

Pelican



Work site safety

JF Prolec launches new hazard-limitation products for construction and rail: **Page 4**

Submarine man

JFD's top submarine rescue pilot discusses the highs and lows of life in the deep: **Page 5**

Coastal clearance

JFMS sweeps the Lincolnshire coast before work starts on Triton Knoll: **Page 6**

Pipe cleaning mission

A JF NDT surveillance project puts a South Wales reservoir back on the map: **Page 7**

STOP PRESS

Assisting safe LNG imports in Thailand

Strainstall has secured a contract to design and supply a bespoke mooring and berth management solution at the new Nong Fab liquid natural gas (LNG) terminal in south-east Thailand. The team will be working with PPT LNG, a unit of Thailand's national oil and gas company PTT Public Company Limited at the facility in Rayong province helping to improve Thailand's LNG supply to meet the country's growing needs.

More information in the autumn issue.

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Bringing up the Barracuda

JFMS has been working closely with archeologists to bring a rare WWII bomber which crashed in the English Channel to the surface. Above: archeologists inspect the airplane's wing. **FULL STORY PAGE 2**

High voltage wind farm expertise

A complete operations and maintenance solution led by EDS HV brings James Fisher group companies together at Greater Gabbard

Twelve months ago, the team at James Fisher's high voltage engineering specialists, EDS HV was bidding for the chance to be one of many sub-contractors working on the Greater Gabbard offshore wind farm off the Suffolk coast, but now, in an impressive turn around of fortunes, it has been awarded the complete operations and maintenance package for the assets at the site.

The 15-year deal is with offshore transmissions owners (OFTO) Equitix Investment Management, which owns Greater Gabbard's grid assets – made up of two offshore platforms, an onshore

substation and the network interface point with the National Grid.

EDS will apply its innovative approach to asset management to help maximise the availability of Greater Gabbard's high voltage network and ensure the wind farm fulfils its energy output potential.

Jonathan Ball, head of OFTO projects at EDS HV explains: 'We were able to build on and leverage the crucial importance of achieving high levels of transmission network availability through strategic planning and a long-term commitment to asset condition based monitoring and maintenance.'

'If the transmission assets fail, for any reason, there is huge potential impact to revenue stream, but by putting high voltage specialists at the heart of a full, turnkey solution, we are able to show how the whole asset can operate at maximum levels of safety and efficiency.'

'It is quite a notable increase in responsibility,' he adds, 'but one which we have fought very hard over the last two years to secure.'

Its new status as O&M contractor means EDS HV will work to build the internal supply chain within the James Fisher group to increase supply chain efficiencies for customers.

The contract includes maintenance

Continued on page 2

High voltage wind farm expertise

services on both the transmission and auxiliary assets, including fire systems and cranes, as well as crew transfer vessels provided by James Fisher Marine Services (JFMS). But operations, which will be managed from the EDS HV 24/7 control centre, will also include network surveillance, HV safety management and marine coordination using JFMS's Offshore Wind Management System (OWMS).

'Supporting critical UK infrastructure like this requires a level of expertise and experience which we have been developing within EDS over a number of years. We are thrilled that our efforts have culminated in this contract which fulfils our evolution into a specialist provider of high voltage engineering services,' Jonathan says.

EDS HV group executive director Ryan Henderson agrees: 'This key contract is aligned with James Fisher's long-term strategy to become the number one provider of O&M services to the offshore wind industry. We are really looking forward to starting this journey with Equitix at Greater Gabbard as we continue to build on our strong relationship,' he says.

The EDS team is currently in talks about offering a turnkey O&M solution at other wind farms across the UK.

JAMES FISHER'S LATEST WIND FARM PROJECT LOCATIONS

FRASERBURGH

MORAY EAST
JFMS has won a contract to support construction of Scotland's biggest wind farm with a total area of 295km², 22km off the Scottish coast (more details in the autumn edition of Pelican)

TRITON KNOLL
JFMS is clearing this 145km² site of obstructions such as unexploded ordnance (UXO) and boulders, 30km off the Lincolnshire coast (see page 6)

GRIMSBY

LOWESTOFT

GREATER GABBARD
EDS HDV is coordinating O&M on this 140-turbine site 36km off the Suffolk coast

SCOTLAND
WALES
ENGLAND
NORTH SEA

A salvage operation to make aircraft history

A delicate project to salvage the last remaining Barracuda bomber lost during the Second World War

A specialist team at James Fisher Marine Services (JFMS) has been working to safely bring a World War II bomber in the English Channel to the surface.

