

**FINDING OF NO SIGNIFICANT IMPACT (FONSI)  
ENVIRONMENTAL ASSESSMENT / OVERSEAS ENVIRONMENTAL ASSESSMENT  
FOR TRIDENT II (D5) LIFE EXTENSION/LIFE EXTENSION 2 (D5LE/LE2)  
WEAPON SYSTEMS TESTING PROGRAM  
AT SPACE LAUNCH COMPLEX 46, CAPE CANAVERAL SPACE FORCE STATION, FL**

**INTRODUCTION**

In compliance with the National Environmental Policy Act (NEPA), as amended by the Fiscal Responsibility Act of 2023, the Department of the Air Force (DAF) is issuing this Finding of No Significant Impact (FONSI). Pursuant to the provisions of the NEPA, Department of Defense NEPA Implementing Procedures (June 30, 2025), and DAF Policy for Implementation of NEPA (July 7, 2025); the DAF, United States Space Force, adopts the Environmental Assessment (EA) prepared by the Department of the Navy (DON) (EAXX-007-17-USN-1740598013). The DAF participated in the preparation of the EA/Overseas Environmental Assessment (OEA) as a cooperating agency to address the potential environmental impacts on the human environment, including the natural environment, associated with conducting land- and sea-based flight tests and fielding evaluations for the TRIDENT II D5LE/LE2 weapon systems testing program at Space Launch Complex 46 (SLC-46) at Cape Canaveral Space Force Station (CCSFS).

**PURPOSE AND NEED FOR PROPOSED ACTION**

The purpose of the Proposed Action is to demonstrate weapon system effectiveness, to test applicable design features, and to identify and validate effective operating procedures for deployment of the D5LE and D5LE2 weapon systems in both the Atlantic and Pacific Fleets.

The Proposed Action is needed to further the Navy's execution of its congressionally mandated role and responsibility under United States Code (U.S.C.) Title 10, Section 8062 to maintain mission readiness of the nation's submarine forces. To meet Title 10 requirements, Strategic Systems Programs (SSP) conducts flight testing throughout the service life of the TRIDENT II (D5) weapon systems to ensure that accuracy, reliability, and performance requirements continue to be met. Sea-based testing of the weapon systems is needed in both the Atlantic and Pacific study areas because both the Atlantic and Pacific Fleets must acquire and maintain proficiency with all deployed weapons systems. Land-based testing is needed to ensure that the technology is safe, reliable, and effective before being used on deployed submarines.

**DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES**

**Proposed Action**

This FONSI applies solely to launches from CCSFS at SLC-46 with impact in the Atlantic Broad Ocean Area (BOA), as described below, and in Sections 2.1.2 and 2.4.2 of the EA/OEA.

The EA/OEA analyzes potential impacts from the Proposed Action occurring at SLC-46 on CCSFS. The activities at the CCSFS site include the SLC-46 launch area, the over-ocean flight corridor originating from SLC-46 and extending over the Atlantic, and the designated Atlantic BOA impact area for each test event. The program proposes and intends to launch a total of up to 10 inert TRIDENT II (D5) weapon systems during calendar years (CYs) 2032–2036. Existing facilities, transportation routes, and infrastructure would be used at CCSFS; therefore, no new construction is associated with the proposal. The weapon system includes a three-stage, solid fuel, guided missile with an equipment section that carries independent non-tactical re-entry bodies (RBs). In a typical launch from SLC-46, the first stage ignition would occur at ground level. The second and

third stage motors would then ignite in sequence over the BOA. The weapon system would follow a calculated ballistic trajectory to a designated and pre-cleared target impact area within the BOA. The RBs would be released during down-range flight and would also travel on a predetermined trajectory to the designated impact area. After burnout of the solid propellant and separation of each stage, the three spent motor casings and the equipment section casing would splash down at various points in the Atlantic BOA and sink. All solid fuel propellant in the rocket motors would be consumed before the spent motor casings impact the ocean surface. The spent casings would not be recovered. No land areas would be overflowed, and all components would land at least 50 nautical miles (NM) from the United States (U.S.) shoreline and at least 200 NM from any other landmass or islands. Most test launches would occur during daytime, but nighttime launches may also occur.

### **No Action Alternative**

Under the No Action Alternative, the Proposed Action would not occur. Flight testing required to verify the operational performance and safety of the TRIDENT II (D5) weapon systems prior to deployment to the submarine fleet would not occur. Therefore, the No Action Alternative would not meet the purpose of and need for the Proposed Action.

