

PLANET



8. Interview with Andrew Hodgson



16. J2's Innovative Tool Changer



27. Double Eagle Down Under



36. ROVs for Marine Research

5

The magazine of choice for Subsea Construction and ROV Professionals

ISSUE

Q4 / 2015

TABLE OF CONTENTS

-
- 04** Welcome to ROV Planet
-
- 06** ROV Demand Update
-
- 08** Interview with Andrew Hodgson, CEO of SMD
-
- 12** Sub-Atlantic Tether Management Systems (TMS)
-
- 16** The Power of Four: J2's Innovative Tool Changer
-
- 20** The 7 Steps to Success – Site Integration Tests
-
- 22** Poster – The Oceaneering NEXXUS ROV
-
- 26** ROV Hall of Fame – WSP/PIV
-
- 27** Double Eagle Down Under
-
- 31** QSTAR Providing Stellar ROV Training
-
- 36** ROVs for Marine Research
-
- 40** MATE's 2015 Underwater Robotics Competition
-

EDITOR-IN-CHIEF

Richie Enzmann

COPY EDITOR

Will Grant

CONTRIBUTORS

Richie Enzmann, Kieran O'Brien, Andrew Hodgson, Ryan Lumsden, Andrew Coughlan, Oliver Gilbert, Dan Fjellroth, Robert L. Wernli, Darren Burrowes, Jose María Sepúlveda López, Michael Porritt, Jill Zande

DESIGN & LAYOUT

Milan Farkas

SPECIAL THANKS TO

Craig Sim, Victoria Bosi, Jamie MacDonald, Gareth Procter, Nick Rettie, Nick Wilson, John Walker, John Valentine, Graham Thomson, Ravi Chandu, Peter Buchanan, Merethe Berge Paasche, Victor Sepúlveda, Anthony Broadhead, Catherine Rankin, Kevin Edwards

Trojan Crates
SMD
Sub-Atlantic
ROCOL
ToolTec
J2
Sonavision
Workocean
Oceaneering
ATSA Defence Services
QSTAR
ROV Innovation
Seamor
Nigel Wright
Valeport
MATE Center
The BIG Partnership



WELCOME TO



My name is Richie Enzmann and I would like to welcome you all to the latest issue of ROV Planet!

Currently the market shows a weakness short term, but we can anticipate a more positive outlook on the long term. The next 12-18 months in the oil industry is expected to be tough. Some companies diversify towards other industries to ride through the storm, meanwhile others look for partners that can complement their businesses or provide financial backing.

Despite the general slowdown, training is always important. Canary Islands based QSTAR provides ROV training in one of the best climates in the world, with practical ROV piloting opportunities in both shallow and deepwater. Located between two continents they are perfectly positioned to provide training, and the Canary Islands could very well become one of the offshore support hubs of Africa.

I have interviewed Andrew Hodgson, CEO of SMD about the recent acquisition of his company by CRRC, a Chinese technology company. The move will allow SMD to grow and even expand further in these critical times. Andrew was kind enough to share his thoughts on this acquisition and explained how it positively impacts the future of SMD with new opportunities opening up as a result of it. We talk about China, global opportunities, subsea mining, offshore renewables, and technological developments. It's well worth the read!

In our defence focus Double Eagle Down Under features the story of the Double Eagle System that has been successfully in operation with the Royal Australian Navy for the past 15 years. Also, we briefly feature the US Navy's PIV/WSP in the ROV Hall of Fame.

Finally, Jill Zande reports from the MATE 2015 International ROV Competition in St John's, NL, Canada, where students competed against each other with their self-built ROVs in the state-of-the-art-facilities at the Marine Institute of the Memorial University, simulating real life arctic conditions in line with this year's polar theme.

Sit back and enjoy the fifth issue!
Best regards,
Richie Enzmann

UPCOMING EVENTS

19-22nd October, 2015 – Oceans'15 MTS/IEEE – Washington, DC, USA

The premier North American marine technology event.

03-05th November, 2015 – Oceanology International – Shanghai, China

China's leading event for marine science and ocean technology.

