

Revenge Advanced Composites (RAC) relies on latest **NVIDIA® Quadro®** by **PNY** graphics boards to design military precision boats.



From sleek state-of-the-art Sport Fisherman Yachts to carbon fiber strength Special Operations Craft, Revenge Advanced Composites (RAC) takes marine design and manufacturing to new heights. Since its inception in 1982, RAC has used sophisticated CAD/CAM applications when designing and building their vessels. To take full advantage of the benefits offered by 3D vessel design applications, RAC relies on the outstanding performance of NVIDIA Quadro FX by PNY graphics boards.

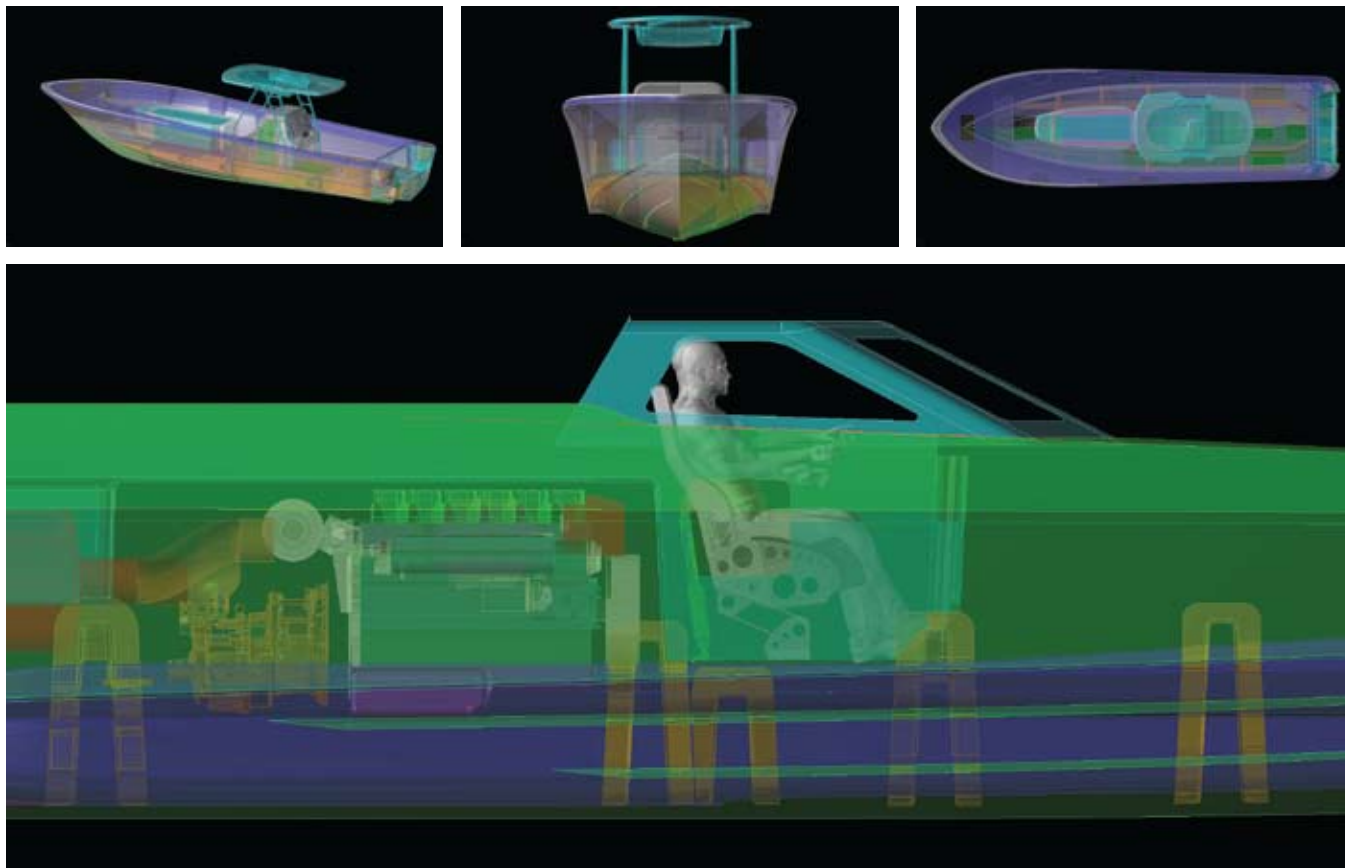
and Rhino 3D to design the complete vessel and all the equipment right down to the piping and wiring. The results are very large and complex models, hundreds of megabytes in size. "When designing our vessels the CAD file sizes get very, very large so having a gaming card or a card aimed at the mid-tier CAD market just doesn't work for us. We need the fastest graphics board we can get – which is why we use the NVIDIA Quadro FX 5600 by PNY," said Jonathan Sadowsky, CEO of RAC.

