DIVENWS

10 2023

IDSA ANNUAL MEETING MAY 2023

HISTORICAL DIVING: MICHAEL MOHRHARDT

FROG - COMMERCIAL DIVERS TRAINING CENTER

THE BADGE: HOSSAM ELMASRY BRIAN MURPHY

THE PROFESSIONAL DIVER EXPLAINS

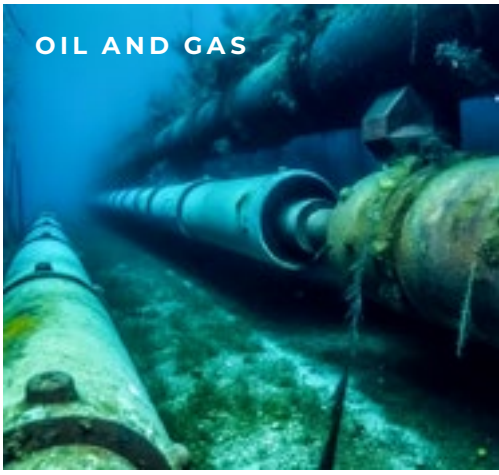
INTERNATIONAL DIVING SCHOOLS ASSOCIATION

iDSA

CYGNUS 40TH ANNIVERSARY

Clever new features for professional divers

NEW



Cygnus Underwater

MADE IN BRITAIN

The new Cygnus Underwater Thickness Gauge is designed for professional divers to achieve quick and accurate metal thickness measurements in corrosion inspections, classification surveys and asset integrity management.

- 3 measuring modes for levels of corrosion, various materials and through-coat measurements
- Depth sensor - live depth display providing the diver with an accurate depth indicator
- Live A-Scans aid visual measurement verification
- Extremely Simple-to-Use with 3 function keys and up to 4 screens
- Comprehensive data-logging: linear and grid
- Available in STD, PLUS and PRO variants with upgradeable options, e.g. Topside Repeating and Data Logging

PRE-ORDER SAVE £100
DISCOUNT CODE IDSA23

cygnus-instruments.com • sales@cygnus-instruments.com

COLOPHON

International Diving Schools Association (IDSA)
Ambachtsweg 27
2641 KS Pijnacker-Nootdorp,
The Netherlands

Board
Chairman: Leo Lagarde
Gouwakker 8
5321 WG Hedel, The Netherlands

Hon Secretary:
Lars William Wroldsen
Norsk Yrkesdykkerskole, P B 23
1464 Fagerstrand, Norway

Member / Editor IDSA News:
Robbert de Bie
MacArtney Benelux B.V.
Buitendijk 31
3143 LV Maassluis, The Netherlands

Member: Dr. Hossam Elmasry
Middle East for Commercial
Diving MECD
3, Iskandar Ibrahim St, Miami
Alexandria, Egypt

Secretariat NL: Carin Bot
Ambachtsweg 27
2641 KS Pijnacker, The Netherlands
T +31 (0)15251 2029

Chamber of Commerce Reg No:
27199463

The Alan Bax Award honorable mention:
Alan Bax
Dag Wroldsen
Leo Lagarde

CONTENTS

REGULAR SECTIONS:

05 FROM THE CHAIRMAN
10 THE BADGE
HOSSAM ELMASRY
32 BRIAN MURPHY
12 FROM THE EDITOR
15 MEDICAL ISSUE FOR SAFE DIVING
FOREIGN BODY AIRWAY OBSTRUCTION
25 HISTORICAL DIVING:
MICHAEL MOHRHARDT
34 A PROFESSIONAL DIVER EXPLAINS
GILLES BRULE
39 THOMAS SCHMIDT
40 ANDREI TARASOV
42 WILFRIED MIOCHE
48 ÁLVARO PINZÓN
54 JOEY PRIANON
56 IDSA MEMBERS LIST

EXCLUSIVE ARTICLES:

06 IDSA ANNUAL MEETING MAY 2023
17 TRITEX: UNDER WATER THICKNESS MEASUREMENT
20 FROG COMMERCIAL DIVERS TRAINING CENTER
37 WET BELL LAUNCH AND RECOVERY SYSTEM
44 KBA TRAINING: ENSURING SHIP HUSBANDRY SAFETY
51 MOSS DEPTH-SYSTEM

Please contact your authorized KMDSI dealer Kirby Morgan | 1430 Jason Way Santa Maria, California 93455 Phone: 805-928-7772
© MMXXII Kirby Morgan Dive Systems, Inc. All rights reserved. www.kirbymorgan.com ® Registered Design Trademark, U.S. Patent Office, EU and other foreign Registrations. U.S. and foreign patents have been issued for these products.

FROM THE CHAIRMAN

LEO LAGARDE

Despite the fact that the attendance of the members of the last Annual Meeting in Bergen was disappointing, the meeting and the program were experienced as particularly valuable.

Dear members do not forget that the IDSA Annual Meeting is an important tool of our mission. Seeing and speaking other members will give you tools to improve your school and to enthusiasm your instruction teams. Our mission is and stays to improve the diving quality and diving safety worldwide. To communicate, network and exchange knowledge is essential for our aim. Use this tool. Use this worldwide built network and share built knowledge about diving safety and quality. When you are receptive you and your staff will show the importance of good education and proof that a certain basic education is required to perform the profession safely.
The power is that worldwide IDSA members offers the same training conform IDSA standards & procedures in their own language in their own region. Which improve the safety on dive site as well. Our influence, with your support, goes beyond training.

We are working on the diver's handbook and supervisor course, and we continue our work in order to approve and extend our standards and training. So, we need the help from our Full Members to read the draft so please drop me an e-mail if you would like to improve our manuals.

We would need all the help and support from all our members in order we can spread out the word of IDSA more. We also need your support with articles for our IDSA news, so let your student, instructor, or the school introduces themselves in order to have more the story behind the training and the IDSA.

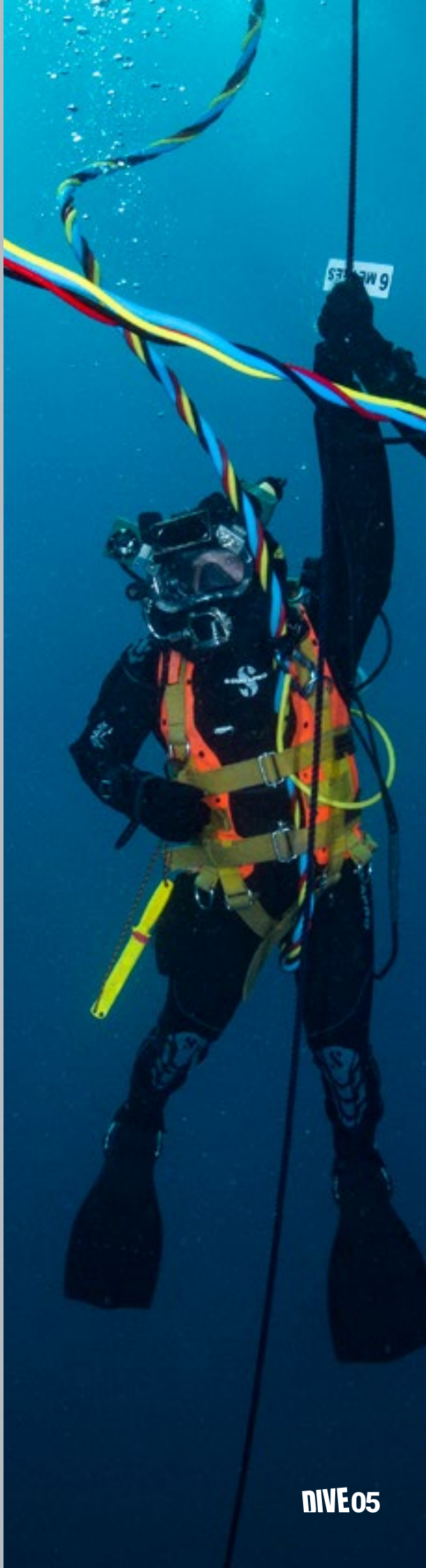
We have finished all IDSA audits for 2023 and we also would welcome our new Full Member, OSNZ Frog from Poland.

When you need the support of the board or have questions and ideas that can help the IDSA please let us know so we can work on this together.

The board will plan the data and location of the next IDSA Annual Meeting and we do hope to see you all, so we can learn from each other's stories during the meeting.

We do hope that you all stay safe and hope you have a lot of new students.

Your Chairman,
Leo Lagarde



WESTERN NORWAY UNIVERSITY OF APPLIED SCIENCES (HVL), DIVER EDUCATION

HOST THE IDSA ANNUAL MEETING 2023 IN BERGEN

This year's annual meeting was held at the Scandic Bergen City Hotel and hosted by HVL, Diver Education 8-11th May.
Bergen is the second largest city in Norway with 7 mountains surrounding it. That is perhaps also the reason why any rain shower never passes by before all the moisture is dropped. The effect on the air is purifying so a sunny day after the rain is a great experience when it happens. Our group photo in front of the diving bell in Skålevik this year is evidencing one of the rain showers ongoing.

THE HOTEL

A total of 14 delegates attended from schools in Norway, Sweden, Ireland and Panama.

The Diver Education owned by the Western Norway University of Applied Sciences and a full IDSA member train divers in an annual program to a vocational level with diploma. Intake is in August with graduation next year in June. After some years in the business many of our students come back to sit the dive leader course. In addition, we train rescue divers and their dive leaders all over Norway. Also, we have a class per year from the bachelor study taking an elective Level 1 course in diving.

Being the host of the IDSA annual meeting 2023 we were planning to demonstrate the complete diving campus. It has been a goal for a long time for the Diver Education to reach all water depths from the shore with vessel backup only. However, delays in delivery limited that we could only show pictures from our latest innovation, a 12 by 24 meters concrete barge. The barge with two dive posts onboard will be able to reach the 50-meter mark while permanently moored close to the shoreline. The Diver Education promise a good report in the magazine when all is set. Anyway, we believe that the delegates were happy to see our school in present situation with students in action.

IDSA has been noticed for their long-term work to improve quality and safety in professional diving. The recent IMCA information note 1384 from March 2023 stating the IDSA Training Standard (Level 3) as the recommended offshore surface supplied diver training standard is proof of this recognition.

The chairman Leo Lagarde opened the meeting with welcome to the delegates and their colleges attending the annual meeting and a thank you to the host for making it happen.

In March this year we had the sad message that IDSA's former secretary Jill Williams passed away and to honour her we had a one-minute silence in the opening of the meeting.

GROUP PICTURE IN SKALEVIK

PICTURE OF THE NEW CONCRETE BARGE

The local welcome was held by Jens Kristian Fosse, Dean of Faculty of Engineering and Sciences at the Western Norway University of Applied Sciences.

Jens Kristian gave a good overview of the Western Norway University of Applied Sciences, HVL with the 5 campuses and their activities. HVL is one of the largest education institutions in Norway with nearly 17.000 students and staff nearly 2000. HVL has 49 Bachelor programs, 32 Master programs and 5 Ph.D. programs.

Jens Kristin sent the best wishes for a good annual meeting in Bergen.

In the introduction of delegates, we had a short presentation of their activities the last year either verbal or with a PP presentation. Delegate from the Norwegian Association of Underwater Entrepreneurs, NBU gave a good status report of the underwater work situation in Norway, the relationship among the companies in their association and the common work practice and standard.

Dr. Hossam Elmasy was signed up for the meeting but was unsuccessful to obtain Visa to Schengen despite efforts from the host in Bergen to appeal the initial decision.

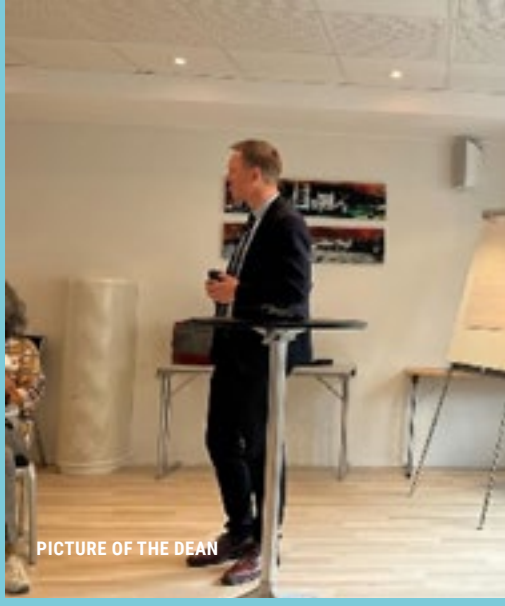
A regular post in the agenda is acceptance of last year's minutes of Annual Meeting, which was in Bantry, BIM IRELAND 2022.

No comment from the delegates beside it was a well-directed meeting with engaging content and a good atmosphere in Bantry.

Lars William from the board gave a god reasoning and recommendation for continuation of the board due to several unfinished tasks on their hands. No bench proposals from the delegates for other candidates were announced.

PRESENTATION OF WESTERN NORWAY UNIVERSITY OF APPLIED SCIENCES, DIVER EDUCATION BY

PICTURE OF GEIR GUNDERSEN


PICTURE OF THE DEAN

FINN HANSEN, HEAD OF THE DEPARTMENT.

As a host of the annual meeting 2023 Finn Hansen presented the Diver Education, challenges and achievements so far in Skålevik where the school is located.

PROJECT MANAGER FOR THE ONE YEAR VOCATIONAL CLASS, STIAN MJELDE

As the current project manager for the one-year vocational education Stian presented the study program and a short promotion video produced by Tarjei.
Picture of Stian Mjelde

PROJECT MANAGER FOR THE RESCUE DIVER TRAINING, TARJEI HOLSEN

Tarjei is project manager for the Rescue-diver and RQ-dive leaders' courses which are held all over Norway where this service is included in the local fire brigade. His contribution to the training was special techniques in multi-simultaneal video presenta-

PICTURE OF FINN HANSEN

tion of the exercises. His ability to edit the take from 5 different cameras in 30 minutes time give value to the debrief and assessment of the students. He highlighted the professional feedback where only facts should apply and no making fun of the performance.

