

Divuged Winter 2019

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Golden Arrow

Comprehensive NATO Submarine Rescue Exercise completed successfully

JFD has successfully completed a comprehensive submarine rescue exercise to mobilise the entire NATO Submarine Rescue System (NSRS). The exercise, titled Golden Arrow, provided vital hands-on training that further optimises the crew's ability to conduct safe and effective rescue operations, ensuring the capability remains ready to seamlessly respond to an incident anywhere in the world.

The Golden Arrow exercise involved the full mobilisation and demobilisation of the NSRS, as well as operational training including the safe launch and recovery of the Submarine Rescue Vehicle (SRV), laying the mating target, and conducting mating and hyperbaric operations.

During the exercise, JFD also took the opportunity to formally demonstrate to the participant nations the ability to launch and recover NSRS's Submarine Rescue Vehicle without the use of a support boat, or deploying swimmers. The diverless launch and recovery system - known as "DLARS" - is a feature of several of JFD's submarine rescue systems, and is key to being able to operate confidently and safely in higher sea states.

Upon completion of the exercise, the mothership (MOSHIP) transited back to the disembarkation point at King George V Dock, from where the equipment was returned to HMNB Clyde where it remains primed and ready to respond instantaneously.

Exercise Golden Arrow demonstrated JFD's ability to safely plan, manage and execute a complex large scale at sea deployment to the satisfaction of customers in France, Norway and the UK. Fast and effective mobilisation of submarine rescue systems is a vital component of successful rescue operations, and having the ability to quickly reach a DISSUB anywhere in the world whilst maintaining optimum operational capability is critical to protecting human life at sea.





Ortega Submersibles welcomed to the team

In August 2019, JFD was delighted to welcome Ortega Submersibles to the team through the acquisition of all the assets, IP and designs rights of the Netherlands-based submersible boat designer and manufacturer.

The acquisition enables JFD to expand further its offering of advanced Swimmer Delivery Vehicles (SDVs) and to develop new vehicles and capabilities in order to meet increased market demand for specialised small and medium-sized craft. It adds to its existing SDV manufacturing capability based in Vaxholm, Sweden.

Development, testing and trials of JFD's existing range of SDVs has taken place in the Stockholm archipelago, the Baltic Sea, Portland harbour and the waters off the west coast of Scotland. Fully tailored to customer requirements, the vehicles combine the Swedish commitment to safety-led design and the ship-building heritage of the Clyde; all underpinned by a unique operational pedigree with operator input at all stages of this process. The expansion of this through the acquisition of the facilities and the team in Enschede will allow JFD to continue to build on this heritage.

Giovanni Corbetta, Managing Director, JFD, said:

"Deploying Special Forces operators into their field of operations always has its challenges, but when it comes to covert operations in the open sea, safe insertion and extraction to and from the field takes on an even greater level of complexity and importance. Divers can become easily fatigued and exhausted if exposed for long periods in the open water, particularly where there is a need for submarines and surface vessels to be kept as far away from the area of operations as possible in order to avoid detection. This often requires divers to swim great distances unless there is an SDV capability in place suitable for their mission requirements.

"JFD's SDVs primarily exist to facilitate the safe insertion and extraction of special operations forces and equipment. They have been developed with the needs of today's operations in mind, enabling us to offer navies a broad range of vehicles to suit a variety of mission types and deployment methods. Through our acquisition of Ortega Submersibles, we will be able to expand our SDV offering, particularly for fully electric smaller and medium sized boats, to ensure that Special Forces operatives have the means to safely insert and extract themselves from any operation and under any mission requirements. The partnership will strengthen the synergies between the two companies, whilst allowing engineers and designers to share their knowledge and experience to ensure there is an optimal SDV capability that meets the market's needs for specialist submersibles."

The subsidiary, which will be known as JFD Ortega, will retain the office and manufacturing facility and its whole team of designers and engineers at the established operational base in Enschede, The Netherlands.



CAPABILITY

JFD provides advanced SDVs to a number of notable navies. As an established capability provider, and operating worldwide, JFD has in its portfolio a comprehensive range of products, services and after-care solutions for the defence industry, including Special Forces, law enforcement, counter terrorism, maritime protection and mine countermeasures.



Republic of Korea Submarine Rescue Vehicle will sustain highest standards of safety

JFD has been awarded a multi-million pound contract for the design and build of an advanced Deep Search and Rescue Vehicle (DSRV), as part of a comprehensive submarine rescue capability being provided to the Republic of Korea Navy (RoKN).

