: safety.

Years of practical experimentation in the water brought me closer to the pioneering world of cavitation, which appeared on the paper as the optimal response to these needs. However, even the best of the projects must follow the necessary researches and tests, for the conduct of which I have extensively collaborated with Cavitcleaner Limited. This led to the Cavitation 2.0: the Cavitcleaner machines.

Cavitcleaner represents the evolution of underwater cavitational cleaning. Cavitcleaner R&D divers team has been involved in giving an answer to all the divers who had different needs, by creating a specific tool for every different job.

Cavitcleaner has created a vast and evergrowing line of machines and accessories:

Evo2 gun is the evolution of the previous cavitational guns that ensures a performance increase. It is suitable on the tough encrustations (barnacles, mussels, etc) and ensures manageability and safety thanks to the absence of back-jet.

Stingray is the new underwater cavitational cleaning plate, studied to clean easily and fast big areas covered with medium fouling. This new accessory is the ideal ally for the treatment of big Yachts and vessels. Relax and let the Stingray do the job! Stingray creates its own suction, staying attached to the surface and making your work easy and light.



Extensions Set, a simple yet clever accessory composed by two modular extensions that can be used combined with Evo2 and Twin Jet guns. It is reccomended for the cleaning of spots that are not easily accessible, such as sea chests (so that it is no longer necessary to remove the grille and this makes you save hours of work and money).

Twin Jet, the new Cavitcleaner gun with double cavitational nozzle perfect to clean quickly areas covered with light to medium fouling. Created from a pure stainless steel block, its use is suggested for the cleaning of big surfaces, especially when combined with the Extensions set.

2D Double Diver's kit is a smart system composed by a full stainless steel switch and 2 cavitational Evo2 guns, designed to consent the use of the machine by two divers simultaneously that work in two different areas of the vessel or of the surface treated.

All these accessories are supported by reliable and efficient machines powered by diesel, gasoline or electric (single and three-phase) motors.

In order to reach these results, Cavitcleaner proceeded with the experimentation and testing (including several stress tests) making use of a technologic production that guarantees high standards, using advanced machinery.





The Cavitcleaner parts are produced with the use of innovativeand technologic machinaries.

### DIVER'S INSTITUTE OF TECHNOLOGY RELEASES A VIDEO SERIES, WHICH GIVES THE PUBLIC A LOOK AT WHAT A DIVE SCHOOL IS LIKE

The Diver's Institute of Technology released a series of videos today that give a window into what it's like to learn one of the world's most interesting professions: commercialdiving. Shot on location at the school on dryland and underwater, the eight videos offer viewers a chance to go below the surface of commercial diver training. Each video looks at an aspect of the profession such as underwater chain saw operation, salvage, or using a 10.000 degree torch to burn through sunken metal objects.

Commercial diving's popularity has grown as an alternative to professions which require a four year college degree but still pay a family wage. Demand for workers in this industry is steady and growing, especially in the offshore companies. Divers work in places like the Gulf of Mexico, working on oilrigs and pipelines, as well as doing big ship salvages all over the world, or ship maintenance at inland sites. There are several schools that offer training in Commercial Diving, and D.I.T. in Seatle is one of only two in the nation to offer an Unrestricted International Certification. Training takes seven months and involves in-depth skill development in many different fields within the industry. These videos give the public a glimpse at what it is like behind the scenes at one of the America's Top dive schools.

Footage features interviews with staff as well as action shots of students working and learning above and underwater .D.I.T. has been in Seattle since 1968, and is eager to give the public a look at what they do". These videos are a spectacular look at commercial diving, they will give you a chance to take a look into an interesting world of work not many have laid eyes on. They're awesome! "Says John Paul Johnston Executive Director at D.I.T.

The videos were produced byTripJennings,award winning documentary

film maker of BalanceMedia, a Portland,Or. based production company. "I was filming underwater, just inches from a torch that can cut through anything humans can make, not your average day at the office... unless you're a commercial diver."

Viewers can find the 8 short videos on Diver's Institute of Technology's You Tube

Channel htps://www.youtube.com/user/ DiversInstitute/videos

The Diver's Institute of Technology is a Commercial Diving and UnderwaterWelding training school in Seattle Washington. The school was established in1968, and is veteran owned and operated. Located at 1341N NorthlakeWay #150, the school attracts students from all over the country.

