



Unmanned vessel could soon be working for Navy

April 12th, 2012 in Technology / Engineering



[Enlarge](#)

Image: AAI Corporation

Technology that sent unmanned aircraft over Iraq and Afghanistan soon could be steering unstaffed naval boats for such dangerous

tasks as minesweeping, submarine detection, intelligence gathering and approaching hostile vessels.

Defense contractor Textron Inc. demonstrated what it calls its Common Unmanned Surface Vessel technology Thursday at its Textron Marine & Land Systems shipyard in New Orleans.

"The unmanned vessels will keep the dull, dirty and dangerous jobs away from our personnel," said Ryan Hazlett, director of the advanced systems group of AAI, another Textron subsidiary.

The boat - painted in Navy gray and with a striking resemblance to a PT boat - is 39 feet long and can reach a top speed of 28 knots. Using a modified version of the unmanned Shadow surveillance aircraft technology that logged 700,000 hours of duty in the Middle East, the boat can be controlled remotely from 10 to 12 miles away from a command station on land, at sea or in the air, Haslett said.

Farther out, it can be switched to a satellite control system, which Textron said could expand its range to 1,200 miles. The boat could be launched from virtually any large Navy vessel.

It's not the first unmanned boat. But Haslett said others generally have been boats simply refitted with remote control equipment. The CUSV was designed from the first step not to have a crew.

"It uses space without having to worry about the things that are required for a manned vessel," he said.

Using diesel fuel, the boat could operate for up to 72 hours without refueling, depending upon its traveling speed and the weight of equipment being carried, said Stanley DeGeus, senior business

development director for AAI's advanced systems. The fuel supply could be extended for up to a week on slow-moving reconnaissance missions, he said.

Accompanied by another small vessel with its control equipment, the boat was shown off to the public with a sweep up and down Bayou Sauvage at full speed. DeGues said the boat could be operated in as little as 5 feet of water because of its shallow draft.

The CUSV would be hard to sink by accident.

Haslett said that if the boat overturns, it shuts down its engines, rights itself, restarts the engines and resumes the mission. DeGeus said that should the boat lose contact with its command, it's programmed simply to return to its launching point or another pre-determined location.

Additional technology under development would allow the CUSV to "detect a sailboat with a family on it" and pass safely - without controller intervention, DeGeus said.

The [boat](#) had its initial sea trials in 2009 and passed a recent U.S. Navy exercise drill off the coast of Virginia when it approached a potential "enemy vessel" that was near a restricted area and warned it off with an acoustic system featuring DeGues' voice. This summer, it will travel to Camp Pendleton in San Diego to test its mine detection and sweeping capabilities, DeGeus said.

Textron has produced two CUSV prototypes. DeGues said commercial production could begin within nine to 12 months after the company receives a contract. Hazlett wouldn't reveal how much development cost, but said it has all been funded by Textron. He also wouldn't speculate on the eventual cost of each vessel, saying that would depend upon equipment ordered by a customer and the number of boats built. Textron is pursuing contracts to supply the U.S. Navy, as well as foreign navies.

If the company gets contracts for the CUSV, construction will take place in New Orleans.

©2012 The Associated Press. All rights reserved. This material may not be published, broadcast, rewritten or redistributed.

"Unmanned vessel could soon be working for Navy." April 12th, 2012. <http://phys.org/news/2012-04-unmanned-vessel-navy.html>