The contract will ensure the provision of an advanced submarine rescue vehicle to sustain the highest standards in safety for submariners.

The DSRV design and build is bespoke to the customer's requirements and will enhance the operational capabilities of its submarine rescue service. It has been designed to maximise battery capacity and operational endurance, increasing the chances of a successful rescue operation. This also ensures minimal time is spent recharging the vehicle's batteries, ensuring the DSRV can be deployed quickly in the event of an incident.

Once in operation, the DSRV will be deployed from the submarine rescue vessel via a 'moonpool' to rescue the crews of distressed submarines at depths of up to 500m and in waves as tall as four metres. This method of launch and recovery minimises the impact of weather and sea conditions on the ability to operate the DSRV, maximising the chances of a successful submarine rescue operation, further safeguarding the lives of submariners.

JFD has supported an advanced submarine rescue capability for over nine years for the RoKN, and following delivery of the new DSRV, will continue to work with the team in providing a comprehensive training and support programme to ensure that submarine rescue operations are carried out safely and efficiently.

JFD is committed to leading the market in submarine rescue, and the value we place on building and maintaining strong relationships with our customers will ensure the safety of submariners operating anywhere in the world.

Successful mating trials for Portable Hyperbaric Reception Facility

This summer JFD successfully completed rigorous mating trials of its latest Portable Hyperbaric Reception Facility (PHRF) for TechnipFMC. The successful completion of the trials, conducted with two of TechnipFMC's vessels, provides divers with the assurance that every possible measure has been put into place to ensure their safety should there be an incident.

In the event of an emergency evacuation, even once divers have reached the perceived relative safety of onshore via a hyperbaric lifeboat, they still need to undergo a thorough decompression process to safely return to sea level (Surface) before being exposed to atmospheric pressure and prevent suffering the potentially fatal effects of decompression sickness. Although the preferred option may be to transfer saturation divers to a fixed Hyperbaric Rescue Centre (HRC), often due to time constraints, and depending the location of the divers, this can be challenging. As a contingency, a portable HRF capability allows divers to safely begin the decompression process even if they are operating in a remote location.

Over the course of the trials, JFD performed successful mating exercises with the port and starboard Self-Propelled Hyperbaric Lifeboats (SPHL) of TechnipFMC's vessels Deep Discoverer and Deep Arctic. Testing included lifting the SPHLs from a Harbour and also transported by trailer to the PHRF at the NHC and mating with the PHRF using a precise hydraulic system to ensure there is a solid seal with no leaks, thereby facilitating a safe and effective decompression process. Critically, each separate mating exercise was completed in less than two hours which ensures that divers can be transferred into the PHRF as quickly as possible, an essential aspect of conducting safe and efficient rescue operations, and one that optimises the chances of returning the diver to safety.

Giovanni Corbetta, Managing Director at JFD, commented:

"The health and safety of divers must always be the primary concern for any operation, regardless of how or where it is carried out. In order to protect the lives of divers it is paramount that there are emergency measures in place, supported by the necessary technical capabilities, and that this



covers the entire rescue and evacuation process, from deep sea to the shore. This means providing divers with advanced and reliable technical solutions that will allow them to return to safety at pressure and undergo a safe decompression process.

Incidents that can impact divers, who are often at times operating in challenging environments and under difficult conditions, can quickly become life-threatening. Knowing that divers will have access to a PHRF within a short time-frame irrespective of where they are operating offers reassurance that all possible measures have been taken to ensure that divers can safely carry out their operations. These trials are part of an ongoing drive to realise significant improvements in safety standards across the global subsea industry."

JFD's portable HRF systems are easily transportable and are designed to suit a variety of hyperbaric lifeboat and HRC configurations to maximise the likelihood of a successful rescue. For over 30 years, JFD has played a key role in advancing hyperbaric rescue capabilities through designing and manufacturing the most capable land based system in the world, as well as proven Portable Hyperbaric Rescue Facilities (HRF) assets. JFD has played a leading role in the provision of hyperbaric reception services having maintained the UK's only land based fixed HRF, at the National Hyperbaric Centre, since 1987.



