

CASE STUDY

Oceaneering's International Team Relies on the Mission Specialist Defender for Worldwide Inspections

Oceaneering International, headquartered in Houston, TX, is a global subsea engineering company that provides services and hardware to customers operating in marine, aerospace and other environments in a variety of industries. For the oil & gas market, the company deploys integrated solutions that provide greater value, reduce the total cost of ownership and minimize risks across the life cycle of the project.



Summary

Michael Johnson, Program Manager of International Diving Programs at Oceaneering, partnered with VideoRay to find a rugged underwater robotic system that his team could easily deploy, carry onto a vessel and use to inspect and clean ships.



Challenge

The home offshore support vessel was located in the southern Atlantic Ocean off the coast of Angola. The Oceaneering team needed a robotic underwater remotely operated vehicle (ROV) system that could handle difficult subsea environments, as well as transport easily to locations around the world, require only one operator, maneuver in confined spaces and accommodate specific probes and cleaning tools. Factors such as size, packaging and power requirements affect the cost to deploy an underwater robotic system and complete the mission.

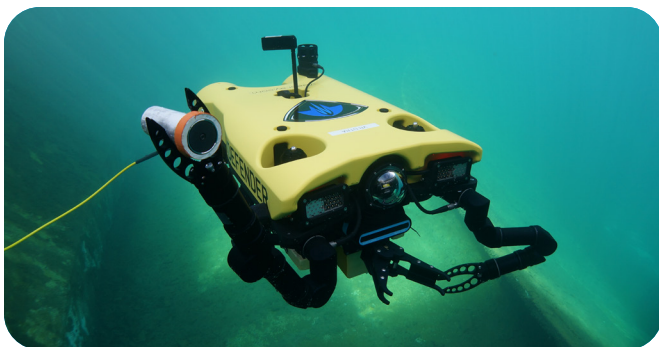


Solution

After a demonstration of the Mission Specialist Defender inspection-class system, the Oceaneering team recognized how easy it is to integrate accessories onto the rugged Defender system for reliable operation in harsh environments offshore. During the project, they recorded images of the vessel inspection and easily transferred the pictures to Oceaneering management locations.

Thanks to their modular design, all VideoRay Mission Specialist systems enable operators to add new sensors and tooling from a broad range of manufacturers to accommodate a wide selection of tactical, communications and power options. In addition, all systems require only one operator to accomplish missions even in difficult situations and confined spaces.

The Mission Specialist Defender is designed for precise control of the vehicle position and orientation, heavier payloads and demanding missions. The Defender system has seven thrusters for exceptional maneuverability. It can move in any direction and maintain active pitch to move the vehicle in an upward or downward orientation.



Results

Oceaneering was impressed with the portability and low total overall weight of the Mission Specialist Defender. The company now has a dependable underwater robotic system on its vessel off the coast of Angola that personnel can easily transport anywhere in the world.

The Oceaneering team uses the Defender system for inspection of vessels, including required testing using a cathodic protection probe and cavitation cleaning using a Caviblast[®] tool.

Mission Specialist systems come in a rolling, durable Pelican[™] storage case with extra reinforcement padding to transport equipment to and from destinations safely and efficiently. The Defender system that Oceaneering selected to complete a full inspection required only a few Pelican cases to contain all of the equipment, so it doesn't take up a lot of room on the vessel and is easy to store in transit.



VideoRay succeeded in delivering a reliable, easy-to-use underwater robotic system and delivered it in record time on very short notice. The Oceaneering International team is making the most of the system's design and technology to create new opportunities offshore.

— Michael Johnson, Program Manager of International Diving Programs, Oceaneering