Filling the Materiel Management Gap

■ By Maj. Gen. Paul C. Hurley Jr. and Lt. Col. Tracie M. Henry-Neill

len years ago, then Maj. Gen. Mitchell H. Stevenson wrote an article for the May-June 2007 issue of Army Logistician entitled "Where's my MMC?" The article described how materiel management would be performed without materiel management centers in the modular sustainment force. His article laid out the vision for materiel management across all echelons and particularly within sustainment commands at echelons above brigade (EAB).

How It Was Supposed to Work

A fundamental concept of the modular force was the single EAB logistics command and control structure. The goal was a streamlined logistics force structure driven by the Army's decision to move from a divisioncentric force to a brigade-centric one. Sustainment capabilities would be pushed forward to create more self-sufficiency at the brigade combat team level.

The vision for how materiel management would work under this new system relied on two premises. First, the system was predicated on the maturation of emerging automated systems such as the Battle Command Sustainment Support System (BCS3).

Second, the solution gave specific logistics planning and execution responsibilities to the division and brigade staffs. The G-4 and S-4s would have robust staffs and assume all the property book functions to include asset visibility roles.

Although not explicitly stated, there was an assumption that the experience levels in sustainment commands would remain the same since they would be taking on some materiel management for forward formations.

The Problems

Feedback from corps and division

commanders indicates that a perceived materiel management gap currently exists. Commanders are not receiving the same level of rigorous analysis and materiel management that they had with materiel management centers.

Several factors have contributed to this situation. For one thing, the enablers that the Army counted on in 2007 are in some ways still emerging. Legacy sustainment information systems are still being merged into current systems. Additionally, BCS3 was never able to deliver the capabilities that planners expected

The Army also still lacks adequate business intelligence/business warehouse (BI/BW) capabilities to allow for analytic forecasting, a logistics common operational picture, supply chain management visibility, and synchronization from the strategic to tactical levels.

Another key factor has been that the robust staffs required for the expanded G-4/S-4 mission were never fully developed, and then they were even reduced in size. The current division G-4 section is authorized only 80 percent of the staff of the original design. As a result, the staff is forced to focus almost exclusively on day-to-day operations rather than managerial analytics.

On top of the structural issue, mandated grade plate reductions severely reduced experience levels at EAB sustainment units, such as theater sustainment commands (TSCs), expeditionary sustainment commands, and sustainment brigades. Materiel management in the modular force rested on these units.

A final issue is that the Army lacks a clear understanding of materiel management roles, responsibilities, and tasks by echelon.



Combined Arms Support Command is working to fill a matemanagement gap caused by the modular force's lack of materiel management centers.





Lt. Col. Andrew Duss, a product manager for Program Executive Office Aviation, explains to Gen. James McConville, the vice chief of staff of the Army, new avionics developments on a UH-60V Blackhawk helicopter during a visit to Redstone Arsenal, Ala., on Aug. 3, 2017. (Photo by Sgt. 1st Class Teddy Wade)

Current Initiatives

In January 2017, the Combined Arms Support Command (CAS-COM) hosted a session with more than 15 organizations to take a hard look at distribution management and materiel management (DM3). Findings from that session were validated at the DM3 Seminar in June 2017, which included participants from the Department of the Army G-4, the Army Materiel Command (AMC), the Army Sustainment Command, and several TSCs. The participants identified a number of major solutions and the changes required to implement them.

Doctrine. Future sustainment doctrine will better articulate the DM3

process, roles, and responsibilities across echelons. CASCOM will publish multifunctional sustainment and quartermaster doctrine by the end of fiscal year 2019. It will also work to make changes to joint doctrine to clarify the DM3 process.

Organization. During the examination of the DM3 process, it became clear that leveraging movement control is essential and that grade plate reductions at EAB had hit theater-level movement control especially hard. This led to the development of the theater movement control element (TMCE).

Starting in the fourth quarter of fiscal year 2018, the Army will field six TMCEs to augment TSCs. The

TMCEs will provide movement management, container management, and highway regulation and coordination for personnel and materiel movements.

Training. CASCOM has developed an enterprise resource planning (ERP) systems training strategy for Army personnel of all branches and components. Soldiers are currently being trained in the Global Combat Support System-Army (GCSS-Army) and the General Fund Enterprise Business System.

To fully implement the strategy, CASCOM is pursuing a live training environment, which will provide realistic, hands-on training at the operator, middle manager, and senior leader levels. CASCOM will leverage technology to develop content that can be shared for instruction across all three domains of training: institutional, operational, and self-development.

