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15. Supplementary Notes The R&D Center's technical point of contact is Robert C. Desruisseau (860) 441-2660, email: rdesruisseau@rdc.uscg.mil					
16. Abstract (MAXIMUM 200 WORDS) Tactical testing for the new 225-foot Juniper Class of Coast Guard Seagoing Buoy Tenders was conducted on June 9, 1998, and the preliminary results were forwarded to the sponsor in September 1998. The testing was conducted on the USCGC JUNIPER (WLB-201), the first ship of the class. The tests consisted of turning circles, acceleration to full speed from a standing stop, and deceleration from full speed. The turning circle tests were completed at speeds of 6, 9, 12 and 16 knots under almost optimum conditions of seas less than 2 feet and winds less than 15 knots. The majority of test runs were conducted to the port side with an occasional test to starboard to establish variation. The data were collected using the differential global positioning system (DGPS) and the Tactical Maneuvering, (TACMAN) GPS software. The tactical diameter for turns to port was smaller by approximately 14 percent than for turns to starboard. On an average, the ship accelerated to full speed in 9.5 boat lengths and stopped in less than six boat lengths.					
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EXECUTIVE SUMMARY

The tactical testing of the new Juniper class of ship was requested by the Commandant, U.S. Coast Guard Headquarters, Office of Cutter Management (G-OCU). Testing was conducted by the USCG Research and Development Center onboard the CGC JUNIPER, the first of the 225-foot class of Coast Guard seagoing buoy tenders. The tests were conducted off the coast of Rhode Island in near ideal conditions of seas less than 2 feet, winds less than 15 knots, and water depths between 87 and 134 feet.

Tactical testing consisted of performing turning circles, and acceleration and deceleration tests. Measurement data were obtained for advance, transfer, tactical diameter, turning radius, turning speed, acceleration, deceleration and distances, and times for each. These tests, corrected for localized current and wind effects on the ship, provided a measure of the turning and maneuvering ability of the ship. The testing was completed using the Differential Global Positioning System (DGPS) and Tactical Maneuvering (TACMAN) GPS software.

The data returned from tactical testing are important for a ship in close maneuvering situations. These data can be entered into the ship's Electronic Chart and Display Information System (ECDIS), where the information can be used to program and execute a turn with a great deal of accuracy while underway.