INTERNATIONAL DIVING SCHOOLS ASSOCIATION



NEWS EDITION NO. 21 JANUARY 2013

DIVER HEATING-CUSTOM DESIGN & FABRICATION

A NEW ADDITION TO THE DIVING MUSEUM IN PLYMOUTH

A NEW UNDERWATER CLEANING SYSTEM-CAVIDYNE

SCIENTIFIC DIVING

NEXT ANNUAL MEETING IN COPENHAGEN

LAST ANNUAL MEETING IN SEATTLE DIVER TRAINING IN TASMANIA



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Cover Photograph: A diver from the Israeli Professional Diving Academy (IPDA) about to descend to carry out a cutting job.

FROM THE CHAIRMAN

As always I am pleased to welcome members who have joined the Association since the Annual Meeting: **Associate:** Sea Royal Maritime Studies, India

CDA Bilbao, Spain

Affiliate: Divesafe International, Canada

In addition, at the present time, six schools are preparing their applications for Full Membership.

The Board utilised the annual meeting of the European Diving Technology Committee (EDTC), which took place in Oslo, late October to get together and discuss the decisions made at the Annual Meeting in Seattle, which are summarised on pages 10 & 11

The EDTC Meeting, chaired by Jorn Ryberg from Sweden, was constructive and forward looking. The work of the 'Renewables' sub committee of which I am a member continues, and a Guidance document is planned in the near future. One aspect of the meeting which was both interesting and worthwhile: delegates were split into groups of 3 or 4 and asked to discuss

various aspects of EDTC future policy. After some 30 to 40 minutes a spokesman from each group gave a short presentation which was discussed by all delegate. The consensus views will then be used by the EDTC Executive Board as guidance during

Leo on his recent birthday in October with a small statuette given by the Association – we wish him many more similar occasions.



their meetings.

I am also pleased to say that the work on the major revision of the Standards and Procedures is going well and it is planned that a document will be sent to all members at the end of February. It will be loose leaf, so that changes can be made from time to time, and the outside cover will look as illustrated. Publication is reasonably expensive, but we are lucky to have received some sponsorship. Any member with ideas on how further sponsors can be attracted should contact the Administrator.

It is good to see the steady development and expansion of IDSA, and I thank all members for their continuing support and wish everyone a happy and prosperous 2013.

LEO LAGARDE

ABOUT IDSA

The Association is concerned with all divers - Offshore, Inshore and Inland, and has established International Diver Training Standards based on the consensus view of its many members. The Standards provide both a yardstick for those responsible for either administering existing National Standards or creating new ones, and a guide for Clients, Diving Contractors and Divers themselves. It is considered that the introduction of these Internationally agreed diver training standards will have the effect of

improving safety, providing contractors with a direct input to the Diver Training Syllabus enabling Contractors to bid across national borders on a more even playing field, improving Diver competence and providing Divers with greater job opportunities.

Some governments have and will, set their own National diver training requirements. The IDSA programme provides a means of

equating National Standards by maintaining a Table of Equivalence.

One of the main thrusts is towards International Diver Certification in order to bring together the various National Schemes which are currently in existence. However, the Association is not just concerned with standards; it also serves as a valuable forum for the interchange of News & Views between members, many of whom are the only Commercial School in their Country. Current routes for this interchange are the Newsletter - published in January and July, the IDSA Website:

(www.idsaworlwide.org) the Annual meeting in September/October, and various and many forms of contact between members and the Executive Board.

For Membership and all other information contact the Administrator at: info@idsaworldwide.org

ANNUAL MEETING 2013 COPENHAGEN 28 TO 30 AUGUST



Hosted by the Royal Danish Navy Diving School (RDNDS)

165 YEARS WITH NAVY DIVERS The Danish Navy bought its first diving equipment on December 17th 1847.

t all started with the battle of Copenhagen in 1807. The British Royal Navy came to steal the ships from the Danish Navy, which they succeeded in doing and went off with more than 30 ships. But they left a lot of wrecks behind in the harbor of Copenhagen, and these wrecks were a menace for the traffic in the years to come. There was a strong need for cleaning up. There was a real need for divers!

HOLMEN

From 1688 to 1992 the total Danish Navy had its home base on Holmen in Copenhagen. For centuries the Navy was the largest employer in Denmark and most of the employees worked at Holmen – sailors, soldiers, shipyard workers and many many more. But there were no divers!

THE FIRST DIVING SUIT

"We'll propose that the Navy buy some diving equipment. The private divers are too expensive." This was written by one of the chiefs from the Navy Shipyard to the Marine Ministry, and they agreed that the Navy ought to have divers. On December 17th 1847 the Navy received its first diving equipment from England with a written instruction of how to use it. It is a fact that they actually began to dive, and they did so for nearly 40 years, before the Admiralty realized that they had to provide a proper education of the divers. Until then it was learning by doing and teaching your mate. But in 1883 the Danish Navy's Diving School was founded.

THE SUBMARINES

Denmark got her first submarine from Italy in 1909. It was called "Dykkeren" (the Diver) and even though it only sailed just around the harbor of Copenhagen as a training ship, it had a rather dramatic fate. It collided with a Norwegian ship in 1916 and sank with the crew of nine still aboard. All except one were rescued, but the accident showed yet another role for the navy divers – a role so important that the Diving School became a part of the Submarine Division in 1930. A couple of years later the Diving School parted from the submarines and became an independent part of the Navy – which were maybe pretty lucky since the submarine division were closed down in 2004.