VISIT TO THE DIVER EDUCATION

With a 30 minutes bus travel from the hotel to Skålevik where the diving school in Bergen have their facilities the delegates arrived in slight rain also to be seen on the group photo. Finn and Stian guided each one group on a tour both indoor and outdoor to present the staff, dive stations, technical equipment and classrooms. To some delegates the tour was so interesting that the scheduled gathering in the conference room with refreshments was delayed with allowance from the bus driver for the return.

On the second day of the annual meeting chairman Leo gave a status report of the current situation and the ongoing project with a study book and showed some pages from it. He estimates a first edition by the end of this year for consultation among the members. A supervisor curriculum is also under development.

Presentation by Geir Gundersen, Commander in the Norwegian Royal Navy of the loss of HNoMS Helge Ingstad in Hjeltefjorden north of Bergen 8th November 2018. Geir had a presentation with combination of Powerpoints slides and live images telling the story how the modern frigate after collision with the oil tanker Sola TS capsized and sank close to the Sture terminal jetty. No lives were lost and only one crew member had small injury after being rescued by a towing vessel and brought to safety. Geir was in charge himself of the diving operation on the sunken vessel with several civilian companies and the special military diving division involved to recover armaments and delicate equipment from the wreck. We also saw the explosives being fired off on the shore at a safe distance from the site.

NEWS FROM THE TECHNICAL COMMITTEE

Robbert de Bie gave a report about the situation in the Technical Committee regarding changes in the Diving Standard and the current version from October 2022. Also, he talked about the promotional activities ongoing.

WORKSHOP

Lars W. Wroldsen administered a workshop in the following subjects:

A) What should be the board's main focus areas or priorities the next few years?
B) How can we make the annual meeting more attractive for members to attend?
C) What should IDSA's slogan be?

Two groups we established, and they gave good feedback to the board regarding the queries.

IDSA ANNUAL MEETING DINNER

The IDSA annual meeting dinner was held at the Scandic Bergen City Hotel with common starters, optional fish or meat as the main course followed by recommended wines and dessert. The meal was rounded up with café avec.

VISIT TO NUI

Last day of the meeting offered a visit to Norwegian Underwater Intervention, NUI to see their facilities in Gravdal outside Bergen city. The IDSA delegates were well taken care of by the managing director Rolf Røssland who also guided us on a tour at the facility.

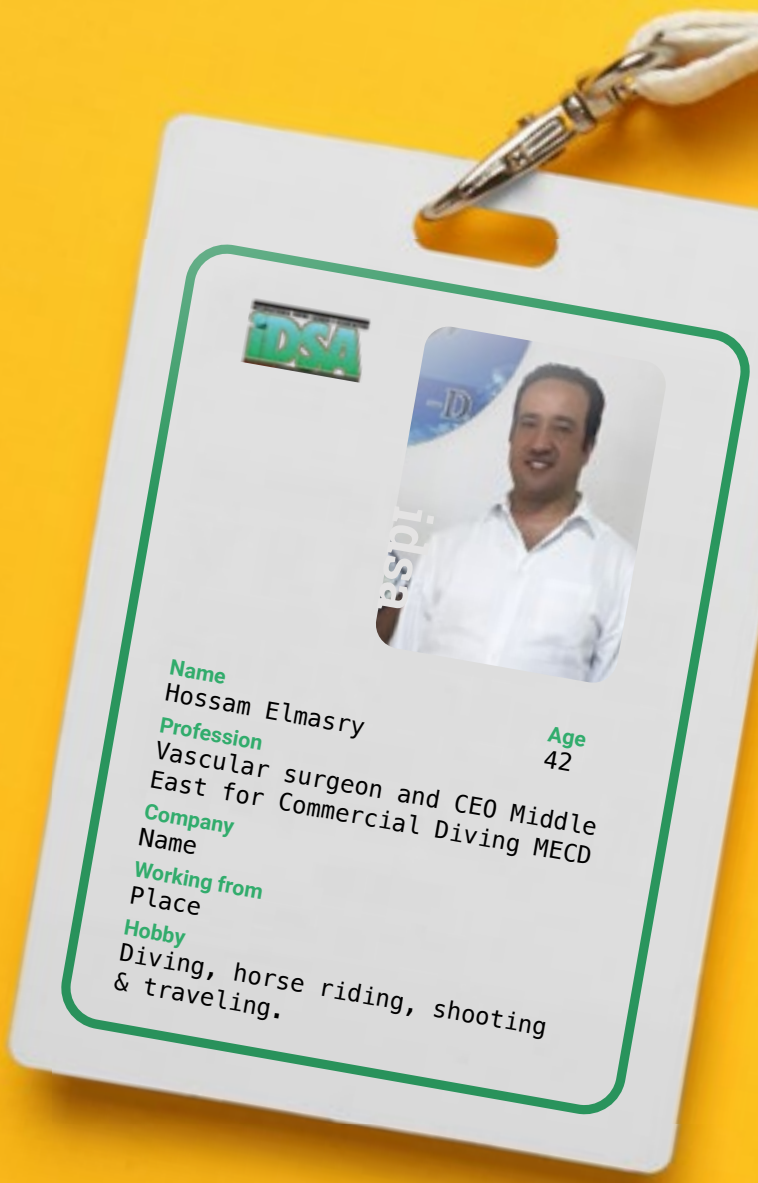
After a good lunch at the hotel it was time to say goodbye and safe journey home for the delegates.

DIVE POST 14

PICTURE FROM NUI CHAMBER

THE BADGE

How did you get involved with diving? What are your ambitions? What annoys you the most? In The Badge we talk to people from the Professional diving world and find out who they really are and what drives them. In this month's issue we meet Hossam Elmasry who is Vascular surgeon and CEO Middle East for Commercial Diving MECD.



01

How did you get involved with the Professional diving world?

I first got into diving as a hobby. My passion to diving grew by years to come during which I was introduced to commercial diving and made friends in the field. After study and observation, I decided to start my own commercial diving school in 2014. And here I am in 2023 very proud with what my team and I have achieved.

02

Who did you learn the most from?

I consider life as the best mentor. One could learn through trial and error and through observing and studying as well. Step by step in life you gain experience, knowledge and vision.

What are your drives and ambitions? 03

What I have been working on for years is enhancing and developing diving standards in the Middle East and Arab region. My main drive and focus is the well being and safety of divers in the industry. Most of my efforts are to help them learn and develop through our training programs. I aim to provide them with all courses that will add to their knowledge and experience and enable them to dive safely.

What annoys you the most? 04

People at work who don't do their job well. Also companies that don't follow the standards and look for the easy and low cost alternative to have t he job done no matter of the consequences.

What is your life motto? 05

Team work is essential in order to succeed and reach your ambition.

I CONSIDER LIFE AS THE BEST MENTOR

FROM THE EDITOR

ROBBERT DE BIE

In this sixth edition of the new version of IDSA news, we get more and more to our goal to having this magazine for the members by the members.

But we still need you help more and more.

We see more stories but please write about your school, challenges you are facing. When you have had an audit from IDSA or another organisation please write an article for IDSA news on this.
For all of us this magazine is not only to promote our organization but also **YOUR** school. So also, for your instructors please write your article on your important job. Being the editor of IDSA news is a very challenging and satisfying responsibility. After all, our readers rely on IDSA news to fulfil their needs regarding topics which they bring to the table.

We have some standard items, topics in our magazine, such as;

Medical issues
The Badge
Historical Diving
The Student if we get YOUR articles!
The Instructor if we get YOUR articles!

So please ask your instructors and students (or ex-students) to write an Article for IDSA news.
Finely we trust that you can identify yourselves in these topics and that this will encourage you to take part in the next edition of the magazine, therefore we ask you to send us articles regarding your schools, education and from the divers who followed the trainings.

WE are looking for **HELP** to make each time a new IDSA news this take a lot of time and effort with finding advertisements and stories, so please sent me an e-mail if you want to be a co-editor of IDSA news!
So, if you have interest to help out with IDSA news, please sent an e-mail to info@idsaworldwide.org.

Enjoy reading the IDSA News and Safe Diving Training.

YOUR AD IN IDSA NEWS!

IDSA news is looking for advertisers, so if you want to advertise, please let us know, the costs for advertising are:

The Magazine is A4 format printed in 4 colors offset litho.

Whole page bleed area: 285 mm x 198 mm	€ 325
Half page: 146 mm x 198 mm	€ 225
Quarter page: 146 mm x 99 mm	€ 175

All digital photographs and artwork to be supplied at 300dpi.

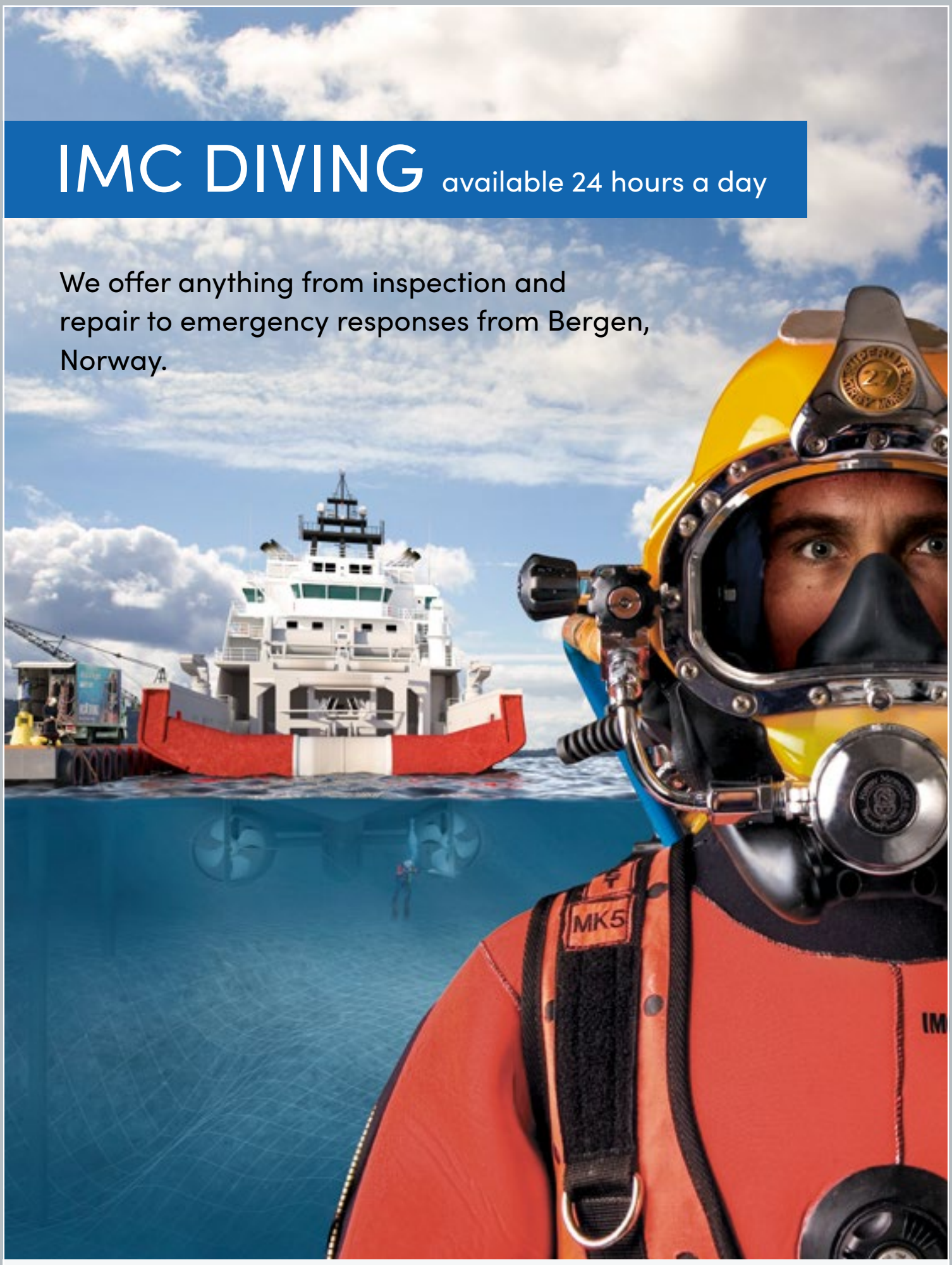
DISCOUNTS

1. A discount of 25% is available to all IDSA Members.
2. A discount of 10% is available to all non IDSA Members who place more than one advertisement paid for in advance.

If you have any interest, please sent your e-mail to **post@idsaworldwide.org** or **robbertdebie@gmail.com**

IMC DIVING available 24 hours a day

We offer anything from inspection and repair to emergency responses from Bergen, Norway.

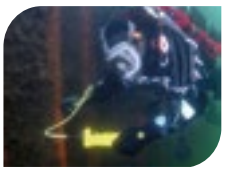


IMC Diving AS
Phone: (+47) 55 36 34 34, **Email:** firmapost@imc-diving.no
Web: www.imc-diving.no

IMC DIVING

Tritex Multiple Echo Underwater Thickness Gauge

Excellent performance with <u>free</u> annual calibration for the life of the gauge.



- Ignore coatings up to 20 mm thick, only the metal thickness is measured.
- One probe for all applications, including extremely corroded metal.
- No probe zeroing.
- Automatic Measurement Verification System (AMVS).
- Intelligent Probe Recognition (IPR).
- Integral battery with 55 hour runtime.
- Simple to use.
- Easy to connect a Topside Repeater with either a surface display unit or datalogging option.
- Large bright 10 mm display.
- Multiple echo and single crystal probes in accordance with class society regulations.

tritex ndt

simple . accurate . robust

ISO 9001:2008 REGISTERED FIRM

Made in the UK

www.tritexndt.com

Rated EXCELLENT on Trustpilot

Tritex NDT Ltd
t: +44 (0) 1305 257160
e: sales@tritexndt.com

MEDICAL ISSUE FOR SAFE DIVING

By Dr Hossam A. El-Masry *- CEO Middle East for Commercial Diving MECD*

FOREIGN BODY AIRWAY OBSTRUCTION

Oxygen is essential for life and required for cellular function. Hypoxia is oxygen deficiency while Anoxia is the absence of oxygen. Our respiratory system provides the interface between the atmosphere and the bloodstream for intake of oxygen & removal of carbon dioxide. Blocked airway due cause by foreign bodies will result in tissue hypoxia & accumulation of Carbon dioxide, 4-6 minutes without oxygen, organs (especially the brain cells) may start dying.

