



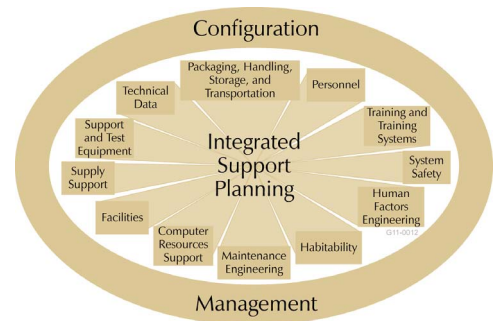
AMSEC has a process-oriented, analytical approach to integrating maintenance elements in order to provide the maximum system performance at the lowest total operating cost and to accomplish this basic engineering process in support of evolving, proactive maintenance programs.

- **Data-driven solutions:** Avoid the pitfalls of consensus decision-making that can occur with exclusive use of Subject Matter Experts (SMEs)
- **Verifiable Effectiveness:** Planned Returns on Investments (ROI) and Measures of Effectiveness that verify the ROI

### AMSEC Supportability Engineering Capabilities

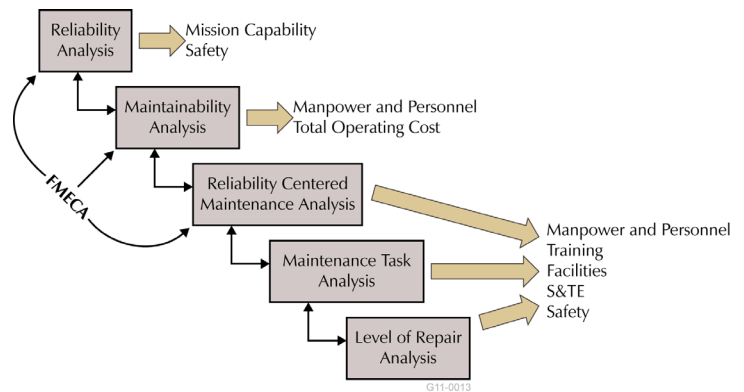
Supportability Engineering integrates 12 elements of logistics that support maintenance. AMSEC has active tasking in the majority of the Supportability Engineering elements and has strategic alliances for those elements that are specialty functions.

- **Maintenance Engineering** consists of reliability analysis, maintainability analysis, Reliability Centered Maintenance (RCM), Maintenance Task Analysis (MTA) and Level of Repair Analysis (LORA). These analyses relate the engineering function to the mission requirements and set the basis for the remaining supportability elements.
- **Computer Resources Support** encompasses defining the functionality of a Maintenance Management Information System to manage the maintenance function and to provide data for enhancement programs such as Total Enterprise Integrated Maintenance Strategy (TEIMS).
- **Facilities** are needed to perform the maintenance functions. Facilities are selected to optimize the applicable support and effective maintenance tasks at the least cost.
- **Supply Support** is balancing with readiness requirements the optimal mix of organic, government agency, direct vendor delivery, full-service contractor, prime vendor support, power-by-the-hour and performance-based logistics. Additional supply support includes equipment criticality, surge needs, contract periods, cost and funding, contractor presence and competition constraints and risks to provide the best value supply options.



**Elements of Supportability Engineering**

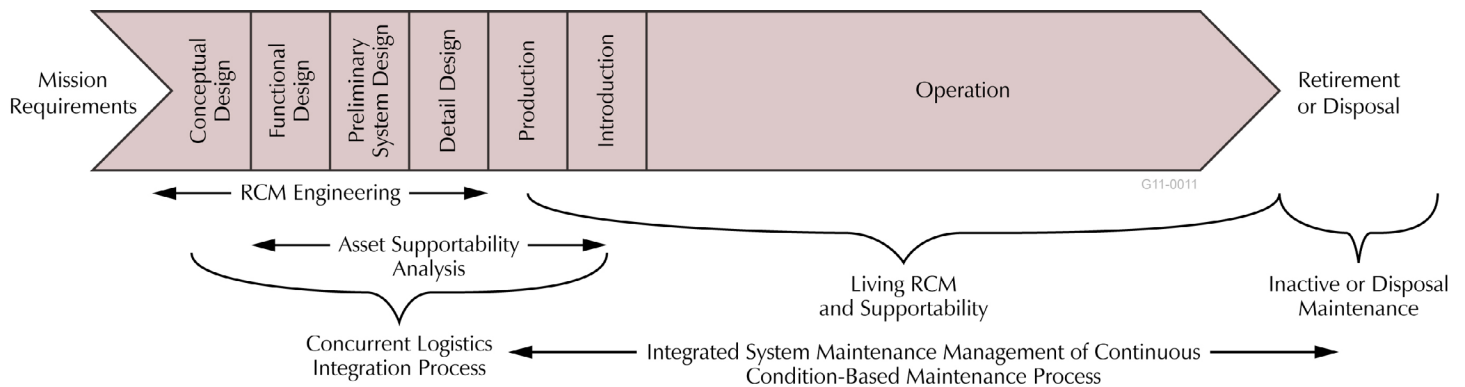
- **Support and Test Equipment (S&TE)** includes equipment selection, location, management and maintenance of the S&TE itself.
- **Technical Data** includes the creation and provision of accurate, current maintenance documentation in a variety of media to support the maintenance function.
- **Packaging, Handling, Storage and Transportation (PHS&T)** is the selection of the most cost-effective handling of the equipment and all associated support equipment, while meeting schedules and readiness objectives.
- The **Personnel** element involves the selection of the number, skill levels and location of personnel to support the maintenance function. This includes allowances for the ancillary functions that maintenance personnel must perform.





- **Training and Training Systems** are those training evolutions and equipment required to provide skilled maintenance personnel, including the management of maintenance as detailed in AMSEC's Maintenance University.
- **System Safety** covers all elements of safety, from the handling of hazardous materials to safe operating procedures to training specifications as they apply to ensuring safety.
- **Human Factors Engineering** covers the design of equipment to accommodate the majority of users and ensure that equipment is accessible for maintenance.
- **Habitability** addresses the quality of life issues associated with the maintenance functions.

AMSEC provides full integration of all the above elements as show below:



### Supportability Engineering from Cradle to Grave

Supportability Engineering is applicable from cradle to grave. All or any of the elements of Supportability Engineering can be used to augment system performance, from the conceptual design of new systems to the enhancement of existing systems to the disposal of old systems. Supportability Engineering enhances system performance and reduces cost over a system's life. AMSEC has the right expertise to provide comprehensive Supportability Engineering. Our RCM-certified engineering staff, multimedia trainers with their state-of-the-art facilities, safety engineers, S&TE experts, supply support personnel and habitability designers have all worked on Supportability Engineering projects for various customers, TYCOMs, at shore facilities and on major communications systems. AMSEC has provided integration leadership for multidisciplinary projects, and our solutions have demonstrable cost savings for our customers. Our Supportability Engineering staff is in place, and contract vehicles are available.

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