

Sea Coaster is a unique highspeed vessel that combines the features of a catamaran hull form with those of a surface effects ship. Pockets built into each hull of Sea Coaster can be filled with air by powerful blowers to lift the vessel in the water. This lift reduces drag against the hull, permitting the 102-foot Sea Coaster to travel at higher speeds. The vessel is able to navigate in very shallow water, which is why its hull form is being considered for use as a high-speed "beachable" connector for transit from


Conceptual drawing of Sea Coaster logistics ships to shore. Sea Coaster's already shallow draft of 6 feet is reduced by half when the blowers are operating and the ship is lifted.

The vessel is powered by four Caterpillar diesel engines that produce $1,420 \mathrm{hp}$ at $2,300 \mathrm{rpm}$. The diesels each turn a surface-piercing propeller. The amount of power generated from the engines and the catamaran hull form allow Sea Coaster to reach a top speed of approximately 56 knots in sea state zero.

After launching Sea Coaster, the Navy will test the vessel to determine the efficiency and effectiveness of this hull form for future naval applications and whether it could be scaled to build larger and higher speed seagoing vessels. However, after the extensive testing program, the ownership of the vessel will revert to American Marine Holdings, Inc., the prime contractor, and Sea Coaster will likely be converted to a high-speed ferry.

Construction on Sea Coaster began in the summer of 2003, and was completed in September 2004. Sea Coaster was built by Austal USA, LLC, under a contract held by American Marine Holdings, Inc. The proprietary hull form was designed by Air Ride Craft, Inc.

## Sea Coaster Specifications

Length: 102 ft .
Beam: 33 ft .
Draft: 6 ft .
Draft (hull blowers on): 2.5 ft . light ship; 3.5 ft . full load
Displacement: 76.9 LT light; 150.2 LT full load
Maximum Speed (Sea State 0): 56 knots light; 43 knots full load

