W88 ALTERATION 370 PROGRAM

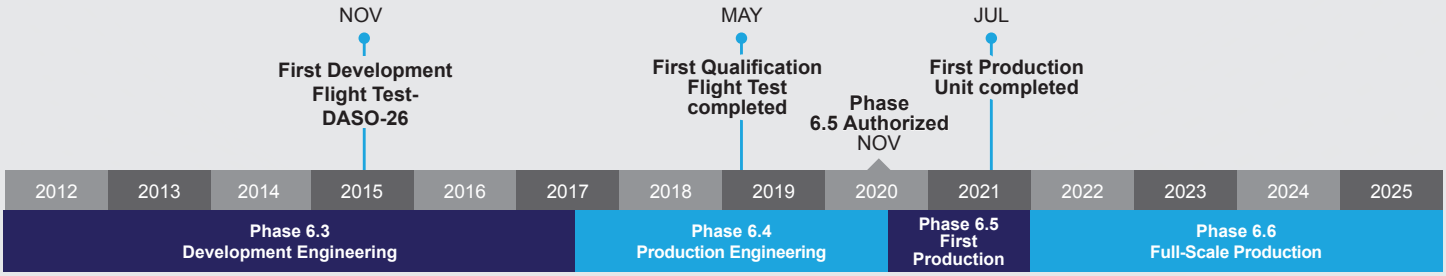
The W88 Alteration (Alt) 370 allows the submarine launched ballistic missile warhead to meet modern safety and reliability standards.

OVERVIEW

The W88 nuclear warhead entered the stockpile in late 1988 and is deployed on the U.S. Navy's Trident II D5 Submarine-Launched Ballistic Missile (SLBM) system, carried onboard Ohio-class ballistic missile submarines. Deployed for more than three decades, the W88 requires several updates to address aging issues and to maintain its current state of readiness. The W88 Alt 370 program replaces the arming, fuzing, and firing assembly; adds a lightning arrestor connector; and refreshes the conventional high explosives within the weapon.

ACCOMPLISHMENTS AND CURRENT STATUS

NNSA and its labs, plants, and sites completed the First Production Unit of the W88 Alteration 370 in July 2021. This was the culmination of approximately 10 years of design, development, and qualification testing with the U.S. Navy. NNSA is currently producing W88 Alteration 370 units to meet delivery requirements to the U.S. Navy.



FUTURE MILESTONES

The last production unit will be completed in FY 2025 and then the weapon will enter the surveillance stage.

Launch of a Trident II D5 Missile Test (Commander Evaluation Test 2)

NNSA NUCLEAR SECURITY ENTERPRISE ROLES

Los Alamos National Laboratory and **Sandia National Laboratories** are the design and engineering labs for the W88 Alt 370, while multiple Nuclear Security Enterprise facilities are responsible for other aspects of the W88 Alt 370:

- **Sandia National Laboratories** production manufactures integrated circuits and thermal batteries.
- **Los Alamos National Laboratory** production manufactures detonator assemblies.
- **Kansas City National Security Campus** manufactures polymers; foams; gas transfer system components; Joint Test Assembly components; and the arming, fuzing, and firing assembly.
- **Pantex Plant** produces conventional high explosives and performs the final assembly of the complete W88 Alt 370 for delivery to the U.S. Navy.
- **Y-12 National Security Complex** manufactures weapon components and performs reacceptance activities.

NNSA is a semi-autonomous agency within the U.S. Department of Energy responsible for enhancing national security through the military application of nuclear science.