

AMSEC improves product and production success by tailoring and integrating RMA analyses with customer efforts. Mathematical models and computer simulations are developed to help predict overall performance once systems are deployed/fielded. Properly implemented, this process increases operational availability, reduces downtime, lowers maintenance costs, enhances personnel/equipment safety, optimizes equipment performance, identifies any possible need for equipment redundancy or fail-safe modes, and improves customer confidence. Our goal is to complement design engineering and product production while providing a product that has higher reliability and reduced maintenance requirements. To achieve this goal, we:

- control the RMA integration process;
- interject RMA system quantitative and qualitative requirements;
- conduct RMA trade-off analyses to support design alternative evaluation; and
- use system and equipment parameters such as Mean Time Between Failure (MTBF) and Mean Time To Repair (MTTR) to develop RMA models.



G07-0438

AMSEC performs RMA modeling by using several widely accepted commercial and government computer programs such as NAVSEA's TIGER and Relex. These models allow us to project system performance, influence the design process, and identify RMA critical items as early as possible,

thus reducing any potential impact on a product's critical design, testing, or production paths. The RMA methodology we employ provides full traceability so that customers, and ultimately the end-user, can have confidence in the analysis output and recommendations.

AMSEC's goal is to improve mission success of ships and systems/equipment by concurrently integrating RMA analyses with design efforts. Mathematical models and computer simulations are developed to help predict overall system and ship performance. The advantage of this process is increased operational availability, reduced downtime, lower upkeep costs, enhanced personnel safety, and improved customer confidence/satisfaction.



G07-0438

AMSEC looks for continuous improvements in RMA predictions as an indication that our systems engineering process has successfully integrated logistics engineering into the design process. This also ensures maximum availability of the product, resulting in minimal life-cycle costs to the customer.

**Points of Contact:** Doug Hess  
202.264.7147  
douglas.hess@hii-amsec.com

Ryan Norris  
757.631.2239  
ryan.norris@hii-amsec.com



**AMSEC**

A Subsidiary of Huntington Ingalls Industries

2829 Guardian Lane, Virginia Beach, VA 23452

www.amsec.com