03-05th February, 2016 – Subsea Expo – Aberdeen, UK

The World's largest annual subsea exhibition and conference.

23-25th February, 2016 – Underwater Intervention – New Orleans, USA

The World's premier event for diving contractors, ROVs, and manned submersibles.

15-17th March, 2016 – Oceanology International – London, UK

The World's premier event for marine science and ocean technology.

Please check out our website on:
www.ROVPlanet.com

QSTAR: PROVIDING STELLAR ROV TRAINING

By Jose María Sepúlveda López, General Manager of QSTAR ROV Training & Subsea services



THE COMPANY

Established in 2007, QSTAR ROV Division and Subsea Services are based jointly out of Las Palmas, Canary Islands and Barcelona, Spain. The vision behind QSTAR was to offer services for offshore and onshore industries that need effective solutions for subsea projects. We have achieved this through the use of our fleet of ROV and experienced qualified personnel.

QSTAR has come a long way since its initial inception. We originally provided oceanographic research for several governmental agencies, and this has led to the company gaining a reputation as a reliable reference for underwater robotics and hydrographic surveys.

QSTAR's philosophy is simple: we provide the highest quality service and the all-important attention to safety aspects for both personnel and equipment. Our goal is to deliver the best possible service, without accident or incident.

Over the years QSTAR has grown in the Spanish market. Now we're expanding even further into international markets, while simultaneously investing in R&D and training qualified personnel.

Photo: Francis Pérez





INVESTING IN THE FUTURE

In 2012 QSTAR SLU saw the need to introduce ROV training both nationally and internationally from a strategic location. Consequently, we expanded our ROV division with the opening of an ROV Training Center (www.rovs.eu) and became a Training Establishment Member of the IMCA (International Marine Contractor Association). This was very exciting as it allowed us to become the first established ROV training center in Spain.

Accordingly, the QSTAR ROV training program is built on (though not limited to) IMCA guidelines. This has meant that our trainers can provide real-world knowledge and skills for students in compliance with the actual requirements of today's oil and gas offshore industry. This is in addition to expertise in other sectors such as search and rescue, oceanography and marine research, marine archaeology, hydrology, subsea operations, and aquaculture.

Besides being able to provide the highest quality training based around IMCA guidelines, we provide real working conditions on board active work vessels. This allows students to work as part of an ROV team on board an actual ship, and provides the best training assessment for a newly qualified ROV pilot.

Since the creation of the ROV Training Center division, QSTAR has trained more than 200 students of various nationalities and backgrounds, and many of those have gone on to secure places with the world's best ROV operating companies.

CORPORATE ONSITE TRAINING

In addition to providing high quality training courses, QSTAR specialises in supplying corporate training. We also offer certification for ROV personnel from different companies worldwide by performing specific on-site training, tailored to the company's individual needs. Furthermore, QSTAR have been undertaking ROV installation and commissioning projects internationally, from both offshore vessels and onshore operating bases.

In 2014, QSTAR SLU – represented by its General Manager, José María Sepúlveda – became part of the IMCA ROV TSG (Training Steering Group). This places our training program firmly alongside the big players of the ROV industry.

TSG includes individuals from IMCA member companies of all types: contractors like Fugro, Bibby, i-Tech 7, Subsea 7 and Saipem; training providers including MTCS-England, The Underwater Centre-Scotland, School of Ocean and Technology, QSTAR ROV Training-Canary Islands/Spain; and suppliers and manufacturers such as SMD, SAAB Sea-eye, Schilling, and Forum; with the IMCA technical adviser Neil Evans. Over the past year, the committee has been working on the drafting of new documents and guidelines that will facilitate a more global approach to the development of ROV training.

The companies involved contribute with their experience and by updating the competency schemes in order to fulfil their operational requirements. The QSTAR ROV Training center has recently become an IADC (International Association of Drilling Contractors) member, with the aim of having a more focused involvement in offshore drilling.