Safety enhancements to Stealth rebreather range

Increasing diver safety is of utmost importance to JFD. Therefore JFD is proud to announce a major safety upgrade to its Stealth rebreathers range that will significantly reduce the potential for incidents when switching to bailout gas during mine countermeasures and explosive ordnance disposal (MCM-EOD) operations, as well as other underwater missions.

Launched at DSEI 2019, the new dual mode bite mouthpiece is an industry-first technology that enables divers to switch between JFD's Stealth closed circuit mode and a bailout gas supply without having to remove their mouthpieces. This seamless transition between primary and secondary gas supplies significantly reduces divers' risk of incident in the event that they need to switch gas supplies, and highlights JFD's market leading position and pioneer of safety improvements in the military diving sector.

The dual mode bite mouthpiece eliminates the previous necessity for divers working in extreme and unpredictable conditions to manually remove their mouthpiece to change from rebreather to bailout gas. The new mouthpiece has been extensively tested to achieve full compliance to all relevant standards to 100msw and allow simple integration into all existing and new Stealth systems, which includes both Stealth CDLSE, Stealth SC and previous variants, further enhancing diver safety and system commonality that allows full compatibility with additional systems such as the External Breathing System (XBS) and Surface Supply Bail-Out System.

Giovanni Corbetta, Managing Director, JFD, said:

"The launch of the dual mode bite mouthpiece marks an important milestone in our ongoing programme of upgrades to JFD's Stealth rebreathers range, all aimed at continually setting new benchmarks in underwater life support technology and diver safety standards. This latest innovation dramatically improves the outcomes for divers who find themselves without gas in the most extreme and challenging environments, enabling them to focus on their missions without being distracted by concerns over equipment reliability."







Following an acquisition of the closed bell saturation diving system and associated assets at Fort William, JFD will re-establish the leading global closed bell diver training programme - also known as sat diver training - and the only UK-based training capability that will fulfil an urgent market need for skilled saturation divers.

The future of the global offshore and subsea markets is dependent on the ability of saturation divers to conduct complex and demanding installation and maintenance operations in what can be extremely challenging environments. The re-establishment of industry-leading closed bell diving training in the UK will allow commercial divers to gain the skills and expertise they need to safely dive using a saturation diving system, enabling them to reach their field of work and return safely to the surface for every operation they conduct. Once established, JFD's saturation diving training will be one of only two programmes in the world that will provide divers an internationally-recognised closed bell saturation diving qualification.

Giovanni Corbetta, Managing Director, JFD, commented:

"Re-establishing closed bell diver training at Fort William is very much in line with JFD's ongoing drive to provide divers and subsea operators with the skills, equipment, capabilities and training they need to carry out their work whilst ensuring their safety at all times. Given recent growth in the industry, now more than ever it is essential that there is a training capability in place that fulfils an urgent need for skilled saturation divers, whilst ensuring that the highest standards in safety are always maintained."

Before delivering closed bell diver training, JFD are making further enhancements to the system to further develop its capability. The system also includes a Self-Propelled Hyperbaric Lifeboat (SPHL), giving divers the ability to undertake emergency escape training as part of the saturation diving course. JFD will be the only company to conduct emergency escape and evacuation training as part of its closed bell diver training, ensuring that divers understand the integral operation of a SPHL as part of a saturation diving system.

The diving facility in Fort William has been training divers for over 40 years and has long been seen as being one of the world's foremost diver training locations. Building on its global reputation as a centre of excellence for advanced diver training, JFD's acquisition of the saturation diving system and re-establishment of closed bell diver training will further solidify both JFD and the UK's reputation as a leading global centre for diving excellence.





The first flexible rebreather capability for military combat divers

JFD recently launched the Shadow back mounted kit, providing the market with a back mounted rebreather capability for the first time. The back mount kit enables the standard front mount Shadow to be back worn providing ready access to mission equipment and is suitable for a range of mission profiles representing the latest in a long line of technological developments designed to enhance safety in military combat diving.

In the development of Shadow back mount capability, JFD proactively engaged with divers to firmly establish the requirements and deliver an innovative solution that is fit-for-purpose. Traditionally, rebreather sets worn by combat divers are front mounted which prevents the diver from being able to pilot the SDV that would facilitate their insertion into the operational field. However, the new JFD Shadow set and conversion option allows divers to adapt their equipment to best suit mission requirements, allowing them to carry out their operations safely and efficiently.