Signs & Symptoms:

- Inability to breath
- Inability to speak.
- Hands on neck
- Irritability
- Sweating
- Sometimes blue discolouration of the skin.
- Loss of conscious

Management & Treatment:

- Assure the casuality
- Finger sweep should only be used when obstruction can be seen.
- Magill Forceps **Only used for clearly seen airway obstruction.**
- Ask him to look forward & Extend his neck to open the airway
- Encourage the casuality to cough which may help in dislodging the foreign body
- Then start in-between the shoulder

IF THE PERSON LOST HIS CONSCIOUS, YOU MUST PERFORM TRACHEO STOMY

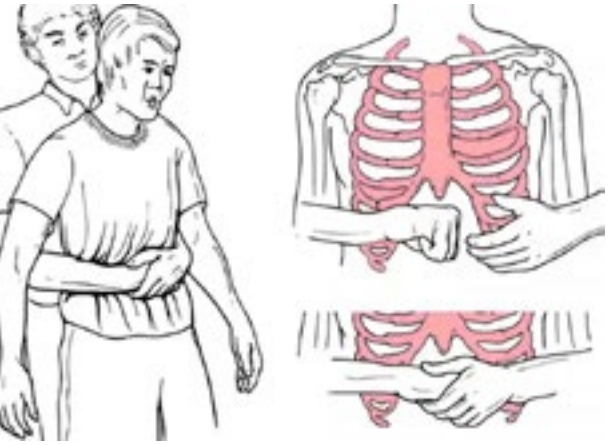
blades give 5 back thrusts, stand to the side and slightly behind the victim, having bend forward at the waist to ensure object is dispelled if dislodged then support the victim with one hand under his chest. With the heel of the other hand deliver up to five sharp back blows between the shoulder blades: any blow may dislodge the obstruction.

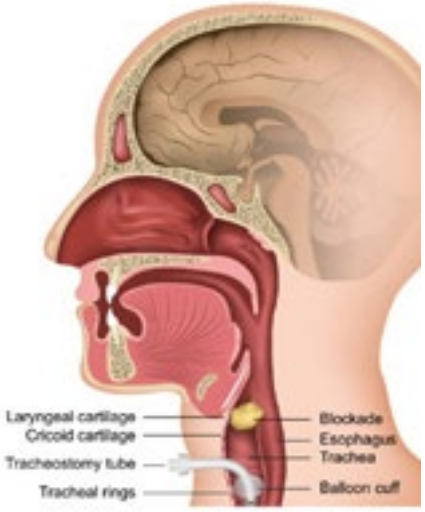
- If the back blows are not successful and the victim is still conscious move on to abdominal thrusts. Stand behind the victim and wrap your arms around the victim's waist then feel for the victim's navel, and place two fingers of one hand above the navel, after this place the fist from your other hand above the two fingers with your thumb facing in then grasp the fist with the other hand. Perform up to five quick inward and upward thrusts using your arms. With each thrust you are attempting to dislodge the object.

- If the object is not expelled and the person is still conscious, perform five back blows and continue to alternate methods until the object is expelled or the person loses consciousness.

- If the person lost his conscious, you must perform tracheostomy (Do not perform CPR as his air way is obstructed). Using sharp knife or scalpal (if found), Feel the trachea and hyoid bone and below them open a vertical incision. Open the membrane between the tracheal rings& nsert a clean tube & be sure it is fixed in place . Some medical kits especially DMAC 15 contains special tubes & kits to be inserted.

- Suctioning can aid in clearing the airway when vomiting occurs in adults (use manual vacuum pump) Limit suctioning to no more than 15 seconds or hypoxia may occur.





LEADING THE WAY IN UNDER WATER THICKNESS MEASURE MENTS

TRITEX NDT

Tritex NDT have for many years been manufacturing ultrasonic thickness gauges and are now established as one of the leading companies offering multiple echo gauges. Multiple echo technology means that thickness measurements can be taken through 6mm thick coatings, only the metal substrate is measured. This technology is therefore ideal for use with an underwater thickness gauge to save both time and money.

The popular Multigauge 3000 Diver hand held gauge is a simple, accurate and robust gauge, designed for the harsh conditions that exist in offshore and underwater applications. The gauge is equipped with Intelligent Probe Recognition (IPR), which automatically adjusts settings in the gauge for enhanced performance, and Automatic Measurement Verification System (AMVS) to ensure only true back wall measurements are displayed, even on the most heavily corroded metals, negating the need for A-scan.

The excellent performance of the Multigauge 3000 means there is no need to for additional measuring modes, such as single echo and echo – echo when measuring on corroded metal. Jon Sharland, Tritex NDT's Sales Director, says," The performance of the Multigauge 3000 Diver gauge is outstanding. Not just through coatings, but on bare and corroded metal as well. All Tritex gauges are simple, accurate and robust; a motto that we stand by and one that is confirmed by many satisfied customers. Tritex NDT is rated as excellent on Trustpilot."

All ultrasonic thickness gauges are calibrated to the velocity of sound of the metal being measured. Any coatings or water layers, between the probe and metal, will affect the accuracy of measurement. However, using multiple echo underwater has a particular advantage because it ignores the water layer, just like a coating, and hence avoiding inaccuracies. It is for this reason that single echo should not be used underwater.

The Multigauge 3000 Diver Thickness Gauge has a large bright red 10mm LED display, ensuring measurements can be seen by the diver, even in poor visibility. It is hand held for ease of use and requires no probe zeroing. Single crystal probes have a linear accuracy throughout their measuring range and they are not affected by curvature of the part being measured, such as pipelines.

Class societies specify that companies involved in the inspection of ships should use multiple echo gauges with single crystal probes, so the Tritex Multigauge 3000 conforms to this perfectly.

The gauge has an integral battery with 55 hours runtime on a single 2-hour fast charge and it can be easily upgraded to a topside repeater by simply exchanging the end cap. It is supplied already assembled and ready to use in a Peli case with all the necessary spare parts. Tritex NDT have a complete range of thickness gauging solutions, from surface gauges with datalogging to underwater diver handheld gauges, from ROV mountable to high level drone thickness gauges. Tritex NDT are also leading the way in high level thickness gauge inspections. They are the only company in the world that manufacturers a drone dedicated thickness gauge. All gauges are designed and manufactured in the United Kingdom and supplied as complete kits, ready to use, with a 3-year warranty and free annual calibration for the life of the gauge.

For further information please contact Mr. Jon Sharland using the contact details below, or go to www.tritexndt.com.

Tritex NDT Ltd | Unit 10 | Mellstock Business Park | Higher Bockhampton | Dorchester | Dorset | DT2 8QJ | +44 (0) 1305 257160 | sales@tritexndt.com

Apox

Apox B.V is a leading expert in providing medical solutions tailored to the needs of divers and diving companies.
Based in the Netherlands, we proudly export our products to countries worldwide.
All our items have been certified by a specialized medical doctor with expertise in diving medicine, holding a B qualification. At Apox, we boast a dedicated pharmacy department, ensuring that all necessary medicines are readily available to meet your specific requirements.
Moreover, we take pride in our GMP (Good Manufacturing Practice) certification, which guarantees the highest standards in filling medical oxygen cylinders. This accreditation further reinforces our commitment to delivering safe and reliable products to our valued customers.

Apox B.V.
Daggeldersweg 10, 3449 JD Woerden,
The Netherlands

Contact
+31 (0) 348 447 869
Info@apox.nl
www.apox.nl

FROG COMMERCIAL DIVERS TRAINING CENTER

FROG is top1 underwater works in Poland today. Our 15-years' experience of underwater and hydrotechnical works allowed to achieve the highest quality of services. We are focused on providing theoretical and practical trainings that guarantee highly-qualified commercial divers. Constant development – investment both in professional divers and modern equipment – with health and safety rules and best quality are the lifeblood of our business.

FROG IS TOP 1 UNDERWATER WORKS IN POLAND TODAY

Our Center provides underwater training acc. to polish law and international IDSA standards. We've trained more than 300 commercial divers: supervisors, divers, diving system operators, hyperbaric wet welders. The scope of training is strictly specified of essential requirements, ranges of qualification, test conditions acceptance requirements and certification for the qualification testing. To ensure the high standards courses of education and safety demands we have got Certificates of Safety and Hygiene and Quality in underwater work practices. Educational standards comply with international standards and market demands.

FROG Training Center for professional divers is located in Elblag/Poland., in Technology Park. During courses best quality equipment is in use 27/37/97 KM helmets and innovative mobile diving complex: 2-section decompression chamber, dive control system and LARS.

We cooperate with instructors and divers with various experiences in underwater works: inspections, maintenance works, repairs or replacements, hyperbaric welding, ultra thermic cutting and other underwater works, Including work in chemical and biological contaminated waters or with explosives.

For more information visit:
frog.elblag.pl
or
www.facebook.com/
frogpracepodwodne

De Zeeman PRO introduces DAR1210

The DAR1210 has been developed due to the high demand in the industry for a certified & reliable a high specification reducer for use during diving operations. The DAR1210 has a flow of 1100 Liter per minute at 10 bar and an optimal designed outer body in order to meet this requirement. This without any compromise towards safety or reliability.

Ordering info:

DAR1210:	DZP High flow reducer with Approval (Without accessories)
DAR1210-JIC06:	DZP High flow reducer with Approval with following accessories: HP & LP pressure gauge Safety valve WP: 5-20 bar Inlet: DIN200 or DIN 300 (To be specified upon order) Outlet: JIC06 1.100l/min, freeze-proof, incl. Certificate
DAR1210-LP006	DZP High flow reducer with Approval with following accessories: HP & LP pressure gauge Safety valve WP: 5-20 bar Inlet: DIN200 or DIN 300 (To be specified upon order) Outlet: WP LP006 Female 1.100l/min, freeze-proof, incl. Certificate
DAR1210-C747E:	Maintenance kit for DAR1210

Technical Specifications:
Flow: 1100 Liter per minute at 10 bar
Inlet pressure : 200 bar / 300 bar
Range outlet pressure: 5 – 20bar
Operating temperature: -20°C to +60°C

Design features:
- CE certified according to EN15333-1:2008
- Custom designed inlet DIN connection in ordered to be tightened by hand or tools
- Outlet port on side or the bottom of the reducer for optimal configuration
- Special body design to ascertain no freezing-up during operations

BELGIUM info@dezeeman.be
FRANCE info@dezeeman.fr
GERMANY info@dezeeman.de
ITALY info@dezeeman.it
SPAIN info@dezeeman.es

The Historical Diving Society

www.thehds.com
www.divingmuseum.co.uk

Charity No. 1159032

Promoting and Preserving our Diving Heritage

Everything we do today is history tomorrow.

From Snorkels to Superlites, the Historical Diving Society is dedicated to recording our diving heritage for future generations.

Your diving experience is part of the story. Share it with us. www.thehds.com/join-us

Michael Mohrhardt in the diving shack of the diving barge Labrus. Photograph: Helen Wynné-Dyke archive.

HISTORICAL DIVING

MICHAEL MOHRHARDT

1907-1966 GERMAN DIVER IN SOUTH AFRICA

BY HELEN WYNN-DYKE

MICHAEL MOHRHARDT was one of seven children born to the stonemason Adam Mohrhardt and his wife Katharina, in the village of Grefenhausen, Palatinate, Germany on 22 July, 1907. After leaving school at the age of 15 in 1922, he began a three-year apprenticeship to the building firm of Joseph Hoffman & Sohne, in the industrial town of Ludwigshafen, near Heidelberg on the Rhine.

Michael obtained his papers as a Master Mason and worked in the building trade from 1925 to 1929. A keen sportsman, mountaineer and canoeist, he made it to the final round of the European Wrestling Championships circa 1928, but lost against thereigning European Champion. Fired by the spirit of adventure and the lure of the unknown, Michael undertook a mammoth walking tour through Middle and Eastern Europe, during 1929 and 1930. Working mainly as a farm hand, he made his way front village to village through Czechoslovakia, Hungary and Austria ending his journey in Spain, where hewas employed by the construction firm Soeiedad Metropolitans deConstruction S.A. Coppa for several months. On 15th April 1930, he sailed from Cadiz for the Canary Islands. It was in St. Cruz de Tenerife and later in Las Palmas in Gran Canaria that Michael acquired the skills of deep-sea diving that were to stand him in good stead when the deteriorating political situation in Germany forced him to leave his native land.

Historical Diving Times - No 21 Spring 199

IT WAS IN ST. CRUZ DE TENERIFE AND LATER IN LAS PALMAS THAT MICHAEL ACQUIRED THE SKILLS OF DEEP-SEA DIVING

Germany in 1935 was in a severe economic depression and unemployment was rife. Although he was not a Jew, the outlook for a young man such its Michael was bleak, particularly as his political views were diametrically opposed to the rising National Socialism that ultimately led to war. After he had been questioned by Hitler's SS and it became abundantly clear in what direction the country was moving, he decided to emigrate to South Africa. German emigrants were allowed a meagre travel allowance, which had to be handed to the ship's purser for safekeeping. Monies not used on the voyage were repatriated to Germany, with the result that many emigrants claimed fictitious on-board expenses such as "English lessons", in order to retain this small sum for their arrival in the new country. Between 1933 and 1935, the number of non-Jewish German immigrants to South Africa outweighed the number of Jewish German immigrants by 1598 to 1066 and many of these, like Michael Mohrhardt, left for the same political reasons as the Jews. Michael sailed for South Africa on 3rd January. 1936, on the Union Castle steamer Durham Castle arriving in Cape Town on 29th January, with nothing but a suitcase of personal belongings and 10 Reichsmark in his pocket. He had no lodgings, no job and was unable to speak English. The day of his arrival was marked by a southeasterly gale so severe, that many vessels were delayed or unable to dock at all. Also in port at the time were the French cruiser Jeanne d'Arc and the grand Empress of Britain. The latter was, at 43,500 tons, even bigger than the battle cruiser Hood, which until then had been the largest ship ever seen at the Cape. (The Empress of Britain was later sunk by German U-boats during the war). At 3.30 p.m. on the previous afternoon, as the Durham Castle steamed towards Cape Town on her last leg from Lobito Bay, the entire British Empire observed a two-minute silence at the exact moment when the body of the late "Sailor King" George V was lowered into hi,s grave at Windsor Castle.

