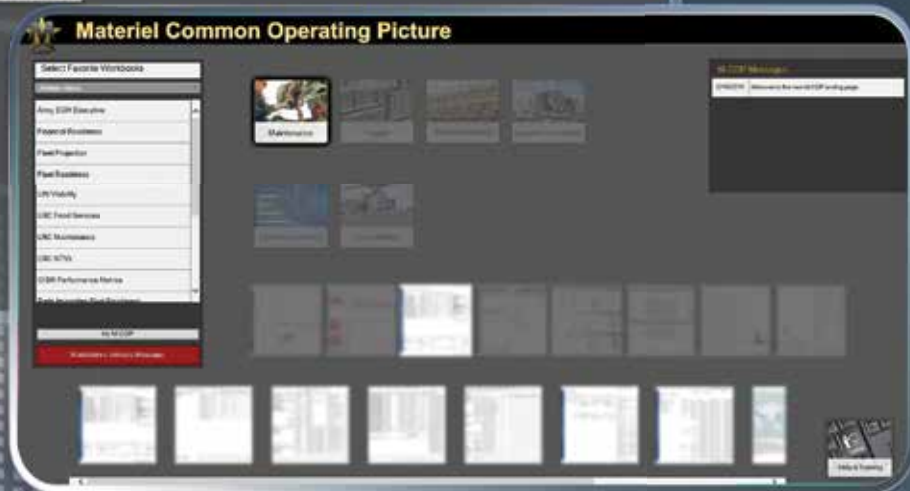


Visualizing Army Readiness Through the Materiel Common Operating Picture

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Visual illustration by Stefanie Antosh



As the Army's lead materiel integrator, the Army Materiel Command (AMC) manages the global supply chain and synchronizes logistics activities across the Army to deliver readiness. Resources are not in infinite supply; therefore, the Army's ability to see and make decisions about readiness is critical. Managing the supply chain and synchronizing efforts and effects requires visibility of readiness rates and sustainment activities from the tactical to the strategic levels of support.

While the tactical level is where readiness exists, all readiness resourcing happens at the operational and strategic levels. Synchronizing readiness and resourcing information to achieve one common picture is paramount.

What started out as an idea written on a napkin has evolved into a common operational picture and business intelligence capability that provides

commanders with predictive readiness insight to make key readiness and resourcing decisions. This business intelligence system is known as the Materiel Common Operating Picture (M-COP).

Why the M-COP?

As the Army transitioned from counterinsurgency operations, logistics information systems transitioned simultaneously. Enterprise resource planning (ERP) systems reinvented data processing and analysis and have provided an electronic way to accomplish tasks that before could be done only manually.

The ERP capability provides tremendous potential for Army human resources, finance, and logistics. At AMC, an ERP system called the Logistics Modernization Program has helped modernize depot and arsenal operations, increased depot inventory control, and reduced stocks by more

than \$10 billion.

Additionally, a single ERP system, the Global Combat Support System—Army (GCSS—Army), has replaced the Standard Army Maintenance System (SAMS), Standard Army Retail Supply System, and Property Book Unit Supply Enhanced (PBUSE) for managing all maintenance, supply, and property functions. This single system provides better analysis and linkage between a unit's property and its sustainment operations.

However, the expanding amount of data and information available through ERPs has made it harder to see key readiness indicators. Adding to this difficulty is the fact that a portion of the force still uses SAMS and PBUSE because the Army is still in the process of developing and fielding GCSS—Army.

While ERP systems integrate more data and information, they are built using software that does not com-

FEATURES

A tool developed by the Logistics Support Activity provides commanders with up-to-date readiness information from 17 different systems.

municate with the Army's legacy systems. This has resulted in two separate systems for reporting Army readiness.

Army leaders need a means to see readiness comprehensively. The M-COP has become an increasingly capable lens for the necessary visibility to make decisions to sustain the Army.

What Is the M-COP?

The M-COP is a web-based tool that incorporates and analyzes data from 17 different sources. Through automated processes, the M-COP creates workbooks and dashboards that provide reports on fleet readiness, unit maintenance, supply operations, warehouse operations, installation logistics readiness center operations, and other functional logistics areas.

The M-COP was developed by AMC's Logistics Support Activity (LOGSA), which also developed the Theater Provided Equipment Planner and the Lead Materiel Integrator Decision Support Tool (LMI DST). These previous developments provided a proof of concept for the M-COP.

What Does the M-COP Do?

The M-COP allows leaders at all levels to see multitiered views of key readiness areas or to focus on specific functional areas, such as maintenance, supply, or finance. The M-COP preserves leaders' custom views, allowing them to review and act on information faster. Leaders use this information to make decisions and to review how unit performance aligns with the Army's goals.

The M-COP provides one consolidated readiness picture for tactical, operational, and strategic commands. While the Army uses SAMS and PBUSE in the legacy information systems environment and GCSS-Army in the ERP environment, M-COP consolidates these readiness feeds into a single view of critical fleet readiness, unit property levels, and more.