RAC, previously known as Revenge Yachts, has established a reputation for designing and building some of the world's fastest and toughest boats. Built from carbon fiber advanced composites, using innovative construction techniques and designed with advanced 3D modeling applications, RAC certainly lives up to its tag line – Aerospace at Sea Level®. RAC uses 3D design software CATIA®

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- Jonathan Sadowsky, CEO, RAC

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- Images courtesy of RAC

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- Image courtesy of Robert Holland.

Whether it is for sportsmen fighting big fish or the US Navy, RAC vessels are designed to deliver the speed, strength and maneuverability that these clients need. All RAC's boats are engineered using sophisticated models. "We are continually using real-time rotation and visualization on these complex and large scale models in the design process, the graphics board can become a major choke point in how quickly you can look at a model and rotate it. The NVIDIA Quadro FX 5600 by PNY offers us the speed, performance and advanced features that we need," explained Sadowsky. "We run very high resolution screens. Being able to run dual 30 inch monitors off of one card and still have the speed is extremely important to us, and that would be almost impossible to do with anything other than the Quadro FX 5600," continued Sadowsky.

Not only are the vessels engineered using the latest CAD applications, RAC also analyzes its designs by graphically simulating real world at sea conditions using advanced Computational Fluid Dynamics (CFD) techniques. Being able to test how the vessel will react in the water before it is built is a tremendous advantage to RAC. Even slight design modifications can make a huge difference on the water. "CAD with embedded analysis makes it easy for us to try out different design ideas and determine very quickly if they will work, the savings in time and money is amazing," said Sadowsky. The company's clients benefit enormously from being able to preview the designs of their boat before it gets built. Using CAD, RAC can also calculate more precisely how much material will be needed to build the vessel and give its clients a very accurate assessment of the cost as well as the final performance characteristics. "The net result is greater value to the customer in the end state product," concluded Sadowsky.



#### About Revenge Advanced Composites (RAC)

RAC is at the leading edge of marine composite design and manufacturing. The team at RAC has been designing and building high speed epoxy / carbon fiber composite hulls and structures since 1982. RAC was one of the first companies in the marine industry to use 3D technology in the design of its hulls, it now uses 3D CAD for the complete vessel design. RAC's latest development is in perfecting the ability to manufacture vessels from high temperature cured epoxy pre-preg's. RAC is the only manufacturer worldwide to be using this type of construction on production vessels.

For more information visit: [www.revengeyachts.com](http://www.revengeyachts.com)

#### About PNY Technologies, Inc.

Established in 1985, PNY Technologies®, Inc. is a leading supplier and marketer of NVIDIA® Quadro® by PNY Technologies professional graphics boards and XLR8™ and Verto® brand consumer graphics cards. The company also offers a full line of high-end memory upgrade modules, flash media, USB flash drives, portable hard drives and flash peripherals. Headquartered in Parsippany, N.J., PNY maintains facilities in North America (Santa Clara and Orange County, Calif., Miami, Fla. and Parsippany, N.J.), Europe (Benelux, France, Germany, Italy, Norway, Spain, United Kingdom,) and Asia (Taiwan and China).

For more information, please visit [www.pny.com](http://www.pny.com).

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