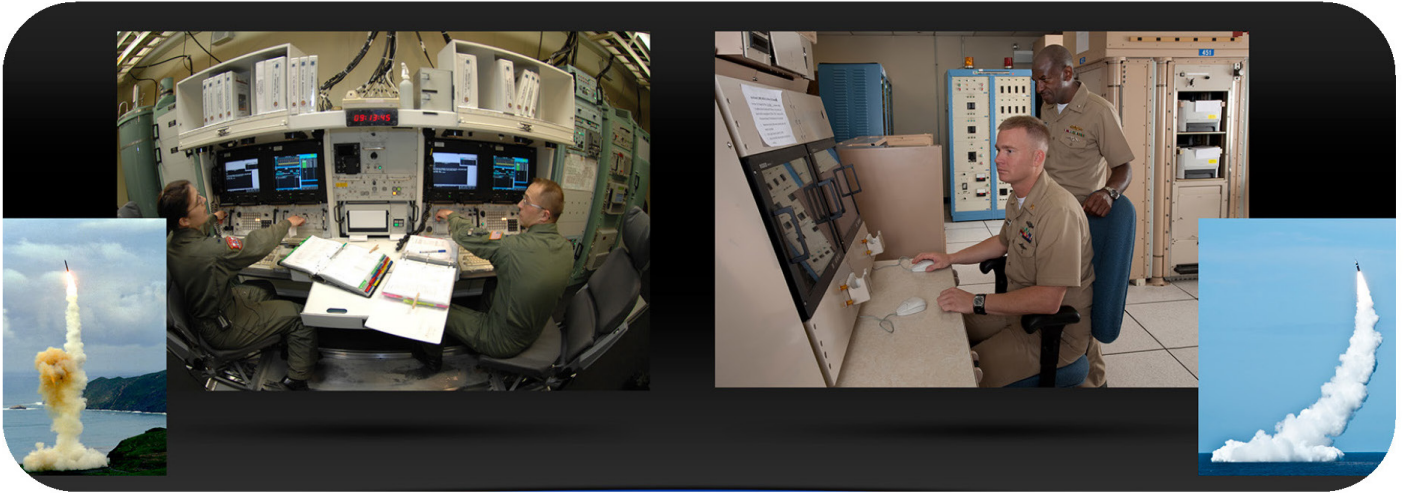


# Nuclear Deterrent Systems Modernization, Production, & Sustainment

*70 year heritage of providing full lifecycle strategic nuclear ballistic missile guidance, weapon command and control, and survivable communications*



High assurance, high consequence processes

Modernization while preserving nuclear surety

Cost reduction and improved performance by using modular architecture and technology insertion processes

Improved situational awareness and proactive surveillance

Increased data collection and analysis

Preserve critical assets with enhanced testing strategies for new development and ongoing sustainment

## Overview

General Dynamics Mission Systems has a 70 year heritage of providing full life-cycle support for strategic nuclear ballistic missile guidance, weapon command and control, and communications systems. Our unique experience and proven capabilities are demonstrated through our support for the U.S. Air Force intercontinental ballistic missile (ICBM) and U.S. Navy submarine launched ballistic missile strategic weapon systems.

General Dynamics offers proven capabilities in the design, development, production, and sustainment of strategic weapon systems. These capabilities demand understanding positive control, nuclear surety, radiation hardening, space and ballistic missile flight environments, high accuracy and reliability design, modeling, qualification, and higher quality standards than most other industrial areas.

We have the experience required to help customers maintain and sustain strategic weapon systems, while reducing risk and saving time and money. This approach enables customers to quickly and affordably add new capabilities and upgrade or reconfigure existing capabilities to meet the evolving mission requirements of the Nuclear Deterrent Enterprise.

# Nuclear Deterrent Systems Modernization, Production, & Sustainment

For the U.S. Navy, we offer unique experience and proven capabilities to support the Nuclear Deterrent Enterprise, General Dynamics Mission Systems has designed, produced, installed, and sustained every version of the Weapon Control System (Fire Control) for Polaris, Poseidon, Trident I and Trident II Submarine Launched Ballistic Missile (SLBM). Additionally, General Dynamics has been part of the team developing, testing, producing, deploying, and sustaining the guidance systems for each of these missions. Today we continue production and sustainment in both areas as we support the Trident II D-5 Life Extension.

For the U.S. Air Force, we continue to provide nuclear weapon support applicable to ICBM sustainment, and support Northrop Grumman on Sentinel modernization, while delivering cost efficiencies, assurance of operational performance, and a collaborative environment with increased customer access to critical information allowing improved decision making.

Our incremental modernization strategy enables effective sustainment of both the weapon system and the work force. We offer a proven track record of introducing new technology while maintaining nuclear surety, improving system performance, and lowering life cycle costs.

General Dynamics is recognized by the Defense Science Board for our knowledge management approach to retaining critical skills. Knowledge management, systematically passing domain expertise and unique experience from generation to generation, is critical to the success of the future Nuclear Deterrent Enterprise.

## Features

- Rigorous systems engineering
- Nuclear safety and surety
- Information assurance
- Hardware development
- Software development
- Independent validation and verification
- Radiation Hardening (Rad Hard) design and production
- Circuit card production for unique environments
- Parts control and tracking
- Modification of commercial-off-the-shelf (COTS) hardware and software for use in nuclear weapon systems
- Full spectrum of qualification and surveillance testing
- Knowledge management and knowledge transfer
- Transition management planning and execution
- Production and sustainment of other original equipment manufacturer (OEM) products
- Incremental modernization strategies for nuclear weapon systems
- Installation and checkout in operational weapons systems
- Repair and requalification of critical assets
- Support equipment modernization
- Personnel reliability program
- CMMI Level 5 Rating
- ISO: 9001 Certified

**GENERAL DYNAMICS**  
Mission Systems

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