The plane, a Fairey Barracuda (MKII) Torpedo bomber, was discovered by JFMS last year during an ordnance clearing campaign for the National Grid in preparation for the IFA2 electricity cable between France and the UK. It is believed to have got into difficulties during a test flight in 1943, crashing into the sea 500m from the coast of Portsmouth.

Because no Barracudas survived the war this submerged wreckage caused considerable excitement among military historians, and the Fleet Air Arm Museum in

Somerset asked IFA2 if it could be retrieved.

The rarity of the aircraft and the fact that it could still have live ordnance on board, meant JFMS had to make full use of its expert UXO, subsea and diving experience, and an in-house archaeological diver was also drafted in.

Keith Forward, subsea manager at JFMS, explains: 'Our all-inclusive solution to National Grid and its IFA2 project has involved UXO identification and detonation, subsea salvage and survey works. Retrieving the Barracuda has been a fascinating and challenging extension to the project.

'All the dredged material has had to be sieved for artefacts and as the aircraft was



75% buried there was a lot of seabed to get through,' he adds.

The job required the provision of storage containers for the recovered artefacts and special subsea lifting baskets which were brought in from sister company, James Fisher Offshore.

A hand-mounted ROV3D system was also deployed to create a 3D digital map of the wreckage to aid its accurate reconstruction. The diving team also used a high definition video camera system to record minute details of each dive for the archaeologists.

The plane's pilot is believed to have been Sub. Lt DJ Williams who escaped the crash and survived World War II.

Enhancing its reputation for nuclear expertise

New contracts in Scotland and Sweden won through decommissioning expertise



JF Nuclear (JFN) has won a suite of new contracts in Scotland and Sweden which recognise its position as a key player in both decommissioning and remote handling.

Last year JFN formed a joint venture group called Nuclear Decommissioning Ltd (NDL) which brings together leading decommissioning businesses, Shepley Engineers, REACT Engineering and WYG. Now the consortium has been awarded a multi-million pound services framework for Dounreay Site Restoration Ltd (DSRL).

Although the four companies have worked together on projects in the past, working together as NDL enables them to offer a substantially increased capability and capacity to DSRL.

The award of the DSRL framework puts JFN in a strong position to be involved at the site over the next four to seven years, helping to deliver the safe demolition of the Dounreay nuclear power plant on Scotland's north Caithness coast.

The NDL companies will contribute a wide range of services to ensure site safety, including architecture, civil and structural engineering, design, and project management.

As the UK's centre for fast reactor research and submarine reactor testing, the Dounreay nuclear power complex included one of only two fast breeder reactors ever built in the UK. Its decommissioning is widely recognised as one of Europe's most complex nuclear closure programmes and Scotland's largest decommissioning project.

For the Dounreay contract, the NDL companies have pledged a commitment to invest in local skills (offering training courses, apprenticeships and work experience places) in a move which will have a long-lasting impact on the local economy.

Paul Read, managing director of JFN says: 'This contract marks a strategic

commitment by NDL to the future of the Caithness and Sutherland area. The whole team at NDL is looking forward to exploring opportunities to invest in local talent and to bring our collective expertise to the Dounreay site, ultimately supporting DSRL to safely deliver its programme.'

Robotic handling system for Swedish research facility

Separately, the JFN team has also won two contracts to help support the work of the UK Atomic Energy Authority (UKAEA) Remote Applications in Challenging Environments team (RACE) by supplying specialised equipment for its new international research facility in Sweden.

On the back of this, the team has now been asked to supply a complete robotic handling system (RHS) which will be used to carry out highly technical operations in the linear accelerator active cells facility at the European Spallation Source (ESS) research base.

'We've been building our relationship with UKAEA and RACE for many years,' says Stuart Yellowlees, chief operating officer for

JFN, 'and we were delighted to win such a high profile contract to deliver a robotic handling system in May of this year and play our part in making the ESS the next great "Big Science" research facility.'

