

# Orca Gear: adding aesthetics to PFDs

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When it comes to designing a new personal flotation device, the owners of Orca Gear go to the head of the class.

The four founders of the Troy, N.Y.-based business met while pursuing MBA degrees at Rensselaer Polytechnic Institute's Lally School of Management and Technology. Through a school project that began in September 2001, the four designed a foul-weather jacket with Float Tech, an inflatable liner.

"The problem we saw was that [PFD use] still suffered from wearability," says Jeffrey Betz, one of the founders and the company's chief operating officer. "There is a problem with aesthetics."

Indeed, life jackets traditionally have tended to be bulky, less than stylish and somewhat uncomfortable to wear. The Orca Gear float coat was designed to overcome those wear hurdles and still do what a PFD is designed to do — save lives.

"Bottom line, if you want a PFD to work, you have to wear it," says Betz.

Betz, along with co-founders Cecilia Domingos, Michael Lobsinger and Michael Farmer — who had engineering and business backgrounds — met in a design, manufacturing and marketing course. The class assignment was to create a product and devise a business plan to market it. "We were all interested in the boating industry," says Betz, who was raised on the New Jersey shore and had been boating since his youth. Domingos, a graduate of the U.S. Merchant Marine Academy, had worked on commercial ships, including as captain. The other founders were boaters, too.



Orca Gear executives, from left: Michael Lobsinger, Cecilia Domingos and Jeffrey Betz.



The jacket incorporates an inflatable-PFD liner that the company says can be removed and worn alone.

The team came up with several boating-related ideas, but the concept that most appealed to them was creating a stylish all-weather jacket with a liner that inflates automatically when submerged. With help from the research and development department of a nearby sports apparel manufacturer, the entrepreneurs developed several prototypes.

"We tore jackets apart and put inflatable material in it," says Betz, a civil engineer.

The team won a school award for their business plan, but that was only the beginning. They formed a corporation in April 2002, just seven months after they began the project. Before they graduated in 2003, their company was up and running. They filed patents and trademarks on their existing product and the jackets were on the market by summer of that year.

The Orca Gear jacket is made of waterproof, breathable nylon, with high-reflective tape and piping. The jacket features zip-off sleeves and hood to transform it into a vest. The interchangeable Float Tech liner provides Type III PFD performance with more than 22 pounds of buoyancy. The liner zips into the jacket or can be worn independently as a light and comfortable PFD, according to Orca Gear. The automatic inflation system is CO<sub>2</sub>-driven and has two manual backups: a ripcord and an oral inflation tube.

The jacket has a suggested retail price of around \$395 and is available through several boating retailers, including Defender Marine ([www.defender.com](http://www.defender.com)), Landfall Navigation ([www.landfallnavigation.com](http://www.landfallnavigation.com)), Team One Newport ([www.team1newport.com](http://www.team1newport.com)), Fawcett Boat Supplies ([www.fawcettboat.com](http://www.fawcettboat.com)), Ahoy Captain ([www.ahoycaptain.com](http://www.ahoycaptain.com)), and Sailor's Solutions ([www.sailorssolutions.com](http://www.sailorssolutions.com)). Online prices as low as \$200 have been listed.

Betz says Orca Gear is focusing on marketing the Float Tech concept, and one day the liner could be compatible with products made by other apparel manufacturers. The company is negotiating with international manufacturers and also has a contract with the U.S. government to test the product for use by the Navy and Army.

Domingos is Orca Gear chief executive officer, and Lobsinger is listed as the vice president of technology and operations. Farmer is still a co-owner of the company but isn't active in its management. [www.orcagear.com](http://www.orcagear.com) ■