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DOER Company Profile

DOER was founded in **1992** by Oceanographer, Dr. Sylvia Earle, focusing on the support and development of technology and innovative solutions for **Deep Ocean Exploration and Research**. Highlights from past years include:

1997: DOER provides submersible support and ROVs for the National Geographic Society Sustainable Seas Expeditions – a five year study of Marine Protected Areas.

1999: DOER begins design and build of fiber optic extreme tunnel penetration system and expands ROV development with a number of custom built systems.

2002: DOER begins development of the Ocean Explorer Series ROV to produce a portable remotely operated vehicle with work class vehicle features.

2003: DOER completes a multi year project with real time data, life support, voice, gas monitoring and related data through more than 8 miles of buried tunnels. DOER provides submarine and ROV support to the USCG for oil spill response efforts

2004: DOER completes move into 50,000 sq. ft. facility in the historic Alameda Marina allowing expansion of the Deep Machine Division, streamlining production of the Ocean Explorer Series ROVs, Thrusters, Submersible Service Capacity and enhancing customer support capability. DOER receives recognition from the State of California Governor's Environmental and Economic Leadership Awards for meritorious contributions to environmental protection and resource conservation.

Tools for Science

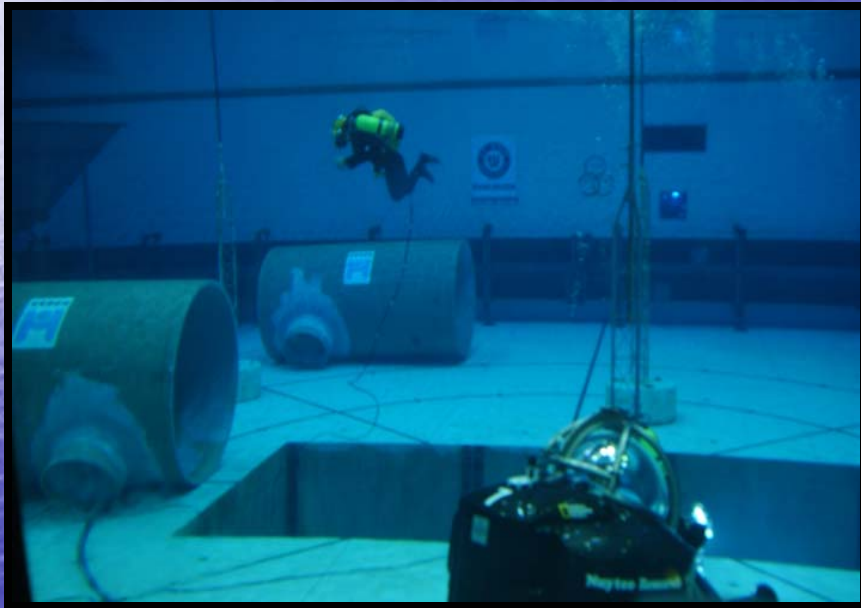


SCUBA is familiar to most people as a way for scientists to work in and explore the Oceans.

While valuable, this method is limited by:

- Depth constraints
- Time constraints
- Physical endurance
- Safety considerations

Complementary Technology



Technology such as manned submersibles and remotely operated vehicles (ROVs) greatly enhance the ability to conduct science at greater depths and for longer duration than possible with SCUBA.

A variety of complementary tools at hand makes field and ship time more productive while increasing overall safety when working in remote locations.