Michael fortuitously arrived in Cape Town when huge extensions were being made to Table Bay Harbour. By 1913, larger mail ships started using the Cape regularly, such as the 14,700

ton Nestor and Ulysses (Blue Funnel Line) and the 18,500 ton Ceramic (White Star Line) plying to Australia. After World War 1, however, problems of berthing arose when more than one large liner was in port at the same time, as only the East Pier (in the original Victoria Basin) was adequate to accommodate a ship of more than 183 metres in length. In 1926 a new basin comprising an area of 75 hectares was commenced on the south-eastern side of the Victoria Basin and the project completed by 1932. When, however, in 1934 the Empress of Britain attempted to sail out of the new basin in a strong south-easterly gale, even the three most powerful tugs were unable to move her from her berth. It became clear that other arrangements would have to be made for larger ships and a much more extensive scheme was mooted .This called for the demolition of both the Rogge Bay random concrete-block mole completed in 1932 and the Old Pier jutting into the sea from the foot of Adderley Street. Since its erection in 1913, the Municipal Pier had been an integral part of the social life of Capetonians, and was known particularly for the popular promenade concerts held at the end of the Pier. The new harbour scheme also called for the reclamation of 140 hectares of ground later to be known as the Foreshore. Michael often remarked that when he arrived in Cape Town, the water "was lapping at the foot of Adderley Street". A famous row of palm trees, which marked the original waterfront before the reclamation, has been preserved to this day.

Leading Harbour Engineers from Britain, Canada, Holland, Germany, Sweden, Denmark and the United States showed a keen interest in submitting tenders for the new scheme. Although dredging operations had been officially begun on 15th May 1935 by Prime Minister Gen J B M Hertzog and the quay walls were built depart-mentlally by the South African Railways and Harbours, the dredging contract was officially awarded by the Union Government in December 1937 for an amount of £1,125,262 to the Hollandsche Aanneming-Maatschappij (HAM), a Netherlands -firm with the requisite plant and experience. Due to the worsening international situation, the work was expedited and before the outbreak of War the new Duncan Dock basin (named after Governor-General Sir Patrick Duncan) and 117 hectares in extent, was partially hi use. Many large and famous ships were berthed in Duncan Dock, including the Ile de France (43,200 tons), Mauritania (35,600 tons) and Aquitania (46,000 tons). Facilities at Table Bay harbour had improved to such an extent since the First World War, that Cape Town was able to play her part, not only as one of the most strategic ports on the Empire trade routes, but also as one of the chief Allied convoy ports during the War.

The author believes that for the best

part of 1936, Michael was employed as a construction worker by the SA Railways and Harbours. On his first day at work in Table Bay, Michael settled down with the other chaps (mostly "Coloured" men) to eat his lunch. He recalled with some amusement his astonishment at being scolded by "White" colleagues for this unacceptable fraternisation. Michael's non-racialism remained one of the guiding principles of his life and during his latter years he became increasingly saddened by the rise of the same kind of Nationalism and race-hatred in his country of adoption, that had driven htm from his country of birth thirty years before. On 22 June 1936, Michael's young betrothed, Liesel Haagmann, arrived in Table Bay on the 9,500 ton Deutsch Ost-Afrika Line steamer Ubena. Strong as the south-east gale had been on the day of Michael's arrival six months earlier, the winter north-wester was blowing an equally howling 44 niile-an-hour gale causing considerable berthing problems for the Ubena. The liner had to be manoeuvred broadside into the wind, and while she was swinging round into position, she bumped twice into

the six-inch thick chafing boards along the dockside of No 6 quay, despite two other tugs assisting the TS McEwen. The Cape of Storms had lived up to its name, Michael and Ltesel Mohrhanit were married the following day, 23 June 1936, in Cape Town.

The SA Railways and Harbours lender specifications provided for the payment of "fair wages." A letter written by .Liesel to her parents in Germany on 26 October 1936, confirmed this, in a rather charniing manner (in translation): ..."(We) often convert the cost of food locally to what it would cost at Home, and Michael always draws comparisons with the respective hourly rates. Yesterday we had banana pudding for dessert and Michael worked out what this would have cost in Germany. For the rate of one hour's pay, not even overtime, we are able to buy 100 bananas or more. At home we would have been able to get 6, perhaps 8 or maybe even 10 bananas...! Michael earns 36 pennies an hour! ...." To Michae! and Liesel, deprived of luxuries after the Great War and during the Depression, Africa was a giant cornucopia spilling out riches such as they had never known. Homesickness however, remained a constant factor. In August 1936 Liesel wrote.., "This afternoon I sat at the Harbour and stared out across the sea...there is at the end of the Old Pier a high tower from which one can see far into the distance and I originally intended doing my needlework as I sat there, but decided against this, as I could not stop thinking about all of you at Home..." By the end of 1936, Michael's skill as a diver combined with his experience in the building trade earned him a job with J. Donaldson and Son, a South African firm of Harbour Engineers which had been awarded a government contract for the construction of the new-quay. In a letter to his family in Germany, dated 18 October 1936, Michael writes (in translation): "....as regards the Diving, they are still awaiting the delivery of an underwater rock-breaker from England. As to your fears that this work could be unhealthy or even dangerous, please be reassured. The work is generally carried out close to land, at a depth of 8-10 metres, which is approximately 1 atmosphere of pressure. In Las Palmas the work took place at a depth of 25 metres, which constitutes more than 2 atmospheres of pressure...". A week later in a letter to her family, dated 26 October 1936, Liesel confirmed the above, writing (in translation); "The matter concerning the diving job will take a while longer. Michael has again been to see (he Englishman in question, wl\o gave him renewed hope, but mentioned that work is likely to begin only in January (1937). Although we are not entirely sure that this will come about, we have decided in any event to look forward to it. Most probably, more divers will be brought over from England."

Michael and the barge crew in front of the diving shack. The profile of Lion's Head, overlooking Cape Town, is visible in the background. Photograph Helen Wynne-Dyke archive.

The machine in question was the Lobnitz rock-breaker, consisting of a ten-ton chisel operated by a patent winch.

The ten-ton "pencil" drove a powerful blow and the broken rock was in turn picked up by a bucket dredger. The bed of Table Bay is made up of a stratum of materials with a layer of mud on top, then sea sand mixed with shells, then clay turning
into soft rock, which in turn develops into the hard rock such as found on Table Mountain. J. Donaldson and Sons worked on the 3000-foot long sea wall being constructed across the City front (marked "X" on the map). Michael dived from the barge Labrus (seen in the photographs), an old suction dredger converted for block-laying, on which were mounted three fifteen-ton Booth cranes from Rodley in England. The Labrus was moored on a line with the quay under construction and in this way, her cranes lowered the blocks to the divers below. The incumbent Harbour Engineer, J. F, Craig, maintained that this method was unique in the world at the time.

Michael's specific job was to position the huge concrete, blocks weighing upwards of 10 to 15 ions on the sea bed, which had been levelled by blasting and dredging. (A depth of 40 foot was specified for the entire new basin, so as to accommodate increasingly heavy tonnage of shipping.) The divers worked for eight hours a day, coming to the surface every two hours for a short break. Standard gear was worn and helmets used were either-Siebe Gorman or Heinke 12-bolt, for harbour work. Although divers were brought over from England, there were many highly trained and competent South African divers and surface crew working in Table Bay before the War, The photographs which accompany this article were taken in 1937 or 1938 at Table Bay harbour, while Michael was employed by J. Donaldson and Son. The Donaldson family took a personal interest in Michae! and Liesel and understood that although they were Germans, they were opposed to Hitler and his political ideologies. The fact that the Donaldsons ("decent Smuts men" as Michael referred to them) were prepared to vouch for him. was in large measure responsible for the fact that Michael escaped internment throughout the War, and wnss able to continue working as a fret" agent.

Michael's employers continued to protect him politically, but towards the end of 1939 when War was imminent, it became apparent that resentments from other harbour employees against him as a German could endanger his safety. On one occasion, he was underwater directing the lowering of a heavy concrete block into position on the sea door, when he accidentally became trapped underneath it, and Michael frantically gave the "double-four" to alert his attendant above. Water had begun to trickle into the helmet and he attempted to slip into a small trough in the sand, to protect his head. Although there was no official enquiry at the time, it was clear to Mr Donaldson that the linesman

had been aware of Michael's predicament and deliberately chose to ignore the distress signal. By sheer luck Donaldson noticed in time what was happening and immediately ordered the crane driver to lift the block. Michael was severely shaken by this incident and aware of the gravity of its implications for him. It was clear that something would have to be done.

By lucky circumstance, extensions were being undertaken to the fishing harbour at Lambert's Bay, a small village on the West Coast, about 275 kilometres by road from Cape Town. As Jack Donaldson and Son were contracted (from 1935) to build a new breakwater there, they were in a position to relocate Michael and his wife to the Marine Hotel, Lambert's Bay. A former resident of Lambert's Bay remembers the arrival of the Donaldsons from Cape Town, when Jack (Jnr) landed his two-seater plane on the beach, as there was no airfield, neglecting however to take note of the rising tide, so that a team of donkeys was hurriedly procured to drag the stricken aircraft to safety. Jack (Jnr.) is remembered as a handsome, charming and rather daring young man,

whose flying exploits later earned him a stern warning (from the Herrnanus authorities) for "low flying" over the village! Michael worked on the breakwater from 23 July 1939 to 4 December 1939 as can be seen from the entries in the original hotel register now housed in the Museum. During this time War broke out, and the hotel register on the 6 September 1939 (the day on which General Smuts won the watershed vote in Parliament against Gen. Hertzog and in terms of which he became Prime Minister and South Africa declared war on Germany) includes an instruction from the Police that all guests were henceforth to state their country of origin. This was by way of the Alien's Registration Act, through which control was exercised over foreign nationals, particularly Germans. It was a time of great anxiety for Michael and Liesel, having left their family behind in Germany, with only minimal communication possible during the six long years of the War. They obtained permission to send brief telegram-style messages through the International Red Cross in Geneva, so that personal news could be transmitted, but there were months at a time when no news came through. Due to the fact that Michael was not permitted to inform his relatives of the nature or location of his work and as all communications were censored by the South African authorities, no written details remain of the exact diving work that was carried out at that time. The building of harbours was clearly a very strategic job, and any mention of specifics would have raised suspicions of spying. This was not a whimsical matter as the South African coastline was heavily patrolled by German U-boats intent on destroying Allied troop ships rounding the Cape to and from the East.

Michael being dressed in. Behind the group is one of the large concrete blocks ready for lowering. Photograph Helen Wynne-Dyke archive.

In July 1938, J Donaldson and Sons had also been awarded the job of building the new fishing harbour at Heintanus, a small coastal town on the southern Cape coast 135 km from Cape Town. In October 1938, blasting operations were in full swing and by February 1939, the laying of blocks for the breakwater had begun. This would form a harbour basin 30ft deep and capable of accommodating larger fishing trawlers than was possible at the Old Harbour (now a Museum). Michael and Liesel were relocated to the Central Hotel (Neillsens) in Hermanus soon after the Christmas recess in early 1940. Great difficulties were experienced with the building of the Hermanus harbour, due to the violent storms, which tore at the coastline in winter. The first wall, which was solid concrete, had reached only forty feet when the sea washed it away. When, later, Michael began work, enormous thirty-ton blocks were used, but some of these were torn away by high swells and had to be replaced. A story well-remembered by the locals from this time is that during a particularly heavy storm, the sea rose up and swept away a large crane belonging to J. Donaldson and Son, which had been left standing at the end of the wall. When the crane toppled off the breakwater it lodged, itself so firmly on the seabed that it could not be raised again. A diver (probably Michael) was charged with cutting it up underwater and bringing it to the surface piecemeal.

By mid-1940 Hermanus had settled down to devoting its energies to the War effort and many young men and women joined the Armed Forces. Amongst these were Jack Donaldson

(Jnr.) who joined the South African Air Force, his Donaldson and their brother-in-law, Billy Maine. Michael continued work at the harbour site tat anti-German sentiment in the village reached fever pitch and suspicions ran riot. Shepherds reported sighting a strange kind of "whale" dose to shore with men walking about on its back and Coloured fisherfolk described what appeared to be water-logged boats with short masts sticking up from them. It was clear that a German, no matter how honourable, was no longer welcome in the town.

Proportionate to its population, Hermanns had among the highest number of volunteers for the Armed Forces in the Commonwealth. One of those who did not return was Jack Donaldson (Jnr.) who died tragically at the age of 31 while-serving with No 1 Fighter Squadron at Wiagfield Aerodrome, Cape Town, in early April 1940.

Michael and Liesel left Hermanus on the 16 July 1940 and headed for the inland town of Stellenboseh, 50 km from Cape Town, where Michael ran his own Building & Construction Company until his death. Lacking formal training in architecture, Michael taught himself to draw plans, which over the years were all approved by the town planning department and included four large apartment blocks. Perhaps his greatest monument is the unique mountain holiday retreat he built during the War in the pic-tuwsque Kogelberg Mountain Range, between Hermanus and Stellenbosch. He had discovered the spot on Christmas Day 1940, while hiking, but the area was totally Inaccessible to vehicles. Undaunted, Michael built an access road down to the bank s of the Palmiet River and erected two stone cottages, fashioning the bricks by hand from river sand. Michael's spirit of adventure never left him. In the late forties, long before "caravanning" became popular, he single-handedly built the first of two ingenious mobile homes, utilising the shell of a double-decker bus, to which the little family annually explored the wonders of Southern Africa. Shortly before his death, he made one last epic journey. Lightheartedly challenged by the Curator of Stellenbosch University's Hortus Botanicus, to organise an expedition to the hitherto largely uncharted Riehtersveld, a desert area just south of Namibia, Michael responded with enthusiasm and the historic journey was made in a small converted delivery truck. This collaborative venture with the University of Heidelberg, Germany resulted in the collection of rare specimens of desert succulents, in particular the Ltthops "window-plant", forming the nucleus of two renowned botanical collections still in existence today.

