

Search:

Join TechTV Member Service

You are here: Home > TV Shows > Tech News > Special Report > War Tech > Robo-Ships to the Rescue?

· HOME

Select a TV Show

· TECH NEWS

· PRODUCTS & REVIEWS

· HELP & HOW TO

· ENTERTAINMENT

· Interact

· Video

· TechTV Store

- [Tech News](#)
- [Security & Viruses](#)
- [Computing](#)
- [Sports Tech](#)
- [Tech Live Video](#)
- [Business](#)
- [Internet](#)
- [SciTech](#)
- [Culture](#)
- [Politics & Law](#)
- [Show Notes](#)
- [About Us](#)
- [Archive](#)

Tech Live: Tech News and Information
Weekdays at 8 p.m. Eastern

Robo-Ships to the Rescue?

Navy tests unmanned robotic vessels for submarine, mine detection.

By Peter Barnes, Tech Live Washington, DC, bureau chief

[Printer-friendly format](#)
[Email this story](#)


Off the coast of North Carolina, a 10-foot-long unmanned speedboat zips across the water at speeds of up to 40 mph.

Video Highlight



Controlling unmanned ships from the Net

TechTV S



Panasonic
Theater S
Available :

It's an experimental Navy vessel called the Owl. (Researchers can't remember who gave it that name or why.) Among other things, it can be remotely controlled from the Internet.

Within five years, the Navy could be deploying small fleets of this kind of high tech, unmanned craft ahead of battle groups to help detect mines. It could also be used for other missions.

"We might have five or six in a distributed kind of sensor grid," said Peter Renfree, the Owl division manager for prime contractor Science Applications International Corporation (SAIC). "We'd send them with, say, side-scanning sonars, deploy those sonars automatically in the mine warfare area, and do the scan and clear the path for the ensuing amphibious force."

Navy Vice Admiral Cutler Dawson said small, unmanned ships with detection sensors will help keep naval personnel out of harm's way in mined seaways and areas patrolled by enemy submarines.

"They're quick, and when we network them to other elements of the battle group, we have a much better picture of our battle space," Dawson said.

The Owl has been under development on and off for more than a decade. But since the

attack on the USS Cole in Yemen in October 2000, the Pentagon has stepped up research and development of this kind of technology.

The Owl runs on a Jet Ski-type engine and can cruise at up to 35 knots, or about 40 mph. A control box houses 14 CPUs that run mission modules, transmitters, and receivers.

AN ALTERNATIVE
TO THE
\$*E=&%!
PHONE COMPANY

\$39.99/month
unlimited local & long
distance calling through
your broadband connection.

VONAGE GET INFO▶

"This is actually an Ethernet network running inside the boat," said SAIC's Renfree, pointing to a gray housing box inside the Owl. "The boat has its own IP address. And if you wanted to, you could actually control it over the Internet."

The guidance system works with GPS satellites. The operator can run the Owl from a laptop computer or a manual remote-control panel.

The version of the Owl in North Carolina, with video and infrared cameras, is configured to detect enemy forces. Features include flashing police lights and sirens. But it will be reconfigured for testing mine detection sensors this summer.

SAIC says each Owl would cost at least \$100,000. It could be in production in six months.

In North Carolina, the Navy is also testing a new, larger, 23-foot unmanned craft called the Spartan.

Though there are two crew members on board for this test, the craft is controlled from a laptop computer on the mother ship, or with a manual remote-control box, using radio signals and GPS satellite guidance.

The Spartan is estimated to cost \$120,000 per ship.

Part of the appeal of the Spartan, as with the Owl, is its usefulness in fighting terrorists and other enemies who will likely attack in small ships with small forces, as in the attack on the Cole.

"Compared to a billion dollar destroyer, this thing is very inexpensive, basically expendable," said Spartan engineer Don Johnson of the Naval Undersea Warfare Center in Newport, Rhode Island. "You want to go out and deploy it against a comparable threat, instead of sending a large ship after it."

The current version of the Spartan is designed for submarine detection, but it can also be used for detecting mines. On deck, 4-foot-long tan tubes contain sonar-equipped buoys called "sono-buoys," which can be fired into the water by remote control.

"Our antenna will pop up to the surface," Johnson explained. "The transducer will deploy to a specified depth and listen for a submarine. That information would be 'telemetricked' back through a helicopter or through this platform for processing."

Navy researchers are testing other types of unmanned vessels such as a robotic Jet Ski, or Roboski, and something called the "magnetic sled."

The sled drags an electrified cable behind it, simulating the magnetic signature of a warship to set off mines with magnetic triggers.

Posted January 29, 2002

Related Articles

- [Accessing the Net Through Electrical Outlets](#)
- [Special Coverage: Force of Technology](#)

Talkback

[Post your comment here >](#)

No comments have been posted yet

[Join TechTV](#) [Member Services](#) [Site Help](#) [About Us](#) [Contact Us](#) [Jobs](#) [TechTV International](#) [Get TechTV](#)

[Copyright](#) © 2003 TechTV Inc. All rights reserved.

Use of Techtv.com is subject to certain [terms and conditions](#). We respect your [privacy](#).