For information, call (800)3648377 or visit www.diversinstitute.edu.





## **IMCA SAFETY FLASH 19/14 DECEMBER 2014**

Members may find this extract from Safety Flash 19/14, published courtesy of IMCA, contains information which is will contribute to their Safety Procedures

### 1 Injuries due to Failure of Diver's Emergency Gas Cylinder

A member has reported an incident which a valve failed on a diver's emergency cylinder. The incident occurred on board adiving support vessel (DSV) whilst divers were preparing for a dive and were putting on their diving suits. A valve forcefully

parted from a high pressure (HP) compressed air cylinder filled to 180 bar. Five divers were injured by the parted valve as it flew off the cylinder.

Investigation is still ongoing but preliminary assessment has confirmed that the inner thread on the HP cylinder was not compatible with the outer thread of the pillar valve. The pillar valve outer thread was an M25x2 parallel thread and the inner thread of the HP cylinder was a 3/4"x14 TPI parallel thread. How the incompatible valve and HP gas cylinders came to be used together, is still being investigated.



Figure: inspection of the inner thread type at a HP gas cylinder



Figure: inspection of the outer thread type at a pillar valve

A pillar valve or cylinder valve is the point at which the cylinder connects to the diving regulator. The purpose of the pillar valve is to control gas flow to and from the cylinder. The neck of the cylinder is internally threaded to fit a cylinder valve.

Parallel threads are made to several standards and the most common standards are: M25x2 parallel thread, which is sealed by an O-ring, M18x1.5 parallel thread, which is sealed by an O-ring, 3/4"x14 BSP parallel thread, [5] which has a 55° Whitworth thread form, 3/4"x14 NGS (NPSM) parallel thread, sealed by an O-ring, 3/4"x16 UNF, sealed by an O-ring. These parallel threads are very similar but not compatible, as pitch, pitch diameter and thread forms are different.

The main lesson learnt is that the incompatibility of the valve thread and HP cylinder thread led to a serious incident. Members

involved in diving operations should perform an immediate check to confirm the compatibility of the HP gas cylinders and valve threads in use at their operations. They should also clearly mark and register both HP gas cylinders and valves separately, so that compatibility can be verified and assured.

The following actions were recommended:

Make documented check of all HP gas cylinder threads and pillar valve threads for compatibility;

Mark the cylinder thread size for all HP cylinders; mark the thread size for all pillar valves, applying a unique identification that will be permanently visible and traceable;

Develop and implement a working procedure and instructions that include the verification of the compatibility of both the pillar valves and HP gas cylinders; AB

Include the HP gas cylinder and pillar valve identification numbers in the six-monthly inspection certificates;

Include compliance with this working procedure in the IMCA DESIGN audits which validate the six-monthly internal and external inspections of HP gas cylinders.



### SPECIAL FEATURES:

Dimensions: L30-W 24-D 14 cm Weight: 5,5KG Power supply: Internal Battery & external socket for charger or extra battery.

Battery life: 10 hours in audio and about 4 hours in full load.

Supports two divers and one tender in full duplex or half duplex mode with two cameras and lights Cross-talk between the divers and tender

Automatic restoration of communications in full duplex in case of failure of the divers' microphones. Sound peak limiting system

### Power saving system

Use in closed mode using the remote control, with or without a headset with microphone and video glasses. Video recording on SD card in high quality D1 720x576 25 fps PAL - 720x480 30 fps NSTC

10/100 LAN Port and incorporated video web server that can be used with wireless and internet through self-powered mini router and H3G modem.

USB VIDEO SAMPLER port for connection with PC and MAC - auto-configurable.

Great connetivity with external devices as monitors, client Pc ,Mac, Android, wired and wi-fi local networks and internet, ecc.

Waterproof - can be used in closed mode or shoulder strap, also in bad weather conditions. Many others....