LOCATION

As previously stated, QSTAR SLU Subsea Services and the ROV Training Center's headquarters are located in Las Palmas de Gran Canaria, Canary Islands: a strong reference point for both the offshore and maritime industries. QSTAR's operations are also firmly established in Barcelona, where ROV training courses and subsea services are on-going.

'This location was one of the reasons for developing the training center [in the Canary Islands].', explains Technical Manager, Victor Javier. '[The] Islands are a strategic location between three continents: Europe, Africa, and America. We are in the middle of the offshore industry's routes.'

'The Canary Islands [have] cheap flights and very good connections heading all over the world, and the island of Gran Canaria offer a great variety of industrial services for the offshore industry, not only sun and holidays.'

The fortuitous nature of this location has allowed for connections with other regions of interest, bringing in the island's port rigs, drilling, and construction vessels from all over mid-Atlantic and Mediterranean. This composition gives our students a rich and in depth experience of the offshore industry. We are even able to set up visits to specific vessels and rigs. However, the surrounding area isn't simply swathed in floating steel and plastic, florescent-coloured boats. The local government takes stringent care of its tropical resources. These include crystal clear waters with sudden depths of up to 3,000m. This is yet another reason why the region is the perfect location for ROV training as we can lead practical ROV piloting in both shallow and very deep waters.

The training center itself is approximately 100 km from the African coast and relatively close to the main and second reserves of West Africa, Nigeria, and Angola. Out of consideration for the geopolitical environment of the location, QSTAR offers European quality, safety, and security to the offshore sector of the African continent. Recent reports have indicated approximately 55 oil rigs operating in this area, in addition to vessels performing exploration, survey, and construction activities.

Another fantastic feature of this sunny locality is the region's weather has previously been referred to as the

best in the world: minimum-maximum temperatures lie between 18 and 28 degrees Celsius year round, and wind conditions are mainly calm. These conditions are ideal for living in the area. and are definitely conducive to conducting offshore operations.

This is a virtue for QSTAR as it enables us to give our students coastal and offshore training experience in a safe and pleasant environment, before taking their experience onboard their own multipurpose vessel, the 'Atlantic Explorer'. The Government of the Canary Islands – through the Canary Islands Hub (www.canaryislandshub.com) – is proud to have a strategy to promote these ideal conditions and many other attractive aspects of this region around the world, further positioning the Canary Islands as an international hub in the offshore industry and other sectors.

TRAINING AND FACILITIES

The QSTAR ROV courses are designed in accordance with industry requirements. The students are briefed about working offshore and the relevant safety regulations, and here they can gain skills in ROV maintenance and operation. The classes offer theoretical and practical input – depending on the students' or company's needs – with the goal of preparing them for real-life situations.

Many of QSTAR's alumni have great things to say about the time invested with our group. 'The ROV career is the shiny star of offshore', opines engineer Christian Gurgu, a QSTAR ROV instructor from Romania. '[Working] independently of



the offshore industry's phases, doing what you like (and) what you are good at, brings reliability and satisfaction. He goes on to discuss his own experience working with QSTAR. 'Working offshore for years, I've been contributing to the global supply of oil, gas, energy. Presently, as (an) ROV Instructor, the value of contribution feels even more intense by giving... the experience and knowledge to the new entrants in the industry. Shaping people's future is what we do at QSTAR, shaping for the brightest.' Someone else with a high opinion of QSTAR's training opportunities is Marius Molstad, an ROV pilot and technician from Norway. 'The ROV course opens lots of opportunities in my country and internationally.' says Molstad. 'Personally, QSTAR gave me the most complete education. I got to refresh my electronic background and [awarded me] new competencies that make me feel prepared for even the hardest technical and operational challenges offshore.' He goes on to say 'The center's facilities and local climate – as in weather, social vibe – is the perfect environment for an international study. For all these reasons I also chose to do my apprenticeship for ROV Pilot Technician, Grade I, with QSTAR.'

Candidates who complete the course are provided with all the relevant documentation to present to existing and potential employers. After successfully completing the theory, workshops, practical training, and exams the students are provided with an IMCA ROV Personnel Logbook and the QSTAR competency certificates.