SDK OF TODAY

The Danish Navy's Diving School is still situated at Holmen – as one of the last institutions at this historic place. The students get their equipment in the old submarine building and their first dive in a beautifully restored old arsenal building from 1824, which nowadays is used as a school building. After this first trial dive the students spend the next couple of weeks diving in the old harbor of Holmen, until they sail with the diving ship "Søløven" (the Sea Lion) to the island Bornholm, where they make deep dives. After that, they (hopefully) pass their examinations and leave the school as fully educated divers.

Most of the students are from the Navy, but since 1936 – where a law stated that all professional divers need to be educated at a regular diving school – a percentage have been civilians. This means that the Danish Navy's Diving School through the years has been an important centre for professional diving in Denmark ... and it still is!



ABOUT THE MEETING

he meeting this year hosted by the Royal Danish Navy is to be held in the ancient and splendid city of Copenhagen – more about the city on pages 8 & 9 The meeting itself will be held in the historic Fortress of

Kastellet which is still used by the Military Administration..

The meeting Hotel the 'Copenhagen Strand' is some 10-15 minutes drive from Kastellet and transport will be arranged as required each day for delegates, not just to Kastellet, but also to the Diving School

ACCOMMODATION

The address of the Copenhagen Strand is: Havngade 37, DK-1058 Kobenhavn K The Room rates are DKK 995 single or DKK 1190 Double (inc Breakfast). Bookings should be made direct with the Hotel

quoting reference: 1380686. Telephone +453348 9901 E Mail: copenhagenstrand@arp-hansen.dk,

WEB: www.copenhagenstrand.dk

In case of difficulty please contact the Administrator at: info@idsaworldwide.org



The Meeting Hotel – Copenhagen Strand



The Fortress of Kastellet

ATTENDANCE:

In addition to Association Members, the meeting is open to non members as Observers. Wives or Partners wishing to attend meals and other social occasions - for example the Association Dinner - are welcome on payment of an appropriate fee. The meeting fee which will cover attendance, all transport, refreshments, lunches, and the Association dinner has been maintained at €350 (DKK 2611) per delegate and €400 (2984 DKK) for observers.

Please Note:

The Hotel Booking Form and the Meeting Registration Form may be downloaded from the News section of the IDSA Website

TRAVEL:

A Taxi from the Airport to the Hotel will take about 30 minutes and cost about €40 (DKK 300)

INFORMATION:

Full details are available on the IDSA Website where changes and additional information will be shown.

The Agenda: The Agenda for the meeting sessions will be circulated late July.

THE OUTLINE PROGRAMME

Tuesday 27 August

1830 to 2030

Registration and welcome drinks at the Hotel Copenhagen Strand

Wednesday 28 August

0900 0915	Bus from Hotel to Kastellet Welcome by Commander Niels B. Mejlhede – Commanding Offic of RDNDS
0945	Meeting session 1
1200	Lunch at Kastellet
1245	Meeting session 2
1445	Bus from Kastellet to RDNDS
1530	Tour of RDNDS
1630	Harbour Cruise in DV
	'Soloven' - Buffet on board
2000	Return to Hotel

Thursday 29 August

Friday 30 August

0900	
0915	
1200	
1200	

Bus from Hotel to Kastellet Meeting session 3 Lunch at Kastellet Bus from Kastellet to RDNDS 1 Program at RDNDS Group Photograph Return to Hotel Pick up at the hotel Association Dinner

Bus from Hotel to Kastellet Meeting session 4 Meeting Closes Bus from Kastellet to the airport

ABOUT THE CITY

Her Majesty's Copenhagen

Copenhagen is not as old as Rome, as big as London, as tall as New York, as beautiful as Paris or as vibrant as Berlin. But it is still something special.

ake a walk down Strøget on a summer's day and look at the people – busy or strolling, wearing suits or mini dresses, eating ice cream or drinking beer. After a while you end up at Kongens Nytorv with the Royal Theatre at your right hand, but you pass it and find a spot in the sun In Nyhavn.

Nyhavn

This means "new harbor" and even though most of the houses go back to the 18th century, it actually is quite new. It was dug out as an alternative to the old harbors in 1671-73. Up to the 1980's it was a sinister place filled with whores and drunken sailors. Many poets – among them Hans Christian Andersen – were fascinated by this dark part of the city, lived there and got a lot of inspiration from all the sailor's tales and lies. Nowadays Nyhavn is fashionable with expensive flats and fine restaurants ... but the beer's still good!

Royal in many ways

When you wak to the end of Nyhavn and turn left you look out over the main part of the harbor. At the other side you see a funny looking building with a big canopy – the new operahouse. The operahouse is a part of The Royal Theatre, just like the brown building just ahead of you stretching out over



the water. This is Skuespillerhuset, which in English means "The Actor's House", and this is also a part of The Royal Theatre. If you continue your walk along the quay, you'll eventually reach a small park. Go through it, cross the street and you're standing in the courtyard of Amalienborg – the royal palace.

Queen Margrethe II

Our queen is a descendant from a royal family, which stretches back at least till the 8th century. Her ancestor – Queen Margrethe I – lived 1353-1412, and she was the ruling queen of all Scandinavia – Denmark, Norway and Sweden. Still she was not the mightiest royal figure in the history of Denmark. This was Knud den Store or Canute the Great, who was king of England, Denmark, Norway and part of Sweden.

Capitol of Denmark

Well, neither of these two royal persons stayed in Copenhagen, simply because Copenhagen was not the capitol of Denmark until 1443, where Christoffer III made it the royal city. Before that it was just another small town, which had been there at least since the 8th century, where it was just called Havn or "harbor". This word "harbor" is in fact the explanation of the city's success! From the beginning it was a fantastic harbor, which was easy to defend, and since the king at that time ruled both the Danish Isles of today and the southern part of Sweden (plus Norway), Copenhagen was placed just in the middle of the Realm.





