

A soldier in camouflage uniform and safety glasses is working on the undercarriage of a vehicle. He is using a power tool connected to a red hose. A bright work light is illuminating the area. The soldier's uniform has "U.S. ARMY" and "SAVARD" visible on it.

# Matériel Management of Readiness Drivers

■ By Jerry Figueroa

*Pvt. Adam J. Savard and Pvt. Dakota S. Bohl, Arizona Army National Guard, remove the half-shaft on an humvee during an inspection service on March 14, 2017, at the TACOM Fleet Management Expansion Tactical Vehicle Division at Fort Benning, Ga. (Photo by Staff Sgt. Brian A. Barbour)*





*“The Army Materiel Command and its subordinate life cycle management commands have a national-level responsibility for materiel management. As defined in several places in Army sustainment doctrine, materiel management functions include warehousing, cataloging, requirements determination and validation, prioritization for procurement, distribution, redistribution of excess, and materiel retrograde. Materiel management is the application of all these functions to produce the highest level of readiness within given funding constraints and changing priorities.*

*This article discusses the materiel management of readiness drivers. Readiness drivers can be many things, but for the purpose of this discussion we will focus on repair parts.*

*The TACOM Life Cycle Management Command and its joint partner the Defense Logistics Agency are responsible for materiel management of items associated with Soldier support, ground systems, and weapons. They are also responsible for many associated items for more than 60 percent of the equipment within a brigade combat team and more than 57*

*percent of all Army major end items. TACOM manages more than 45,000 national stock numbers, while the Defense Logistics Agency manages more than 322,000.*

*In this article, the director for readiness and sustainment for ground combat systems at TACOM’s Integrated Logistics Support Center will discuss how TACOM performs materiel management of these critical readiness drivers.*

*One way to better communicate this role to supported organizations is through a TACOM-initiated training program called “TACOM 102.” This class is specifically targeted to operational- and tactical-level sustainment units that are responsible for executing materiel management functions across the Army. The class is designed to enable those materiel managers to better understand and communicate requirements and problems to TACOM to increase equipment readiness for the force.”*

*—Maj. Gen. Clark W. LeMasters Jr.,  
TACOM Life Cycle Management Command*



# The TACOM Life Cycle Management Command performs materiel management of critical readiness drivers such as repair parts and major end items.

The global combat environment has evolved to be dynamic and fluid, requiring today's Army to be nimble and responsive to changing circumstances and emerging threats. Maintaining a high readiness posture is paramount to successful mission accomplishment, especially considering that today's operations are often executed in austere conditions.

Materiel readiness is a complex issue determined by a number of factors including training, maintenance discipline, equipment shortages, and facilities infrastructure. The availability of class IX (repair parts) is most closely associated with maintaining acceptable readiness levels and is a critical element in facilitating successful mission accomplishment.

Materiel managers at the national level are responsible for all aspects of class IX management, but it is unquestionably a team effort. Managers routinely work with engineers, maintenance managers, program managers, and others to ensure accurate coding and up-to-date item configuration data and drawings.

While executing their responsibilities, managers make decisions about demand planning, requirements determination, and distribution. Distribution decisions are critical when availability is scarce; managers must determine the optimal distribution of parts to enable maximum readiness throughout the Army inventory.

## The LMP

The Logistics Modernization Program (LMP) has enabled the Army Materiel Command (AMC) to move into the next phase of enabling combat power and power projection for today's Army. It allows AMC to better execute national-level materiel management.

The LMP is a commercial off-the-shelf enterprise resource planning system that has changed the way AMC's life cycle management

commands manage class IX supplies and supply chains, task organize the organic industrial base, and pre-position supplies to enable global power projection.

The LMP facilitates real-time visibility of emerging trends, allowing managers to anticipate class IX demand and respond by pre-positioning the appropriate supplies to enable uninterrupted operations. The LMP also enables real-time self-assessment of supply chain performance and responsiveness to the Army's support requirements.

## The SMCAT

The TACOM Life Cycle Management Command has developed a number of automated systems that assist secondary item managers with executing materiel management functions. These systems help managers to anticipate field consumption of spares and measure performance against well-established metrics.

The Supply and Maintenance Cost Analysis Tool (SMCAT) extracts LMP data to provide "dashboards" that portray real-time statuses of supply availability and outstanding backorders that are stratified by priority and brigade combat team (BCT). These dashboards have the flexibility to drill down to the individual national stock number level or provide an overview of the health of an entire weapon system.

