C4 and Systems Integration

Life Cycle Management

INTEGRATED PRODUCT SUPPORT

Readiness

Modernization
Today’s tactical vehicles must perform reliably within severe operating environments, while protecting those who serve. For more than 90 years, Oshkosh Defense has been designing, delivering and sustaining best-in-class vehicles to serve military and security missions around the world. Oshkosh has the experience to deliver tactical vehicles with cutting-edge integration solutions for today’s missions, and the versatility for future enhancements.

After thousands of mission miles in the most rugged terrain and adverse conditions, vehicle components may need to be repaired, refurbished or updated. That’s why Oshkosh is also dedicated to providing life cycle management, readiness and modernization services that keep vehicles running at peak performance and up-to-date with the most advanced technologies and protection available. We provide what you need, where and when you need it.
Wide-Ranging C4 Solutions
- Command and Control: On-the-move battlefield Situational Awareness (SA) systems and Global Positioning Systems
- Communications: HF, VHF, UHF, SATCOM and vehicle intercoms
- Computers: Centralized computers and Smart Displays including network and software integration
- Electronic Warfare: Counter Radio Electronic Warfare systems
- Weapons: Turret Operated Systems, Remote Weapons Systems and Tube Launched Missile System
- Exportable Power: AC and DC

Complete Integration Services
- C4 integration engineering and design specialist team with extensive experience
- Consulting for vehicle integration to third party integrators
- Complete adaptation and installation of existing kits into vehicle platforms
- Custom kit design with complete mechanical, electrical and user interfaces
- Full vehicle network and software integration for data sharing between systems and information consolidation
- Complete in-house installation and testing of C4 equipment
- Worldwide integration capabilities

The Oshkosh Integration Advantage
- Unique understanding of vehicle design and C4 equipment integration for optimized vehicle and C4 performance capabilities
- Work with customer on design and equipment placement to meet demands for operation, visibility, ergonomics and process simplification between multiple systems
- Oshkosh vehicles are designed with the versatility to incorporate a wide-range of C4 equipment for today’s mission, and future capabilities for tomorrow’s
- C4 mechanical, electrical and user interface factored into vehicle designs to reduce integration time and optimize overall system performance
- In-house integration allows for more efficiency to meet delivery schedules
Modern tactical vehicles put performance and versatility to the test on every mission. Oshkosh combines a proven history of vehicle design and production with extensive C4 and systems integration capabilities to enhance the user experience and optimize overall system performance. Our vehicles are designed integration-ready for a diverse range of equipment without the need for disassembly or bolt on installation. Every platform takes into account accessibility, visibility and versatility to adapt to the ever-changing mission.
Supportability Analysis
• Assessment measuring performance and cost impacts associated with all product life cycle stages
• Leverages existing product and logistics data to deliver performance-based outcomes
• Drives down the total life cycle cost through minimized logistics footprint
• Utilizes design, model and simulation technologies to optimize life cycle cost
• Collect and analyze product data to aid in proactive, preventative vehicle support
• Provides visibility into overall product/fleet health and identifies opportunities for improvement

Publications and Provisioning
• Operator and maintenance manuals, with Interactive Electronic Technical Manuals (IETM) with equipment diagnostic and troubleshooting capabilities
• Parts provisioning with enhanced schematics and Repair Parts and Special Tools List (RPSTL) data
• Maintenance data management
• Electronic inspection and maintenance documentation with point-to-point (PTP) with hydraulic, pneumatic and electrical schematics

Diagnostics and Condition-Based Technology
• Sensors for monitoring critical components and systems such as engine oil quality and level
• Monitor and broadcast diagnostics and vehicle status to dash displays
• Sophisticated algorithms for proactive, predictive maintenance analysis
• Telematics and terrain mapping (using GPS and accelerometers)
• Data logging of vehicle information from J1939/J1708/J1587 communication buses
• Calculates data items such as fuel consumption and other parameters
• Allows the operator to perform/configure (+, −, /, x, max, min, mean, RMS) functions to data items for proactive, predictive maintenance analysis

Training
• Blended instruction solutions incorporate classroom, hands-on diagnostics and troubleshooting, as well as Virtual Task Trainers (VTT)
• Operation and maintenance instruction in accordance with the vehicle design
• Standard and customized courses for vehicles across the entire Oshkosh vehicle portfolio
• Trainers with extensive technical knowledge and experience
• Instruction that goes where you go to maximize learning and minimize tuition and travel costs
• Oshkosh Learning Management System (LMS) offers customizable training programs including e-Learning solutions
Oshkosh stands behind you and your vehicles with accurate and proactive life cycle management services. Anytime. Anywhere. With blended training solutions, Condition-Based Maintenance (CBM) technology and interactive publications, we provide critical vehicle logistics support with proven expertise. Our team of experts is trained to deliver comprehensive services, optimizing vehicle life cycle cost and advancing the highest level of fleet readiness.
FOR WHATEVER THE WORLD THROWS YOUR WAY.