JFD is committed to investing in R&D that will drive the advancement of the innovative solutions our customers need and employs a comprehensive and in-depth understanding of the entire mission spectrum for customers to deliver innovative solutions that drive the highest standards in safety and operational efficiency.

The entire Shadow range of special forces equipment is designed to be modular, allowing divers to adapt to mission requirements and ensuring they have the flexibility they need to safely complete their operations. Our expert technical team developed this new practical rebreather capability for combat divers to ensure safe insertion into the operational field whilst also carrying the equipment they need to carry out their mission, representing a leap forward in capability for combat divers and JFD's customers.

'Last Breath'

JFD's National Hyperbaric Centre becomes a film set for documentary movie





In 2012 a saturation diver was left stranded below the surface of the North Sea with no breathable air supply after the vessel ran off DP, cutting his umbilical supply. This incident has been made in to a feature length documentary where the original participants deliver an emotional first-hand account of this dramatic event.

JFD was approached by producers as they looked to film some reconstruction scenes within our land based saturation diving system. The facilities at NHC replicate those found on board a Dive Support Vessel (DSV) and are able to simulate deep underwater pressures within a controlled environment providing the ideal facility for subsea testing, training and hyperbaric welding trials. The full set-up includes living chambers for up to 16 divers and a 'diving bell' which connects to the main work chamber.

The unique set up the NHC offers enabled the film crew to safely capture reconstruction scenes within the simulated diving bell with access to our specialist life support team who were able to assist and advise.

Last Breath was released in April 2019 and was shown on BBC and is still available on Netflix.

China Shipbuilding award submarine rescue contract

JFD has been awarded a multi-million pound contract for the design and build of submarine rescue equipment, including advanced Deep Search and Rescue Vehicles (DSAR), as part of a comprehensive submarine rescue capability being provided to China Shipbuilding & Offshore International Co., Ltd.

JFD provides fast, safe and reliable subsea rescue services, solutions products, engineering services and training to 80 countries and 33 of the world's navies including the Royal Navy, Australian, Indian, Singapore, and South Korean Navies, as well as providing the NATO Submarine Rescue System.

Giovanni Corbetta, Managing Director, JFD, said:

"This contract award underlines JFD's position as market leader in the submarine rescue market, safeguarding the lives of submariners and providing a comprehensive submarine rescue capability to organisations around the world."



COBRA award winning!

Back in February of this year we were delighted to be nominated, and then win, the award for Innovation for Safety at the Subsea UK Awards for our revolutionary bailout rebreather, COBRA!

A product such as COBRA takes an enormous team effort to go from design concept to production and it's thanks to the drive and passion of all at JFD that we have made that happen.

We spent 5 years designing, testing and evolving COBRA ensuring the most reliable piece of equipment was produced to safeguard the life of divers and let them work with confidence in the harsh environments they work. Operating in depths of up to 500m, in temperatures close to zero and in pitch black they need to know they have got the safest and most reliable bailout rebreather in the world on their backs should the worst happen, and thanks to COBRA – they do.







Key partnerships enhance submarine escape capability

As part of JFD's strategy to provide complete SMERAS (Submarine Escape & Rescue Surface Abandonment and Survival) capability support from escape training through to a full submarine rescue service, JFD has expanded its base of operations for escape training to provide further choice to the market. The recent partnerships with both Aquacentrum Den Helder and Y-40 in Italy allow customers the choice of pressurised training facilities at which they can undertake submarine escape training in the facility which best suits their needs and location.

The partnership between JFD and Aquacentrum Den Helder will allow both new and existing submarine operating nations to train their submariners in escape and abandonment in the most realistic environment possible.

The facility, which is owned by the City of Den Helder, will provide JFD and its customers with access to a uniquely realistic experience in simulating an escape from a distressed submarine utilising an 11-meter-deep pressurised escape tower in a safe and disciplined environment. JFD will provide three-day courses for international navies, even at short notice, ensuring that the capability can be easily accessed, and that the training is tailored for each customer accordingly.



Herbert de Vries, Dive Safety Manager from Aquacentrum Den Helder commented:

"Providing submariners with the most realistic environment to simulate submarine escape and rescue is fundamental in delivering the best possible training. Accommodating the only non-military escape tower in Europe which can support both diver training and escape training makes the facilities of Aquacentrum Den Helder unique to the region, and in partnering with JFD we can create a benchmark for best-in-class training for submariners and those that operate beneath the sea, often in the harshest of conditions."