# Sub MINICAM SET







### FEATURES

CCD: 1/3 Sony Super Had EXview III 960H and digital video processor inside with automatic correction of images. Field of view: 120° in air Weight: 0,3 Kg Sensibility: 0,001Lux - Resolution: 700 Tvl Total pixels: 1020H x 596V 610000 Pixels Average depth of use: 600 Mt Absorotion: 120 Ma -Power supply: 12-15V Omnidirectional Brackets SPOTLIGHT:

LED: 6W 6000°Kelvin- Intensity:1288 Lum Amgle: 120° in air - Absorption: 350 Ma Power: 11-15 VDC - Low heat dissipation

### INDONESIAN DIVERS SURFACE MIXED GAS DIVING COURSE ORGANISED BY

INTERDIVE SERVICES LTD (UK)

2014 was nearly coming to an end when Interdive were contracted by the state oil company of Indonesia – PERTAMINA – to train there diving personnel in the use of Surface Mixed Gas diving techniques.

PERTAMINA have long been a client of Interdive who have previously trained many of their dive teams in specialised techniques including NDT, UW Cutting & Welding, Explosives and Salvage, Supervision, First Aid and Advanced Medical skills to name but a few.

The Surface Gas Diver training included classroom theory of USN Surface Gas Diving techniques, Safety procedures, Emergency & Contingency procedures as well as training in Mixed Gas theory, Gas Analysis, Safe handling and Standard/Emergency Decompression procedures.

Training also included practical diving using Helium/Oxygen mixtures with both in-water and Sur-D-O2 techniques using their own on-site twin lock DDC.



On completion of training all those involved, Management, Supervisors & Divers were very satisfied with the quality & standards of the course – as can be seen from the photo!

Further training courses are planned for 2015.

Interdive Services Ltd would just like to thank all our clients, past & present, for their confidence in us throughout 2014 and continued support. John Rabone, Managing Director Interdive Services Ltd (UK) & Interdive (Spain) SL For further information on these or many other training courses & services we offer, please see our website at http://www.interdive.co.uk or contact our UK office on +(0)1752-55 80 80.

www.chinadiveshow.com

# Dive China 2015

### Date: April 28-May 1

Venue: China · Guangzhou · Asia International Yacht City

Join the Luxury Feast! Join the Diving Party!



Contact: Liva Lee Tel: (+86-20) 2894 5347 Mobile: +86 13642740319

Fax: +86 20 8257 9220 E-mail: grand.de@grahw.com

# **YRGO-COMMERCIAL**

4 thrusters: One vertical; Two

horizontal; One lateral.

he school gained approval to teach IDSA Level 2 in May 2007, and since that DIVING SCHOOL time has worked continually to acquire the equipment and other facilities necessary **OF GOTHENBURG** to teach Level 3. This involved the construction of a Barge carrying a Wet Bell AWARDED IDSA construction of a Barge carrying a viet bein launch and recovery system, the Bell itself, LEVEL THREE plus the transfer of the practical diving facilities from Gothenburg to Svanesund some 70km North of Gothenburg, this new facility has a tarmac Quay in good condition about 80m long with a water depth of 6m at the wall to 30m some 50m out from the wall. It is backed by a very large warehouse which has ample space for Classrooms, Stores, Workshop, Chamber, and even parking.

> The creation of these facilities has taken seven years of extremely hard work and dedication by the General Manager Dan Hedberg and his staff, backed first by the Gothenburg Fire service and then by the Further Education Department of the Gothenburg City Education Department, which is now responsible for the School.As a result in September 2014 the School was audited successfully, and is now accepted to teach IDSA Level 3.



Before



After



camera. 7 Thrusters: Two vertical: Four horizontal: One lateral.

camera. 11 thrusters: Three vertical: Six horizontal; Two lateral.

**COMMERCIAL DIVING SERVICES:** Inland/Onshore diving Ship Husbandry

5 thrusters: Two vertical; Two

horizontal: One lateral.

he tool has been developed to be used as a hand tool for divers and also as a separate tool to be fitted to the arm of an ROV. Waveblade's patented technology delivers high frequency resonance through its oscillating head, sending multi-directional vibration through the blade into the unwanted marine growth.

