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Photo courtesy US Navy.

Photo courtesy NASA.

Advanced Technologies

Oceaneering International, Inc.

Oceaneering is a global oilfield provider of engineered services and products primarily to the offshore oil and gas industry, with a focus on deepwater applications. Through the use of its applied technology expertise, Oceaneering also serves the defense and aerospace industries.

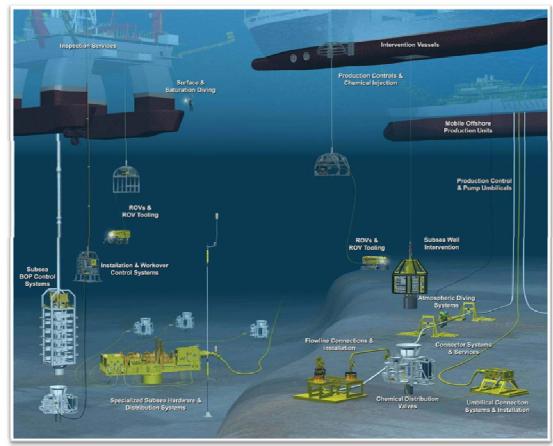


Worldwide Operations Bases



Offshore Oil & Gas

- Remotely Operated Vehicles
- Build-to-order Specialty Hardware
- Deepwater Intervention and Manned Diving Services
- Non-destructive Testing and Inspections
- Mobile Offshore Production Systems
- Engineering and Project Management





Remotely Operated Vehicles

- World's Largest Fleet of Work Class ROVs
- ROV Manufacturing Facility
- Training
- ROV Tooling







Current ROV Fleet



Magnum

Dimensions: 8.5 x 4.8 ft x 6 ft Weight in air: 5,600 lbs Depth Rating: 10,000 ft Payload: 500 lbs Horsepower: 170 hp Tooling Package Interfaces



Millennium

Dimensions: 11'5.5" x 5'4.5" x 6' Weight in air: 8,800 lbs Depth Rating: 10,000 ft (standard) Payload: 900 lbs Horsepower: 330 hp Tooling Package Interfaces



Oceaneering International, Inc. Advanced Technologies Group

The Advanced Technologies (AdTech) group of OII is recognized as an industry leader in enabling humans to work safely and effectively in harsh environments ranging from depths of the sea to the outer reaches of space.



Certificate No. 6353

www.oceaneering.com

Deep: Search and Recovery Capabilities



Magellan 725



Ocean Discovery



Magellan 825



Ocean Explorer 6000

NOMAD



Deep Water System Considerations

- Pressure, Power, and Size they are all interrelated
 - Longer umbilicals lead to more power loss, larger conductors
 - More power leads to larger conductors
 - Bigger umbilicals leads to bigger handling systems (sheave diameters, storage winches
 - More deck space, bigger ships



Deep Water System Considerations

- Cage helps umbilical management
- Different Foam
- Subsea equipment needs to have ROV interface (reach, access, plug, manipulate) to assist operator
- Takes longer to get to depth
- Logistics and Sparing



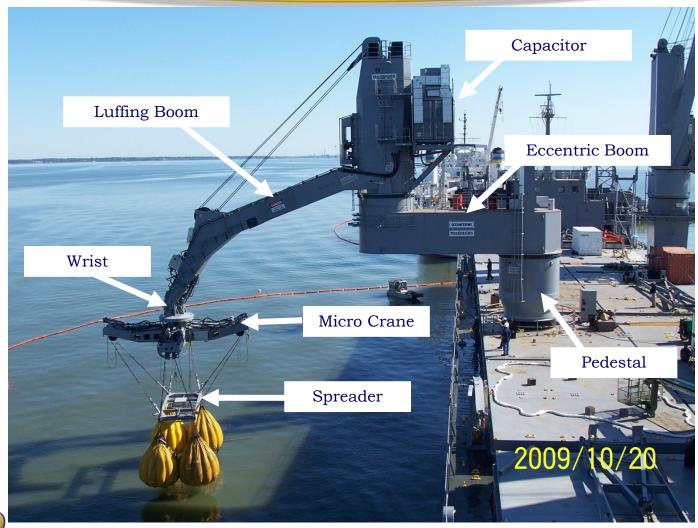
Sea Basing

MacGregor Foundation Ring OCEANEERING **Crane House** Main Deck Operator Frame Station Luffing Rigging Capacitor Housing Luffing Boom Wrist Stowage Pitch Foot Spacer Wrist Frames Slew Modular Eccentric Boom Column MICRO Pedestal Base Spreader Units





Sea Basing







Sea Basing











