Managing and Maintaining Equipment for a Materiel Recovery and Retrograde Mission

Because retrograde sort yards use heavy equipment and vehicles to move supplies, the retrograde mission requires a maintenance program to keep the equipment running. This article outlines the U.S. Central Command materiel retrograde element's integrated maintenance concept.

■ By Capt. Christian S. Noumba

In the summer of 2012, the 18th Combat Sustainment Support Battalion (CSSB) headquarters deployed to Afghanistan to provide mission command of U.S. Central Command materiel retrograde element (CMRE) units supporting the excess equipment reduction and retrograde mission. Complying with the manning requirements they received before the deployment, the battalion and all of its assigned CMRE units deployed without organic maintenance capabilities. Most of the equipment that they took with them supported the retrograde sort yards' mission requirements.

The battalion developed a comprehensive program that integrated maintenance operations into mission planning. After improving maintenance practices within the battalion for 90 days, the 18th CSSB achieved 100-percent mission capable status. After that, the unit kept its operational readiness rate above 90 percent, which represented a significant increase from the low of 20 percent it had when it assumed mission command.

This article reviews maintenance activities before mission assumption, the integrated maintenance concept, and the successful transfer of maintenance responsibilities to a contract operation.

Retrograde Sort Yard Beginnings

Maintenance operations before the 18th CSSB assumed mission command reflected the task organization needed to support retrograde operations at three strategic locations: Kandahar Airfield, Bagram Airfield, and Mazar-e-Sharif. The Joint Sustainment Command–Afghanistan (JSC–A) had established the first strategic retrograde sort yard in December 2011 at Bagram Airfield to conduct retrograde operations, with yards at Mazar-e-Sharif and Kandahar Airfield to follow. All three operated as major retrograde hubs for the recovery, redistribution, retrograde, and disposition of excess materiel in support of the reposturing efforts in Afghanistan.

Before the 593rd Sustainment Brigade assumed mission command of the CMRE in August 2012, the JSC–A had organized the three retrograde sort yards under two sustainment brigades. When the 18th CSSB took over, it conducted an early assessment of operations, which revealed the importance of materials-handling equipment (MHE) and movement equipment (trucks and trailers) in retrograde operations. This assessment uncovered a similarity in maintenance activities and practices at all three retrograde sort yards, although each was organized under a different brigade headquarters.

Maintaining heavy equipment, such as MHE and heavy trucks, is challenging and largely depends on a maintenance program that aggressively enforces preventive maintenance checks and services (PMCS). Because the Soldiers working in the retrograde sort yards came from diverse backgrounds and were grouped into autonomous entities with parallel chains of command, the provisional company commanders who owned equipment in the yards did not have administrative control of the Soldiers who operated the equipment.

Sustainment brigades submitted requests for augmentation and received additional Soldiers from National Guard units deployed to Kuwait to augment the manpower in retrograde sort yards in Afghanistan. Request-for-augmentation Soldiers arrived with their own company commander and first sergeant. Thus, the commander of each provisional company operating a retrograde sort yard was no longer the only commander in the yard.

This situation resulted in two captains claiming command responsibilities over personnel, but only one captain clearly owned the equipment. The consequences of a lack of coordination and clearly defined roles and responsibilities were a dual leadership environment and poorly implemented programs such

as maintenance and equipment training.

As a result, MHE and movement equipment suffered from poor operator skills and deficient maintenance. Each retrograde sort yard relied on the maintenance company to provide support. However, because of the workload, the maintenance companies only gave priority to CMRE equipment when they were told to by the sustainment brigade support operations officer.

As soon as the 18th CSSB assumed command and identified the problem, the goal became very clear: develop a comprehensive maintenance program based on an integrated concept.

Comprehensive Maintenance Program

The 18th CSSB CMRE initiated and developed an integrated maintenance concept with the goal to achieve three objectives:

- ☐ Integrate maintenance activities into CMRE operations planning and objectives.
- ☐ Consolidate all CMRE equipment maintenance under a single program and leadership.
- ☐ Prepare CMRE equipment for a successful transfer of management and maintenance responsibilities from military to contractors.