We walk on

Take Frederiksgade out of Amalienborg, where you walk past a big church – Marmorkirken or "the marble church". Turn right and keep strolling down Bredgade until you reach Grønningen. Here you have a green area on your right hand. Walk in there and turn left. If you follow the path along the water, you'll eventually reach a wooden bridge. This leads you to Kastellet.



Kastellet

Like most of the old towns in Europe Copenhagen was surrounded by a heavy defense - mostly earthworks. Kastellet was a part of this defense, build by King Christian IV in 1662-64. It was a fortress with barracks for soldiers, but it was also a military prison and an execution place. Quite a lot of people were imprisoned, tortured, whipped and beheaded at this place. It was captured twice in history: First by the English in 1807 and second by the Germans in 1940. Again it served as a prison through WW2. Kastellet has got a church and a mill of its own, which is still standing. And even

though there are no prisoners awaiting execution today the area still belongs to the military and the beautiful old houses are a workplace for soldiers.

The city of the Navy

When you've done looking at Kastellet, take one of the wooden bridges back to solid ground and follow the path back to Grønningen. Continue walking this road until you reach Store Kongensgade at your left hand. Now turn down this road. On your right you see a lot of yellow old houses, and this is actually a small town within the town - made for the people from the Navy and their families. Once again the initiative was taken by King Christian IV. He called the place Nyboder, which in English means "new little houses". Until 1807 Denmark had one of the biggest and strongest navies in the world, and since the Navy was stationed in Copenhagen, it was necessary to have houses for all the sailors. For centuries the Danish Navy was the biggest workplace in Denmark with the ships being just a part of business. Nowadays the heavily diminished Danish Navy is mostly situated in Jutland, so unfortunately it looks like most of the area are going to be sold.

Strøget once again

If you continue walking down Store Kongensgade you reach Kongens Nytorv once again. You just have to cross a couple of streets and then you're back at Strøget. Try to walk down the small streets running along Strøget. If you follow Strøget all the way to the other end you'll reach Rådhuspladsen or in English the town hall square. On the other side of that square you can see one of the main attractions of Copenhagen.



Tivoli

Denmark has got the two oldest amusement parks in the world: Bakken situated a couple of kilometers north of Copenhagen and founded in 1583, and Tivoli in the center of Copenhagen, founded in 1843. Many Danish families have got a tradition in visiting Tivoli at least once a year, and as a tourist you haven't really visited Copenhagen unless you've been in Tivoli. It is a fact that Mr. Walt Disney took a good look around when he visited Tivoli: "His spirits revived when he saw Tivoli Gardens in Copenhagen: it was spotless and brightly colored and priced within the reach of everyone. ... "Now this is what an amusement place should be!" Walt enthused to Lili [his wife]."

Have a good time in Copenhagen





Divers preparing to descend for Rescue Drills from the DV 'Stand By' which was on hire from 'Impresub' - a Diving Contractor based locally - during the 1st part of the conversion course in Palermo.

60 days to run Italian course for "Operatore Tecnico Subacqueo Specializzato" (OTS) which contains basic diver training.

10 days to run the IMCA Diver Medic course 20 days to convert divers from the OTS. course to IDSA Level 2 in accordance with IDSA reguirements for Scuba and Surface Supply

20 days to complete the conversion course from Level 2 to Level 3 - 15 days deep surface orientated diving in Palermo and the final 5 days at NYD diving from a Wet Bell using a Hot Water suit.. On Tuesday 27 of November, Students had the final assessment in front of an examination board, established by a decree of the Regional Assessor for Professional Training, who had nominated an Officer of the Sicilian Government as chairperson of the board, a representative of Port Authority of Palermo, and 2 Instructors from Cedifop Staff.

This conversion course, run by Cedifop, is the only course of its type run in Italy

There was a special guest, observing training and activities run by Students, Mr Walter D'Aniello, staff manager of Diving Division I.D.M.C. Impresub Diving Marine Contractor Srl.

their training. The total length of the course was 110 days, divided into 4 steps: Students and Instructors during the final stage of the course at the sophisticated NYD base at Fager-

INTER-SCH CO-OPERAT

Students of the Conversion course from IDSA

Level 2 to Level 3 have come back to Italy after

School (NYD) near Oslo, where they completed

5 days at the Norwegian Commercial Diving



AWARD FOR THE DIRECTOR OF DDRC

The Diving Diseases Research Centre (DDRC) adjacent to Derriford Hospital, Plymouth has a long and well respected reputation, and we are pleased to count it as one of our of longstanding and active Associate Members. We are therefore pleased to learn that Peter Atkey, the Operations Director, has been awarded chartered membership of the Institute of Occupational Safety and Health (IOSH) UK. Peter was active as a commercial diver in the early 1980's before moving into diver training where safety and protecting trainees during their training is imperative. He later moved on to running a consultancy specialising in underwater inspections before joining DDRC.





DIVING DISEASES RESEARCH CENTRE (DDRC) – ASSOCIATE MEMBER





IPDA A Diver previously trained at the Israeli Professional Diving Academy (IPDA) cutting clear the ropeguard of a cargo ship damaged by a steel wire which became entangled with it. A new guard was later welded in place.

THE LAUNCH OF AN IDSA RESCUE DIVER STANDARD

The Board recognises that there is a requirement in many countries for a common Rescue Diver Standard. At present such standards, which are used by Police, Fireman, and other rescue services vary considerably.

