

For Immediate Release
17 February 2010



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Zyvex Performance Materials Formally Unveils the Piranha USV: First Unmanned Surface Vessel Constructed with Nano-enhanced Carbon Fiber

Advanced surface platform delivers efficient solutions to piracy and emerging threats

COLUMBUS, Ohio (February 17, 2010) – Zyvex Performance Materials (ZPM) officially unveiled the Piranha unmanned surface vessel (USV), an ultra-lightweight composite boat designed to provide unparalleled reach and capabilities for today's surface fleet. Built entirely of Arovex™, ZPM's proprietary nanotube-reinforced carbon fiber prepreg, the Piranha USV is the largest boat built from nano-enhanced materials. The use of Arovex allows this 54-foot boat to weigh only 8,000 pounds, and carry up to 15,000 pounds of payload more than 2,500 miles. Compared to other existing USVs, the Piranha USV has triple the payload capacity and ten times the range. Construction of the Piranha USV is currently underway, and the prototype is scheduled to begin sea trials in the second quarter this year.

"The Piranha USV is designed to perform a wide variety of missions like anti-piracy, search and rescue, submarine hunting, and harbor patrol. Since the Piranha is an unmanned surface vessel, it will reduce the risk to the warfighter and provide greater capability for



those missions at a dramatically lower cost," said Russell Belden, VP Advanced Composite Solutions and Director of the Piranha USV Program at ZPM. "This craft provides real opportunity to use unmanned vessels as a true force multiplier."

Designed by ZPM's Advanced Composites Solutions team and built entirely from Arovex, the Piranha USV has greater modular payload options than other available USVs. Armament options will include stabilized machine guns, Mark 54 torpedoes, and over-

the-horizon missiles. Future versions will leverage the Piranha USV's reconfigurable payload capacity for a wide range of missions, including anti-piracy, surface surveillance, surface action, mine countermeasures, electronic warfare, and antisubmarine warfare.

"The US Navy and Coast Guard are facing a looming budgetary crisis with little relief in sight," said James Hasik, principal at Hasik Analytic, a defense industry consulting firm that has been working with ZPM to refine the USV's operational concept and marketability to military customers. "A cost-effective unmanned vessel like the Piranha, with its range and payload, could provide the numbers and capabilities to significantly augment the current fleets, and help to control the seas from the Caribbean to the Mediterranean, the Persian Gulf, and the Horn of Africa."



In particular, the Piranha USV could be a very useful tool for combating modern piracy. Capable of cruising long distances to escort single ships or convoys, it can use advanced sensors and networked satellite or terrestrial communications to detect pirates or other hostiles before they can threaten shipping.

"Surface navies have been clamoring for unmanned systems that can truly deliver useful capabilities," said Lance Criscuolo, president of ZPM. "The Piranha USV offers the US and its allies the platform they need to bring the advances in unmanned aerial systems from the sky to the water. ZPM has a history of developing materials for lighter, more efficient products. We're very proud to apply this knowledge and offer a USV to keep the waters safe and our sailors out of harm's way."

For more information, including images, technical specifications and sales/licensing information, please visit www.piranhausv.com.

Zyvex Performance Materials unlocks the power of nanomaterials. Headquartered in Columbus, OH, with partner facilities in Texas, South Dakota, and Washington, ZPM was the first company to bring nano-enhanced products to the marketplace. Their commercially proven technology makes composite products stronger, lighter, tougher, and stiffer. ZPM offers the world's highest performing prepregs, epoxy resins, and adhesives. ZPM also has an Engineered Solutions team to develop white space solutions and help their customers create a new generation of advanced composite products.

For more information about Zyvex Performance Materials, visit www.zyvexpro.com.