JFN will design, manufacture, install and commission an integrated package of remotely operated manipulators, hoists and cranes to handle the radioactive components produced as a by-product of ESS research activities.

ESS is one of Europe's largest science projects, backed by 17 European countries and constructed as an accelerator-based facility to produce neutrons for a large array of advanced instruments. It is designed to enable scientists to understand basic atomic structures and forces and will make new opportunities for scientific discovery possible for researchers in materials and life sciences, energy, environmental technology, cultural heritage and fundamental physics.

'This marks a significant step in the strengthening commercial relationship between UKAEA and JFN and firmly establishes JFN as one of the pre-eminent nuclear remote handling businesses in the UK,' adds Stuart.



Artist's impression of the European Spallation Source research base in Sweden which will use JFN's specialised equipment



Smart new technology for road and rail

A suite of new launches brings the safe operation of excavators up to date

After significant research and development, the team at JF Prolec has launched an exciting new product for the construction industry, which has been showcased on the M1 and M6 smart motorway projects.

PMX is a combination of two tried and widely accepted technologies – machine control (PME 500) and GPS - which allows any number of excavators on a site to operate within a safe, yet flexible, working envelope.

Significantly this means for the first time, work can be safely carried out on smart motorway projects alongside open lanes of traffic.

‘Modern construction sites can be highly hazardous places,’ says JF Prolec managing director, Simon Everett, ‘and ensuring safety, particularly when a site is close to live infrastructure or moving traffic, can be complex and potentially expensive.’

But PMX works by using information input from a hand-held GPS rover or pre site surveys to create a site-specific hazard map for any job. This map can be continually updated as hazards change (as lane priorities shift, new fixed hazards are added to the site, or boundaries extended), and this new information is transmitted (via USB) to any number of excavators fitted with a receiver.

This allows the map of hazard locations to be continually updated over long distances as work progresses and keeps each excavator in a safe working envelope as it

moves around the site.

PMX is also the first of its kind to be approved by Network Rail for off-track use (reducing the need for night work or line closures) because it delivers transformative benefits in terms of site safety, improved operational efficiency and reduced costs.

The key to its success is the fact that PMX does away with the need for operators to manually input a machine’s height, reach and slew restrictions at each work location to limit its movement, and then repeat the process each time an excavator moves.

Instead, PMX accurately tracks machine location and automatically updates limit settings to control the safe working envelope, continuously monitoring a machine’s proximity to any hazard and calculating the necessary restriction in movement.

‘In cleverly combining the well established technologies of hazard mitigation and geolocation, PMX helps prevent plant equipment from striking pre-defined hazards, increasing machine efficiency by up to 30% compared to existing systems,’ adds Simon.

‘This system is a significant technological step towards our vision of creating one connected site. It marks the transition from a machine-centric industry standard, to a site-wide solution of enhanced safety and productivity; from a hardware-oriented past to a data-driven future.’

TRACKPILOT



The JF Prolec team has also launched TrackPilot which delivers next generation hazard mitigation for on-track rail operations.

TrackPilot has been specifically designed for excavator rail-road vehicles, setting new standards in reliability, productivity and serviceability. It combines the latest rated capacity limiter and movement limiting device technologies in one hazard mitigation solution.

- **Compact:** The JF Prolec team has worked hard to shrink the necessary hardware required, reducing TrackPilot’s footprint to the size of a small laptop (above) which sits in the engine bay
- **Fast:** It boasts ten times faster processing and functionality speeds, than standard solutions
- **Easy to use:** A minimalistic and intuitive graphic user interface shows only operationally critical information as and when needed
- **Simple to service:** fewer system parts and easy-access ‘plug and play’ design.

Specialised marine equipment...



In the spring issue of Pelican we announced that James Fisher has acquired Martek Marine (Martek) which supplies specialised marine equipment to the shipping industry aiming to improve ship safety, performance and crew welfare.

Importantly, Martek has recently added two new products to its range:

- KVH is an advanced satellite communication system using high-speed and expanded VSAT coverage available on monthly subscription (no contract) with free installation (pictured right) .
- Sewage Effluent Test Kit is an all-in-one portable testing solution for onboard testing of effluent. When used in conjunction with DrinkSafe (a potable water test kit) it ensures all tests comply with stringent water testing legislation.

