



Obsolescence Management

VSE's expertise in Service Life Extension and Technology Insertion ensures the overall service effectiveness of legacy systems and maximizes the return on new technology investment.

The *VSE Solution* employs engineers and technicians familiar with DoD systems and configuration management processes to deliver cost effective, state-of-the-art technology insertion or reverse engineering solutions, while maintaining effective configuration control.

The *VSE Advantage* is the unique ability to leverage and integrate expertise in engineering, manufacturing, repair, and logistics support for legacy systems to provide innovative solutions to meet obsolescence demands.

Obsolescence management has become critical to military systems due to rapid technology advancements and to fill the gap between legacy and objective force infrastructures. VSE's obsolescence management capabilities provide solutions throughout the systems lifecycle.

Technology Roadmapping

VSE applies technology roadmapping techniques to identify critical current and future product needs that will drive technology selection and development decisions; identify, screen, and select the technology alternatives that can satisfy those needs; and generate and implement a plan to develop and deploy those technologies. The use of technology roadmaps minimizes risk of obsolescence and develops a strategy for technology insertion during the entire lifecycle. Through technology roadmapping, VSE develops the information necessary to make better technology investment decisions: first by identifying critical technologies or technology gaps that must be filled to meet product performance requirements; then by identifying ways to leverage R&D investments – within an individual program, throughout a systems area, or among broad strategic industry-government alliances.

Technology Insertion

VSE's technology insertion programs proactively resolve obsolescence issues. By introducing new technology into a design, manufacturing, or maintenance process, VSE delivers measured and reliable improvements in performance, reliability, or maintainability. VSE implemented technology insertion programs on a wide variety

of systems from wheeled and tracked vehicles to aircraft, ships, and combat service support systems, which have resulted in demonstrated improvements in:

- Performance
- Ruggedization
- Survivability
- Material and structural viability
- Safety and health
- Total lifecycle costs

Diminishing Manufacturing Sources and Material Shortages (DMSMS) Response

VSE's range of capabilities, particularly in the areas of reverse engineering and acquisition engineering, enables us to select and execute the most effective resolutions to DSMS challenges:

- *Alternate Sourcing*- VSE develops or completes the specifications and technical data necessary to develop new aftermarket sources to reproduce DMSMS parts.
- *Substitution*- VSE engineers analyze DMSMS items to locate and analyze similar COTS parts for form, fit, function, and ruggedization to identify potential replacement, and prepare any engineering changes or waivers that may be required to adopt the substituted item.
- *Redesign*- VSE engineers design out DMSMS items via engineering changes at various system levels, to enhance system performance and improve reliability and maintainability.

