San Antonio Express-News

German aerospace manufacturer Blackwave to open first U.S. factory at Port San Antonio

The factory to build high-tech tanks for rockets comes as SpaceX races to make its Starship ready to meet deadlines for NASA's Artemis moon program.

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Brandon Lingle, Staff Writer – June 29, 2026

A machine that wraps carbon fiber to create the composite overwrapped pressure vessels made by Blackwave. The company is opening its first U.S. factory later this year at Port San Antonio. Image credit: Blackwave.

A German manufacturer of high-tech tanks used in rockets and other spacecraft is setting up its first U.S. factory at Port San Antonio.

Bavaria-based Blackwave GmbH has committed $2.5 million to upgrade a 35,000-square-foot building at the Southwest Side technology hub.

The 10-year-old company is among a small group of outfits worldwide that make the tanks, which are known as composite overwrapped pressure vessels, or COPVs. Wrapped in strands of carbon fiber, they are key components of spacecraft because they can store high-pressure gases or fluids like their steel counterparts, but at a far lower weight.

“We’re hitting the ground running,” Gabriel Pereira, Blackwave’s vice president of U.S. operations, said in an exclusive interview. “We expect to be operational this fall.”

The firm is on track to hire more than 30 employees in San Antonio by the end of the year on its way to total employment of about 250. Economic development officials said it would have a $99 million annual economic impact.

“We are really focusing on the space market now,” said Felix Hacke, Blackwave’s chief of staff. “We already have a solid customer base, also in the satellite industry, and now are targeting more and more the launch industry, where the tank sizes just get quite big.”

Blackwave’s Port San Antonio site will make larger tanks than are produced at its two factories in Germany. The new class, meant for rockets, starts at a capacity of 300 liters, or about 79 gallons, and increases from there.

The company doesn’t disclose its customers, but the top user of such tanks is Texas-based SpaceX. Its workhorse Falcon 9 rockets use them and analysts estimate the company’s Starship mega-rocket is outfitted with about 30 COPVs of various sizes.

“I think that would be one of the ideal customers for the type of tank that we’re going to produce in San Antonio,” Pereira said of SpaceX.

SpaceX has been hustling to get Starship operational to meet NASA timelines for the $4 billion in contracts it holds for Artemis moon missions. Perhaps tellingly, Hacke said Blackwave is racing to meet the "aggressive timelines of potential customers."

One of Blackwave's investors, venture capital firm Alpine Space Ventures, has strong ties with strong SpaceX. The Munich-based firm's founding partner was a former SpaceX vice president.

Hacke said Blackwave's goal is eliminating the failures of such tanks, which have been blamed for at least two SpaceX rocket failures, including a June 2025 Starship testing explosion at Starbase. The maker of the failed components in that explosion hasn't been disclosed.

An employee in a workshop at Blackwave GmBH, which is opening its first U.S. factory to build high-tech tanks for use in rockets later this year at Port San Antonio. Image credit: Blackwave.

Blackwave currently has a temporary site at Lockhart's Proto-Town innovation hub. Five people work there, cleaning tanks from Germany and preparing them for shipment to customers. That site eventually will transfer its work to the Port San Antonio operation.

Project Airwave

Blackwave employs 170 people, with 165 of those in Germany, according to Hacke. It previously served the aircraft and auto industries but now is focusing on tanks for launch vehicles and satellites.

The new factory is expected to eventually create about 250 jobs, said Sarah Carabias Rush, president and CEO of greater: SATX, the region's economic development corporation.

Blackwave, a German maker of high-tech tanks for rockets and spacecraft, is spending $2.5 million to open its first U.S. factory at Port San Antonio, seen in this 2015 aerial photo. Image credit: Port San Antonio.

"We get excited anytime there's an expansion," she said. "For us, advanced manufacturing, and this sector — aerospace and defense — are crucial."

Local officials launched talks with Blackwave in 2024 after receiving a lead from the State Department, Carabias Rush said. A U.S. Commercial Service liaison who'd worked in San Antonio made the connection.

Greater: SATX dubbed the effort "Project Airwave" and officials including then-Mayor Ron Nirenberg met with the Blackwave execs both in Germany and Texas.

"We hosted the company here on multiple occasions and, ultimately, Port San Antonio was the best location for this project," Carabias Rush said. Port President and CEO Jim Perschbach and his team "were looped in pretty early on because it was clear the connection to the strengths of Port San Antonio were there."

Nirenberg said the goal was to leverage the city's strengths in manufacturing and space research and development. But the project slowed after the Trump administration took office.

"Took longer than expected given the chaos of the Trump international trade posture but we've remained in touch in the intervening years," he wrote in a text message. "Glad the bird is landed! It helps continue positioning San Antonio in the broader South Texas space manufacturing ecosystem."

Blackwave didn't seek any city or county incentives to come to Texas, according to Carabias Rush. Nor has it received funding from the state's Space Commission.

“They decided that the Port provides some pretty great, kind of built-in, incentives, if you will, and the Port was able to get them across the finish line,” she said. Advertisement Article continues below this ad

Ron Nirenberg, former San Antonio mayor and Bexar County judge candidate, helped attract Blackwave. Image credit: Katina Zentz/San Antonio Express-News

‘Right mix’

Blackwave adds to the list of aerospace firms doing space-related work at Port San Antonio.

“This is a really exciting customer for a lot of reasons,” Perschbach said. “It’s square within what we think we need for the ecosystem.”

Blackwave officials studied 20 sites across Central Texas, but things “clicked in terms of spirit” when CEO Bastian Behrens visited the port, according to Pereira.

“Port San Antonio was actually the first site that he visited, and it came highly recommended,” he said. “It was at that point that the seed was really planted that this would be the right location for us.”

The pace of talks picked up last year amid customer demands, logistical concerns and tariff worries.

Examples of the composite overwrapped pressure vessels that Germany-based Blackwave makes. Image credit: Blackwave.

According to Hacke, making the larger tanks in Germany and transporting them to the U.S. posed too much uncertainty amid the current political climate and changing tariffs.

“For our customers, it’s a big advantage if you can just source locally,” he said.

The Port has made things easy by quarterbacking the process from permitting through build-out.

“If you’re a really fast-moving space company in a really fast-moving industry, it’s incredible what you realistically can actually achieve in a place like San Antonio, and specifically Port San Antonio,” Pereira said.