Integrate maintenance activities. It was evident that MHE and movement equipment represented critical assets to the CMRE mission. Every maintenance fault that grounded any MHE or truck affected operations at the retrograde sort yard and consequently retrograde output. Maintenance operations focused their efforts on enforcing daily PMCS and scheduled services by qualified operators in order to minimize equipment breakdown that would slow down production goals.

The maintenance program standard operating procedure required proper reporting to The Army Maintenance Management System (TAMMS). To achieve the reporting requirement, the 18th CSSB obtained authorization from the 45th Sustainment Brigade to continue to distribute the maintenance report through the brigade's Standard Army Maintenance System–2 Enhanced (SAMS–2E) temporarily.

The drivers training program also became very important in the new maintenance program. Licensed and qualified operators are less likely to cause unnecessary damage to forklifts, rough-terrain container handlers, palletized load systems, medium tactical vehicles, and associated trailers. The headquarters company commander initiated the drivers training program, linked it to maintenance, and turned licensing into a critical subcomponent of the maintenance program.

Consolidate CMRE management. The newly developed concept orga-

Soldiers from the 1462nd Transportation Company guide a forklift operator in loading damaged tires for transport. (Photos by 1st Lt. Henry Chan)

nized maintenance operations under the headquarters company commander. The battalion maintenance cell provided oversight, and a battalion maintenance supervisor managed daily maintenance activities.

The battalion maintenance cell also tracked maintenance activities throughout the battalion and reported to the brigade headquarters through TAMMS. These changes enabled the unit to conduct centralized planning and coordination without hampering the decentralization of maintenance tasks, which was crucial to the success of operations.

A rough-terrain container handler loads a 20-foot shipping container of retrograde materiel onto an out-bound convoy vehicle.

With no organic maintenance capabilities, the headquarters company command team and the battalion maintenance supervisor requested expedited maintenance support from local maintenance contractors and military maintenance units. However, a more reliable maintenance program that would have significantly reduced the waiting time for repairs at local maintenance facilities would have required organic maintenance equipment and dedicated qualified personnel. A single maintenance leadership cell has its limitations, and the battalion accepted those risks after careful evaluation.

The battalion was located at Kandahar Airfield. To report its equipment maintenance through TAMMS with accuracy, the maintenance representatives in the retrograde sort yard at Bagram Airfield and Mazar-e-Sharif had to call the battalion maintenance cell at Kandahar Airfield immediately after each manual job order to input equipment in the SAMS–2E. The maintenance cell at Kandahar Airfield and the maintenance companies providing area support at Bagram Airfield and Mazar-e-Sharif had to jointly order class IX (repair parts) through their respective SAMS–2E.

This practice had its limits: slowing down the process and decreasing the efficiency of maintenance operations. In the absence of an integrated maintenance team in the retrograde sort yard, the battalion maintenance program provided the coordinated effort needed to use the few available maintenance support options.

Prepare CMRE equipment for transfer to contractors. The U.S. government created a performance work statement (PWS) for each contractor covering its respective obligations and responsibilities in retrograde sort yard operations. The resulting contract agreement covered the operation, management, and maintenance of all equipment supporting retrograde operations. To meet these requirements, contractors would have to own the equipment in order to accept responsibility.

To prepare the equipment for transfer, the maintenance cell had to coordinate technical inspections, repair deficiencies in order to meet the required standard, and complete property book transfers. The battalion assumed the risk and liability for retrograde mission disruption during the transfer of equipment because of its lack of internal maintenance capabilities. Engaged leadership and deliberate maintenance management assisted in risk mitigation. The contractual clause transferring MHE and movement equipment to contractors also helped mitigate the risks for a unit with no organic maintenance capability.

The transition to civilian-led maintenance was a challenging process that the maintenance team carried out successfully. The battalion developed this maintenance program and executed it as a bridging solution until the unit transferred all equipment to contractors at each retrograde hub.

