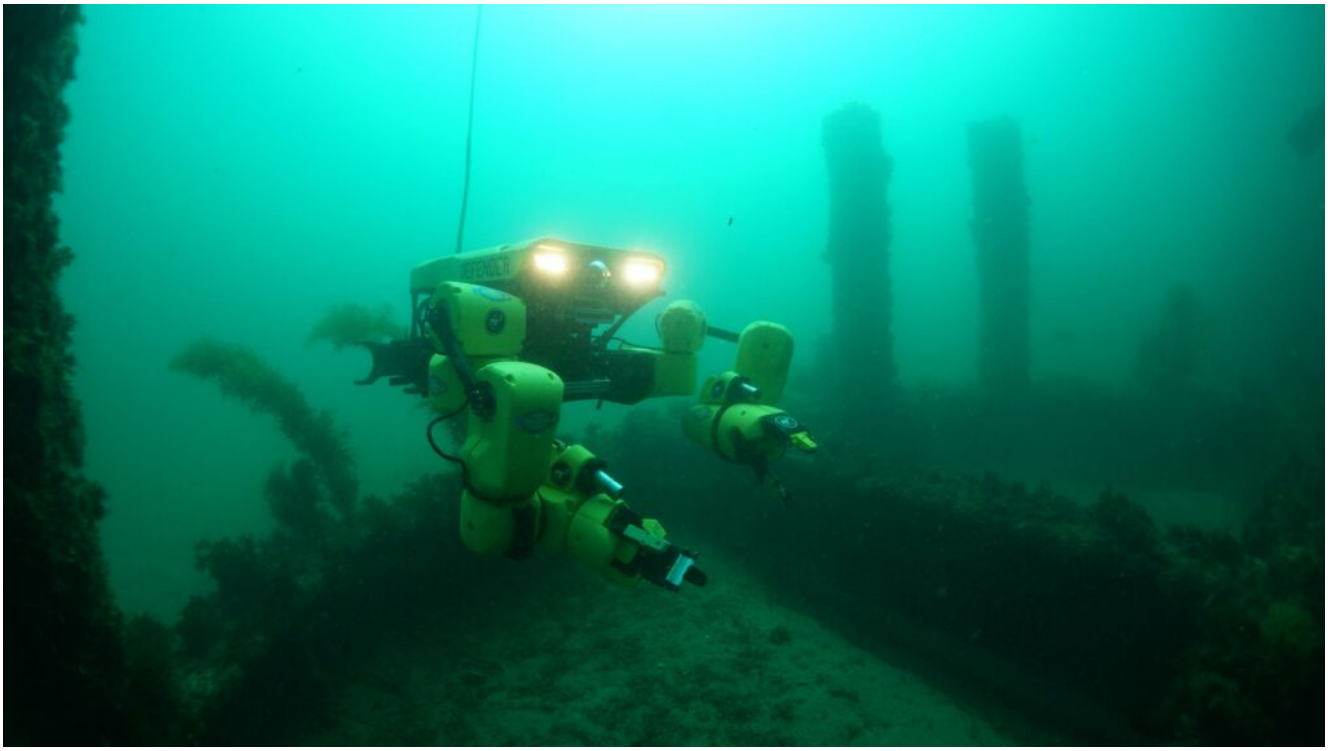
ONR-Sponsored RE2 Robotics, VideoRay ROV Achieve New Depth Milestone



RE2 Robotics' Sapien Sea Class underwater robotic arms, coupled with VideoRay's Defender remotely operated vehicle, make up the Maritime Mine Neutralization System. *RE2 ROBOTICS*

PITTSBURGH and POTTSTOWN, Pa. – RE2 Robotics, a leading developer of intelligent mobile manipulation systems, announced March 22 that its Maritime Mine Neutralization System reached an unprecedented depth milestone of more than 1 kilometer during a recent open-water demonstration for the U.S. Navy's project sponsor, the Office of Naval Research.

M2NS is an underwater autonomous mine neutralization system composed of RE2 Sapien Sea-class underwater robotic arms mounted onto VideoRay's inspection-class Defender remotely operated vehicle. M2NS also uses RE2's advanced computer vision and autonomy software, RE2 Detect and RE2 Intellect, to enable the precise, autonomous, and clandestine neutralization of a target.

During the test event, which took place in the Pacific Ocean with support from the Naval Information Warfare Center Pacific in Point Loma, California, four successful dives exceeding 1,000 meters of depth were completed. The dives were conducted using supervised autonomy, which allows human operators to monitor the robotic system's autonomous movements and make corrections if necessary.

"These tests allowed us to demonstrate the continuing success of the M2NS project for the U.S. Navy," said Jack Reinhart, vice president of project management, RE2 Robotics. "The progress we made during these deep dives shows that we could successfully complete an underwater supervised autonomous mission at depths of more than 1,000 meters without any damage to the system. The M2NS system succeeded where no other system of this class has before."

All onboard electronics remained operational during the deep dives, including the ROV's camera feed and data to the support vessel, proving the survivability of the complete system to a depth of more than 1,000 meters.

"We have proven the ability to deploy the Defender with a large payload to depths of 3,500 feet [1,000-plus meters] from a small deck footprint," said Marcus Kolb, chief technology officer, VideoRay. "We performed complex, autonomous manipulation tasks with the RE2 system while station-keeping a few feet off the bottom. We are excited about the direction of this program and how it will help accelerate commercial solutions."

Following the success of these dives, RE2 Robotics and VideoRay are planning future demonstrations for ONR to test the system's autonomy capabilities using a tetherless ROV at extended depths. OceanComm Inc., a provider of high-speed wireless underwater communication technology, will provide wireless acoustic modems for future dives.