

MSIS

R&D EG&G

Strategic Weapons Systems

Additional experience includes conducting R&D in the areas of ballistic missile trajectory, guidance, and atmospheric conditions as they apply to ballistic missile reentry systems, and methods for the application of strategic ballistic missile systems. This effort involves performing research on the calculation of electric fields produced by a high-altitude detonation of a nuclear weapon. Research and findings were documented in numerous technical memoranda including "Thermal Radiation From a Spherical Fireball" and "Derivation of a Simple Model of Spherical Fireball Hydrodynamic Growth."

Strategic Weapons Systems

EG&G develops and maintains software that supports the generation (at USSTRATCOM), processing and validation (at NSWCDD) of the Submarine Launched Ballistic Missile (SLBM) strategic targeting data. Team members design, develop, and test SLBM fire control software used for fire control prelaunch computations and for the expansion of Targeting Change Messages (TCMs) transmitted to the fleet. The SLBM software development team has been assessed at Capability Maturity Model (CMM) Level 2.

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Strategic Weapons Systems

EG&G is responsible for the receipt, acceptance, storage, and delivery of all SLBM Magnetic Tape Cartridges (MTCs). This effort also includes providing Quarterly Production and Inventory Status Reports as well as maintaining associated Government Furnished Equipment (GFE) and Government Furnished Materials (GFM) databases.

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Strategic Weapons Systems

EG&G is providing engineering and technical support for various types of computer storage, transportable media, and auxiliary Automated Data Processing (ADP) equipment and components for SLBM missions. These efforts include media certification, media repairs and storage; media engineering (analysis, requirements analysis, and specification development); providing trend, engineering, and failure analysis support for the resolution of subsystem conflicts between media, drive hardware and firmware, and subsystem software; and failure analysis of fleet media returned with Trouble Failure Reports (TFRs).

Reliability

FFC SWS - also -

defect & design deficiencies in SCOM storage media -

including identification of a firmware bug in tactical hard drives.

- Also work done in mod 6/7

target data
STRATCOM

NSWCDD

proc +
validation

Do
Database

also
proc +

val

data?

Strategic Weapons Systems

EG&G has provided management and execution support to the SLBM Fire Control (FC) Modernization and the Strategic Systems Program (SSP) Alteration (SPALT) program. This effort included preparing agendas, meeting minutes, action items, and program schedules.

Strategic Weapons Systems

EG&G also performs acceptance testing on all SLBM Magnetic Tape Cartridges (MTCs) to ensure high quality of the media. Acceptance testing includes several major steps and follows thorough step-by-step documentation for performing cartridge dimensional, torque and tension, and digital testing.

EG&G

Strategic Weapons Systems

Ships and Ships Systems

EG&G has performed detection and correction of design deficiencies, weak parts, and workmanship defects in SLBM storage media including the identification of a firmware bug in tactical hard drives. This effort has also included performing market research to determine product availability and End-of-Life information for Nuclear Power Guided Missile Submarine (SSGN) and SLBM Fire Control Systems Mod 6/7.

Strategic Weapons Systems

EG&G provides maintenance and technical support for the SLBM Distributed Graphical System Network (DGSNET) and the SLBM Internet-to-Desktop System (SIDS). Support includes establishing, testing, and upgrading of networks, workstations and support equipment hardware (such as the installment of fiber optic cables, network cards, switches, and routers) and the testing of giga-bit connections.