Once in M-COP, users can tailor their views to their respective needs (for example, information about a specific battalion, brigade, or class of supply) without disrupting or breaking the integrity of the data viewed by other users. After users set up and sort data specific to their needs one time, M-COP will update their established reports daily with necessary data while maintaining a complete data set to be used at other levels.

By using the Army's agreed upon metrics and standards applied as business rules, M-COP automates data analysis and information presentation so that fleet readiness is measured the same at all levels. A supply technician may focus on a specific supply support activity and view its performance in M-COP, while a division G-4 or sustainment brigade may view all of the supply support activities in the division. The M-COP provides single and combined unit views of performance, measured against established metrics and business rules, to accommodate both types of users.

The M-COP also provides a quality control capability for units and staffs as Soldiers continue to learn GCSS-Army. As the M-COP pulls property and maintenance data from units with GCSS-Army, it exposes errors within the system that units do not always see.

GCSS-Army is still new to many users, and some legacy system processes are not conducted in the same way in GCSS-Army. In M-COP, leaders can apply quality checks on their own units' data to ensure what is reported for maintenance and supply is correct.

The M-COP links directly to the LMI DST and provides reports on a unit's progress in executing the turn-in, transfer, or disposal of excess property. While LMI DST sees all unit property book data, including on-hand in lieu of items, the M-COP provides a quick view of unit and installation performance.

The M-COP also provides the ca-

pability for units to conduct meetings and reviews without spending staffs' time building presentations and standalone reports. Staffs can instead spend this time taking action by visiting unit motor pools, maintenance shops, or supply support activities to better understand challenges on the ground. They can also use this time to talk to installation supply representatives or item managers about the delivery of parts with long lead times.

M-COP provides the ability to tailor, save, and share views that will update daily, both on the nonsecure internet protocol router network and on the secret internet protocol router network. Units can conduct nearly all aspects of a brigade maintenance meeting in a live setting without spending hours and days doing staff preparation.

Using prebuilt M-COP views, they can review key maintenance and safety messages, a unit's fleet readiness and projection reports, work order and supply part statuses, and recoverable and repairable items.

M-COP Improvements

The M-COP is continuing to improve by automating division readiness reviews, corps logistics readiness reviews, and other key readiness forums to further reduce the churn and burden of staff preparation.

The logistics community has requested that M-COP allow users to tailor their respective and relative views in any workbook and then save the view. This will allow users to log in to M-COP at any time and view saved workbooks with refreshed data. Users can then share saved views through email with other M-COP account holders (subordinates, partners, and higher headquarters) without developing reports or presentations.

Within the last year, more critical data has been added to the M-COP. At the request of the Army G-4 and the commanding general of the Combined Arms Support Command, LOGSA added 10 additional

dashboard views of information to meet 10 brigade-and-below capabilities, transforming the M-COP from an AMC product to an Armywide product.

Some of the viewable dashboards that reach down to brigade-and-below levels include financial readiness statistics, ammunition management, property accountability, and overall fleet status by system. Bringing this data to the tactical level gives new commanders saved dashboard views that are critical to their jobs and relevant to their units and keeps them from having to go through a lot of work creating slides and reports.

M-COP training for this target audience is beginning in the Logistics Captains Career Course and the Support Operations Course offered by Army Logistics University at Fort Lee, Virginia. Further expansion will include training in logistics warrant officer and noncommissioned officer courses.

M-COP Training

To improve the fidelity of the readiness picture, LOGSA launched an aggressive training and orientation effort to help the Army become familiar with the system. M-COP training teams visited installations and headquarters around the Army in 2016. They will continue to do so this year to increase Soldier and leader awareness of the capability.

In the vicinity of each of AMC's Army field support brigades there is a LOGSA liaison officer serving as an initial touch point for M-COP issues and education. They are ready to provide M-COP assistance and information.

LOGSA can also launch M-COP teams that travel around the Army and provide demonstrations, instructional forums, and question and answer sessions at every level of the Army. Teams have conducted large forum training sessions at Fort Hood, Texas, across Hawaii, and at Redstone Arsenal, Alabama.

At a recent Global Force Symposium in Huntsville, Alabama,

LOGSA offered training for 200 personnel at the LOGSA Logistics Training Forum. The forum taught personnel about the M-COP as well as the most current logistics tools and programs available for sustaining and generating readiness.

Tools like the M-COP have allowed commanders to improve readiness visibility. The Army is moving forward by eliminating stovepiped systems and migrating to ERP systems, and the M-COP gives Army senior leaders the ability to see strategic-level insights in one place.

Through stakeholder involvement and feedback from the field, the M-COP will continue to offer greater predictive analytics for operational and strategic leaders. The M-COP should be operationalized to synchronize sustainment efforts at every level so that units can clearly see and report readiness, identify requirements, conduct risk assessments, develop courses of action, and ultimately provide the right output to meet requirements. The end game is enabling readiness.

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