Transferring Responsibilities

The 18th CSSB could not transfer equipment to contractors without including it in the contract. The unit developed a long-term CMRE maintenance concept in collaboration with contractors and the Defense Contract Management Agency and added it to the scope of work

(SOW). The PWS, which served as the basis for negotiation, had already mentioned that the government would provide the contractors with the equipment that they would operate and maintain.

To support the maintenance requirements, the original SOW needed some in-depth modifications that took four months to accomplish. To overcome setbacks and avoid the disruption of CMRE operations, all parties involved used letters of technical direction (LOTD) as incremental outputs to modify and clarify standing clauses in the PWS. This resolved issues derived from the lack of an SOW at the time of transfer of operations to contractors.

The concept called for the transfer of government-furnished or -provided equipment to contractors while allowing the military leaders to maintain control of operations in retrograde sort yards. During the 180 days that followed the assumption of command, the 18th CSSB maintenance efforts focused on getting the MHE and movement equipment ready for a transfer to DynCorp International in the south and Fluor in the north.

The battalion had the obligation to meet the contractual requirement that equipment must meet the –10/20 maintenance standard before a lateral transfer to contractors. Contractors and service members involved in this operation conducted technical inspections of all equipment and identified deficiencies that the battalion maintenance team had to correct before the lateral transfer, which had to take place within 60 days of the publication of the LOTDs.

With no organic capabilities and an average wait time of 90 to 120 days at local maintenance facilities, the task challenged the transition timeline. A mix of interpersonal skills, networking abilities, support from military maintenance facilities, and negotiations with the gaining contractors made it possible to meet suspense dates.

Lessons Learned

The 18th CSSB compiled the following lessons learned from this experience:

- ☐ Maintenance operations are more efficient if supervised under an integrated battalion-level concept.
- ☐ Government furnished equipment must meet –10/20 standards before being transferred to contracting companies.
- ☐ Equipment must be listed in the contract or in an appendix as part of the contract before it can be legally transferred to contractors.
- ☐ Coordinate with the administrative contracting officer of an LOTD in order to modify contractual clauses or direct the contractor to perform a service.
- ☐ Ensure that the contract specifies the minimum amount of equipment that the contractor must continuously maintain during operations.
- ☐ Ensure that the contract specifies the time window for the contractor to repair or replace government-furnished equipment in order to avoid disruption of operations.
- ☐ The sustainment brigade CMRE and the CSSB CMRE must develop and maintain good relationships with non-CMRE sustainment brigades and CSSBs that provide maintenance area support in order to overcome the CSSB CMRE's lack of internal maintenance capabilities.

The final lesson learned was to implement a multipronged approach to equipment acquisition as follows:

- ☐ Submit an operational needs statement and search the Theater-Provided Equipment Planner for available equipment.
- ☐ Request equipment acquisition through either procurement and purchase commitments or the joint acquisition review board.
- ☐ Submit a request through the brigade S–4 for intrabrigade cross-leveling.
- ☐ Negotiate informally and educate sister units in theater to release equipment that is nonmission essential for them but critical for the CMRE mission.

During the assumption of a nondoctrinal mission built with multiple organizations, a leader needs to review maintenance activities before assuming the mission. He then needs to explore the integrated maintenance concept and the successful transfer of maintenance responsibilities to a contracted solution or another military organization.

The success of CMRE operations in Operation Enduring Freedom during the 2012–2013 deployment was tied to the ability of the 18th CSSB CMRE to navigate the maintenance and contracting requirements in a deployed environment. Many factors helped set conditions for successful CMRE operations, but without a comprehensive program, equipping and maintaining equipment would have hindered the establishment of operations.

The program must be part of the centralized planning process yet allow decentralized operations for retrograde sort yards to maximize locally available resources. In an environment where maintenance resources are scarce, interpersonal skills and networking abilities become essential to completing the task and contributing to mission accomplishment.

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