Materiel. Since the divestiture of BCS3, the Materiel Common Operating Picture has served as an interim solution for some BI/BW capabilities. Ultimately, full BI/BW capability will reside in the Army Readiness Common Operating Picture (AR-COP). This system will provide commanders at every echelon, both at home station and deployed, a tailorable, integrated, and continually updatable readiness picture.

The AR-COP's dashboard view, which is organized by commodity with near-real-time data, will establish a base for the predictive analytics of the future. The AR-COP fielding will begin in the summer of 2018.

In addition, the Army's Fuels Automated Management System will support petroleum needs within joint combined arms operations. When implemented, the system will vastly improve real-time visibility, accountability, and reporting for ground and mobile storage assets. It will also add a secondary billing capability.

Leadership. As materiel management doctrine has evolved, so has leadership education. However, CASCOM will have to examine what is integrated into professional military education (PME) for all cohorts, considering that courses must have zero growth.

Functional courses can help. The Support Operations Course covers materiel management at the tactical level, and the Theater Sustainment Planners Course and the Joint Logistics Course cover the topic at the operational level. A new GCSS-Army Middle Managers Course is also being developed and is expected to be implemented in fiscal year 2018.

Another functional course may be required to help bridge the gap that PME cannot fill, particularly for noncommissioned officers and warrant officers. However, the institutional domain cannot meet the entire need. Leaders will have to take advantage of experience in operational assignments and self-development to expand their knowledge.

Personnel. CASCOM is currently conducting a study to determine the appropriate sustainment automation support management office (SAS-MO) military occupational specialty to perform duties as access administrator for GCSS-Army and emerging ERP updates.

The SASMO is responsible for providing dedicated automation support to the various logistics automation systems, but the role has not been redesigned since GCSS-Army was implemented. This study will inform force structure, training, and leadership solutions for the future force.

Policy. As GCSS–Army is fully fielded, the Army must update the appropriate policies to reflect the impact that enabling ERP systems have on operations. Specifically, the Army will have to update the following publications by fiscal year 2019 to clarify policies that incorporate GCSS–Army:

- ☐ Army Regulation (AR) 700-15, Packaging of Materiel.
- ☐ AR 710-2, Supply Policy Below the National Level. AR 56-4,

Distribution of Materiel and Distribution Platform Management.

☐ Department of the Army Pamphlet 700-32, Packaging of Army Materiel.

At the same time, CASCOM, in coordination with the Army G-4, is moving forward to refine the governance strategy for GCSS-Army in fiscal year 2018. The strategy will engage senior leaders and develop buy-in for decisions affecting business areas throughout the Army. The governance process will explore ways to accomplish three objectives: increased leadership visibility, accountability, and communication.

The Next 10 Years

Advancements in the mid and far terms (2027 and beyond) will continue to provide ways to mitigate challenges within DM3. The goal for decision support tools will be the ability to fuse available enterprise sustainment data and external data and present it within a tailorable dynamic tool. This will enable sustainment integration with the mission command network.

CASCOM will also continue working on predictive analytics within ERP systems to enhance joint interoperability. Truly effective DM3 will require the melding of many manual and automated sustainment systems to feed a joint common operational picture.

These goals will depend on improved sensor technology to develop platform self-reporting readiness capability and artificial intelligence technology to improve situational awareness.

Another critical area for the future of DM3 is the network on which the ERP system operates. The future adversary will likely target and attempt to exploit the network and logistics information to gain an advantage.

ERP systems are particularly vulnerable to cyberthreats. CASCOM is working with both the Mission Command Center of Excellence and the Cyber Center of Excellence to

address the protection requirements for the entire supply chain.

Changes within strategic partner organizations such as AMC will enhance the interface between the operational and strategic levels of materiel management. Establishing the theater readiness support brigade and the Army readiness support brigade will provide the necessary interface between Army forces and AMC. This will likely eliminate the requirement for AMC to develop ad hoc teams to overcome shortfalls in TSC-level staffs for materiel management.

Transformation in the Army is constant; making sure we have the right capabilities to fight and win our nation's wars is difficult as the operational environment continues to change.

Ten years ago, the decision to transition from a division-centric force resulted in a modular sustainment structure that has endured and proven itself in battle. Since then, operational, structural, and technological changes have affected DM3 significantly. CASCOM, in turn, must continue to evolve to provide the ability to manage sustainment to build and maintain readiness.

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