

Last year, the first UAV wind gust test was also conducted, combining the SMP, its UAV Superstructure and the Environmental Test Lab's Blowing Rain Test Apparatus to introduce a controlled wind gust to a flying UAV. While more work is needed to improve future wind tests, Pellegrino said the initial efforts met the needs of the customer's schedule and available budget and credits his Site-Engineering Technician, Harry Beals, for the unique solution to the customer's request.

"It's leveraging the idea that what Lakehurst lacks in physical airspace we make up for in configurability, and we can tailor the infrastructure of our site to replicate more than just shipboard landings and launches," Pellegrino said. "The end goal of the platform is to reach out to all of the UAV stakeholders, Navy and private industry and say 'look what I can do.' I can replicate a ship in a quantifiable and repeatable environment. I can give you your mini-mission. We can use our site with relatively minimal interference because I can carve out my airspace to execute the test to your needs."

Recently, a United States Marine Corps contingent conducted risk-mitigation testing at Lakehurst. Pellegrino described the testing as a "rousing success," demonstrating that small UAVs could land on small ships in a real-world scenario. The Marines' next step is to take their testing to a ship to confirm their findings from the Lakehurst exercises.

The potential impact of the testing on the Marines' immediate operational posture made it a particularly significant moment for Pellegrino and his team, underlining the platform's relevance to military operations and industry stakeholders.

Pellegrino said six UAV models have used the platform in three years of testing, proving the site's significance in a relatively short period, with each test providing different lessons and capabilities to showcase now and in the future.

In addition to their UAV work, the SMP team has also extended its outreach to other emergent arenas, participating in the first NAWCAD-led Shipboard Robotics Technical Exchange Meeting in Philadelphia, showcasing the capabilities and benefits of the platform.

"This isn't a one-time capability. We're here for the long haul," Pellegrino said. "We aim to harness the growing UAV interest and establish ourselves as a reliable and long-term testing site. 🌟"



Team members from Naval Air Warfare Center Aircraft Division Lakehurst attended a meeting in Philadelphia on March 5 to discuss the future of shipboard robotics. The employees included (from left) Kevin Larkins, Ryan O'Shea, Ari Goodman, Dr. Todd Morehouse, Kyle Hart, Tyler Comisky, Dr. Nathaniel Goldfarb, Harry Beals, and Robert Pellegrino. (U.S. Navy photo)