...and life-saving defibrillators

Martek’s flagship product is an easy-to-use defibrillator called Lifeforce AED.

Defibrillators can increase survival rates of cardiac arrests by 75% when applied in the first three minutes so having them installed at a place of work, both on and offshore, can save lives. This was demonstrated recently when a Belfast man with no training or first aid experience was able to use Martek’s Lifeforce AED to save his colleague’s life.

A simple picture card on the product shows exactly how and where to apply the pads and a recorded voice then clearly explains subsequent steps.

The device is set up to ensure a shock is only delivered when necessary making it impossible to deliver a shock by accident.

We meet Ralph Addison who is one of JFD's submarine rescue pilots responsible for supporting trials and training for the prestigious Indian Navy contract

Tell us a bit about yourself

I grew up near Glasgow and joined the army at 17, serving for five years in the Army Air Corps as an avionics technician, serving two tours in Afghanistan. My school teachers said I'd regret missing out on university but I was really lucky to get to work on Apache helicopters and I knew I wanted to learn to pilot sophisticated kit like that.

How did you come to join the James Fisher group?

I left the army in 2007 and met up with the James Fisher team at a recruitment drive. I was fascinated by ROVs and keen to train as a pilot/technician so I was thrilled to land a job as a sub-electrical engineer with the submarine part of JF Rumic (now JFD). JFD, which has become the world's leading submarine rescue service provider, went on to operate trials for the UK's submarine rescue system in preparation for its take over by NATO. This was where I began my pilot training.

The team was also working on submarine rescue systems for Singapore and Korea and I was lucky enough to be involved in the first sea trials on both systems.

In 2009 I was part of a small team sent out to Australia to support the Royal Australian Navy with their submarine rescue system. It was a fantastic opportunity for me to get up to speed with the system and to continue my pilot training.

In 2012 I returned to the UK to join the NATO submarine rescue system and in 2015 I switched to working as a freelance contractor. As well as working on JFD projects, I spent quite a bit of time on a vessel called Alucia which has two 1000m rated submersibles. These were chartered by the National Geographic programme, Years of Living Dangerously and the BBC's Blue Planet series.

Quite a bit of my work ended up on film and you can catch me on camera in the 'behind the scenes' clip for the Blue Planet episode in Antarctica about life under the ice. I'm piloting the sub that sprang a leak!

Under the surface with: Ralph Addison



Ralph Addison on board a DSRV and below making final checks during preparation to dive



Tell us about your job?

In 2017 I returned to full time work with JFD as operations lead for the Indian Navy contract. This put me in charge of supporting the two deep search and rescue vehicles (DSRVs) JFD has supplied, sea acceptance trials and conducting pilot and rescue chamber operator training courses both in the UK and India. It's been quite a challenge!

Once the second system is online I

am joining JFD's global operations team supporting the needs of the operational systems for NATO, Singapore, Australia and the new Indian Navy systems too.

This means I will be part of a specialist JFD team on standby, seven days a week, 365 days a year, ready to support any submarine rescue incidents globally.

What do you enjoy most about your job?

I love the fact that I get to travel – and dive – all over the world. No two dives are ever the same, and so much of the seabed has never been explored. It is challenging, and there are sacrifices (my children are very young and it's tough spending so much time away from them) but I feel very lucky to have such an exciting and varied job.

What does the future hold?

The team is busy working on the new DSRV for the Korean Navy, which is bespoke to the customer's specific launch requirements and I'm looking forward to working with them again!

Putting Triton Knoll firmly on the map

Pre-installation teams move from East Anglia One to Lincolnshire to start preparatory work on innogy's latest offshore wind farm

James Fisher Marine Services (JFMS) has started work on clearing the site of innogy's massive new Triton Knoll offshore wind farm off the Lincolnshire coast of any potential obstructions to construction such as unexploded ordnance (UXO) and boulders.

As we reported in the last issue of Pelican, the JFMS team recently won this significant contract to clear the 145km² site, which is bigger than the city of Manchester and the largest in the innogy portfolio.