MICHAEL MOHRHARDT DID NOT LIVE TO ENJOY HIS RETIREMENT

Michael Mohrhardt did not live to enjoy his retirement. In the European summer of 1966, aged 58 and while on a visit to Germany, he died very suddenly of a stroke. Although a postmortem was performed, it was not ascertained whether the diving had been a contributory cause of his premature death. Reticent by nature, he rarely spoke about his life, with the exception of the years of diving. These appear to have made a lasting impression on him, from the earliest days in Las Palmas, Canary Islands to the heady days in Table Bay, Cape Town, in the years leading to War. By his own request, Michael was buried in the land of his birth. Liesel is interred with him in the family grave in Ludwigshafen, Germany and in that sense, Michael and Liesel had finally come Home.

ACKNOWLEDGEMENTS:
Mr Jack Donaldson III (Johannesburg); Mrs Patricia Eve (ne, Donaldson) (Benoni, SA); Mr Billy Maine (Harare, Zimbabwe); Mr George Dun (Villiersdorp, SA); Mr Joe Marsicano, (Knysna, SA); Portnet: Maps (Cape Town) and Private Papers of Michael Mohrhardt held by the Author. Standard Encyclopaedia of Southern Africa; Cape Times 1936; i 1936; Caledon Venster, various issues; Tredgold, Arderne: Village of the Sea, The Story of Hermaus; Burman, Jose: Hermanus, A Guide to Riviera of the South, Craig, J F, Ed. Tavern of the Seas.

Helen Wynne-Dyke is the daughter of Michael Mohrhardt and resides in South Africa.
This article first appeared in the Historical Diving Times, No.21, Spring 1996.

THE BADGE

How did you get involved with diving? What are your ambitions? What annoys you the most? In The Badge we talk to people from the Professional diving world and find out who they really are and what drives them. In this month's issue we meet Brian Murphy who is Dive School Owner/operator.

01 How did you get involved with the Professional diving world?

I started diving in 1975 at the age of 15. At the time I was still in school and worked as a life guard at the school swimming pool. A Sub Aqua club started using the pool and I was invited to have a go. My first try was buddy breathing with an instructor and I loved the excitement of it. I joined the club and started training straight away. I always loved swimming and being in the water, holding my breath most of the time, so I took to scuba diving with great enthusiasm and ease. When I left school, I started work in a dive and water sports shop and soon became involved in other water sports. Life was busy and full of fun and adventure.

In 1980 the Irish government through the Employment Agency (FAS) determined that Ireland was soon to become an Oil/Gas producer, and suitably qualified personnel would be required. Divers would be needed and so after a speedy selection and interview process I found myself bound for Fort Bovisand. This was a shock to the system and while I thrived in the water I struggled in the class. Alan Bax made it clear from the start that this was not a holiday camp and instructors were intitled to administer a penance of push-ups or runs in your Avon dry-bag to the top of the hill for minor infractions or sometimes simply to maintain discipline and improve fitness. It was here that I discovered that if you have an interest in something it is much easier to learn and so I put my brain into gear and dived into the books. I came first on the course and was awarded the COMEX shield along with an offer of work straight from school. This was my first time away from home for any long period and I was keen to get back home and see family and friends. So, instead of heading offshore with Comex, I worked for 12 months on a harbour improvement scheme and spent long hard hours in the water every day.

The following year I went to Yarmouth and got my first Offshore job working for Solas Ocean Systems on gas platforms. I had made it, good money, time on – time off and I really enjoyed the excitement of helicopters, ships, platforms with flare stacks and the industrial scale of everything. Twelve months later I was again sent by the Irish Government to further my training as a Saturation Diver and completed my course under the instruction of John Rabone of Interdive. We studied at Fort Bovisand and completed our bell dives at the Statens Dikker Skol in Bergen. My next port of call was

Aberdeen and I was very fortunate to get a sat job almost immediately with IUC. Again, there was the excitement and a bit of nervousness as I made my first bounce into sat. I relied heavily on my bell buddy, Lou O'Leary, a fellow Irish man with many years sat experience. We worked well together and did many long dives. Our longest bell run was 18 hours, spending over 8 hours each in the water, eventually changing out a spool piece with valves and getting the system back on line.
I worked between the UK and Norway, air and sat until 1989 and then took a break to go travelling with my girlfriend (now wife).

Post travels through Australia, Thailand, Burma, India and Africa I returned to Ireland and along with two good friends opened the first PADI Dive Centre in Ireland. Soon after I was asked to run commercial diver training for the Aquaculture industry by the Irish Fisheries Board (Board Iascaigh Mhara, BIM) and so contacted Alan Bax and assembled a course based on programmes run at the Fort. We applied for HSE approval and ran the first pilot commercial Scuba course (HSE Pt iv) for BIM in 1992 monitored by Donald La Monte. Our courses were approved by HSE and BIM and ran for 10 years. BIM became members of IDSA and we soon added Surface Supplied Diver (HSE Pt iii) training to our programme. There was a break in these courses but we are now back running again based at the National Fisheries College in Castletownbere Co. Cork. BIM have hosted the IDSA annual meeting twice, first back in the early 90s and more recently at the new facility in Castletownbere. Both were memorable occasions and it's always great to meet old and new members. I am still involved in both recreational training and commercial training but will be soon leaving the recreational training to the young bloods and will have more time to focus on the commercial diver training and hopefully add new programmes and services.

Who did you learn the most from? 02

I've learnt a lot over the years from many different people and the University of Life. What I learned in recent years is the importance of being open to new learning and ideas and accepting that I make mistakes, we all make mistakes and therefore systemised approaches and tight checking procedures are really important but still not bullet proof. Look and listen to what others are doing, then make an informed decision. I suppose Alan Bax and my other key instructors, Rod Chappel and Joe Voss, at Fort Bovisand certainly taught me a lot about diving and the real world and in later times Rob Palmer of TDI with whom I did my first Tec Diving course. He gave me a new level of awareness and focus in the water that I have really benefited from. Teaching is also a great way of learning as it forces you to be current and have a full understanding of what you are teaching. I also learn something new from my own students on every course I teach.

What are your drives and ambitions? 03

I have always been active and enjoyed being outside doing stuff. I have always been driven and passionate about what I do and I try to do any job to the best of my ability. A good result and a job well done is what drives me, almost regardless of the job. I get a great reward from the students who develop a real passion for diving as they go through our courses both Commercial and Recreational. I don't see myself as being ambitious in terms of achieving any major career goals but I am ambitious in terms of running a successful business and living a meaningful life. I enjoy my work (most of the time) love travel and adventure and am starting to look forward to having a bit more time to do more travelling.

What annoys you the most? 04

There are plenty of things that annoy me, but one that goes across the board is untidiness. I like a clean, organised working environment and so don't take kindly to others who leave a mess in their wake or don't bother looking after equipment. Unnecessary paperwork, the need for a Password at every turn, which is always the wrong one, also get om my nerves!

What is your life motto? 05

My life motto is "everything in moderation". A Buddhist friend shared these words with me many years ago. I think it's important to be able to live and enjoy life, not to be overly restrictive but to be open to new experiences and opportunities; to be careful and to have a bit of fun along the way.

GILLES BRULE A PROFESSIONAL DIVER EXPLAINS

In what year were you trained as a professional diver?
In 2019.

Where did you receive your diving training?
At the ENS (Ecole Nationale des Scaphandriers) in Fréjus

How did you experience the time of your training?
Very good, I learnt a lot, the trainer was very good and really listened to me.

What is your technical background before starting the training?
A Certificate of Professional Competence in motor vehicle maintenance, several "Certificate of competence in safe driving in worksite machinery" as well as Heavy Goods Vehicules and super-heavy goods vehicle licences.

What did you have to do in the field of further education / safety training to practice your profession?
I had to learn how to equip a commercial diver, all the theory, diving tables, formulae and laws of physics, diving and ascending in safety, trying on different helmets, learning to use a boiler and hot water suit, welding, concrete, search techniques (circular), getting around and finding your bearings underwater with or without visibility, using a hyperbaric chamber...

How did you experience the time after your training - eg finding the right employer?
Very good, because thanks to the school I did a 5-week work placement in a company, which enabled me to get a job straight afterwards. After that, the school continued to provide 'after-sales service', offering me a number of other positions that were always in line with my career development aspirations.

Are you employed by a diving company or are you self-employed?
Yes, in freelance.

How did you find your way into the job market in the beginning?
Thanks to the support of the school, and above all by being serious, willing and curious to learn, even for the most difficult tasks.

Have you underestimated things?
No.

Have you overestimated things?
No.

Where do you work now diving company / region / international / work field civil underwater construction, shipping, ports, SAT)?
I'm currently working for V-SCAPH-MARINE, a diving company based in Port-Gentil in Gabon, whose main activity is offshore.

What is your specialty within the specialty of the diving company?
I'm currently a supervisor, I dive and organise all the work of my team, paying attention to all the safety parameters.

What does your day look like in the workplace?
I start with a toolbox to explain the day's work, pointing out the dangers and ways of avoiding accidents. We prepare the diving equipment and check that all the tools are working properly. Then we do the dive laps and at the end of the day we clean up and put away all the tools and diving equipment.

How did you see your profession develop or foresee future developments in terms of innovation, knowledge transfer, rules about safe diving, etc. (Do you see differences in the workplace since you started and now)?

I DON'T RECOMMEND TO DO THIS TRAINING ON LEAVING SCHOOL

It's evolved quite a bit in terms of equipment, and ROV are making more and more of an appearance on construction sites, but they'll never replace manpower. There's no difference for me in the workplace between when I started and today.

Have you mapped out your future - are there still challenges?
There are always challenges to overcome.

If you had the choice now to become a professional diver - with the knowledge of today - what would you do?
I will continue without any hesitation.

How do you see the labor market developing?
Difficult because it's a very closed circle where everyone knows everyone.

How important is it to be able to work in a team where the dive supervisor is in charge, but you as a diver are also expected to think along about diving safety and the technical aspect of the assignment?
I think that in a team everyone has to do their bit, share their opinions and concerns about safety so that we can establish working procedures to ensure that there are no accidents. Everyone in a team has to feel concerned about safety and we all have to look out for everyone in the team.

What would you like to advise future divers?
Be well informed before you start, have already worked a bit before, I don't recommend to do this training on leaving school because of the lack of maturity. Being resourceful and organised, having knowledge of welding and mechanics is very useful, and above all having a love of diving and the aquatic environment.

SURFACE SUPPLIED DIVING AT SMP

FOLDING A-FRAME

When fully retracted, the system can fit into a standard 20' ISO container. Perfect for storing away when the LARS isn't in use.

HIGH QUALITY BUILD

The pressure pipe work and fittings are constructed using high-quality 316 stainless steel and brass for a more durable build quality.

LIFE SUPPORT FOR 3 DIVERS

Fully fitted out for the life support of 3 Divers including all surface gas interface /control, onboard gas and hot water distribution.

TRANSFER TO A CAGE

The bell can be transferred with a cage/basket, allowing the LARS to work as 2 systems in 1. Perfect for IDSA Level 3 diving.

WET BELL LAUNCH AND RECOVERY SYSTEM

Designed with a compact operating footprint, the SMP Wet Bell Launch and Recovery System (LARS) is the perfect solution to optimize deck space on your vessel or barge. Our emphasis on ease of mobilisation and demobilisation ensures minimal costs for your operations.

MORE OF WHAT WE DO:

DIVING HELMETS

MIXED GAS PANELS

COMPRESSORS

SEE MORE OF WHAT WE DO

+44(0)1772 687775

www.smp-ltd.com

WET BELL LAUNCH AND RECOVERY SYSTEM

Fully Compliant
Compliant with IMCA D023, IMCA D037, and IMCA D018, along with Third Party Design approval to Lloyds Rules.

Support up to 3 Divers
Our Wet Bell System is fully equipped to support the life of three divers.

Reach depths up to 125m
With a 10m vessel freeboard allowance, the Wet Bell LARS enables the delivery of three divers to a maximum depth of 125 m.

Durable Build
All pipework and fittings are made of durable 316 stainless steel and brass.

Our easy to mobilise, compact Wet Bell Launch and Recovery System

Compact Capabilities with Innovative Retracting Design

The Wet Bell LARS boasts a clever design that allows it to be fully retracted by hydraulic cylinders. When stowed on the heavy-duty base skid, both the wet bell and clump weight occupy the same width as a standard ISO 20' container. This enables convenient transportation without any additional out-of-gauge costs.

Designed with a compact operating footprint, the SMP Wet Bell Launch and Recovery System (LARS) is the perfect solution to optimize deck space on your vessel or barge. Our emphasis on ease of mobilisation and demobilisation ensures minimal costs for your operations.

The wet bell itself features complete fittings for surface gas interface/control, onboard gas and hot water distribution. Inside the bell, divers will find a light and communications speaker for enhanced safety and communication. Two additional external lights further illuminate the surroundings. The air pocket, made of steel, incorporates two large acrylic windows, providing excellent visibility.

To ensure operational reliability, the hydraulic supply is fed from two 30kW HPU units, providing 100% redundancy in case of unexpected failures. The pressure pipe work and fittings are constructed using high-quality 316 stainless steel and brass. Our power units include essential features such as filtration, desiccant breathers, relief valves, inspection hatch, sea water cooling, and level gauges.

Designed for Safety and Compliance

Choose the SMP Wet Bell Launch and Recovery System (LARS) for a compact, efficient, and compliant solution that optimises space, reduces costs, and enhances diver safety.

MIDDLE EAST
FOR COMMERCIAL DIVING

MECD is one of the most prestigious commercial diving and **ROV** training schools in the world with a unique link to the commercial diving arenas.

With a passion to help our students in the acquisition of commercial diving skills to build a career in commercial diving industry, we have established training courses that are relevant to commercial diving industry requirements on a global level.

