

PORT HUENEME, CALIFORNIA, UNITED STATES

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Video by Marco Hinahon and Eric Osborne

Naval Surface Warfare Center, Port Hueneme Division

REPTX 2022

On the second day of the Navy's first-ever Repair Technology Exercise, or REPTX, several companies demonstrate their remote repair and maintenance technology near or aboard the Self Defense Test Ship, an asset of Naval Surface Warfare Center, Port Hueneme Division (NSWC PHD) in Port Hueneme, California, which is hosting the exercise. (Video by Eric Osborne and Marco Hinahon)

Sarcos Technology and Robotics Corp., headquartered in Salt Lake City, Utah, deploys its Guardian S Remote Visual Inspection & Surveillance Robot against a piece of a wood pallet and a metal dumpster on Aug. 23.

American Laser Enterprises joined a timed comparison of laser coating removal, atmospheric plasma, and chemical processes used to remove paint, primer, corrosion, and debris from SDTS deck plating. Navy personnel observed each approach and recorded key factors, including air quality, temperature, hazardous waste, staffing, safety equipment, and other requirements for completing the work.

A team from the Pennsylvania State University Applied Research Lab deploys an autonomous submersible vehicle to inspect the running gear on the hull of the Self Defense Test Ship.

Gecko Robotics Inc. uses its Phased Array Robot and its Toka 4 Robot to scan the depth of corrosion and wear-and-tear on the Self Defense Test Ship's deck plate.

Sarcos Technology's Sapien 6M Robotic Arm is mounted to a mobile platform and placed beside the Self Defense Test Ship to see if it can reach the hull from the dock, in preparation for demonstrating the recovery of an unidentified object hanging off of the side of the ship.

A mobile operator uses Sarcos Technology's Guardian DX Teleoperated Dexterous Robot to remove flaking paint from a vertical surface on the bow of the Self Defense Test Ship.

Naval Sea Systems Command's (NAVSEA) Naval Systems Engineering and Logistics Directorate Technology Office (NAVSEA 05T) is sponsoring REPTX 2022 and selected 65 technologies to participate.

NSWC PHD is a field activity of NAVSEA and is located at Naval Base Ventura County in California.

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