

SYSTEMS ENGINEERING SERVICES

From requirements definition to deployment and beyond

ENSCO has the experience and ability to address the big picture.

When you require an extremely high level of confidence in the performance of a system or product, you can rely on ENSCO. For more than 20 years, we have repeatedly proven our ability to deliver cost-effective mission success throughout the aerospace industry.

What are ENSCO's System Engineering Services?

ENSCO System Engineering services include the following activities:

- Provide consultative services to customers throughout the acquisition and development process
- Conduct trade studies to determine the best approach ensuring mission success
- Objectively work with the customer community to define requirements
- Analyze requirements and track them throughout the system life cycle
- Design or review a system architecture to make sure it meets all of the defined requirements
- Design a test and integration plan that will meet cost, schedule and risk objectives
- Monitor the system development to verify the implementation meets all system requirements
- Participate in system testing to verify that the system performs according to the specifications
- Analyze mission data to determine overall or subsystem performance
- Assess risk and develop mitigation strategies
- Independent Test and Evaluation Services, including software verification and validation
- Developing simulations and test tools supporting various tasks throughout a program life cycle

ENSCO Can Solve Your Systems Engineering Puzzle



How has ENSCO proven its skills?

ENSCO has proven its skills on critical range systems at the Air Force's Eastern and Western Ranges and at the Alaskan Aerospace Development Corporation Range.

ENSCO has extensive knowledge of missile flight safety systems, airborne vehicle systems (particularly navigation, telemetry and flight termination), test range instrumentation and communication, and geophysical and meteorological phenomena. Using a mix of computer, electrical and mechanical engineering talents, ENSCO performs special safety and performance studies on instrumentation, communications and processing systems.

Success

ENSCO has received many letters of appreciation, awards and special recognition for the value of our services. Of particular note is our work for the Florida Air National Guard and the Air Force Research Laboratory who chose ENSCO to provide Independent Test & Evaluation (IT&E) services for the ground segment of the Ballistic Missile Range Safety Technology (BMRST) program system, which is a mobile, stand-alone, range safety tracking and command control system.

ENSCO's role in the program helped advance the development of low-cost missile and launch vehicle onboard navigation and tracking products for use in a variety of government and commercial space launch applications.

07.0044



Innovation Starts Here

CORPORATE HEADQUARTERS

3110 Fairview Park Drive, Suite 300
Falls Church, VA 22042-4501
703-321-9000 • 800-ENSCO-VA
info@ensco.com • www.ensco.com



Our participation in the BMRST project resulted in an additional follow-on contract to provide continued operational IT&E services for the BMRST system. Through exposure to ENSCO on this same program, the Alaska Aerospace Development Corporation (AADC) also recognized ENSCO's excellence by awarding us a contract for independent evaluation of the Range Safety Systems at their Kodiak Launch Complex.

Our Expertise

As a research and systems engineering company, ENSCO has integrated its considerable knowledge and experience in several areas to provide service to our customers. We are well versed in electrical engineering, computer science, physical science and mathematics. This background permits us to provide comprehensive analysis of system, software, algorithm and circuit designs.

Our analysts are highly experienced in development and evaluation of top-down and bottom up structure methods. As a government contractor for many years, we have become intimately familiar with military standards for systems development. This background provides us with an understanding of the system evolution process, allowing us to evaluate the developer's activity regardless of the methodologies or standards used.

We use a mix of electrical engineers, mechanical engineers, computer engineers, mathematicians and scientists to perform feasibility, performance and safety studies. We employ techniques to isolate potential system faults and bottlenecks, develop performance envelopes and predict the ability of a system to meet heavy load requirements. These approaches are particularly useful in the evaluation of alternative system architectures.

Our Usage of Simulation

We employ a number of simulation and data generation tools to evaluate the ability of the system to perform under nominal and non-nominal conditions. Since 1989, ENSCO has developed mathematical models and simulators to reduce the risks associated with range instrumentation modernization programs. Using these tools to create test data and simulate sensor input, we can conduct performance testing at a point in the development cycle that is significantly earlier than a traditional test program, resulting in lower cost and lower risk solutions.

For more information, please contact:

Ron Ostroff

ostroff.ron@ensco.com

1-877-ENSCO-FL ext. 283

ENSCO, Inc.

Aerospace Sciences and Engineering Division

1980 N. Atlantic Ave. Suite 230

Cocoa Beach FL 32931