



Ohmsett

RESEARCH • TESTING • TRAINING

The National Oil Spill Response Research
& Renewable Energy Test Facility

OHMSETT'S MISSION IS TO IMPROVE OIL SPILL RESPONSE TECHNOLOGIES AND REMEDIATION TECHNIQUES THROUGH TESTING, TRAINING, AND RESEARCH & DEVELOPMENT.

WE PROVIDE INDEPENDENT AND OBJECTIVE PERFORMANCE TESTING OF FULL-SCALE RESPONSE EQUIPMENT, MARINE RENEWABLE ENERGY SYSTEMS, AND MARINE DEBRIS REMOVAL EQUIPMENT.

Accurate and reliable results

We have been an integral part of the spill response community for more than three and a half decades and hold the distinction of being an independent, objective test bed for some of the most innovative technology.

Ohmsett is the only facility in North America where full-scale oil spill response testing, training, and research can be conducted with oil in a realistic marine environment. Government agencies, academia, private industry, and oil spill response organizations from around the world have used the Ohmsett facility for testing, research and training.



- 203 meters long
- 19.8 meters wide
- 3.5 meters deep; 2.4 meters nominal operating water depth
- 10 million liters of water maintained at open ocean salinity (28-35 ppt)
- Programmable wave generator
- Equipment tow bridges capable of speeds up to 3.1 meters/sec (6 knots)
- Computerized drive system

Programmable wave formation

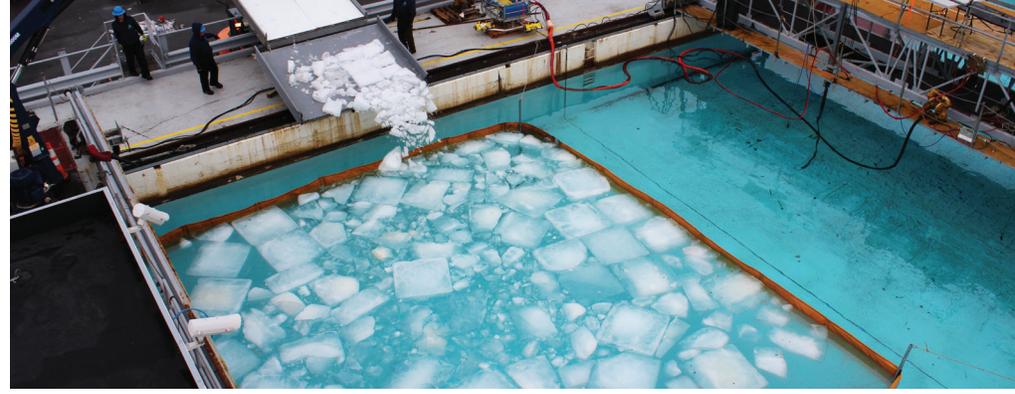
To provide the waves best suited for your research or testing needs, the fully computerized wave maker can be programed to control significant wave height, average wave height, wave period, and wavelength. The wave-damping beach system attenuates the reflected waves so they will not interfere with newly generated waves.



WAVE MAKING CAPABILITIES

- Programmable amplitude and frequency
- Wave spectrum capable
- 59 cm height ($H_{1/3}$ at 7.1 meter wave length)
- 83 cm height ($H_{1/3}$ Harbor Chop)
- Wave length 25.3 m (at $H_{1/3}=29.4$ cm, 5.48 sec)
- Wave damping beach system
- Wave focusing





Testing Specialists

From sorbents, chemical treating agents and dispersants, to containment boom, skimmer systems, pumping systems, and remotely operated vehicles – you can test them all at Ohmsett. We also provide custom testing for new and unique technology.

FACILITY CAPABILITIES

- Controlled reproducible conditions
- Test protocol development
- Computerized drive system
- Data collection and video system
- On-site fabrication/work shop
- On-site oil/water laboratory
- Oil distribution and recovery system
- Dispersant application system
- Ability to create ice on-site
- Emulsion formation



Marine Renewable Energy Device Testing

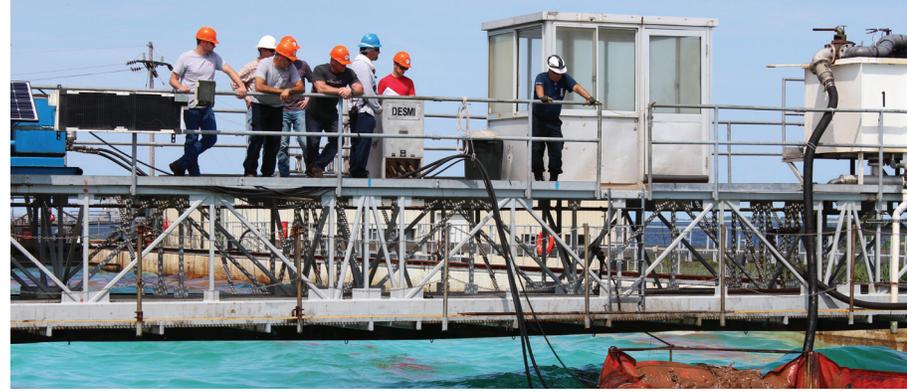
The ocean is a vast and barely tapped source of energy which has the potential to be a leading alternative source of clean, renewable power. With the growth in the development of harnessing power from renewable resources, a surge in R&D of reliable and predictable ocean based renewable energy technologies is taking place with a focus on current and wave energy.

We can assist you with the development of equipment processes for ocean wave and current technologies with performance testing in a controlled environment. The wave generator creates realistic sea environments, while state-of-the-art data collection and video systems record test results.

Marine Debris: Prototype Development & Testing

Controlling and collecting plastic waste from our waterways is an engineering challenge. It takes innovation to design a cleanup system that can collect, sort and compact the debris. Our engineers are available to provide assistance as you develop advanced technology, using proven concepts for containment booms and oil spill skimming systems, to rid the waterways of plastic.

WE ARE A WORLD CLASS VENUE FOR TRAINING AND TESTING THAT SIMULATES SPILL ENVIRONMENTS IN A SAFE AND CONTROLLED MANNER.



Training in a realistic environment

Training builds confidence and competence, while providing essential skills that can make all the difference when a spill occurs.

Ohmsett has partnered with leading industry experts to provide spill response strategies and tactics training, as well as marine salvage response training. These training sessions take place in the classroom, on the tank, and during SCAT and tabletop exercises where you will learn effective operational planning and equipment deployment. During tank exercises you have the opportunity to improve your response skills using related equipment while experiencing the challenges of removing oil under conditions that simulate an actual spill or salvage operations. Our training facility includes a classroom with state-of-the-art audio-visual equipment where you can conduct interactive sessions. Training can be tailored to meet your organization's needs.

Research possibilities that rise to the challenge

By providing a laboratory environment for R&D, we assist researchers and manufacturers in evaluating cutting edge technologies that are helping remove spilled oil from the world's oceans.

With a wide range of testing and research capabilities, Ohmsett represents a vital intermediate step between small scale bench testing and open water testing of technology. Our experienced staff of engineers and technicians assists customers with test protocol development, product evaluations, and provides improvement recommendations.



LABORATORY ENVIRONMENT FOR R&D

- Containment booms
- Skimming systems
- Oil emulsions
- Studies for surface & subsurface releases
- Dispersant & chemical herder research
- Cold water and broken ice conditions
- Sunken oil & neutrally buoyant oil plumes
- Sorbent testing standards
- Remote sensing equipment
- Slick thickness sensors
- Wave energy converters and current turbines

Leonardo, New Jersey

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