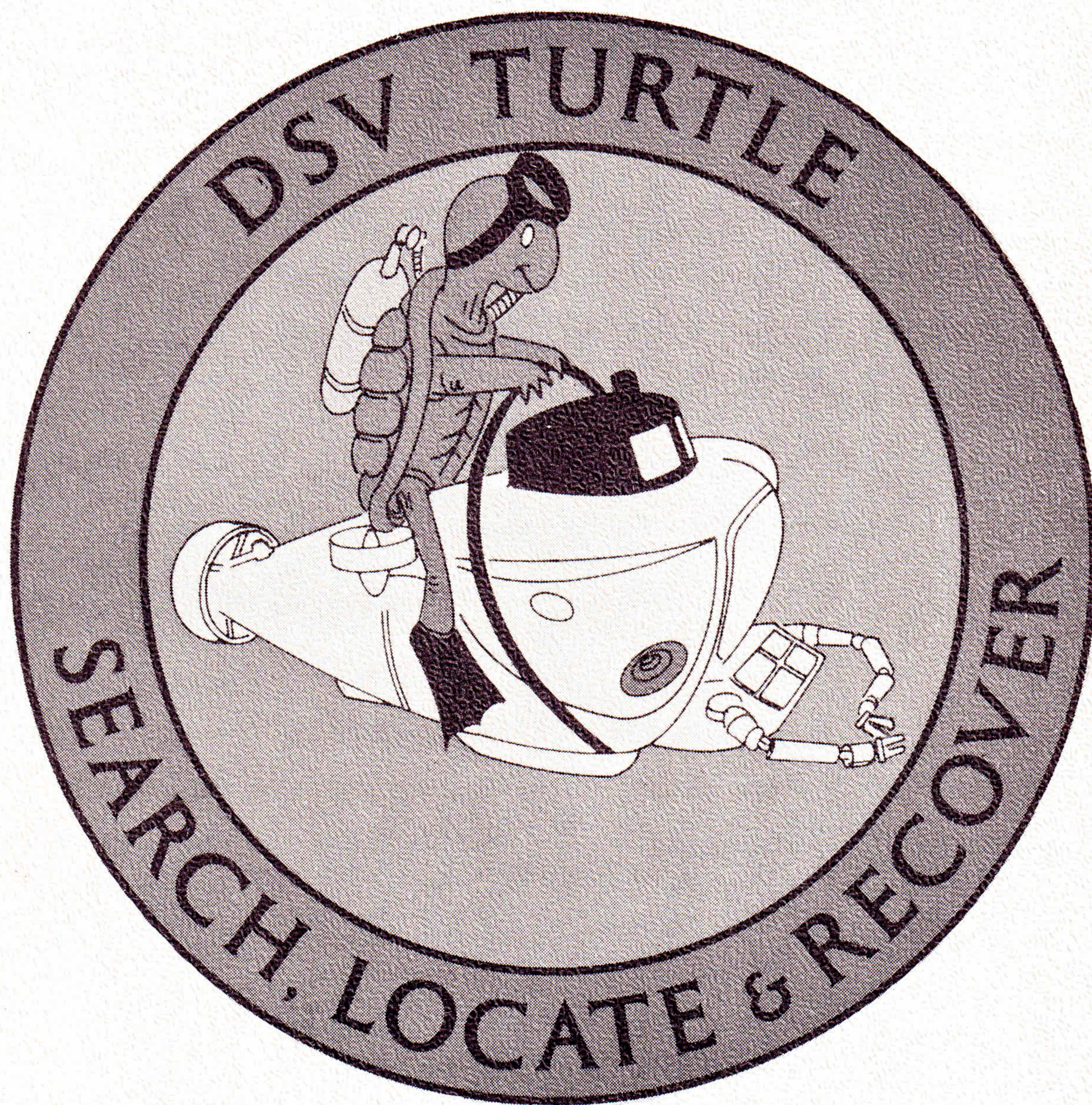


WELCOME ABOARD



TURTLE (DSV-3)

DSV TURTLE

HISTORY

Designed and built by the Electric Boat Division of General Dynamics Corporation at Groton, Connecticut, DSV TURTLE and her sister submarine SEA CLIFF were launched on 11 December 1968. TURTLE's sponsor, Mrs. Edward J. Fahy, wife of Rear Admiral Fahy, then Commander Naval Ship Systems Command, performed the christening ceremony.

Small research submarines are traditionally named after communities in the United States that denote oceanographic life and terms. TURTLE, originally designated AUTECH II, is named after TURTLE TOWN, a small town in Polk County, Tennessee. TURTLE was also the name of the submarine built by David Bushnell and the first submarine used as an offensive naval submersible during the Revolutionary War.

DSV TURTLE, a unit of Submarine Development Group ONE in San Diego, California, was accepted by the U. S. Navy on 25 September 1970 at Woods Hole Massachusetts. Following initial acceptance, the new Navy crew consisting of three officers and eight enlisted men conducted extensive shakedown and training dives at Woods Hole Oceanographic Institution, Woods Hole, Massachusetts prior to going to San Diego.