IDSA has had such a standard in its Guidance Handbook for some time - drawn up by the Norwegian Commercial Diving School (NYD) - , and it is proposed to include it in the new version of the Standards and Procedures, in the same format as the existing Diver Training Standards



SEATTLE

he Association was very fortunate indeed that Phil Newsum the Chief Executive of the Association of Diving Contractors International (ADCI) took time from the ADCI Headquarters in Houston to open the meeting with an interesting outline of his belief in quality education.

Despite the distance and current financial difficulties 24 members from 12 different countries took part in the 30th Annual Meeting of the Association since its birth in 1982.

The organisation of the Host school – the Divers Institute of Technology (DIT) went efficiently and smoothly. The tour of its excellent and extensive facilities was of considerable interest to all delegates, as was a visit to the Global Diving & Salvage Facility close by. The content of the meeting which was arranged to discuss the draft of the New version of the Standards and Procedures (Revision 5) can be summarised in sections:

Remote Dive Sites

A number of schools had considered the possibility of using a site remote from the main base for specialised or deep training. It was agreed that if an existing Full Member wished to train at a dive site which had not been audited, it would have to submit a Full Member application for the Staff, equipment, etc to be used at the remote site. The audit would have to take place while a course was in progress.

Student Details

It was agreed that in cases where a course is funded by one organisation, the address of the company would be acceptable for all divers listed on the Qualification Card Request



Voting – Article 17 of the Constitution

Under the present Constitution only Full Members have the right to vote. The possibility of giving all membership categories a vote was discussed in detail, but it was considered that currently there was no need to alter the present system.

Eligibility to become a member of the Executive Board

A new Rule and Regulation was agreed stating that membership of the Board was open to all – whether members or not - provided they were proposed and seconded in writing by members before the beginning of a General Meeting, and then elected by the meeting

CHAPTER 3 – The IDSA Diver Training Code of Practice

The purpose of this new chapter is to bring together the parts of the existing Standards (Revision 4) which are concerned with the conduct of diving operations, and to clarify and update them for the changes which have occurred since their publication in 2009. Particularly to provide information for schools who are considering Full Membership, so that they may anticipate any changes in equipment, procedures or staffing which are required.

This new Chapter was discussed, and the layout and content of the draft circulated before the meeting will be revised and a new version circulated.

CHAPTER 4 - Joint Courses

It was agreed that IDSA schools should be able to hold a course utilising the facilities of more than one school as necessary, subject to there being an agreement between the schools stating the responsibilities of each school equipment, instructors, location etc, plus the CV of any interpreter(s) used. The School issuing the certification must be approved to the level assessed. The agreement must be forwarded to the Board for approval, before the course begins.

Experience Assessment

It was agreed that the requirement for a minimum of 8 students should be deleted.

In cases where the divers had not kept their own Logbooks and there was no legal requirement to keep them, it was agreed that letter(s) from their previous employer(s) stating that the divers held the necessary experience would be acceptable provided that the letter was verified.

Table 5 –Instructional Staff Qualifications, it was agreed that Instructional Staff should hold the following qualifications and/or experience:



During the meeting, Bruce Banks (DIT) drew attention to a Booklet recently published by CADC containing Guidelines on the Problems of Differential Pressure, which he recommended to all Schools.

To obtain the Booklet go to the CADC Website: www.cadc.ca

At bottom of left hand column click on: "Updated Guidelines for Diving Operations at dams and other work places where Delta-P hazards may exist"

The Booklet may then be downloaded from the next window.

Table 5

Grade	Diving Qualification	Minimum Diving Expe- rience after qualifica- tion	Teaching Qualification	Supervisor Qualifica- tion	Diver Medic See note (iii)	Assessor Qualification See Note (iv)
Senior Instructor	Level being Taught – or equivalent	300 hours bottom time and 3 years experience at the level being taught	YES See Note (i)	YES See Note (ii)	Between them the Senior and the Assistant Instructor should hold these qualifications	
Assistant Instructor	Level being Taught - or equivalent	200 hours bottom time and 2 years experience at the level being taught	PREFER- ABLE			
Staff Stand By Diver	Level being Taught – or equivalent	None				
Specialist Instructor (Non-diving)			YES – as required for the Specialisation			

NOTES:

If no suitable National Qualification exists:

 (i) A Recreational Instructor qualification (CMAS 3* or equivalent), or similar military or civil non diving Instructor Qualification is acceptable, .or a minimum of 2 years experience teaching at level being taught.
 (ii) Evidence of 2 years experience, before the date of this application, as a Commercial Diving supervisor is acceptable, as long as there is written confirmation by the Contractors concerned in that time.

(iii) A similar non-diving medical assistant's qualification may be held.

(iv) Alternative experience or alternative qualification is acceptable.

In a situation which is not covered in this section the case must be referred to the Executive Board for approval before an audit can take place. The decision of the Board is final.



UNDERWATER CENTRE FORT WILLIAM & TASMANIA International contract wins, boost Scottish dive centre's reputation

Scottish dive centre has secured a number of international contracts, highlighting its reputation as a leader in the training of saturation divers for the subsea industry. The Underwater Centre in Fort William, and its sister centre in Tasmania, have this year alone trained divers from Angola, Holland and Russia as its reputation as the world's leading commercial diving and ROV pilot technician training centre goes from strength to strength. Earlier this year, nine divers from Dutch company - DCN Diving - completed the HSE Closed Bell Course at Fort William, specifically for onshore, in addition to offshore, work. The divers have recently completed their first 30day saturation period, carrying out refurbishment of a water entrance gallery of a hydro power dam in a mountain lake in Northern Spain. After a 45-day break, phase 2 of this project will continue with another 30-day saturation period.

