

ICBM Sustainment & Modernization

Leveraging an over 50 year heritage of providing full life cycle strategic nuclear ballistic missile guidance, weapon control and nuclear weapon security



Leverage proven strategic weapon systems expertise to provide synergy and cost savings

Perform incremental modernization while preserving nuclear surety

Reduce cost and improve performance using cost-effective open architecture technology insertion

Provide the most recent strategic guidance modernization experience with improved situational awareness and proactive surveillance

Reduce unique training and provide DoD5210.41M compliance with proven nuclear weapon security solutions

Increase data collection and analysis and preserve critical assets with enhanced testing strategies for new development and ongoing sustainment

General Dynamics Mission Systems has a 50+ year heritage of providing full life cycle support for strategic nuclear ballistic guidance and weapon control systems. Our unique experience and proven capabilities enable us to support the U.S. Air Force intercontinental ballistic missile (ICBM) 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 Air Force Nuclear Enterprise.

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Offering unique experience and proven capabilities to support the Air Force Nuclear 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 sustainment in both areas as we support the Trident II D-5 Life Extension. This portfolio of experience and capability is directly applicable to the USAF ICBM mission. General Dynamics was recently selected to perform the ICBM Concept Design and Architecture-Guidance (CDAG) study, demonstrating our commitment to supporting the Nation's strategic deterrence mission, today and into the future.

General Dynamics Mission Systems has over 50 years of experience in the design, production, installation and sustainment of strategic nuclear weapon systems. We provide nuclear weapon system support applicable to ICBM sustainment, delivering cost efficiencies, assurance of operational performance and a collaborative environment with increased customer access to critical information to allow 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 Air Force Nuclear 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
- Nuclear weapons security systems IAW DoD 5210.41M
- CMMI Level 5 Rating
- ISO: 9001 Certified

GENERAL DYNAMICS

Mission Systems

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