JFD's partnership with Y-40, owner and operator of the world's deepest pool (42.15m), will provide training that simulates the experience of escaping from a distressed submarine in a safe and controlled environment.

Emanuele Boaretto, Architect and CEO, Y-40 commented:

"We are pleased to partner with JFD on this new project, which will enable us to use the existing facilities at our deep-water pool improve the safety of the global submariner community. As the first and only deep pool that runs on thermal waters, we're able to keep operating costs down. This means the training offered at our facility and delivered by JFD will be both affordable, as well as easily accessible."

JFD operates at the forefront of innovation and is a global leader in the provision of submarine rescue and support services, working with most of the advanced navies in the world. Using its market knowledge and long experience, the company continually looks to set new standards in the delivery of comprehensive systems, technologies and training that break new ground in safety and protecting life at sea.

World first with 500m rated dive products

JFD has successfully delivered the world's first saturation diving products rated to a depth of 500m.

The products have been developed as part of a saturation diving system for a leading offshore service provider. The development demonstrates JFD's ability to overcome the most complex challenges and provide solutions that set new operational performance and safety standards.

The new products, which include environmental control systems, gas reclaim and life support products, provide the most advanced saturation dive capability in the world, allowing the most complex offshore operations to be conducted efficiently in the safest possible conditions.

Giovanni Corbetta, Managing Director, JFD, said:

"We are pleased to have reached this latest milestone in this one-of-a-kind deep-sea diving project which demonstrates JFD's capability in developing technology and simulating performance in the most challenging underwater environments. The delivery of these world-first products is the latest demonstration of JFD's world-leading R&D and innovation programme, and our ability to develop solutions that overcome the most complex of challenges for our customers. This is not only integral to everything we do as an organisation, but also the driving force behind delivering ever-improving safety standards for commercial divers operating in the offshore industry."

To meet the requirement for 500m rated products, JFD updated its existing technology to provide greater performance capacity, as well as developing entirely new products, all of which have to be verified and proven at this lower operational depth, improving JFD's offering to the commercial diving sector. The new technology utilised by JFD has enabled multiple products to be designed that are able to cope with increased pressure, increased ability to heat and cool the divers' living environment and increased transfer of gas and fluids at this extreme operational depth.

JFD has previously modified its range of equipment to meet customer requirements. In 2014, as part of a saturation diving system built for the Russian Navy to support submarine rescue operations, JFD saturation diving products were enhanced for 450msw operation and incorporated within the diving vessel Igor Belousov.

Giovanni added:

"The development of these saturation diving products highlights JFD as a leader at the forefront of innovation in the provision of commercial diving products. Using our market knowledge and extensive experience, we continually look to set new standards in the delivery of comprehensive systems, technologies and training that break new ground in safety and protecting life at sea."





Milestone exercises completed for second Submarine Rescue System

In February, JFD successfully completed critical subsea mating exercises as well as a full launch deployment, dive and recovery, marking a key milestone in the sea acceptance trials of the various assets comprising the second of the two Third Generation Submarine Rescue Flyaway Systems being delivered to the Indian Navy.

The JFD team worked closely with the Indian Navy in replicating the operating conditions of a real submarine rescue operation, with the exercise involving underwater mating operations with a bottomed submarine and conducting a safe transfer of personnel from the submarine to the Deep Search and Rescue Vehicle (DSRV). Critically, the success of the exercise represents another key step in ensuring there is a robust and effective submarine rescue capability in place for the Indian Navy.

Throughout the whole sea trials and acceptance programme for the second system, JFD conducted multiple dives of both the DSRV and the Remotely Operated Vehicle (ROV), including deep dives conducted to a depth of 650m and 805m respectively. An angled targeted mating exercise was carried out at 45 degrees in addition to Side Scan Sonar operations, and pressurisation exercises of the Deck Decompression Chambers all of which represent significant 'firsts' for the second system.

JFD continues to work closely with the Indian Navy to train the crew on the safe operation and maintenance of the system, to ensure the safe and effective operation of both systems in the event of an incident. We are proud that the trials have proven the ability of the system and our customers have been active participants ensuring they are equipped with the expertise to conduct safe and efficient submarine rescue operations.

New CE marked diver harness range released!

The JFD Diver Recovery Harness range has been enhanced to comply with the new CE regulations. The range was reviewed, retested and recertified to conform to the Personal Protective Equipment European regulation 2016/425 and satisfies the essential requirements of BS EN 15333-1-2008.