Jan Weick of DCN said that while saturation diving has been used previously for onshore work, it is normally very difficult to transport a saturation system for use onshore. DCN's saturation systems are, however, designed to be flexible and can be mobilised anywhere, allowing them to complete the project in Spain, as well as other contracts for the oil and gas market in the Black Sea and



A group of Russian students at the Underwater Centre's base at Lake Cethana in Tasmania, with the saturation Barge in the background

in the Caspian Sea.

The Netherlands-based company, which has offices in Bergen op Zoom, and also in Germany and the UAE, plans to send more divers to the Centre next year. Just last month, the Centre was awarded AUD \$1million to train 17 divers from MRTS, one of Russia's largest construction contractors in the fuel and energy industry. They spent a total of nine weeks at The Underwater Centre's Beauty Point facility in Tasmania, where they undertook a variety of courses, all of which were taught in Russian, including the ADAS Part 4 Closed Bell Course.

Meanwhile, Antonio Quetes and Antonio Njiva, who

work for Angolan oil and gas service provider Operatec LDA, completed the three-week HSE Closed Bell Course in Fort William. They were the first from their country to receive such training, with the company due to send a further 8-10 divers for saturation training.

As Operatec expands the scale and scope of its diving service in Angola it aims to offer its customers saturation diving support. The increasing breadth of maintenance and repair activities required to maintain Angola's subsea infrastructure is making it more cost effective to introduce saturation diving to the company's service offering.

Steve Ham, General Manager at The Underwater Centre, said 2012 is shaping up to be a busy year for both the Fort William and Tasmania centres.

"As demand from industry for our services increases, our reputation at home and abroad continues to grow, which is absolutely fantastic," he said.

"Due to our facilities, location and personnel, we are pleased to have been able to accommodate and teach divers, in some cases in their own language, from these other countries. Not only do they leave with the qualifications and experience they require to move on in their respective careers, but they also continue to provide the subsea industry with the welltrained and competent workforce that it needs.

"We expect there is going to be a significant surge in demand for commercial air and mixed gas divers and keeping up with that demand could prove to be a real challenge for industry with the current and projected growth in the oil and gas and renewable sector. Many more companies, both at home and abroad, are trying to up-skill their air divers to increase their capabilities and fulfil major contracts.

"As such, our courses do fill up very quickly. However, the advantage of having two locations is that we can accommodate the training needs of corporate clients within their specific timescales, with tailored courses."

The HSE Closed Bell and ADAS Part 4 Closed Bell Courses teach experienced divers the procedures and competencies required to dive using a saturation system.

The Underwater Centre also delivers a number of other subsea training courses, such as Remotely Operated Vehicle pilot technician training, as well as the internationally-recognised HSE air and mixed gas commercial diving courses, which are all designed to equip students with the skills they will need to succeed in their careers.

The Underwater Centre is a purpose built training facility which incorporates an extensive pier complex including four dive stations, classrooms, workshops and decompression chambers.

In addition to this, there are three fully equipped barges set up to support a variety of diving disciplines including closed bell, wet bell and surface supplied diving. With accommodation and additional classrooms based at the landward end of the pier, The Underwater Centre is set up to provide its students with the skills and experience to succeed in their new careers, and continue providing the subsea industry with the workforce that it needs.

Anyone interested in more information about The Underwater Centre should contact 01397 703 786 or info@theunderwatercentre.co.uk

ENDS

Issued on behalf of The Underwater Centre by The Big Partnership. For more information, please contact Alison Ramsay on 01224 615006 or alison.ramsay@bigpartnership.co.uk



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

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Ship Husbandry

CUSTOM DESIGN & FABRICATION LTD



Arnold Monk owner of Custom Design and Fabrication.

Gustom design & Fabrication Ltd. has been manufacturing Divers thermal protection systems for over twenty years. Commercial and military clients worldwide use our systems. Primarily for ships husbandry work and Construction, Including Off shore divers. Many clients use our systems for deep water work. Our standard system off the shelf has been used to supply divers to 275 feet. The system has plenty of BTU's extra. By simply employing a booster pump you can expand the limits.



FREQUENTLY ASKED QUESTIONS.

- The standard system will supply 3 divers to 50 feet. 2 to 100 and 1 to 278 feet. Additional configurations have been employed to meet numerous applications. Customers have also used two units in parallel for deeper work.
- The system is small and requires no additional volume or "mixing tank" Matter of fact we don't recommend this practice at all. The system when properly set up will run plus or minus 1 degree all day long.
- We recommend a 5000 watt generator to operate the system.
- The supply pump is always included in the system price
- The 110 volt system has a GFCI installed.
- Euro systems have a 220 breaker installed
- Pump head can be as high as 100 feet and 150 foot run
- Wheels can be added upon request.
 - Larger fuel tanks are available. 27 Gallon detachable tank on wheels is now standard.
- The fuel system can be plumbed to the vessel. Runs over 50 feet including the lift require a two stage pump this pump looks like and installs the same as standard pump.
- The standard unit weighs approximately. 300 lbs
- Approximately 355 lbs with the pump
- Approximately 381 complete
 Dimensions- Height 31 ½ inches
- Length 44 ½ inches width 26 inches
 Unit with Cover and stack complete
- weighs approximately 490 lbs
- Approximately631 lbs w/ pump drip pan and tank included
- We built many custom systems including large diesel and electric.
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CDF Ltd. is a small family business. We take great pride in offering extremely safe systems that are easy to operate.