Beyond Diver Limits

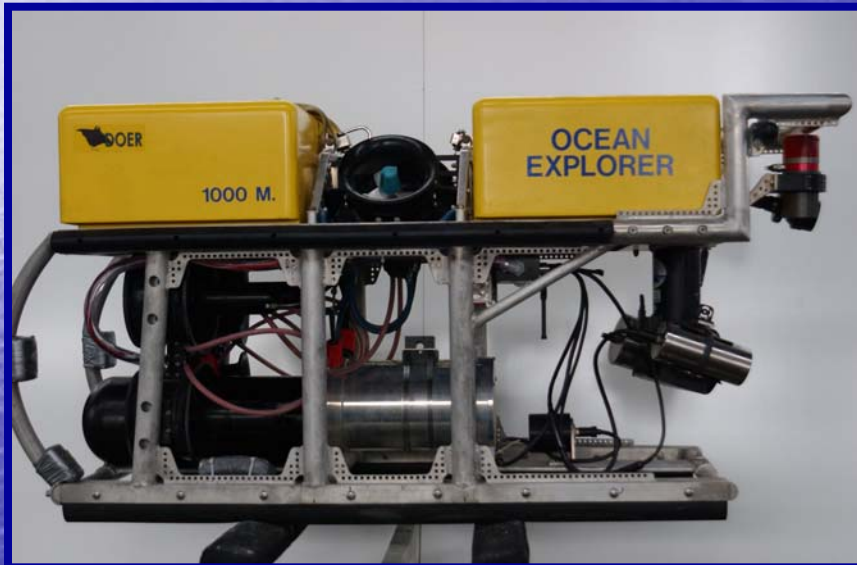


A key advantage to both ROVs and submersibles, is the ability to work for prolonged periods at depths below diving limits.

DOER Ocean Explorer Series ROVs typically work to depths of 1000m (3300ft) and can be modified for deeper excursions

Using laser measurement tools and Green-Sky software, precise size of animals and underwater features can be determined remotely.

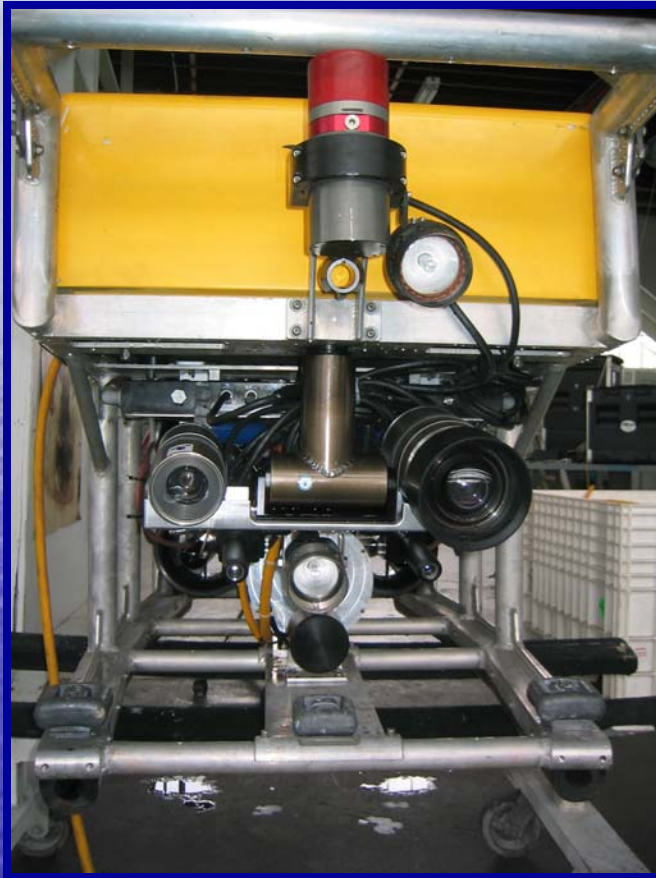
DOER Ocean Explorer Series ROV



Systems with a flexible, open architecture such as Ocean Explorer are well suited to the integration the sensors and sampling devices used for science. These include:

- Manipulators
- Water/Sediment Samplers
- Coring Devices
- Temperature Probes
- HD/Broadcast quality cameras
- Specialty lighting packages

Ancillary Equipment



This ROV is shown with typical equipment including:

- Sonar
- Color 18:1 Zoom Camera
- Digital Still Camera
- Laser measurement tool
- Camera Pan/Tilt/Position module
- Variable intensity lighting

Plenty of additional space is left for manipulators, sampling tools, or other mission specific devices.