OPERATION

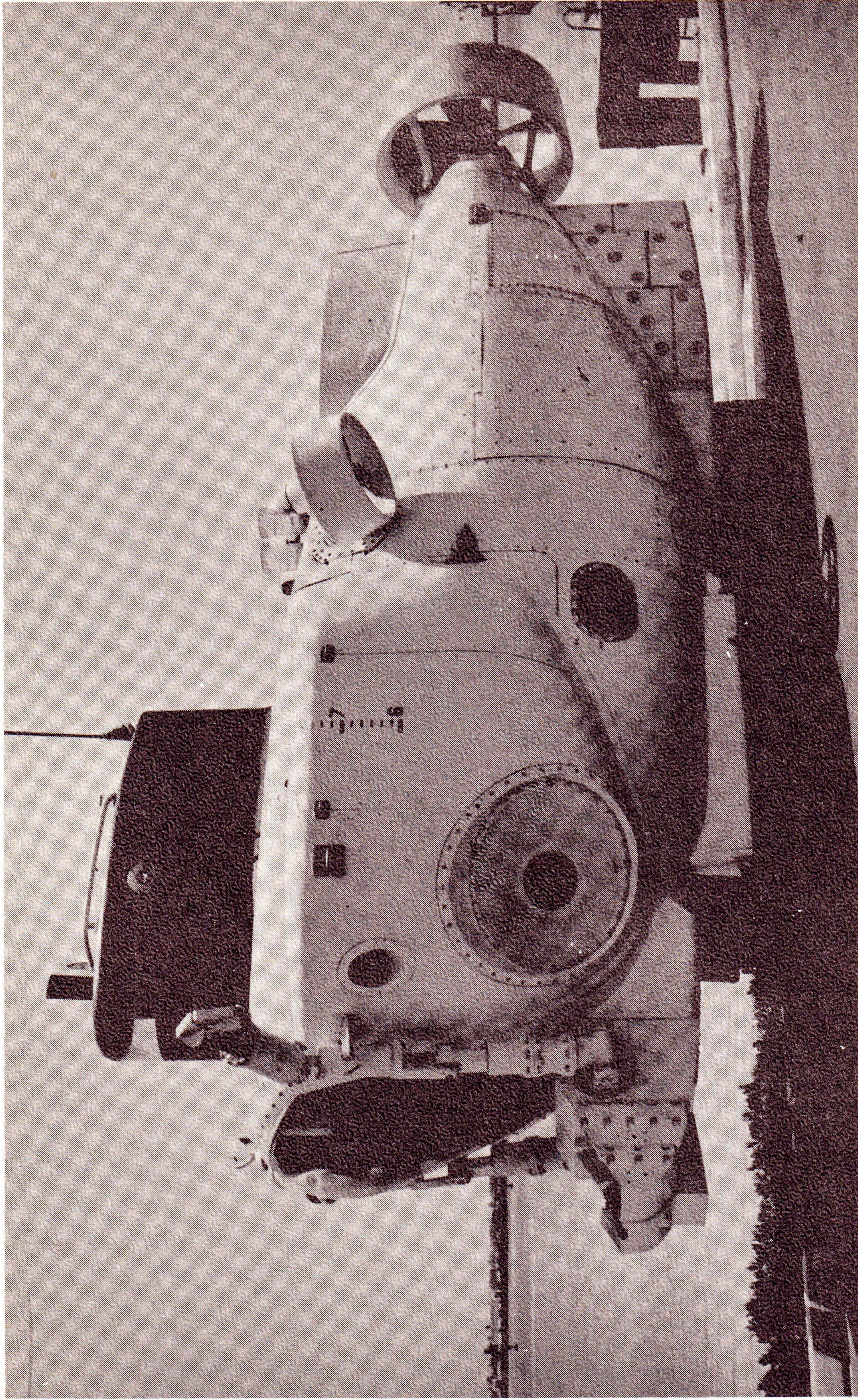
TURTLE, a 26-foot long, three-man submersible, is capable of operating at depths of more than a mile and pressures exceeding $1\frac{1}{2}$ tons per square inch. This is the equivalent of saying that each one of the five plexiglass viewports must withstand the weight of a large city bus distributed over its surface. Perhaps even more graphic, is the fact that the $1\frac{1}{2}$ inch thick HY 100 steel personnel sphere must withstand 30,000 tons, the weight of five Fleet Ballistic Missile submarines.

In the event TURTLE should become trapped or damaged while submerged, several unique emergency features exist which will enable the crew to safely return to the surface. These include the ability to jettison selective lead weights, the two manipulators,, the batteries, and, as a last resort, release the personnel sphere.

TURTLE is equipped with one television camera, a television monitor, lights, still and motion cameras, sonar, a gyrocompass, fathometer, an air purification system, and underwater and surface communications systems. The two hydraulically-powered manipulators can be fitted with a variety of tools, including a drill, a cable cutter, and scissor and parallel jaws for retrieving small objects from the sea floor.

Battery-powered side propellers, which are trainable through 360° in both a clockwise and counter-clockwise direction, provide the submersible with exceptional maneuverability at any depth down to 6,500 feet. A hydraulically powered stern propeller is also available for cruising along the ocean floor. The 24-ton TURTLE can operate at speeds up to $2\frac{1}{2}$ knots and remain submerged up to eight hours. Missions performed by this unique submersible include search and recovery, underwater inspection and photography, and numerous disciplines of scientific research.

In the words of Sir Isac Newton, "If instead of sending the observations of seamen to able mathematicians on land, the land would send able mathematicians to sea, it would signify much more to the improvement of navigation, and to the safety of men's lives and estate in that element." To this end, DSV TURTLE has the capability of investigating 16% of the ocean—an area equivalent to the surface of the moon!



TURTLE (DSV - 3)