The Famous "MONKEY HEATER" was named after its inventor whose last name is MONK. Mr. Monk, being a commercial diver himself desired a system that was economical to operate, safe for the diver to use, and delivered a steady stream of even temperature hot water to the diver.

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THE HISTORICAL DIVING SOCIETY (HDS)



Phil Nuytten the inventor of the 'Newt Suit' with his wife Mary, and the suit in the Background he Historical Diving Society was founded in England in 1990, with the aim of promoting and co-ordinating research into the history and development of underwater exploration and the preservation of associated archives and artefacts.

The motivation for the Society's foundation was the heightened interest in, and awareness of the history of diving, the perhaps-inevitable result of the explosive growth in commercial, military and amateur diving, which followed the end of the Second World War.

The Diving Museum

In 2011, the Society opened a diving museum in Stokes Bay, Gosport. It is the only one of its kind in the UK and exhibits a wide range of military, commercial and sport diving equipment. Its collection also boasts a number of diving bells, chambers and an atmospheric diving suit.

The museum works extensively with the local community and is run entirely by volunteer enthusiasts. Further information about the museum can be found at www.divingmuseum.co.uk

Phil Nuytten

Was here to deliver a lecture about his life and works at a meeting organised jointly by the Society of Underwater Technology and the HDS. At that meeting, John Bevan, in his capacity as Chairman of the Diving and Manned Submersibles Committee of the SUT, presented Phil Nuytten with the SUT's 'Houlder Cup' for 'outstanding contribution to underwater operations'. Presented annually, this cup has also previously been awarded to the Administrator.



The team of volunteers who assembled the suit

On Friday 23 November, a Newt Suit arrived at The Diving Museum ... in pieces. It had been on display at the National Maritime Museum courtesy of Subsea 7. A review of exhibition space at the National Maritime Museum meant that the Newt Suit became available to be displayed elsewhere.

Thanks to the generous support of Subsea 7, arrangements were made to bring it to Gosport where it was installed in The Diving Museum by a willing band of Friends and Volunteers of the Museum. Mike O'Meara, a Director of Subsea 7, supervised and helped in the reassembly which took approximately an hour and 10 minutes.

The suit is an early model of the Newt Suit

 almost 40 years old and is displayed in its working condition, complete with its handling frame.

Coincidentally, exactly one week later, Phil Nuytten, the inventor of the Newt Suit, was visiting the UK and took the time to visit the museum to see an 'old friend'. The museum is currently closed for the winter (undergoing it's usual winter refurbishment) but we were delighted to have the opportunity to show off our newest exhibit to Phil and his wife, Mary.

The Newt Suit, which takes pride of place in our 'Commercial Diving' section, will be on show to the public when the museum re-opens on 30th March 2013.

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SCIENTIF N EIIR HARNAC



Martin D.J. Saver Chair, European Scientific Diving Panel of the European Marine Board

he need to develop an international and resilient research platform for scientific diving within the EU has become established because of the increasing necessity to address scientific issues on pan-European scales while advancing scientific excellence in diving-supported programmes within the EU-research framework. In addition, a more integrated approach will establish an organisation and organisational structure for scientific diving within the developing European Research Area (ERA). In all circumstances, it is essential to ensure that all advances in scientific endeavour and achievement are accomplished within acceptable safety levels. For these reasons, leading scientists who employ diving techniques within eight European countries (UK, France, Sweden, Finland, Poland, Italy, Belgium and Germany) started an EU-wide initiative in 2007 to establish a pan-European platform to support scientific diving. As well as promoting and enhancing scientific excellence within the field of diving-supported aquatic research, the initiative also sought to establish harmonized rules and guidelines. Based on two international workshops in Berlin and Bremerhaven (Germany), the European Scientific Diving Committee (ESDC) was established and formally constituted in October 2007 in Bremerhaven.

In order to place the ESDC within a formal EU structure, the ESDC applied for, and was granted, the status of a Panel of the European Marine Board in 2008. Therefore, since 2008 scientific diving in Europe has operated under the auspices of the Marine Board and is now called the European Scientific Diving Panel (ESDP). However, the aims and objectives of the ESDP remain similar to those of the ESDC. That is, to promote operational and safety issues related to scientific diving: and promote diving as a valid and cost-effective tool for scientific research. The ESDP is also a focused and technical panel which delivers concrete outputs in the form of European scientific diving standards and consultation documents. Consultation documents have been published on the following topics:

- Common Practices and EU Competency levels
- Delivery of science through diving
 - Scientific Diving from large Research vessels

The ESDP supports and organizes a number of symposia and workshops. It maintains regular, two-yearly international symposia on occupational scientific diving (ISOSD) and in 2010 it ran a joint workshop with COST ((European Cooperation in Science and Technology) entitled: Strengthening Synergy and Excellence in Diving Supported Science across Europe. A joint meeting is planned between ESDP and the American Academy of Underwater Science (AAUS) to be held in 21-28 October 2013 in Curaçao (Dutch Antilles). This will be ISOSD4 jointly with the AAUS scientific meeting.

EUROPEAN STANDARDS FOR SCIENTIFIC DIVING

The requirement to establish standard competencies throughout Europe was foreseen and in the late 1980s scientists who used diving in their research sought to initiate the harmonization of the rules and procedures for scientific diving in Europe. In 2000, during the final meeting of that group in Banyules sur mer, France, this effort finally resulted in the development of two European scientific diving standards: that of European Scientific Diver (ESD) and of Advanced European Scientific Diver (AESD; Table 1). The quality and widespread acceptance of these draft standards by much of the European scientific community has resulted in them already becoming adopted within the health and safety legislation of some EU countries.

