Navy conducts first test of shipboard alternative fuels

By Terry Shawn
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The U.S. Navy conducted a full power demonstration today at Naval Base Norfolk, Va., of an experimental Riverine Command Boat, powered by a 50/50 blend of algae derived F76 and traditional F76 fuel procured by the Defense Logistics Agency Energy.

According to DLA Energy's Energy Plans and Programs Office, the fuel was provided to the Navy for testing and certification through one of DLA Energy's research and development projects called Alternative Energy from Organic Sources.

"DLA Energy stands ready to support the alternative fuel and renewable energy requirements for the military Services as they continue their testing of these biofuels in an effort to reduce their reliance on fossil fuels," said Navy Rear Adm. Kurt Kunkel, commander of DLA Energy.

This isn't the first time DLA Energy has supported the Navy's alternative fuel requirements. On Earth Day, April 22, DLA Energy contracted the 50-percent mixture of a fuel refined from the crushed seeds of the flowering camelina sativa plant for the Navy's testing of an F/A-18 Super Hornet, dubbed the Green Hornet, at Naval Air Station Patuxent River, Md.

"The Navy has aggressive energy efficiency goals

and we are prepared to support their alternative fuels requirements that will enable them to meet those goals," Kunkel said.

The testing and demonstration of alternative fuels for ships is led by Naval Sea Systems Command's advanced fuels program office. Working in coordination with the Task Force Energy Maritime Working Group, the office supports the Secretary of the Navy's energy target to demonstrate a Green Strike Group of biofuel and nuclear-powered vessels in local operations by 2012.

The creation of the Green Strike Group is one of the energy targets announced by Secretary of the Navy Ray Mabus Oct. 14 at the Naval Energy Forum in McLean, Va. Mabus said the Green Strike Group fleet would be deployed by 2016. Other energy targets announced by Mabus include: reducing petroleum use in its 50,000 commercial vehicle fleet by 50 percent by 2015 by phasing in hybrid and electric vehicles; producing at least half their shore-based energy requirements from renewable sources, such as solar, wind and ocean generated by the base; and by 2020, ensuring at least 40 percent of the Navy's total energy consumption comes from alternative sources.

"The important part of our procurement support is that we ensure the alternative fuels purchased for the Services' testing and certification purposes are drop-in replacement fuels, meaning the current distribution systems and infrastructure for fuel storage can be used," said Mark Iden, DLA Energy deputy director of operations.

Currently, the Navy's shore energy is down more than 14 percent since 2003 and 12 percent of the Navy's total annual energy needs are produced from renewable sources. The Navy has also reduced the fossil fuel use of its non-tactical vehicle fleet by 30 percent since 2005.

Above and left, sailors assigned to Riverine Group 1 conduct maneuvers aboard Riverine Command Boat (Experimental) at Naval Station Norfolk in Va. The craft is powered by an alternative fuel blend of 50 percent algae-based and 50 percent NATO F76 fuels procured by the Defense Logistics Agency Energy in support of the secretary of the Navy's efforts to reduce total energy consumption on naval ships. Photo by Petty Officer 3rd Class William Jamieson.