The wave power has been shown to remove organic growth more thoroughly in a fraction of the time without damaging surfaces compared to current methods such as scrapers and high pressure water jetting. Advice, support and expertise regarding the operational aspect of the trial was provided by the marine operations, ROV instructors, dive team and support staff from

The Underwater Centre, who participated in the trail. James Hall, Chairman of Waveblade, said that the first trial at The Underwater Centre had gone exceptionally well. "The Waveblade is very different from anything else on the market.

During the trial, it worked brilliantly for the divers and ROV pilots, and the results were very much what we had hoped for," he said. "The Underwater Centre was the ideal location for such a trial; we were able to sit in the control centre and interact with the team which was trying it out. "There were a number of challenges during the trial; however, the team at the Centre was able to help us overcome these in a very short time and the divers got to grips with the Waveblade pretty much straight away. To have this type of service was invaluable. "We are currently talking to a number of oil and gas companies about the product, and we are looking to develop the small tool for larger, heavier commercial use.

The feedback we have had so far has been very positive."Steve Ham, General Manager of The Underwater Centre, said that trialling new subsea equipment is an important part of what the Centre does. "It's always very gratifying to be able to assist companies such as Waveblade, which are at the forefront of technology development for the oil and gas sector," he said. "Key industry figures have spoken recently about the importance of developing new technologies more quickly, but in a cost effective way; the facilities we have on offer at the Centre help achieve this by providing an alternative to having to test offshore."

The Underwater Centre is a purpose-built subsea training and trials facility and is based on the shore of a seawater lake, Loch Linnhe, well sheltered by the surrounding mountains. The Centre's unique location allows it to provide year-round training and testing in an open-water environment, while still being centrally located in the largest town in the Scottish Highlands. With access to depths of over 100 metres,

The Underwater Centre is the ideal location to perform realistic and industry-specific saturation and air diver and ROV pilot technician training, as well as providing a convenient location for subsea equipment trials.



The Underwater Centre, which also has a school in Tasmania, comprises an extensive pier complex including four dive stations, classrooms, workshops and decompression chambers. With accommodation and additional classrooms based at the landward end of the pier, it is set up to provide its students with the skills and experience to succeed in their new careers, and continue providing the subsea industry with the workforce that it needs.

### INNOVATIVE NEW SUBSEA TOOL TRIALS AT THE UNDERWATER CENTRE FORT WILLIAM

A simple yet innovative new tool is set to make waves in the oil and gas industry after successfully undergoing a commercial trial at awardwinning subsea training and trials facility, The Underwater Centre. Commercial divers and **ROV** pilot technicians recently trialled the 'Waveblade' while working in Loch Linnhe, simulating a realistic operational environment. Waveblade, a lightweight, hand-held submersible power tool, is designed to remove marine growth through vibration, without harming underlying surfaces.



### **ABOUT IDSA**

The Association was formed in 1982 as a result <u>of a meeting between</u> Schools attending the American Diving Contractors Conference (Now 'Underwater Intervention') in New Orleans. he aims of the Association were then, and are now;-

• To implement common International Standards of Diver Training

• To provide a means of effective communication between schools.

• To improve the quality of commercial diving education

• To work towards improved standards of safety, emergency drills and procedures.

• To provide a common and collective voice to government industrial agencies on any matter affecting members.

• To co-operate on matters which may improve placement opportunities for graduates from member schools.

• To promote any activity, idea or subject which furthers the international operations of the Association.

The Association is concerned with all divers - Offshore, Inshore and Inland - as well as non diving qualifications e.g. Supervisor, DMT and LST. The Association has established International Diver Training Standards based on the consensus opinion of its many members, they are available in



(Second Edition - Issue 1)

ONLY FULL MEMBERS: DIVER TRAINING are authorised to award IDSA Diver Qualifications, they do so having successfulluy completed an on-site audit to IDSA Standards.

a separate publication. The Standards provide both a yardstick for those responsible for either administering existing National Standards or creating new ones, and a guide for Clients, Diving Contractors and Divers themselves. It is considered that the introduction of these Internationally agreed diver training standard will have the effect of ;-

• Equating Standards Internationally.

• Providing Guidance to Organisations setting Standards for the first time.

Improving Safety.

• Providing Contractors with a direct input to the Diver Training Syllabus.