The standards were conceived initially as a standardized method for recognizing competency gained through work experience in member countries that could then be accepted as equivalencies in other member states. This has not been problematic in countries where there is no or little formal legislation related to scientific diving, or in countries that have formally accepted the ESD and AESD qualifications in their regulations. There remain countries, however, where mobility is complicated.

In addition to recognizing existing competencies, the ESD and AESD standards are now being awarded to students who attain the relevant competency requirements on taught courses. Although not the original intention of the standards, the taught courses must still demonstrate that the students have been engaged on projects with specified scientific tasks of work.

The scientific standards are currently being applied to occupational scientific diving, archaeological diving and diving in public aquaria.

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TABLE 1: A SUMMARY OF THE MAIN COMPETENCY REQUIREMENTS FOR THE EUROPEAN AND ADVANCED EUROPEAN SCIENTIFIC DIVER STANDARDS.

EUROPEAN SCIENTIFIC DIVER (ESD)	ADVANCED EUROPEAN SCIENTIFIC DIVER (AESD)
An ESD is a diver capable of acting as a member of a scientific diving team. They may attain this level by either a course or by in-field training and experience under suitable supervision or by a combination of both these methods.	An AESD is a diver capable of organising a scientific diving team. They may attain this level by either a course or by in- field training and experience under suitable supervision or by a combination of both these methods.
 show proof of basic theoretical knowledge and a basic understanding of: 1. diving physics and physiology, the causes and effects of diving-related illnesses and disorders and their management; 2. the specific problems associated with diving to and beyond 20m, calculations of air requirements, correct use of decompression tables; 3. equipment, including personal dive computers and guidelines as to their safe use; 4. emergency procedures and diving casualty management; 5. principles of dive planning; 6. legal aspects and responsibilities relevant to scientific diving in Europe and elsewhere. 	 show proof of basic theoretical knowledge and a basic understanding of: 1. diving physics and physiology, the causes and effects of diving-related illnesses and disorders and their management; 2. the specific problems associated with diving to and beyond 20m, calculations of air requirements, correct use of decompression tables; 3. equipment, including personal dive computers and guidelines as to their safe use; 4. emergency procedures and diving casualty management; 5. principles of dive planning; 6. legal aspects and responsibilities relevant to scientific diving in Europe and elsewhere.
 be fully competent with/in: 1. diving first aid, including CPR and oxygen administration to diving casualties; 2. SCUBA rescue techniques and management of casualties; 3. the use and user maintenance of appropriate SCUBA diving equipment. 	 be fully competent with/in: 1. diving first aid, including CPR and oxygen administration to diving casualties; 2. SCUBA rescue techniques and management of casualties; 3. the use and user maintenance of appropriate SCUBA diving equipment including dry suits and full-face masks; 4. basic small boat handling and electronic navigation; 5. supervision of diving operations
 be fully competent with: search methods; survey methods, both surface and sub-surface, capable of accurately locating and marking objects and sites; the basic use of airbags and airlifts for controlled lifts, excavations and sampling; basic rigging and rope work, including the construction and deployment of transects and search grids; underwater navigation methods using suitable techniques; acting as surface tender for a roped-diver; sampling techniques appropriate to the scientific discipline being pursued. 	 be fully competent with: search methods, such as those utilizing free-swimming and towed-divers together with remote methods suitable for a various range of surface and sub-surface situations; survey methods, both surface and sub-surface, capable of accurately locating and marking objects and sites; the basic use of airbags and airlifts for controlled lifts, excavations and sampling; basic rigging and rope work, including the construction and deployment of transects and search grids; underwater navigation methods using suitable techniques; recording techniques; roped/tethered diver techniques and various types of underwater communication systems such as those utilizing visual, aural, physical and electronic methods; sampling techniques appropriate to the scientific discipline being pursued.
 show proof of having undertaken 70 open-water dives to include a minimum of: 1. 20 dives with a scientific task of work such as listed above; 2. 10 dives between 15 and 24m; 3. 5 dives greater than 25m; 4. 12 dives in the last 12 months, including at least 6 with a scientific task of work. 	 show proof of having undertaken 100 open-water dives to include a minimum of: 1. 50 dives with a scientific task of work such as listed above; 2. 10 dives between 20 and 29m; 3. 10 dives between 29m and the national limit; 4. 12 dives in the last 12 months, including at least 6 with a scientific task of work. 5. 20 dives in adverse conditions such as currents, cold or moving water.



Jack Fisher,

President



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A NEW COMPACT VERSION **POMMEC'S** SUCCESS & RECOV SYS

ollowing on from the already widely known and successful LARS Lite System the Netherlands based Pommec BV. commercial diving equipment manufacturer and supplier has announced the launch of the 'LARS Lite Compact', a new compact design of the LARS Lite. This two diver Launch And Recovery

System offers an even smaller footprint then the LARS Lite. With a footprint of approximately 2x2 meter it earns its name 'Compact'.

The LARS Lite Compact is designed as a solution for situations where the minimum of deck space is available and maximum performance is needed. This compact model will be a an extension to their current Launch and Recovery System range.

The LARS Lite Compact has the same extensive range of features available on the LARS Lite and other Launch and Recovery systems available at Pommec BV. Think of a remote control, extensive use of high quality components, stainless steel, etc. The LARS Lite and the Lite Compact have winches mounted on top of the A-frame and can be folded completely, giving compact transport sizes.