Furthermore, from October 2015 QSTAR will be organizing via an OPITO Training Center for BOSIET and HUET, offshore survival training courses. These courses are very important to all those working in this offshore industry. QSTAR will start including these OPITO courses as part



QSTAR'S IN-HOUSE RESOURCES INCLUDE:

- | Spacious facilities of 2,500 m²;
- | Accommodation;
- | Teaching classrooms;
- | Electrical, Electronics, Hydraulics, High Voltage, and Fibre-Optic Workshops;
- | Training pools (open and closed);
- | Work class ROV simulators;
- | A large fleet of ROVs;
- | An ROV control room;
- | A work class 7-function manipulator;
- | A multipurpose vessel for coastal and offshore training;
- | Subsea tooling and sensors;
- | Academic and industry experienced personnel;
- | English and Spanish speaking staff.



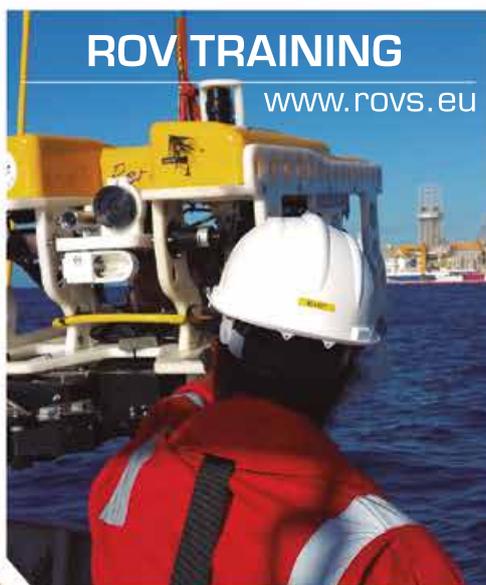
of a full premium package together with the ROV training courses, so as to give a full qualification. Offshore medicals will also be available through QSTAR SLU. The course coordinators at QSTAR ROV's Training Center endeavour to make sure that course content is kept up to date with the offshore and other ROV industries. This helps ensure that we maintain the very highest standards and retain our place as one of the industry leaders in ROV training globally. What's more, we are also offering an internship program with ROV operating companies worldwide, so that our trainees can have their first experience as part of an ROV team. All of these reasons combined mean that the Canary Islands are the perfect location for somebody just starting out in their ROV training. It's possible to do everything that you need to in order to become a qualified ROV Pilot Technician trainee and more, and all set against a picturesque backdrop in one of the best climates in the world.

ROV Training courses are held every month. Check out our web site to see the full training schedule and special offers. WWW.ROVS.EU

Apply now with the following code and get an extra discount for the ROV Premium Pilot Course: ROVPLANET2015

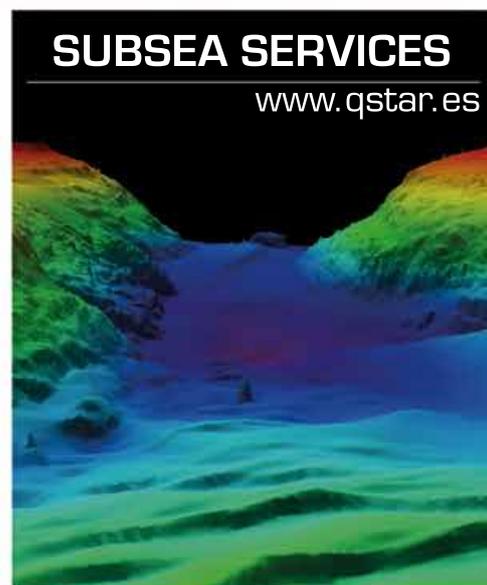


- ROV Pilot Training Center
- ROV Services, Support & Sales
- Marine Geophysical Surveys
- Oil & Gas Pipeline and Platform Surveys
- Submarine Cable Surveys
- Marine Geotechnical Services
- Ports & Marine Construction support
- Vessel & ROV Management
- Multipurpose work vessels
- Oceanography & Marine Research
- UTM & Cathodic potential inspections
- Diving operations assistance
- English & Spanish speaking personnel