Significant upgrades and further improvements have been made to all five variants.

- JFD rationalised their harness range enabling all harnesses to be fully adjustable to all body sizes.
- Each of the three certified recovery points have been load tested and passed at 900kg (9000 newtons) with easy accessibility to a rescuer with the wearer in any orientation. This allows a rescuer to assist the distressed diver by connecting a lifeline to any of the recovery points.
- The range of harnesses allows attachment and removal of items of diving apparatus, if required, freeing up the diver's hands to undertake their task at hand.
- The harnesses have been designed to serve divers working in extreme conditions subsea, highlighting JFD's unwavering commitment for setting the highest standard for safety, quality, performance and reliability of products and services for commercial divers globally.

To ensure the highest standards are achieved; all JFD harnesses are made completely in-house with design, testing and manufacturing undertaken at JFD facilities. JFD's Diver Recovery Harness range has been in operation for over 30 years and supplies significant quantities of their recovery harnesses to the market globally each year. Plenty of stock of our harnesses is held at our Aberdeen facility.

The harnesses are popular for their robustness and durability serving a maximum total lifespan of 10 years and maximum in-service life of 5 years which is in line with IMCA requirements. JFD's aspiration towards continual improvements of safety standards for all divers and diving operators is of paramount importance in protecting life at sea.



Pacific Reach

Submarine Rescue System triumphs in international exercise

JFD has again set new global benchmarks for international submarine rescue following the successful completion of rigorous exercises off the coast of Western Australia.

In a range of weather conditions, JFD's fully-integrated submarine rescue system demonstrated its robustness and reliability in the triennial Pacific Reach, a multi-lateral series of exercises, hosted in 2019 by Australia with the participating nations of South Korea, Japan, Malaysia and the United States and many other observing countries from the Indo-Pacific region.

Designed to simulate a real-life submarine rescue emergency using Collins-class submarine HMAS SHEEAN and South Korean submarine, ROKS Lee Sun-sin, Pacific Reach, which this year was held in tandem with the annual Black Carillon exercise, tested all aspects of JFD's rescue system which includes a free-swimming, piloted submarine rescue vehicle that is designed to locate and "mate" with a disabled submarine and a hyperbaric equipment suite to provide submariners with life-saving medical treatment once they are back on the water's surface.

Importantly this year, along with a series of shallow exercises, the system also successfully completed two deep dives of 400 metres, securing annual certification for this critical sovereign capability.

The 26-day deployment also included a mass evacuation exercise (MASSEVEX) conducted over 36 hours. This involved six separate rescue evolutions with 25 Navy personnel rescuing 45 submariners with a variety of simulated injuries and conditions and transporting them under pressure to the surface for medical treatment in JFD's world class hyperbaric equipment suite.

"Never before have we tested our system to the very limits of its design capability and I am delighted to say it performed exceedingly well both in its reliability and flexibility." said JFD Australia's Managing Director, Mr. Toff Idrus (himself, a former submariner). "It was an extremely long and demanding exercise which included specialist equipment installation and de-mobilization phases and that there were no reportable incidents, accidents or injuries is a clear demonstration of our world-leading safety standards."

"It was also extremely pleasing for our staff and supply chain to be complimented by global submarine rescue experts on the exceptional material state of the full kit and its ability to operate so seamlessly, it really did show that JFD is the world leader in submarine escape and rescue."

Across the four weeks, which relied heavily upon the management and technical skills of JFD's team of more than 40 engineers, operators and tradespeople, the submarine rescue system also successfully completed:

- 23 submarine rescue vehicle sorties
- 72 hours of dive time
- 75 dives
- 16 dives of the remotely operated vehicle
- 21 hours training
- 16 newly trained and qualified personnel in a variety of positions

"Keeping submariners and other defence force personnel safe has been and will always be JFD's highest priority," said Mr. Idrus.

"At our Australian headquarters in Perth, we are proud to be "rescue-ready" at 12 hours' notice to respond to a disabled submarine anywhere in the world."

"But what is also critically important is having the opportunity to work with our regional partners and to demonstrate our trust and confidence in each other's ability to carry out an extremely challenging rescue operation."

"Each and every one of us is focused on saving lives."



Australia | China | Germany | Italy | Singapore | South Africa Sweden | The Netherlands | United Kingdom | USA