All Pommec's products (Deck Decompression Chambers, Containerized Control Rooms, etc.) follow the IMCA, Lloyd's, ABS and DNV guidelines. All the important systems are covered by Design Appraisal Documents. Their systems are recognized being among the most advanced and safest systems available on the market today.

Pommec, founded in 1978, is based in the Netherlands next to the Belgium border. For more information about this LARS or any of their other systems you can visit www.pommec.com or contact them at info@pommec.com



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CAVIDYNE

or over 10 years the people at CaviDyne have recognized the power of cavitation in a number of different areas. Early work with cavitation covered a number of fields, including water heating, surface cleaning, and disinfection. During this early work it became apparent that there was a need for a safer solution to underwater cleaning, the process had a high degree of danger not only from the environment but also from the equipment being used. In the quest to produce a safer cleaning system, the engineers at CaviDyne worked closely with commercial divers to produce a system that was portable, easy to use, efficient and most of all, safe to use.

The resulting CaviBlaster system operates at a pressure range of 2,000 to 4,000 psi but is more efficient than lance systems operating at up to 20,000 psi. The system is easy to operate for both the new diver and the diver experienced with existing

"blaster" technology. Professional divers welcome the safety and efficiency of the cavitation cleaning process as CaviBlasters require little training to become proficient. Most importantly, the cavitation cleaning process makes the CaviBlaster the safest cleaning system available by operating more efficiently at lower pressures. Divers are much more comfortable operating CaviBlasters than with higher pressure systems.

The low density cavitation jet can clean various types of surfaces without damaging them and wraps around bolts, bars etc. to clean the far side, reducing diver submerged time. The balanced cleaning guns are easy to manipulate and result in considerably less stress, both physical and emotional, on the diver.

CaviBlasters are portable and can be easily transported to any jobsite on land or water and are easily maintained with routine maintenance parts being readily available from local hardware / marine suppliers.

CaviDyne continues to explore the world of cavitation and several exciting new products are under development for both the diving and nondiving communities – all with safety and efficiency at the forefront.

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VERSATILE > removes marine growth from steel, concrete, wood, plastic, fiberglass, rubber and more – without damaging surfaces

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Adriano (Dino) Passeri, President of Drafinsub with Dag Wroldsen Director of the IDSA School in Oslo

DRAFFINSUB GENOA IS EXPANDING

RAFINSUB was born 30 years ago, as a family business specialized in the field of underwater works, but much has changed since those early days. Today the company has a workforce of around 50 people, including employees and consultants. They are authorized to take on public contracts in Italy with SOA OG7 category 5th class for Maritime projects and OG12 category 3rd class for mine clearance. They operate under the following Management Systems: ISO 9001 – ISO 14001 – OHSAS 18001. The company has grown exponentially over the past 5 years. For this reason, they decided to expand their core business activities to include mine clearance, which they have always offered as an additional 'service' to their clients in the past.

Drafinsub has recently launch a new Portable Saturation System, the "RAFFAELLA" SATURATION DIVING SYSTEM which is designed and constructed in their own premises in Genoa, Italy.

The system is designed to be an independent, self sufficient hyperbaric facility in the area of operations to a maximum depth of 200 meter and is compliant to amongst others to the RINA Rules for Classifications of underwater units, IMO and IMCA D018 – D024.

The whole is modularized in a number of 20 and 10 feet containers and thereby capable of being quickly mobilized, transported and assembled. The total weight of the equipment is 85 ton. The configuration of the system consists the following components:

- One Deck Decompression Chamber (DDC) / 4 persons living habitat
- One Transfer Under Pressure (TUP) 4 man double lock system (2 chambers)
- One Submersible Decompression Chamber (SDC) / for 3 man
- One Bell Launch and Recovery System (LARS)
- One Hyperbaric Rescue Chamber (HRC) with
- Launch arrangements for 4 man)
- One Control Room
- Environmental control and Conditioning Unit
- One Winch Room
- One storage place for the umbilical

The System is also equipped with R.I.N.A certified monitoring system produced by SAN GIORGIO S.E.I.N. with advanced satellite diagnostic, recording and alert functions.

Additional information about the "RAFFAELLA" SAT nager, Ing Marco Vacchieri marco@drafinsub.it



Dino Passeri with invited guests (which included IDSA Members from Holland, Italy & Norway) at the launch of the System

THE INTERNATIONAL DIVING SCHOOLS ASSOCIATION (IDSA) LIST OF MEMBERS

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FULL MEMBERS : DIVER TRAINING		Israeli Professional Diving Academy	Israel
Centre de Formations pour Petites et		Marine Consulting Sri	Italy
Moyennes Enterprises (CFPME)	Belgium	International Arab Divers Village	Jordan
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YAK Diving Academy	India	(RCUD)	Montenegro
CEDIFOP	Italy	Mieka Dive Training Institute Ltd	Nigeria
Centre Méditerranéen de Plongée		Podvodrechstroy Diving School	Russia
Professionnelle (CMPP)	Morocco	Voronezh Diving school	Russia
Netherlands Diving Centre (NDC)	Netherlands	CDA Bilbao	Spain
Norwegian Commercial Diving School,		Forespro	Spain
Oslo (NYD)	Norway	Oceanos Escuela de Buceo Professional SL	Spain
Farjenas Diving School	Sweden	PROfessional Diving Services	Switzerland
Swedish Armed Forces Diving and Naval		Diving Diseases Research Centre (DDRC)	UK
Medicine Centre	Sweden	London Diving Chamber	UK
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	Netherlands	Nautiek	Netherlands
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Irish Navy Diving School	Ireland	Association of Diving Contractors	110.4
		International (ADCI)	USA

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