ROV TRAINING

www.rovs.eu



SUBSEA SERVICES

www.qstar.es

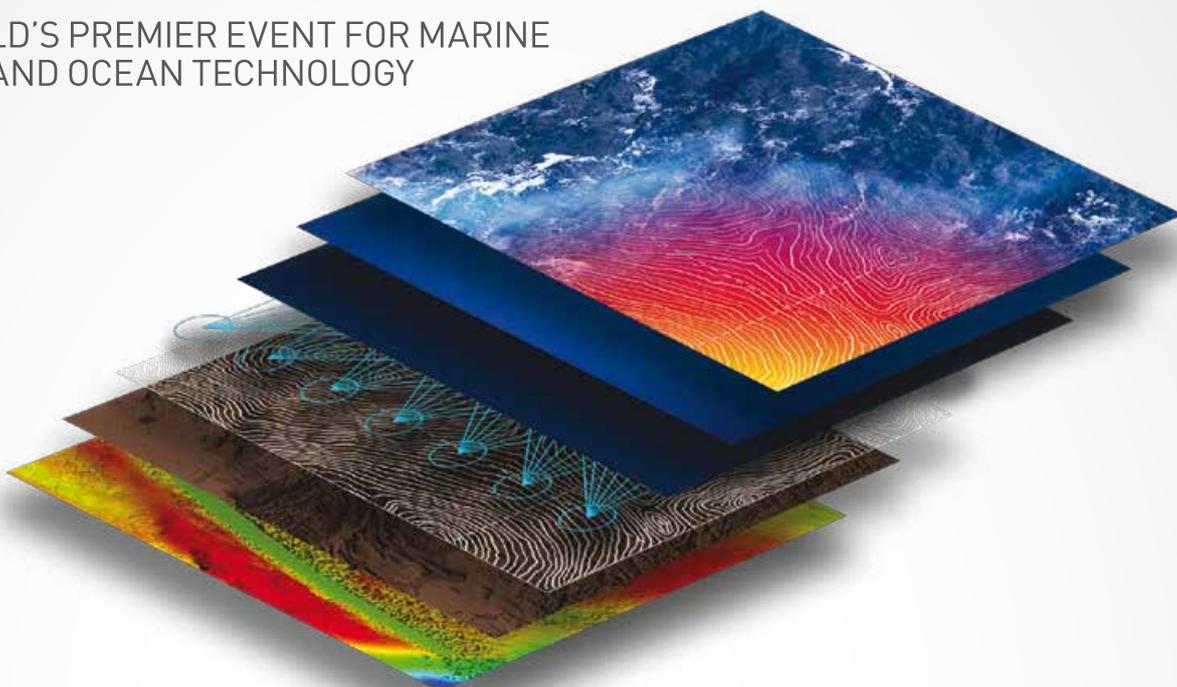


Oi oceanology international®

2016

15-17 MARCH 2016, LONDON, EXCEL

THE WORLD'S PREMIER EVENT FOR MARINE SCIENCE AND OCEAN TECHNOLOGY



ONLY BY EXHIBITING AT OCEANOLOGY INTERNATIONAL 2016 WILL YOU BE ABLE TO:

- **Reach 8,400 attendees from the global marine science and ocean technology community** all under one roof
- **Gain exposure to an international audience** of representatives present from 82 different countries in the oceanography, oil and gas, aquaculture and renewables sectors
- **Meet the market face-to-face:** three days of business bring 528 exhibitors from the industry direct to you
- **Connect with your target audience:** the world class conferences and panel discussions attract high level buyers
- **Develop new business relationships:** new VIP networking events help connect you directly with key buyers

OCEANOLOGY INTERNATIONAL 2016 SHOWCASES SOLUTIONS FOR:

	UNDERWATER COMMUNICATIONS		MARINE RENEWABLES
	UNMANNED UNDERWATER VEHICLES		OCEAN RESEARCH
	MARINE AND SURVEY VESSELS		OIL & GAS
	HYDROGRAPHY		MARITIME SECURITY
	METROLOGY		AQUACULTURE

Secure your preferred location at Oceanology International by contacting the sales team today

☎ 44(0)20 8910 7139 ✉ alex.duval@reedexpo.co.uk 🌐 oceanologyinternational.com

Organised by:



Learned Society Patron:

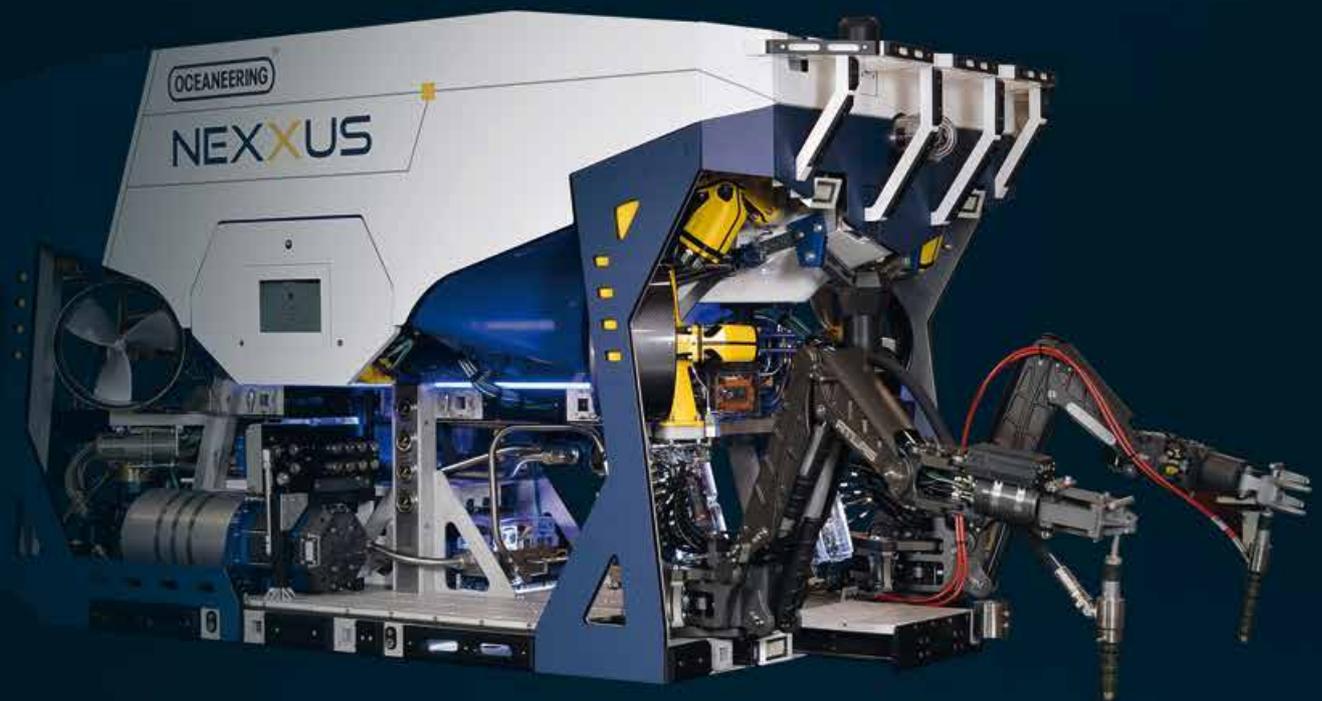


Endorsing associations:





Pushing the boundaries of ROV Intervention work



- » ROV HPU system for API 53 compliance
- » All 250 hp available for ROV and tooling operations
- » Multi-Purpose / High-Flow / High Pressure (0-15ksi) fluid Injection capability
- » Integrated and standardized tooling interfaces
- » Modular HPU and deck designs for easier mission configuration, operation and maintenance

For more information, visit us at [oceaneering.com](https://www.oceaneering.com)