Our Courses :

- Surface Supplied Air Diver (inshore - offshore)
- Commercial SCUBA Diver (30 meters)
- Diving Supervisor (Inshore - Offshore
- Underwater Welding course
- ROV Courses
- DMT / DMTR (IMCA recognised)
- DAN medical courses
- Client Representative.
- Dive Technician
- Underwater Photography
- Diving First Aid course
- Chamber Operator course
- Offshore awareness
- Commercial Diving Safety

Benefit now from our expert training services and experience

+971 569 878 081
+2 0112 362 6262
info@mecdco.com
www.mecdco.com

INSPIRING PEOPLE

THOMAS SCHMIDT
A PROFESSIONAL DIVER EXPLAINS

In what year were you trained as a professional diver?
In 2020.

Where did you receive your diving training?
At the ENS (Ecole Nationale des Scaphandriers) in Fréjus.

How did you experience the time of your training?
Very good, good equipment, great experience.

What is your technical background before starting the training?
Master of Climatic Engineering
L4 Diver Open Water Scuba Instructor and Scuba Diving International diving instructor.

What did you have to do in the field of further education / safety training to practice your profession?
All types of underwater work, all types of safety-related issues.

How did you experience the time after your training - eg finding the right employer?
Like all its students, the school found me my first job. First of all, the school placed me with a company for a 5-week work placement. After 6 months as a temp in the company where I did my work placement, followed by a permanent contract as a team leader.

Are you employed by a diving company or are you self-employed?
Permanent employee.

How did you find your way into the job market in the beginning?
Thanks to my training at the ENS.

Have you underestimated things ?
No.

Have you overestimated things ?
No.

Where do you work now diving company / region / international / work field civil underwater construction, shipping, ports, SAT)?
SATIF Structures at La Talaudière in France. Specialising in underwater expertise.

What is your specialty within the specialty of the diving company?
Inspector Team Leader Equipment Manager.

What does your day look like in the workplace?
National travel, Inspections of bridges, dams, underwater civil engineering.

How did you see your profession develop or foresee future developments in terms of innovation, knowledge transfer, rules about safe diving, etc. (Do you see differences in the workplace since you started and now)?
Any difference, the company I work for invests a lot of money in safety, diving equipment and personal protection.

Have you mapped out your future - are there still challenges?
Validate a few remaining training courses and then consider a move offshore.

If you had the choice now to become a professional diver - with the knowledge of today - what would you do?
Offshore and inspection

How do you see the labor market developing?
Positively. I think that demand is growing, and that there aren't enough divers in France to meet it.

How important is it to be able to work in a team where the dive supervisor is in charge, but you as a diver are also expected to think along about diving safety and the technical aspect of the assignment?
My current mission is all these elements, as the description below corresponds in part to my role as team leader.

What would you like to advise future divers?
- Safety
- Professionalism - Perseverance
- Observation
- Listening to others
- Helping others
- Involvement

ANDREI TARASOV
A PROFESSIONAL DIVER EXPLAINS

In what year were you trained as a professional diver?
2020.

Where did you receive your diving training?
Ecole Nationale des Scaphandriers in Fréjus.

How did you experience the time of your training?
A full course training with competent trainer.

What is your technical background before starting the training?
3 years in the construction industry and 12 years in the Foreign Legion.

What did you have to do in the field of further education / safety training to practice your profession?
BOSIET-HUET et SST.

How did you experience the time after your training - eg finding the right employer?
A complex period following COVID.

Are you employed by a diving company or are you self-employed?
Diving company specializing in the inspection of engineering structures.

How did you find your way into the job market in the beginning?
Via the ENS Management.

Have you underestimated things?
No.

Have you overestimated things?
No.

Where do you work now diving company / region / international / work field civil underwater construction, shipping, ports, SAT)?
"Reseaux et Fondations" in the Normandy region (Caen) in the field of inspection of engineering structures and underwater works as well as networks in confined spaces.

What is your specialty within the specialty of the diving company?
Inspection of engineering structures in underwater and confined environments.

What does your day look like in the workplace?
Travel by lorry to the site, then set up the workstation. Dressing for work. Creation of a technical drawing followed by demobilization from the site and return by lorry.

How did you see your profession develop or foresee future developments in terms of innovation, knowledge transfer, rules about safe diving, etc. (Do you see differences in the workplace since you started and now)?
Changes in skills and motivation. The personal side has also evolved, with initiatives being taken to improve workplace safety.

Have you mapped out your future - are there still challenges?
Challenges still to be met.

If you had the choice now to become a professional diver - with the knowledge of today - what would you do?
I'll continue in the same vein with more motivation.

How do you see the labor market developing?
I think the job market will continue to develop, particularly with the growth of the wind energy sector. What's more, there's a considerable shortage of divers on the French market, so it's going to be easier and easier to find work in France.

How important is it to be able to work in a team where the dive supervisor is in charge, but you as a diver are also expected to think along about diving safety and the technical aspect of the assignment?
It is extremely important to take into account the opinions of the crew members, based on their individual experience.

What would you like to advise future divers?
Be motivated, curious and punctual every day.

HYTECH - POMMEC

With over 40 years of experience in the industry, Hytech-Pommec specializes in the design and manufacture of high quality, professional diving and hyperbaric equipment. We produce a wide range of products and each one is designed to meet the highest standards. Every product is supported by extensive quality control and after-sales service. We are the partner of choice for innovative, sustainable and integrated equipment for the diving, governmental, tunnelling, life support and medical markets. With our extensive knowledge and in-house design capabilities, we ensure compliance with the latest technological developments, strictest safety regulations and most stringent environmental standards.

THE BEST OF BOTH WORLDS

DIVING, MEDICAL, TUNNELLING
& LIFE SUPPORT SOLUTIONS

WILFRIED MIOCHE A PROFESSIONAL DIVER EXPLAINS

In what year were you trained as a professional diver?
I was trained from the beginning of June to the end of September 2021.

Where did you receive your diving training?
I received my diving training at Ecole Nationale des Scaphandriers (ENS, France).

How did you experience the time of your training?
My experience about my training was very good, I loved it, during my first month of scuba diving training it was very intense for my part, because we dived two time per day, we increased our knowledge, it was exciting.
But for the second part, about commercial diving training, I would like to have one month training more in the program to learn more about welding, cutting, lifting and arrive on work site with better knowledge.

What is your technical background before starting the training?
My technical background was road construction (5 years experience and Bachelor's degree of civil engineering) and 6 years experience as a tig welder.

What did you have to do in the field of further education / safety training to practice your profession?
After my first year, I passed my DMT ticket, and 3 month ago I passed my NDT ticket.

How did you experience the time after your training - eg finding the right employer?
After my training, I was very lucky thanks to the ENS because the school placed me to do my internship in the offshore industry during 5 weeks on the yard as welder, and when my internship was finish, my boss give me my chance as diver in his next rotation.

Are you employed by a diving company or are you self-employed?
I am self employed, I work only in offshore in some company and when I am in France I work as a welder.

How did you find your way into the job market in the beginning?
ENS, my school, find me my first job. After, during my first year, I worked only with the same company and during this time, lot of coworkers gave me some contact in the industry.

Have you underestimated things?
At the beginning, I underestimated the physic preparation.

Have you overestimated things?
I overestimated anything.

Where do you work now diving company / region / international / work field civil underwater construction, shipping, ports, SAT)?
I work in the offshore industry in Africa, with maintenance company who work principally on FPSO.

What is your specialty within the specialty of the diving company?
My specialty in the company is underwater welding and, since 3 month, I am also a NDT diver.

What does your day look like in the workplace?
We work 12 hours per day, the day are alike, during the day we dive between 1H30 and 3H maximum, after we are stand by diver, and after we are tender during the same period, and sometime there is some work on the deck, welding, cutting, maintenance on LARS, and at the end of day, we clean and check everything.

How did you see your profession develop or foresee future developments in terms of innovation, knowledge transfer, rules about safe diving, etc. (Do you see differences in the workplace since you started and now)?
I don't have enough experience in order to see some changes. I need more years.

Have you mapped out your future - are there still challenges?
Since I became commercial diver, I always wanted to become underwater welder, but there are few positions for underwater welding and it's very difficult to find a job.
So, if I have any experience in two years, I will try SAT diving or supervisor diver.

If you had the choice now to become a professional diver - with the knowledge of today - what would you do?
The same thing.

How do you see the labor market developing?
I am scared about future, because the ROV and the work force of some poor country will be increasingly present, which will cause wage cuts.

How important is it to be able to work in a team where the dive supervisor is in charge, but you as a diver are also expected to think along about diving safety and the technical aspect of the assignment?
In this job, the most important is safety, and that's the reason why it is essential to have a supervisor diver who know exactly the job and the consequences of each step.

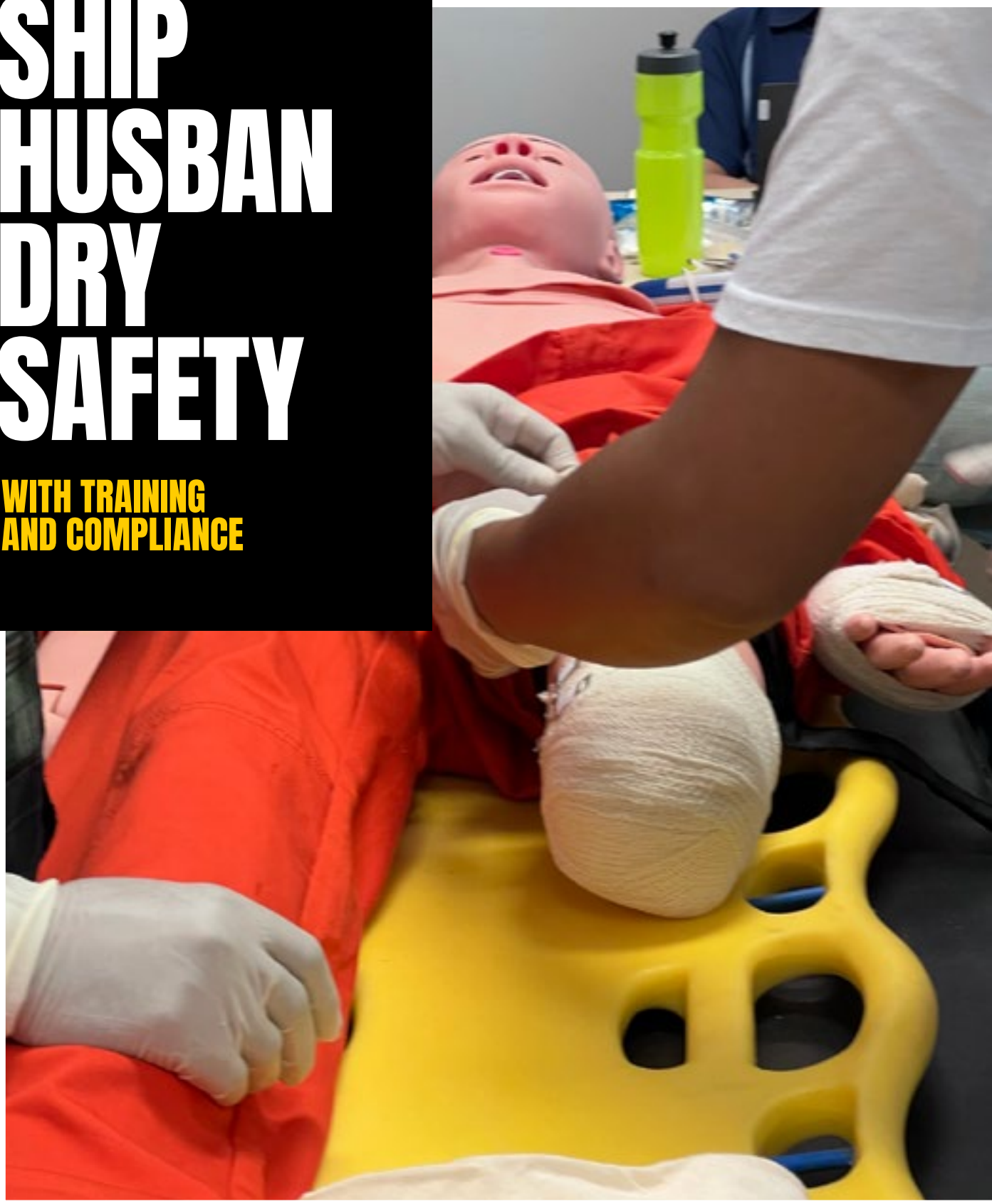
For the diver, it's the same, before to go underwater, he must know exactly what he must do, he must have a plan and always check his bailout, hat valve closed and his umbilical especially during lifting.

IN THIS JOB, THE MOST IMPORTANT IS SAFETY

What would you like to advise future divers?
For future divers, I would give them one advice : to have an experience in a manual job during 5 years before starting a commercial diver course.

ENSURING SHIP HUSBAN DRY SAFETY

WITH TRAINING AND COMPLIANCE



In recent months, several commercial diving incidents leading to diver injuries and fatalities while conducting Underwater Ship Husbandry Works (UWSH) were reported. During the recent 2023 Commercial Divers Association (Singapore) annual commercial diving seminar in Singapore, over 100 delegates attended including diving contractors, regulators, energy operators and shipping agents. One of the presentations referred to 15 commercial diving fatalities over recent years.

In 2022, the International Diving Industry Forum comprising of the International Marine Contractors Association (IMCA), Association of Diving Contractors International (ADCI), International Oil and Gas Producers (IOGP) held the Underwater Ships Husbandry Port Authority Seminar 2022 in Dubai which was attended by over 150 delegates from diving contractors, energy operators, port authorities, shipping companies, vessel owners and shipping agents. We may ask ourselves as an industry – why are incidents still happening? There are plenty of industry guidance provided and available from ADCI, IMCA and IOGP to understand the hazards and risks associated with such work. So, what is going wrong?