Additional class IX metrics include disposal actions, Defense Logistics Agency materiel availability, procurement lead times, excess, storage costs, and blocked orders. Materiel managers can review the existing history of quality deficiency reports against individual items of supply, allowing for causative research of premature failure or the pre-positioning of additional assets to account for the commensurate demand spike.

Managers act upon the data in SMCAT and work in conjunction with the TACOM engineering

community to rectify any identified quality deficiency issues and allow for more cost-effective support. The SMCAT capability gives item managers a holistic view of the status of individual supply items in order to execute the optimal support strategy.

SMCAT also allows for support of operations driven by the Sustainable Readiness Model by identifying the class IX status of BCTs entering a training phase or deploying for operations. SMCAT can drill down into a division, installation, or BCT to assess supply availability, backorders, and shortages of authorized stockage list requirements. It also includes working capital financial data, such as sales, credits, demands, and backorders.

SMCAT provides real-time data for class VII (major end items) management to include outstanding Department of the Army Form 2028, Recommended Changes to Publications and Blank Forms, submissions for proposed changes to technical manuals, storage costs, depot inventory, and disposal actions. Organic industrial base metrics include depot “performance to promise,” new orders, revenue, cost overruns, and unfilled orders.

SMCAT enables readiness by allowing managers to assess data in order to make workload decisions to optimize class VII availability and enhance equipment on hand statistics.

### **Sales and Operations Planning**

The LMP enables TACOM to take advantage of best business practices for supply chain management. Such practices include sales and operations planning (S&OP) techniques by which class IX performance is assessed at both the macro and micro levels.

S&OP allows midlevel and senior managers to assess class IX performance and make real-time changes to support strategy as appropriate. The technique is a recognized best practice in industry and has been

a part of the TACOM assessment regimen for more than three years.

S&OP has facilitated positive changes to supply support strategies by identifying demand trends and inventory levels and by forecasting accuracy trends.

The technique allowed TACOM to recognize that its materiel requirements planning process was chronically underforecasting demand for critical items of supply on major ground combat and combat support systems. Managers recognized that operational tempo increases were forcing increased consumption of class IX items.

Through LMP data mining techniques, TACOM identified the items that were causing the problem and took action to align the forecasts with actual demand. TACOM fully anticipates that this one action will provide for a more robust supply chain that is more responsive to field-level requirements.

S&OP processes also allow materiel managers to assess turnover rates for existing inventory. This assessment often leads to the disposal of unnecessary stocks and saves storage costs.

To date, TACOM has been able to dispose of excess inventory worth more than \$200 million. TACOM has more productively used those funds that otherwise would have paid for unnecessary storage costs.

### **Forecasting for New BCTs**

TACOM employed LMP planning scenarios to anticipate authorized stockage list and consumption requirements for the Army’s planned 15th and 16th BCTs and facilitated efforts to begin to fill the supply pipeline. By analyzing historical data of similar BCTs, TACOM extrapolated data generated by those operations into a forecast of class IX requirements for the new BCTs.

Accounting for variances in equipment and fleet densities, TACOM now has an emerging picture of the class IX requirements to support operations in those BCTs.

The analysis has allowed TACOM to engage its contracting community to begin the procurement process for those assets, ensuring their availability when the BCTs stand up.

This technique will also assist TACOM in forecasting repair parts requirements and initial issue quantities for newly fielded systems, such as the joint light tactical vehicle, armored multipurpose vehicle, and mobile protected firepower.

The LMP is a well-established industry standard and has proven to be an invaluable asset for the logistics support of TACOM’s ground fleets. In an uncertain environment, the Army demands a logistics support system that is not only nimble enough to respond to changing conditions but is also capable of anticipating requirements and pre-positioning stocks to meet demand. The LMP is proving to be an enabling mechanism to meet that challenge.

Materiel management at the national level is a team sport; it requires all members of the team to focus on balancing the materiel management functions of warehousing, cataloging, requirements determination and validation, prioritization for procurement, distribution, redistribution of excess, and retrograde of materiel.

To effectively sustain a supply chain, all members of the team, from the shop stock clerk in an armor company to the item manager at TACOM, must do their parts.

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