Parts
- Lean supply chain management for efficient, accurate parts support and delivery with worldwide distribution
- 24/7 retail support team provides constant, real-time service
- Most critical components are stocked on regional, wholesale and retail levels for instant 24/7/365 access worldwide
- Capable of producing and packaging thousands of vehicle upgrade kits to military specifications and shipping the kits to the field
- Component rebuild and exchange program

Field Operations
- Scheduled and unscheduled maintenance services performed in the U.S. and abroad
- Maintenance services include vehicle body adjustments, component restoration, as well as removal or replacement of worn or damaged integral parts
- Upgrade kit installation including armor and suspension systems
- Lean manufacturing techniques help deliver the highest quality vehicle services consistently on time
- Established 10 operations in less than 60 days in Afghanistan
- Completed over 700 underbody improvement kit (UIK) upgrades within two months, and more than 5,000 upgrades to date in the field

Technical Support
- Field Service Representatives (FSRs) are OEM trained and deployed globally
- Product testing and fielding sites with technical assistance, including retrofit and repair assistance
- Equipment failure analysis
- Battle damage repair solutions
Readiness means 24/7 support with worldwide parts distribution, and expert maintenance services anywhere the mission takes you. To keep pace with the modern mission, Oshkosh utilizes lean supply chain management for efficient and cost-effective parts ordering and delivery, while our knowledgeable engineers are on standby to deliver logistics expertise and technical assistance. Our global maintenance operations and support team makes sure you have everything you need to keep vehicles ready for every mission.
Technology Insertion Kits
- Update vehicles overtime with technological advancements and mission-specific enhancements
- Modular, plug-and-play equipment capabilities for greater fleet flexibility
- Active safety system kits provide improved performance and handling, allowing the driver to maintain control of the vehicle and avoid accidents
- Crew safety and awareness technology kits, including electronic stability, rollover protection and warning, collision warning, blind spot detection
- Power generation upgrades, silent watch, telematics and fleet management

Vehicle Platform Modernization
- Extensive experience with modernization of both Oshkosh vehicle platforms and competitor platforms
- Regional or global installation operations support
- Field facilities are set up and ready to work in as little as three days
- Capacity to deliver high-volume installations in rapid time
- Replaced the HMMWV entire chassis, updated all armor and suspension systems, as well as many other components
- Upgraded over 4,400 legacy MRAPs with TAK-4® independent suspension systems for improved mobility in Afghanistan

Recapitalization Solutions
- Recaps upgrade vehicles to current operational readiness with the same performance and life cycle cost advantages of a new vehicle, including a new bumper-to-bumper warranty
- Recapitalization allows the integration of new technologies including brighter headlights, four-point seatbelts, air ride suspension and improved armor protection
- Vehicles come off line in zero-mile, zero-hour condition
- Lean strategies help reduce vehicle life cycle costs
- Successfully completed recapitalization of more than 11,000 HEMTTs

Reset Solutions
- Factory or in-theatre reset facility solutions
- Resets restore vehicles to like-new condition with proven repair kits
- Reset capabilities include a wide variety of repair kits, such as brakes, steering, engine and transmission assemblies, and numerous upgrade and auxiliary kits
- Rapid turnaround times to support readiness levels
- Refurbished over 2,000 heavy and linehaul fleet vehicles within four years in Kuwait

SCALABLE SOLUTIONS TO KEEP YOU IN FRONT.
All Oshkosh modernization services provide one-source solutions, incorporating the latest vehicle technologies and protection upgrades to help reduce life cycle costs. We provide solutions that ensure rapid turnaround and high readiness levels, including full-scale vehicle remanufacturing to zero-mile, zero-hour condition.

When vehicles require restoration or mission-critical upgrades, we respond rapidly with cost-effective solutions. Count on Oshkosh modernization solutions to keep your vehicles operating at top performance levels.