### **Alternatives Eliminated from Further Consideration**

NEPA requires agencies to identify “a reasonable range of alternatives to the proposed agency action...that are technically and economically feasible and meet the purpose and need of the proposal” 42 U.S.C. section 4332(C)(iii) (2023). The DON evaluated potential alternatives for reasonableness, including testing within other BOAs, testing solely in either the Pacific or the Atlantic Ocean, test launches from National Aeronautics and Space Administration’s Wallops Flight Facility, and test launches from Vandenberg Space Force Base (see Section 2.3 of the EA/OEA). The aforementioned alternatives were considered but not carried forward for detailed analysis in the EA/OEA because they did not meet the purpose and need for the project and/or did not satisfy the reasonable alternative screening factors presented in Section 2.2 in the EA/OEA. Therefore, only the Proposed Action and No Action Alternative were carried forward for further evaluation.

### **ENVIRONMENTAL CONSEQUENCES**

The EA/OEA evaluates in detail the potential environmental consequences from the Proposed Action and the No Action Alternative in the following resource areas: air quality, biological resources (including noise effects on species), hazardous materials and waste management, and public health and safety (including noise effects on humans). Certain other environmental resources (i.e., cultural resources, water resources, geological resources, land use, visual resources, airspace management, infrastructure, transportation, and socioeconomics) were evaluated but not carried forward for detailed analysis in the EA/OEA because potential environmental effects were determined to be negligible or non-existent. Potential reasonably foreseeable effects are also addressed in the EA/OEA. Based on the analysis, neither the Proposed Action nor the No Action Alternative will result in individual or cumulatively significant impacts to any resources.

The No Action Alternative would result in less impact than the Proposed Action; however, it would not meet the Action’s purpose and need.

### **MITIGATION**

As part of their efforts under the Endangered Species Act, Migratory Bird Treaty Act, and Marine Mammal Protection Act, the DAF and DON incorporated several best management practices and

proactive impact-avoidance and minimization measures as part of the Proposed Action Alternative, as discussed in Section 2.5 of the Final EA/OEA.

## **PUBLIC REVIEW**

The DON and DAF solicited public and agency input regarding the Proposed Action by making the Draft EA/OEA available on the Space Launch Delta 45 Environmental website at <https://www.patrick.spaceforce.mil/Resources/Environmental-Information/> and the Navy's NEPA website at <https://www.nepa.navy.mil/TRIDENTII-EA> for 30 days between May 25, 2025 and June 24, 2025, and by publishing notices of availability of the Draft EA in five local newspapers covering key locations associated with the Proposed Action. The notices were published in three consecutive issues of the following newspapers: *Honolulu Star-Advertiser*, *San Diego Union-Tribune*, *Florida Times-Union*, *Florida Today*, and the weekly *Hometown News* (in issues available in the Florida communities of Palm Bay, Melbourne, Suntree-Viera, The Beaches, and North Brevard). No comments were received during the 30-day public comment period.

Pursuant to section 7(a)(2) of the Endangered Species Act (ESA), the DON conducted informal consultations with the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) regarding potential impacts to ESA-listed species and designated critical habitat. The services concurred with the DON's species effects determinations in letters dated August 13, 2025 and June 11, 2025, respectively. In accordance with the Coastal Zone Management Act and appropriate agency guidance, the DON also prepared a Coastal Consistency Determination and submitted it to the Florida Department of Environmental Protection (FDEP). The FDEP concurred with the DON's determination in an email dated August 15, 2025.

## **FINDING OF NO SIGNIFICANT IMPACT**

Based on my review of the facts and analyses contained in the attached EA/OEA, conducted per NEPA (42 U.S.C. 4321 et seq.), Department of Defense NEPA Implementing Procedures (June 30, 2025), and DAF Policy for Implementation of NEPA (July 7, 2025), I conclude that implementing the Proposed Action will not have a significant effect on the quality of the human environment. Therefore, an Environmental Impact Statement is not required and this FONSI is appropriate. I decided this after considering all submitted information, including the fact that no public and agency comments were submitted in response to the Draft EA/OEA, and considering a range of reasonable alternatives. This analysis fulfills the requirements of NEPA and the signing of this FONSI completes the Environmental Impact Analysis Process.

Approved by:

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MARCIA L. QUIGLEY, Col, USAF  
Director, Space Force Mission Sustainment  
(Engineering, Logistics, & Force Protection)

15 Dec 2025

Date

Attachment: Final Environmental Assessment/Overseas Environmental Assessment for Trident II (D5) Life Extension/Life Extension 2 (D5LE/LE2) Weapons Systems Testing Program