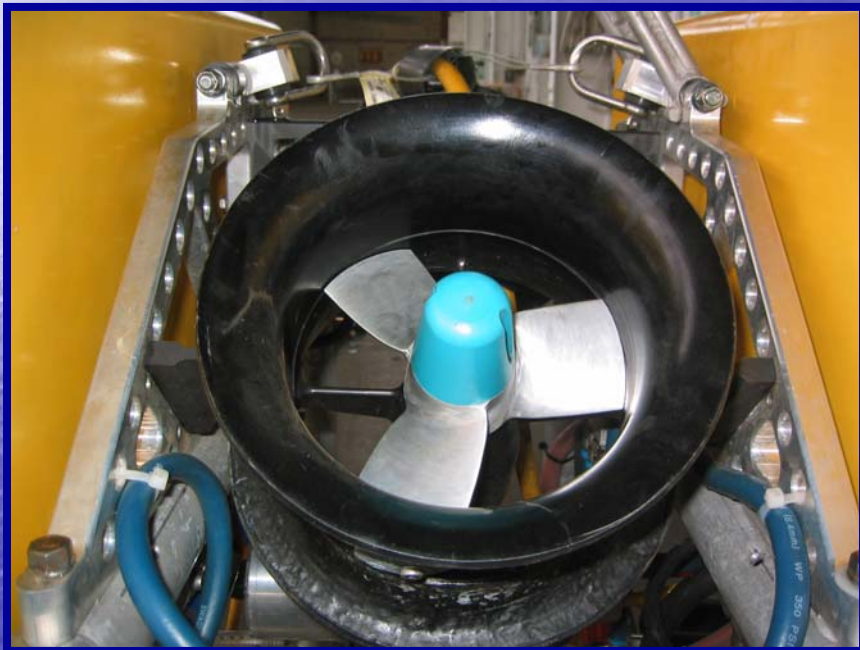
DOER Submersibles



One atmosphere submersibles are another complementary tool for science. Most work to depths of 600m to 1000m and carry 1 to 3 people. While a handful are rated for very deep work, no submersible exists today that can reach full ocean depth and return.

DOER offers full support services for manned submersibles and has trained more than 100 scientists to operate them.

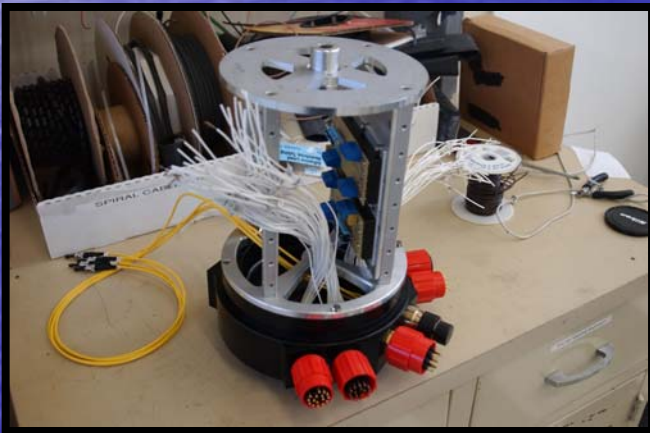
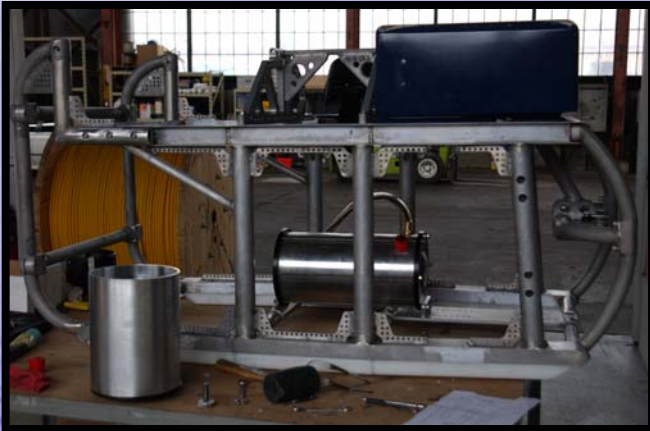
THRUSTERS



Thrusters are critical to ROV and submersible operations. They can also be used for other applications. For example, DOER's **RAP Sled** uses Blade™ thrusters to propel a diver operated, **Rapid Assessment Platform** with onboard camera, lasers, lighting, & recording.

Using such a tool results in consistent results when multiple divers are used to survey large transects.

Custom/Purpose Built



DOER is uniquely qualified to under take purpose built and application specific projects. In addition to an established 12 year corporate history, our core employees and scientific advisors bring decades of experience to every project.

DOER continually strives to combine the best of new technology while retaining proven field methodology.

Products result that are both highly capable and reliable.

DOER: Deep Machine Division



The Deep Machine Division allows DOER to stay lean & cost effective. Services Include:

- Engineering, R&D, Design
- Solid Modeling and F E A
- Complete CNC Machine Shop Custom Fabrication
- Pressure Testing
- Housings for instruments, cameras, & electronics
- Rapid turn around and 24/7 support

DOER Logistics/Field Support



The devil is in the details. Even a simple missing O-ring can become a show stopper. For scientists, ship and field time is especially valuable. In addition to providing field technicians, DOER offers a full range of logistics support.

Widely known as "The Sub Sea Concierge", DOER is available 24/7, so that time can again be on your side.