Based on available public information from each of the incidents that was reported and made known in the public domain, the common issues that led to and that resulted in the incident are:

1. Training competency of divers and diving supervisor.
2. Use of inappropriate diving equipment for conducting commercial diving works.
3. Lack of implementation of safe systems of work (SSW) - Dive

Planning; Lock Out Tag Out; Permit to Work; Risk Assessments; Emergency Response Planning.
4. Competency and knowledge of the hazards and risks involved of the hiring company (shipping agent; vessel owner; operator).
5. Just get the job done attitude.
6. Price – lowest price always awarded the works regardless of how it is completed.

It is often the case that regulations of a country must be established and enforced as a 'tool' and means to encourage companies to work safely. Despite the wealth of industry advice and guidance of how to plan, implement and conduct Ship Husbandry work, there will always be some who think they can 'get away with it'. Is 'getting away with it' a suitable means to operate? If we look at the actual cost of Ship Husbandry works to be conducted safely and aligned to the industry guidance, it will be small in comparison against the cost of a work-life changing results from such an incident for the families and those involved, the reputational damage to the organisations involved, and the legal costs and fines, that in today's workplace environment, it can be considered that every workplace fatality probably costs approximately US$4,000,000.00.

OUR SEMINARS ARE A GREAT WAY OF LEARNING AND EDUCATING INDUSTRY PLAYERS ABOUT UWSH

There are many diving contractors around the world that conduct ship husbandry works daily, safely with the correct SSW in play, trained and competent dive teams to conduct the work. As an industry, we still have a great deal of educating to be carried out, as the passage of goods around the world becomes busier, Underwater Ship Husbandry Works (UWSH) will be an ever-increasing requirement. As an industry, we need to establish a goal and ensure there are no more diver injuries or fatalities when conducting such work. To help achieve this goal, the following should be implemented for all UWSH work: -

1. Ensure divers are experienced, trained and certified by an acceptable authority.
2. Ensure the diving supervisor is experienced, trained and certified by an acceptable authority.
3. Use Surface Supplied Diving Equipment for all commercial diving works, with a minimum of a 5-man dive team, and a minimum of one standby diver for every two working divers.
4. Ensure the robust implementation of safe systems of work (SSW) - Dive Planning; Lock Out Tag Out; Permit to Work; Risk Assessments; Emergency Response Planning.
5. Ensure the nearest operational Recompression Chamber is either onsite OR within a 2-hour travel distance (or a minimum as required by local legislation) and have the emergency response plan tested and that it works.
6. Ensure the shipping agent; vessel owner; operator, marine crew are competent and knowledgeable of the hazards and risks involved and plan accordingly for the implementation of safe systems to work.
7. Vessel owner / client to have a competent diving onsite representative to oversee all diving work being conducted.

The next Underwater Ships Husbandry Port Authority Seminar is scheduled to be held in 2024. These seminars are a great way of learning and educating industry players about UWSH. However, it is what you do before and after such seminars that helps to make the difference to prevent all diving incidents. So, what are you going to do?

For more information, contact KBA Training at +65 6542 4984 or marketing@kbassociates.org

MacArtney
UNDERWATER TECHNOLOGY

SubConn®
DEPENDABILITY AT EVERY LEVEL

Wet-mate connectors

Recognised throughout the industry

Full range of Ethernet connectors

More than 40 years proven track record

Available worldwide

Denmark | Norway | Sweden | Finland | United Kingdom
Netherlands | Germany | Poland | France | Spain | Portugal
Italy | UAE | Israel | Turkey | Africa | USA | Canada | Mexico
Colombia | Chile | Brazil | Singapore | China | India | Saudi Arabia
South Korea | Japan | Taiwan | Australia

ÁLVARO PINZÓN A COMMERCIAL DIVER EXPLAINS

In what year were you trained as a professional diver?
2015.

Where did you receive your diving training?
Océanos commercial diving school in Barcelona-Spain.

How did you experience the time of your training?
It was very professional and they made it easy to understand and easy to do the practices even though they had some that were quite technical.

What is your technical background before starting the training?
Did you see the movie "men of honour"? Well, very similar, I am ex-military and I was a cook! I also worked in construction, selling things or whatever I had to do.

What did you have to do in the field of further education / safety training to practice your profession
After leaving school I wanted to focus on offshore, so I had to do the BOSIET CA-EBS and the DMT diver medical technician because this course already includes O2, AED provider and first aid, which are essential in the sector.

How did you experience the time after your training - eg finding the right employer?
It has been a good path, I can't complain, I had good foundations thanks to the civil diving work, and the good preparation of the school, so on my own it was just a matter of getting known and having more offshore experience, jumping and jumping from countries and diving companies.

Are you employed by a diving company or are you self-employed?
Self-employee.

How did you find your way into the job market in the beginning?
I have been very lucky to have to move and work with many people and in one of those jobs I met a man with whom we worked shoulder to shoulder and he was the one who encouraged me to look beyond what I knew, he had a important position in a company so that was the hand that pushed me to go IN , I went straight to the North Sea (lucky me) and from that moment on I continued to grow in experience and take more courses, because the competition is tough.

Have you underestimated things?
I think not, I have always tried to take safe steps and with the greatest humility possible, there is little room to underestimate things, I knew that you could learn from everything and everyone, and underestimating is also giving rise to failures.

Have you overestimated things?
Perhaps before arriving at offshore I thought it was a world of superheroes and very complex manoeuvres, the truth is that after getting to know it it became easier for me than civil work (you do everything), so I discovered that there were no Super Aquamens and that the tasks were 3/4 of the same.

Where do you work now diving company / region / international / work field civil underwater construction, shipping, ports, SAT)?
I am currently a saturation diver, I have a wide range of companies to which I provide my services, I have worked in Swedish, Italian, Spanish, French, Mexican, Danish, Costa Rican companies, etc. I have moved between the North Sea to Africa, Asia, Central America and I have even been to the Faroe Islands. I do construction and inspection and sometimes when I'm at home I do some work on the coast with divers from my region (old friends) because I like it and it amuses me.

What is your specialty within the specialty of the diving company?
Construction and inspection are the most jobs I do.

What does your day look like in the workplace? Quite entertaining, when you don't dive because it's not your turn or because you can't do it that day, whether due to bad weather or whatever, I'm always looking for what to do, repairing equipment or asking questions about things I don't understand or it's not my job. field, I worry a lot about the safety of myself and others, so there is always something to do or something to learn, it is one of the things I like about my job, every day is different.

How did you see your profession develop or foresee future developments in terms of innovation, knowledge transfer, rules about safe diving, etc. (Do you see differences in the workplace since you started and now)?
Of course yes, I started diving and doing work before having a professional qualification and I think I have seen the "what not to do" and the evolution, especially in the field of safety, with the course I learned many things that have helped me and I am grateful Thank God for having learned them well (because safety and training save lives) now the companies are very worry about safety.

Have you mapped out your future - are there still challenges?
If there were no challenges I would change my profession, we are a profession of change and updating, we always want to take that next step, I like to grow and here you cannot skip the steps, experience - next course-experience... to infinity and beyond.

If you had the choice now to become a professional diver - with the knowledge of today - what would you do?
Without a single moment's hesitation, I would return to being a commercial diver, but knowing which steps to take and knowing which ones not to take.

How do you see the labour market developing?
After a jobs crisis we are now experiencing a great jobs bonanza (bubble) thanks to the COVID stoppage, there is a lot of construction and inspection in the market and we must take advantage of it, hopefully it lasts and continues to be maintained.

How important is it to be able to work in a team where the dive supervisor is in charge, but you as a diver are also expected to think along about diving safety and the technical aspect of the assignment? Safety is everyone's job! the supervisor is human and can make mistakes, 4 eyes see more than 2. I have always been involved in safety from the deck in crane operations or in the care of the umbilical when we are in the water, sometimes the smallest things can add up until it leads to a bigger one, if we all think about safety, we all take care of everyone and everything.

What would you like to advise future divers?
The stronger the bases, the stronger your career will be. Do every drill at school or at work thoroughly because you are going to use it one day and that day there is no time to think, only to act.

DIGITAL DIVE SYSTEM

CONSTRUCTION DEPTH AND ANGLE

TARKA
www.tarka-systems.nl

- Accuracy +/- 1 cm.
- Easy to install and operate.
- Data storage for dive-profile.
- Works in tunneled situations.
- Only operator and diver are needed.
- Direct reading possible in NAP, NN or other national reference value.
- Depth- and Angle-sensor can be used together on existing umbilical.
- Changes in atmospheric pressure or water level are eliminated.

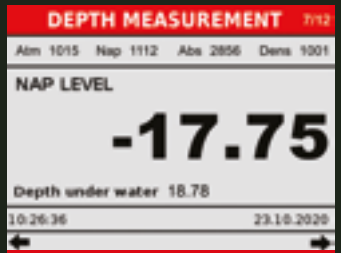
LOOKING TO IMPROVE YOUR DIVE-PROJECTS?

For all inshore underwater projects that require accurate depth measurements and/or angle monitoring the MOSS is the perfect system. Ideal for accurate and fast determination of anchor heights and angles.

The MOSS system is available for purchase and rental.

FOR MORE INFO: WWW.TARKA-SYSTEMS.NL • T +31 6 51986597

Compact system



Large display and logging

Easy and fast anchor info

Angle measurement

MOSS DEPTH-SYSTEM

from prototype to standard requirement

DETERMINE
THE ANGLE OF THE WALL.

TARKA-SYSTEMS is small company owned by Henry Wijgerse that develops technical solutions and monitoring systems for all kinds of industries but mainly for the maritime and civil industry.

With a personal background as a professional diver together with a higher technical education, the request to improve the depth measurement for civil projects was highly accepted. This request came early 2018.

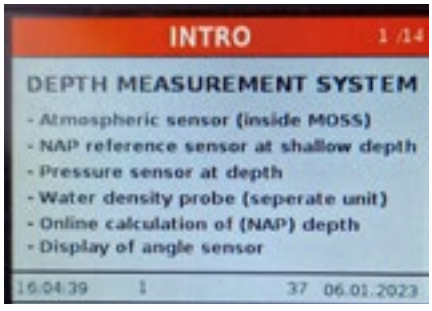
To start with this challenge it was very important to first determine the "problems" of the existing depth measurement systems for underwater construction and infra-structural projects.

The problems of these systems were:
- Not very accurate and consistent
- Complex setup and calibration routines
- Civil depth must be calculated based on human readings. Very easy to include human errors.
- No correction for changing atmospheric pressure during operation
- No correction for change in water level in building pits during operation

Moss depth prototype

Based on the above mentioned problems and additional info retrieved from companies working in the underwater construction, repair and maintenance, the first prototype of the MOSS-DEPTH was ready at the end of 2018.

The prototype system was based on three highly accurate pressure sensors: an atmospheric sensor, an Reference sensor and a Depth-sensor. The depth sensor is taken down by the diver to determine the exact depth.



All sensors are connected to the portable. Logger-unit to gather, display, calculate, present and log the data. With the integrated software on the logger the civil depth is directly calculated and presented. With the setup of three sensor the change of atmospheric pressure and/or the change of water level in the building pit are eliminated.

Most civil construction projects are executed inshore in fresh water. To be able to use the system also in brackish water the salinity value is integrated in the depth calculations.

Rugged case	:	305x270x194 mm
Weight	:	Approx. 4.5 kg
Battery	:	90 Wh (approx. 20 hours)
Connectivity	:	1 x sensor atmospheric
	:	1 x reference sensor NAP
	:	1 x sensor depth
	:	1 x angle sensor
Cable	:	50 m cable depth sensor
	:	25 m NAP sensor
		Options for longer lengths
Charge	:	1 x input 12Vdc
Software	:	Display and store data

Additional to the improved accuracy on the measured data also a practical improvement was the cabling. The first prototype had a separate cable to the sensor at the diver. As the 4-core video line is often not used by the diver it was made possible that the sensor can be connected to this connector and the data is retrieved again on the surface and connected to the logger unit. So no additional cable is needed anymore.

Moss depth deployment

From the first prototype in 2018 the system has proven its added value for the underwater construction work. What started with some demo projects in 2019 for interested companies changed into a standard requirement in 2023.

Many companies use the TARKA MOSS-SYSTEM as a standard tool for all their underwater work.

At the peak moment in 2022 over 25 systems were used simultaneously on the same moment at several different infra-structural projects.

Moss depth improvements

From the first prototype in 2018 to the current system in 2023 many additional improvements are integrated to the system. All improvements are based on requests from users and TARKA's development:

- Added option for Angle sensor to the system for inclination measurements
- Added screen to show mm values instead of cm values
- Added DIVE-time screen
- Improved protection for sensor at diver
- Added signal amplifier for long cables
- User input box for special measuements

Complete MOSS-DEPTH system

Total set consist of:

- MOSS unit with integrated atmospheric -sensor
- 50m cable with depth sensor at diver
- 25m cable for NAP reference sensor
- Density sensor
- Angle sensor
- Control-box for special functions
- Optional 75m cable

EXCAVATION-PIT, WITH GEWI-ANCHORS AND LEKA-PILES

Projects

Over the last years the MOSS-DEPTH has been applied at many projects. With clear screens the supervisor can operate the MOSS very easily and no extra training is required. The setup time of the system is less than 15 minutes.

All anchors and piles were measured by divers when excavation-pit was full of water.When water was pumped out a total-station was used for a reference measurement. Result were spot-on and exactly the same.

Moss advantages

- Digital measurement by means of a pressure sensor instead of visual observation or lead-line.
- Can be used in excavation pits also underneath structures.
- Depth check on submersion projects.
- Easy to apply, direct from surface, dive-container or diving bus.
- Direct readings on MOSS-logger.
- Accuracy of +/- 1 mm
- Readings are stored on USB stick for validation or generation reports.
- Portable system with integrated battery supply.
- Angle measurement for check on walls or constructions.
- Pressure sensor can be connected to existing umbilical of diver.

