Zyvex Technologies finishes testing on a nano-enhanced boat

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(PhysOrg.com) -- Zyvex Technologies, an Ohio-based nano-enhanced products company, has announced that its 54' boat, code name the Piranha, has completed its sea trials. The trials, which took place near Puget Sound in the Pacific Ocean, were the end point of six months of extensive testing. The trial involved a roughly 600 nautical mile rough-weather sea test and showed a record fuel efficiency for the craft.

The boat was made of nano-enhanced materials, which are significantly lighter than the more traditional materials used in boat construction.

Boats made with current generation of aluminum or fiberglass hulls would have consumed 50 gallons or more per hour at the tests cruise speed. The nano-enhanced materials that Piranha is made of kept it light enough to consume only 12 gallons of fuel per hour while cruising at 25 knots.

According to the company the materials are also 40% stronger than metals, such as aluminum, which means that the weight reduction will not result in less durable crafts. The material uses is a advanced carbon fiber that has been infused with carbon nanotubes. The resulted in a craft that weighs only 8,400 pounds. When compared to the weight of a craft made of traditional materials, which would weigh 40,000 pounds, one can see how the 75% lighter Piranha quickly becomes a more cost-

effective vehicle to operate. The Piranha can travel up to 2,800 nautical miles without stopping to refuel.

The Piranha has finished its testing in time to premiere at the Sea Air Space show, which is held near Washington, DC, on April 11th. Defense contractors will be evaluating the Piranha for use in a variety of unmanned platform applications, which may include anti-piracy, harbor patrol, and oceanographic surveying.