Submarine Rescue
Rapid solutions backed by hands-on, global at-sea experience

Oceaneering understands the complexity of submarine rescue because of our long involvement in U.S. Navy submarine rescue initiatives. Our team of engineers, designers, operators, and divers with hyperbaric chamber experience use our technologies including remotely operated vehicles (ROVs), manned submersibles, and launch and recovery systems to ensure successful submarine rescue.
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<th><strong>RESCUE PREPARATION</strong></th>
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| Plans and CONOPS Development for Major Subsea Systems | Equipment packaging for rapid mobilization  
- JATEU  
- MIL-HDBK-1791  
- ISO | Operator of world’s largest ROV fleet (>300) | RESCUEX participant  
(Black Carillon, Sorbet Royal, Bold Monarch) | Developer of deck reception chambers | |
| Rescue system interface definition  
- STANAG 1297  
- ATP 57 | Established VOO database  
- Vessel analyses  
- Ship alteration design packages to meet SRS requirements  
- Deck interface design packages to support SRS installation | ADS owner/operator with more than 40 years’ experience and safe operation | USN’s primary Submarine Rescue Systems engineering and integration agent | Designed and built both fly-away gas rack assemblies for the USN SRS | |
| Innovative ROV fleet maintenance program | Designer and provider of the SRS Ship Interface Structure (SITS)  
Average 100+ vessel mobs per year | Complete design and analysis of ELS5 pods | Design and supply of the USN’s SRS LARS load spreading bases | Developer of Hyperbaric TUP Systems for USN and commercial customers | |
| Developed portable escape training equipment | Operation of international DSV fleet | Developer of specialty subsea tooling to support sub rescue | Designed the current USN SRS air transport plans, air transport pallet loading configurations, and ground shipping plans | Designed the USN’s SRS Pressurized Flexible Manways (PFMs) to meet portable TUP requirements | |
| Development and training support on the portable rescue vehicle simulator | Pre-planning  
- Operational planning  
- Adequate training  
- Regular exercises  
Oceaneering’s extensive field operations knowledge is used to develop necessary pre-plans. | Rapid mobilization saves lives.  
- World-wide multi-mode transport  
- VOO capability/availability/operations  
- Rapid vessel mobilization  
- An understanding of the criticality of providing assistance in a timely manner. | Rescue of the DISSUB crew.  
- Escape support systems  
- Rescue vehicle deployment and operation  
- Critical interface definition  
- End-to-end operation approach  
Oceaneering has been involved in the escape and rescue of DISSUB crews for over 20 years. | Transfer under pressure solutions provide decompression of the DISSUB crew using advanced dive tables.  
- Hyperbaric chambers  
- Life support systems  
- Decompression treatment techniques  
Oceaneering’s experience spans the range of hyperbaric technologies. | |
| Oceaneering provides continuing ILS management for the USN’s SRS. | Rapid intervention to locate, stabilize, and prepare the DISSUB for rescue.  
- Localization and survey  
- DISSUB stabilization  
- Debris clearance  
Providing world-class subsea intervention and tooling services. | Rescue system interface definition  
- STANAG 1297  
- ATP 57 | Member of the Accelerated Decompression Tables Working Group | |
| Test | Repair | Replace | Refurbish | Maintain |
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Our experience designing, building, operating, and maintaining commercial subsea vehicles and diving systems was a critical consideration for the U.S. Navy when they selected Oceaneering to develop their Submarine Rescue System (SRS) in 1992. As the U.S. Navy's Submarine Rescue Diving and Recompression System (SRDRS) requirements evolved, Oceaneering responded by transitioning from a fly-away saturation diving rescue system to a remotely-operated rescue vehicle and deck decompression chambers integrated with innovative transfer under pressure (TUP) technologies.

Understanding Submarine Rescue
Oceaneering’s experience and support of U.S. Navy programs resulted in our team’s unparalleled understanding of the full spectrum of submarine rescue requirements. This includes:

» Vessel of opportunity operations, analyses, and selection criteria
» SRS mobilization improvements, system integration and verification testing, and ongoing Integrated Logistics Support (ILS) management
» Search, tracking, and navigation/positioning systems
» Vessel mooring and dynamic positioning systems
» Intervention solutions including ROVs and Atmospheric Diving System (ADS)
» Participation in operational exercises

Experience

» U.S. Navy Submarine Rescue System – TUP Systems Engineer and Integrator
» Surface ship modifications to support submarine rescue
» U. S. Navy SEIE Suit Ship Alteration Installation Contractor
» World-wide Search and ROV Network
» U.S. Navy SUBSAFE Certification (One of only three U.S. companies)

Oceaneering engineers led the design and fabrication of the innovative flexible manway that allows TUP between the rescue vehicle and decompression complex.

Oceaneering’s experience in Submarine Rescue provides rapid solutions backed by hands-on, global at-sea experience.

For more information visit us at oceaneering.com/OTECH

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