Successful Trident II D5 Life Extension Launches Demonstrate Readiness of Sea-Based Deterrent



ATLANTIC OCEAN (Sept. 17-21, 2025) – An unarmed Trident II D5 Life Extension (D5LE) missile launches from an Ohio-class ballistic missile submarine (SSBN) off the coast of Florida. (Photo by Shelby Thompson)
From April Crew-Kelly, Navy Strategic Systems Progams Public Affairs, Sept. 23, 2025

ATLANTIC OCEAN – The U.S. Navy's Strategic Systems Programs conducted four scheduled missile test flights of unarmed Trident II D5LE missiles from an Ohio-class ballistic missile submarine off the east coast of Florida from September 17-21. One launch test event Sunday evening lit up the night sky and was visible from Puerto Rico.

Flight tests are conducted on a recurring, scheduled basis to

evaluate and ensure the continued reliability and accuracy of the system. The missile tests were not conducted in response to any ongoing world events.

These test flights were part of a planned test event and resulted in the achievement of 197 total successful missile flight test launches of the Trident II D5 strategic weapon system. The test flights were launched from a submerged SSBN and landed in a broad ocean area of the Atlantic Ocean. As part of standard safety requirements, Notice to Airmen (NOTAMs) were issued identifying no-fly zones and Notice to Mariners (NOTMARs) were issued to sea-going vessels identifying stay-out areas for the pre-scheduled test period.

The Trident II D5 strategic weapon system is a highly accurate and reliable weapon system. The D5 missiles were originally developed in the 1980s, and a life-extension refresh was completed in 2017 to extend the service life of the system to the 2040s.

“Our Nation’s submarine launched ballistic missile system has been a critical component of our national security since the 1960s, and these launches continue to demonstrate the credibility and reliability of our strategic deterrence capabilities,” said Vice Adm. Johnny R. Wolfe, Director of the Navy’s Strategic Systems Programs, the command responsible for the Navy’s strategic weapons.

A credible, effective strategic deterrent is essential to our national security and the security of U.S. allies. U.S. strategic weapons capabilities deter aggression and assure our allies by providing unique deterrence effects no other element of U.S. military power can replace.

“For the dedicated SSP team, maintaining our current capability and actively demonstrating through flight testing that the system is ready to respond if called upon is central

to ensuring our nation’s Peace through Strength. The team is also pushing ahead developing the next generation strategic weapon system to ensure the sea-based deterrence capability of tomorrow,” Wolfe said.

Strategic Systems Programs is the Navy command providing cradle-to-grave lifecycle support for the sea-based leg of the nation’s nuclear Triad. This includes training, systems, equipment, facilities and personnel responsible for ensuring the safety, security, and effectiveness of the nation’s Submarine Launched Ballistic Missile (SLBM) Trident II D5LE strategic weapon system deployed on Ohio-class SSBNs.