The project marks an evolution of the relationship JFMS has developed with innogy since completing a landmark offshore services contract on innogy's Galloper Wind Farm, off the coast of Suffolk, in 2016.

Peter Godfrey, key account director for JFMS, says 'We are lucky to have a collaborative relationship with innogy and the experience we've gained from previous projects has allowed us to put together a solution for Triton Knoll based on a really clear understanding of the customer's requirements.'

The JFMS team has been able to move on to Triton Knoll hot on the heels of similar work at East Anglia One, and is expecting to move the team and clearance vessels directly to another wind farm clearance project when Triton Knoll is complete.

Clearance work of this kind is critical to the safe and efficient installation of the 90 turbines, two offshore substations and miles of inter-array and export cables that make up the 857 megawatt (MW)² wind farm. The UXO haul is likely to be significant because Lincolnshire was dubbed 'Bomber County' during World War II as the bulk of the UK's bombing force was based there. Many will have been forced to jettison any unused bombs into the sea close to the coast on returning from missions.

Jennie Kevis-Stirling, survey specialist for JFMS adds: 'This contract win shows clearly that the provision of pre-installation services for offshore wind farms is now a core offering for JFMS. The team is continually growing in



Unexploded ordnance ready for clearance by JFMS specialists

expertise, expanding the wealth of experience we gain from each project.'

In anticipation of this and future contracts, JFMS had already expanded into new facilities at Grimsby, taking advantage of the Government's Offshore Sector Deal that seeks to promote opportunities for investment and the growth of UK coastal communities and businesses.

Health monitoring for Cornwall's Tamar Bridge

James Fisher Testing Services (JFTS) has expanded its bridge monitoring portfolio with an eight-year structural health monitoring contract for the Tamar Bridge in South West England.

The Tamar Bridge is a suspension bridge built in 1961 as a crossing for the River Tamar that divides Cornwall and Devon. With a main span of 335m, it joins the Forth Road Bridge, the Queensferry Crossing and the Mersey Gateway as long-span UK bridges now using JFTS' services.

All are fitted with BridgeWatch, a system that collects data from weather, temperature and structural movement sensors into a sophisticated software solution for advanced analysis, to offer secure, real time monitoring of the entire structure.

BridgeWatch generates information from the data, to give insight on prevailing environmental conditions and their effects on the bridge. This helps the operations team make informed decisions regarding the management of traffic flow to assure

the safety of road users.

'We're looking forward to working with JFTS to deliver this important structural health monitoring project for Tamar Bridge,' says Richard Cole, engineering manager at the Tamar Bridge and Torpoint Ferry Joint Committee. 'The new weather stations will provide essential information to help our operations team deliver a safe and reliable service to bridge users and the data obtained from the structural monitoring sensors will provide an essential record of bridge performance that will support our robust inspection and maintenance regime, both now and into the future.'

As data is accumulated over time, the system will develop a detailed picture of the bridge's performance under a variety of conditions which will be used to optimise inspection and maintenance strategies in the future and allow Cornwall and Plymouth Council to extend the bridge's operational life.

Matthew Anderson, head of bridges and structures at JFTS who co-ordinated



the tender says: 'We are delighted to have secured this contract after many months of talks and particularly pleased that the operators of another high profile bridge have chosen BridgeWatch for the management and monitoring of data.'

The system will go live later this year and JFTS will continue to host client data for an initial period of eight years, using UK-based servers on a secure, cloud-based interface.

Reservoir reconstruction

Detailed surveillance work puts Welsh water source back in action

James Fisher group companies have been working together with Mott MacDonald to bring an old, disused reservoir back into service for Dwr Cymru Welsh Water.

The team at JF Non-Destructive Testing (JFNDT) was able to develop a bespoke programme for detailed surveillance work which combined a number of specialist inspection services from within the James Fisher group.

The integrated solution was developed for the Ynys-y-Fro Reservoir in South Wales, to be delivered by Mott MacDonald working as part of the Welsh Water Capital Delivery Alliance. JFNDT's solution was designed to meet Welsh Water's drought mitigation plans by providing an additional sustainable water source for the region.

