Official: Dahlgren Recently Tested ‘Hypercone’ Hypersonic Test Projectile

Aerospace engineer Adam Jones said the Navy wants to use Hypercone to gather data to benchmark Naval Surface Warfare Center Dahlgren Division’s modeling and simulation capabilities. *LISA NIPP*

NATIONAL HARBOR, Md. — The Navy continues to work on a conical projectile called Hypercone as it tests hypersonic capabilities, an official told attendees at Sea-Air-Space 2022 on April 6.

Adam Jones, aerospace engineer at Naval Surface Warfare Center Dahlgren Division (NSWCDD), said he couldn’t provide any details on the Hypercone firing at White Sands Missile Range in the New Mexico desert.

“Our goal is to provide another opportunity to provide testing,” Jones said. “We know that just across the board there are challenges in aero thermal and aero sciences across the board. And we want to use this as a platform to gather the data that we need to help continue to benchmark our modeling and simulation capabilities.”

The Navy has not revealed much about the Hypercone effort, part of a larger push for advancing hypersonic technology. In an October 2021 statement, NSWCDD described the purpose of the technology.

“Dahlgren is applying its deep knowledge of advanced gun systems, guided projectiles, and telemetry to support hypersonic research and development,” the statement reads. “For example, scientists and engineers are developing advanced guidance and control for future hypersonic systems. NSWCDD

recently conducted the first of several planned tests by launching a conical projectile, dubbed Hypercone, to collect aerodynamic and aerothermal data relevant to hypersonic flight conditions.

“Dahlgren also has multiple efforts focused on accurately modeling the flow around a hypersonic vehicle,” the statement adds. “Recently, Dahlgren’s hypersonic efforts have expanded to include roles in the development of offensive missile boost-glide weapons and other collaborative efforts across the DoD.”

Asked whether Hypercone could be turned into an offensive weapon, Jones declined to say.