

Zyvex Performance Materials announces revolutionary new boat utilizing next generation carbon nanotube-enhanced prepreg.

Columbus, OH, May 11, 2009 -- Zyvex Performance Materials (ZPM), a recognized worldwide leader in nanomaterials applications, unveiled a new boat to be built by Strategic Composites and made entirely with ZPM's next generation carbon nanotube (CNT) enhanced prepreg, Arovex[®]. The new boat, designated 540SE (Super Efficient), is intended as a technology demonstrator to show what future boats are capable of when built with new nano-enhanced materials like Arovex[®].

By building the boat with Arovex[®], the 54-foot boat will weigh less than 8,000 pounds, fully equipped. This is approximately 75% less than fiberglass boats its size, and 33% less than conventional carbon fiber boats. The drastic weight reduction allows the new boat to require 75% less horsepower, considerably reduced emissions, and extended range.

Because of its extreme lightweight, the boat is very efficient, and offers unheard of fuel economy at low to medium cruising speeds. Boat construction has begun at Pacific Washington based Strategic Composites (www.strategic-composites.com) late last month.

"We are very proud to be unveiling this new boat. By re-imagining and designing boats to take full advantage of our materials, a new generation of boats can be built that are remarkably lighter, consume far less fuel, and cut carbon emissions." says Lance Criscuolo, President of Zyvex Performance Materials. "By greatly reducing the weight of the boat, performance is increased and emissions are cut by more than two-thirds. This will create a new breed of boats that have expanded capabilities, range, and are environmentally responsible."

"This new nano-enhanced material will allow us to create the boats of the future," commented Strategic Composites President Ron Jones Jr. "By being able to greatly decrease the weight of the structure, the engine and fuel requirements are reduced as well. This boat will be able to do things that other boats can't. It could be carried and airdropped by cargo aircraft, for rescue, deployment, or intercept missions". Jones went on to elaborate, "The use of these new nano-enhanced materials is what will allow a new generation of ultra efficient green boats to be built. Cities, security forces, and governments that are looking for a flexible platform with super efficiency have an answer now".

The boat is powered by a pair of small diesel engines, typically found on boats under 40 feet in length. These smaller engines will still be able to propel the hull to top speeds of over 50 mph. Offshore capable, and with a range of over 1,000 miles, the boat will also feature a "glass cockpit" similar to ones found in modern aircraft. Larger engines are optional for higher speed applications.

While designed with defense and security missions in mind, the technology demonstrator will be a conventional civilian/recreational boat. A recreational version using the same hull and materials is also planned and should be available in early 2010 through Synergy Yachts. The announced launch date for the prototype is in November of this year.

Zyvex Performance Materials has created a website at www.zyvexpro.com/news/540SE with downloadable pictures and progress updates.

Arovex[®] is a high performance prepreg using CNT enhanced resin. The resin, optimized for use in a prepreg, offers dramatically superior mechanical properties over conventional prepreps without CNTs. Arovex[®] is available in standard, intermediate, and high modulus carbon fibers, glass, and as a unidirectional, woven, or knitted material. Large custom material orders for Arovex[®] are also available. Arovex[®] processes and handles just like conventional prepreps.

Based in Columbus, Ohio, Zyvex Performance Materials Inc. was spun out of Zyvex Corporation in April 2007. ZPM is focused on developing nanotechnology to improve the properties of composite materials. The company's patented technology allows composites to take advantage of the superior physical and chemical properties of carbon nanotubes by enabling the even dispersion of carbon nanotubes in composites mixtures. ZPM was the first company to provide carbon nanotube enhanced products to the marketplace.

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