The work means old pipelines (now fit for purpose) can soon be brought back

into active use to keep taps flowing in South Wales in the event of future water shortages.

Key to the project was the ability of the JFNDT team to calculate the remaining life of old cast iron water pipes connected to the reservoir, some of which were originally laid in 1848. The pipework had become heavily calcified in places with extensive coating breakdown, so the team conducted a pulsed eddy current (PEC) and manual ultrasonic NDT survey using the most innovative testing equipment to create a colour graphic corrosion image.

JFNDT's qualified and experienced technicians worked closely with James Fisher Marine Services which provided a confined tunnel rescue team.

'It was a challenging task,' says Mike Ennis, applications specialist with JFNDT, 'the testing had to be carried out underground and inside the tunnel so there was no natural light and an ever present risk of flooding if any of the supporting infrastructure were to fail.'

The resulting survey has provided accurate information about the condition of the pipes to allow informed decisions about the remaining life of the systems to be made.



Deep tow survey solution for LUKOIL in Romania

When Russian oil and gas company, LUKOIL wanted to check that an area off the coast of Romania in the Black Sea was clear for development it contacted James Fisher Marine Services (JFMS) for an ROV.

However, the JFMS team quickly realised a tailored deep-towed subsea survey would be a more effective option, and took on the contract to sweep the site for anything of historical or archaeological interest.

Over 60 ancient shipwrecks had been discovered in the area in recent years and Romanian environmental law required LUKOIL to check the area ear-marked for development was clear before conducting an exploratory drilling campaign.

LUKOIL, and the local diving authorities, had little experience of a survey of this scale having previously used a platform-based solution only suitable for smaller areas. However, the JFMS team contracted a support vessel with a winch attached to a "towfish" (a weighted fibreglass shell fitted with side-scan sonar equipment) which was able to sweep the 8km x 6km area.

Jennie Kevis-Stirling, survey specialist for JFMS explains: 'The "towfish" was kept at around 10m above the seabed so its sensors could scan the seabed as depths undulated between 800-1300m and identify any targets lying there, or buried up to 10m beneath the surface.'

This survey method allowed the JFMS team to reduce the length of the project from an expected 30 days to just a week, and post-analysis of the data revealed no targets of potential archaeological interest, meaning the Romanian authorities could issue an Archaeological Discharge Certificate and LUKOIL can now proceed with drilling and construction operations in the field later this year.

'This was the first time JFMS had provided a deep-towed subsea survey but the success and acquired expertise means we can now expand the survey options the team is able to provide,' adds Jennie.

Fendering the world's biggest vessels

Building a vessel 220m long, 102m wide, and nearly 50m deep which weighs nearly 275,000 tonnes means you're going to need large and high quality protective equipment to reduce the risk of damage during operations. That's why SembCorp Marine, which is building a new-generation self-propelled, semi-submersible crane vessel for Netherlands-based Heerema Offshore Services, approached Fendercare Marine.

The vessel, named Sleipnir, is being built in Singapore, and when complete later this year, is expected to be the largest semi-submersible crane vessel in the world. It will be used to aid the installation and removal of subsea equipment, decommissioning services and heavy lifting operations at offshore oil and gas sites worldwide.

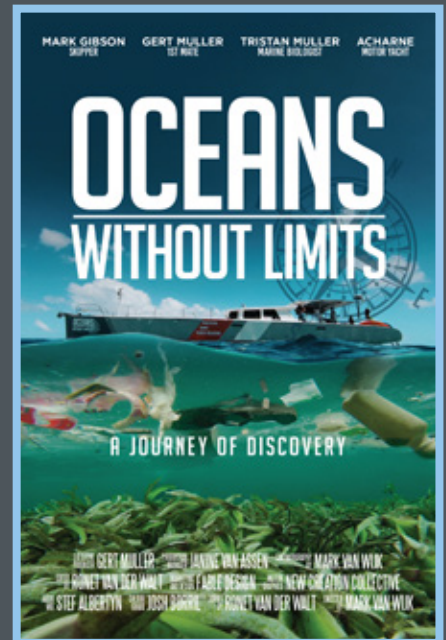
After hundreds of hours in technical discussions with Heerema and SembCorp over a period of two years, the Fendercare Marine team was able to provide floating fenders offering enhanced durability and protection (six Yokohama pneumatic fenders each 4.5m x 9m in size) plus bespoke aircraft tyre nets, shackles and



connectors strong enough to withstand harsh offshore conditions.