• Enabling Contractors to bid across National Borders on a more even playing field.

• Improving Diver quality.

•Providing Divers with greater Job Opportunities.

Some governments have and will, set their own National Diver Training Standards. The IDSA programme provides a means of equating them by maintaining a Table of Equivalence - see the Publications section of the Association's Website.



# **THE INTERNATIONAL DIVING SCHOOLS ASSOCIATION (IDSA) LIST OF MEMBERS**

### FULL MEMBERS: DIVER TRAINING

Centre de Formations pour Petites et Movennes Enterprises (CFPME) Royal Danish Navy Diving School Luksia Sukellusala Ecole Nationale des Scaphandriers (ENS) Irish Navy Diving School Centro Studi CEDIFOP Centre Méditerranéen de Plongée Professionnelle (CMPP) Netherlands Diving Centre (NDC) Norwegian Commercial Diving School, Oslo (NYD) Oceanos Escuela de Buceo Professional SL Swedish Armed Forces Diving and Naval Medicine Centre Yrgo-Commercial Diving School of Gothenburg The Ocean Corporation

### FULL MEMBERS: SPECIALIST TRAINING

**KB** Associates Interdive Services Ltd. The National Hyperbaric Centre ASSOCIATE MEMBERS Aqua Prom Ltd University of Southern Denmark Arab Academy for Science, Technology and Maritime Transport (AASTMT) Egyptian International Diving School(EIDS) Middle East for Commercial Diving National Institute for Commercial Diving (NCID) Universal Marine Institute (UMI) **GT** Corporation SE Faroe Dive Centre Activities Plongee de Trebeurden Institut National de Plongee Professionnelle (INPP) **Diver Ltd** YAK Academy Dolphin Dive Academy Israeli Professional Diving Academy **IDEA** Contracting TechnoSub Regional Centre For Underwater Demolition (RCUD) Academy Marocaine des Science et Technology Maritimes (ASMTM)

Belgium Denmark Finland France Ireland Italy

Morocco Netherlands

Norway

Spain

Sweden

Sweden U.S.A.

Singapore UK UK

Bulgaria Denmark Egypt

Egypt Egypt

Egypt Egypt Estonia Faroe Islands France

France Hungary India India Israel Kuwait Mexico

Montenegro

Morocco

0

Mieka Dive Training Institute Ltd Nigeria Forespro Spain MZ Plongee Switzerland PROfessional Diving Services Switzerland Caribbean Diving & Marine Ltd Trinidad **Dolphin Diving Services** UAE London Diving Chamber UK Divers Institute of Technology (DIT) USA International Diving Institute USA Santa Barbara City College USA **RECIPROCAL MEMBERS Dutch Association of Commercial Divers** Netherlands Alliance of Russian Diving Schools Russia Association of Diving Contractors (ADC UK) UK Association of Commercial **Diving Educators (ACDE)** USA Association of Diving Contractors International (ADCI) USA **INDUSTRIAL MEMBERS** Alpe SUB Srl Italy Drafinsub S.R.L. Italy InOut Security Service Italy Palumbarus Diving Works Italy Cavit Cleaner Limited Malta IHC Hytech BV Netherlands Pommec BV T.D.E. Netherlands Norwegian Association of Underwater Entrepreneurs (NBU) Norway Svensk Sjoentreprenad Sweden C-Tecnics UK **AFFILIATE MEMBERS** Agua Dream SCUBA Academy Cyprus NAVFCO Military Diving School France Arena Sub Srl Italy **Eprons Ltd** Latvia Nautiek Netherlands Bergen University College Norway **BPN** Explorer Poland Aqua Mont Service Serbia **Composite-Beat Engel** Switzerland Searchwise Ltd U.K. Speciality Welds U.K. University of Plymouth U.K. **Underwater Centre** U.K. Minnesota Commercial Diver **Training Centre** 

USA





For almost three decades IHC Hytech is specialised in designing and manufacturing high-end commercial and military diving equipment. Every product that IHC Hytech makes or sells is supported by an extensive quality control and after-sales service. IHC Hytech is formed by a group of people, who have a wealth of experience in every area of commercial diving and are presenting a new perspective on many aspects in this field.



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