Additional to the above practical advantages the MOSS DEPTH system has also direct advantage on the financial part:

- Less people required for project.
- Faster readings during inspections.
- Always demo system available.
- Special rates for IDSA members.

nkel.se

The Divator™ Full Face Mask

The future of diving has history written all over it

Every day this mask stands up to the toughest diving conditions. Through decades of innovation and refinement, it has mastered the secrets of the sea. Users have saved both man and beast, seen dictatorships fall and freedom rise, even greeted astronauts returning from the Moon by way of ocean landing. It might be old news for professionals around the world, but performing well where others fail never gets old.

interspiro.com

INTERSPIRO

Keeps You Breathing

JOEY PRIANON A PROFESSIONAL DIVER EXPLAINS

In what year were you trained as a professional diver?
I did my commercial diving training in 2019, from Mars to July.

Where did you receive your diving training?
I received my training at « Ecole National des Scaphandrier » in Fréjus, France.

How did you experience the time of your training?
I really appreciate the training for the following reason:

- Very qualified instructor with various background (onshore, offshore, civil engineering).
- Various site to dive like river, lake, open sea, container.
- Good quality of the equipment and good logistics
- Welcoming teams

What is your technical background before starting the training?
Prior to commencing my training, I completed a six-month program in Civil Engineering and gained experience through an apprenticeship with SEANERGY, a company specializing in underwater work.

What did you have to do in the field of further education / safety training to practice your profession?
In order to pursue my profession, I had to undergo several specific safety and further education training courses. I initially completed the BOSIET training in ENS, followed by BOSIET and Fire Escape training in Rotterdam. Additionally, I received SST training in France and obtained PSE1 certification, also in France.

How did you experience the time after your training - eg finding the right employer?
Before graduating, we were required to complete an internship. Thanks to the school, I completed mine in Ivory Coast with PETRODIVE, which turned out to be a highly valuable experience. It provided me with the opportunity to explore commercial diving activities abroad and work with a company known for its high standards.

Following my internship, thanks to ENS again, my first commercial diving contract was with Nautilia in the Alsace region of France. This initial contract exposed me to a wide range of underwater projects, including dam work, sewage projects, and cutting operations.

However, due to the less-than-desirable salary, I decided to register with a temp agency and took on assignments with various companies such as OCAN, VINCI, and TETIS, among others.

Are you employed by a diving company or are you self-employed?
At the moment I'm employed at SEANEGRY as COO / Commercial diver.

How did you find your way into the job market in the beginning?
I began my diver career after the covid crisis so I had a lots of opportunities and offer around France and abroad. As a worked for 5 different company in less than a year, I had the chance to compare the management, teams and way to work. I then choose where and how I want to work.

Have you underestimated things?
Yes, becoming a commercial diver require a good physical condition (I was prepared) but also need you to have a mental and good ability to confront various challenges (cold, stress, distance with family during the missions etc). So yes, I underestimated things.

Have you overestimated things ?
No.

Where do you work now diving company / region / international / work field civil underwater construction, shipping, ports, SAT)?
I'm currently working for SEANERGY as Chief Operating Officer. Our head office is base in Réunion Island, but we work often in Madagascar and Mozambique. Due to my position, I have the chance to travel quiet often, to dive with my team or to visit clients to get new contract (India, Senegal, Comores, Mauritius etc).

What is your specialty within the specialty of the diving company?
My specialty is to perform various

inspections and be able to write a detailed report.

What does your day look like in the workplace?
Some day at the office, Some day on the field.

When I mix both:
- 5:00 – Arrive to office – Check and reply to email
- 6:00 – Meeting with diving supervisor and help to prepare the truc or boat.
- 7:00 to 14:00 – On the field, diving, safety meeting etc
- 15:00 Back to office and catch up with the CEO
- 16:00 – 18:00 – Call, email and organizing the next days.

How did you see your profession develop or foresee future developments in terms of innovation, knowledge transfer, rules about safe diving, etc. (Do you see differences in the workplace since you started and now)?
Since I'm with company I see a lots of changing:
- Safety → Hyperbar certification audit every year with update every year to upgrade our system.
- Workplace → Modification of the office to looks like a start up company and made the employee happier during the office hours.
- Knowledge → Old school (diver more than 15years of experience) have a different way to work and was more polyvalent than young diver. Young diver a quickly limited to phase unforeseen event like compressor breakdown or other technical issues that they did not learn on school. I think that it's important to keep an older diver in a company to transfer the knowledge to the new generation.

Have you mapped out your future - are there still challenges?
Of courses, without goal and dream you won't go nowhere. For the moment I'm focusing of improving the financial and marketing aspect of this company. Get shares in this company and develop it to be a recognise company around the world.

If you had the choice now to become a professional diver - with the knowledge of today - what would you do?
I would have done more technical training regarding maintenance of equipment (Elec and mechanics). A diver who can fix everything will catch the attention of the employer.
Also invest in a new training every years (NDT, welding, Cofrend etc).

How do you see the labor market developing?
Yes. In Reunion I see the evolution of the labor market:
- From 2015 to 2020 → Huge amount of work and possibility due to the new coastal road project.
- Crash during covid
- Nowaday the market is quiete calm in Reunion.

In France, I don't know.

How important is it to be able to work in a team where the dive supervisor is in charge, but you as a diver are also expected to think along about diving safety and the technical aspect of the assignment ?
It's important for divers to talk with each other about staying safe and understanding the technical parts of their dives, even if there's a leader in charge. This teamwork makes diving safer, helps solve problems, and makes the whole team work better together, leading to successful and trouble-free dives.

What would you like to advise future divers?
- Before they dive in, make sure they're in good shape both physically and mentally.
- They should stay curious and keep that problem-solving attitude alive so they can figure things out if stuff gets tricky underwater.
- Don't forget to listen old divers – they've got a ton of wisdom and tips to share.
- Improve they english to be able to move abroad and get skills.
- Invest on themselves with training.

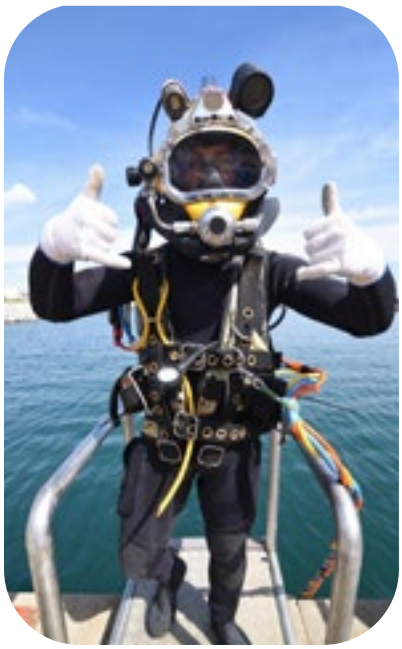
JOEY PRIANON
CHIEF OPERATING OFFICER / COMMERCIAL DIVER

IDSA MEMBERS LIST

Country	Full Members	IDSA LEVEL
Belgium	**SAB AKVO**	**3**
Egypt	**Arab Academy for Science Technology & Maritime Transport (AASTMT)**	**2**
Egypt	**Egyptian International Diving School (EIDS)**	**3**
Egypt	**Middle East for Commercial Diving (MECD)**	**3**
Finland	**Luksia Sukellusala**	**3**
France	**Ecole Nationale des Scaphandriers (ENS)**	**3**
Ireland	**The Irish Navy Diving School**	**3**
Italy	**Centro Studi CEDIFOP**	**3**
Morocco	**Centre Mediterraneen de Plongee Professionnelle (CMPP)**	**3**
Netherlands	**Foundation NOK**	**3**
Norway	**Norwegian Commercial Diving School, Oslo (NYD)**	**4**
Norway	**Western Norway University of Applied Sciences, Diver Education (HVL)**	**3**
Poland	**OSNZ FROG**	**2**
Spain	**Oceanos Escuela de Buceo Profesional SL**	**3**
Sweden	**Commercial Diving School of Gothenburg (YRGO)**	**3**
Singapore	**KBA Training Center PTE Ltd**	**Specialist Diving Training**
United Kingdom	**Interdive Services**	**Specialist Diving Training**

Country	Associate Members
Estonia	**GT Corporation SE**
France	**Centre Activities Plongee de Trebeurden (CAP)**
Gibraltar	**Dive Marine Services (Gibraltar) LTD**
Hungary	**BÚVÁR KFT**
India	**Ganpat University**
Ireland	**Irish Sea Fisheries Board (BIM)**
Ireland	**Kerry Education and Training Board**
Kuwait	**IDEA Kuwait**
Latvia	**Daivtechnoserviss SIA**
Malaysia	**Divestuff Ventures**
Montenegro	**Regional Centre for Underwater Demolition (RCUD)**
Morocco	**Nitrox SARL**
Nigeria	**Mieka Dive Training Institute**
Panama	**Commercial Diving Panama**
United Arab Emirates	**Atlantis Marine Services LLC**
United Arab Emirates	**Gulf Marine Contracting FZE**
United Arab Emirates	**HHA Diving Services LLC**
United Arab Emirates	**ISEAS, Integrated Subsea Engineering and Services LLC**
United Arab Emirates	**JVS Diving and Marine Services LLC**

Country	Affiliate and Industrial Members
Belgium	**De Zeeman Pro NV**
India	**Neel Diving Institute**
Italy	**Alpe Sub Srl**
Italy	**Drafinsub Underwater Technology S.R.L**
Latvia	**Eprons Ltd**
Netherlands	**Hytech-Pommec**
Netherlands	**MacArtney Benelux BV**
Norway	**Norwegian Association of Underwater Entreprenurs (NBU)**
Saudi Arabia	**Deep Dive Est**
Serbia	**Aquamont Service**
Sweden	**Interspiro AB**
United Arab Emirates	**Aries Underwater Solutions LLC**



Follow Us On Instagram

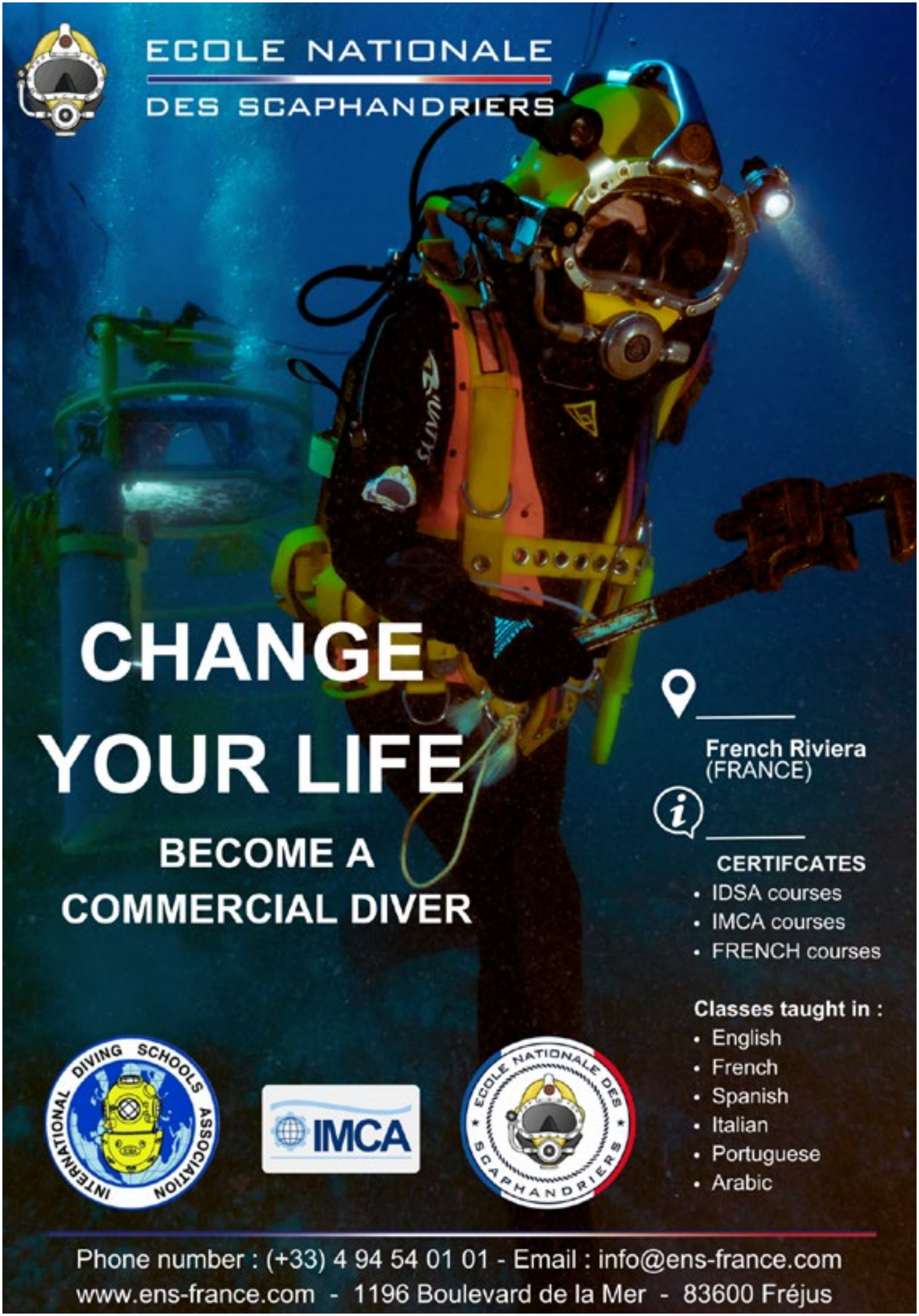
idsa.diving

PROFFESIONAL DIVER'S LOGBOOKS

Exclusively for IDSA members. Customizable with your own logo.
For prices and purchases, download the order form on
www.idsaworldwide.org

IDSA

www.idsaworldwide.org


ECOLE NATIONALE
DES SCAPHANDRIERS
CHANGE
YOUR LIFE
BECOME A
COMMERCIAL DIVER
French Riviera
(FRANCE)
CERTIFCATES
• IDSA courses
• IMCA courses
• FRENCH courses
Classes taught in :
• English
• French
• Spanish
• Italian
• Portuguese
• Arabic
INTERNATIONAL DIVING SCHOOLS ASSOCIATION
IMCA
ECOLE NATIONALE DES SCAPHANDRIERS
Phone number : (+33) 4 94 54 01 01 - Email : info@ens-france.com
www.ens-france.com - 1196 Boulevard de la Mer - 83600 Fréjus