The team also designed and supplied bespoke cradles from scratch to secure the fenders on board, fitting the customer brief by making them stackable to avoid cluttering deck space when not in use.

Fendercare's regional business development manager, Charmaine Wong-Beardsworth says: 'Because this vessel is the first of its kind, there were many unique requirements for our engineering team to consider. We are immensely proud to have been a part of this two-year journey with the SembCorp team and we look forward to co-operating again on further projects in the near future.'



Tackling the rise of ocean plastics

Subtech managing director, Gert Muller took a six-month sabbatical last year to sail across the Indian Ocean researching the impact of plastics in some of the world's most remote areas and he has created a documentary of his findings in a bid to raise awareness of what has become a massive global concern.

Gert was joined on the trip by his son, Tristan, who is investigating the proliferation of microplastics in sea grass as part of his marine biology degree. The mission saw them sailing on a specially adapted motor yacht from Cape Town

in South Africa, around the Western Indian Ocean close to Madagascar, Seychelles, Maldives and Chagos.

'We were aiming to investigate the possible impact of plastics in unpopulated areas away from the holiday resorts and industrial areas and what we discovered was truly shocking,' says Gert, 'the amount of plastic we saw was far, far worse than we expected.'

In the worst affected areas the team collected as much plastic as they could and made arrangements for its disposal, but now Gert is investigating ways the local communities can find workable and

sustainable solutions for the problem.

'This trip has really opened my eyes to the enormity of the world's plastic problem and its impact on our oceans. We hope our documentary will help build awareness and inspire the force for change that is so sorely needed,' Gert adds.

Follow Gert's progress at:
www.oceanswithoutlimits.com

Tackling a gruelling 120km charity run

Mike Ennis, applications specialist with James Fisher NDT has been training hard for a gruelling 120km four-day ultra marathon in the Canary Islands in September to raise funds for charity.

The run, dubbed the 'Half Marathon des Sables' because it is half as long but equally gruelling as the toughest foot race in the planet, is a technical race across mountains, rock-strewn desert and beaches of Fuerteventura carrying all provisions in a backpack.

Mike says: 'I used to be pretty fit, but work and a young family had curtailed any serious exercise endeavours, however, last year I started training properly again and I set myself this race as a target.'

He kicked off the year by running the Anglesey half marathon in March (achieving a personal best of 1 hour 30 mins) and completed his first full marathon, the Excalibur Marathon, in May. 'It was a tough trail running event, with over 5,900ft of ascent, almost the equivalent to running up Snowden twice, but I came 21st out of 100 with a time of just over five hours,' Mike says. At the end of June

he is upping the distance further by tackling the Pen y Llyn Ultra which involves 50 miles of off-road running.

Mike (left) is raising awareness and funds for a charity called Shelterbox which provides emergency shelter and tools for families robbed of their homes by conflict or natural disaster. Each box costs £509 and he hopes to be able to raise enough money to buy four.



You can follow Mike's progress and donate here:
www.facebook.com/MikeEnnisHMDSShelterbox



Fund raising football fun to support Futurestars

A Fendercare Marine football team has succeeded in raising over £3,300 for a charity called Futurestars which supports schools in Ghana and Togo, helping to improve livelihoods and inspire children to further their education.

The team, made up of Fendercare staff and friends, plus two players from James Fisher Marine Services in Lowestoft faced a team from Norfolk-based Applied Satellite Technology (AST) for the charity match hosted at Norwich City Football Club on 14 May.

Fendercare Marine's Adam Goble, who captained the team (and who joined Katie Ingham in organising the event) said it was a very close match which ended in a 2:1 win for AST.

'The match was great fun and we are delighted to have raised £3,330 for such a good cause helping Futurestars run its excellent education-through sport programme for under privileged children in West Africa,' says Adam.

Fendercare Marine has been supporting Futurestars since 2015 helping to support thousands of children in six schools by providing funding for football coaching and PE lessons as a key aid to improve attendance and engagement among the pupils.