

Operationalizing Maintenance through Assembly Area Operations: A Battalion's Lessons Learned

MAJ James E. Jones

30 August 2021

**Disclaimer: CALL presents professional information, but the views expressed herein are those of the authors, not the Department of Defense or its elements. The content does not necessarily reflect the official U.S. Army position and does not change or supersede any information in other official U.S. Army publications. Authors are responsible for the accuracy and source documentation of material they provide.*

In the [September-October 1998 edition of the Armor branch magazine](#), LTC Charles Anderson and MAJ Jeffrey Cobb suggested that traditional command maintenance does not fully leverage available time and personnel to ensure unit equipment readiness for combat operations. Whereas a unit preparing for a wartime mission would pay excessive care to their equipment, having a clear and imminent task at-hand, Soldiers and leaders in the garrison environment tend to find numerous excuses to leave the motorpool, if they show up at all, to attend meetings, medical appointments, training, and so forth. The obvious result of this situation is a reduction in preventative maintenance checks, longer repairs of equipment, and a less mission capable force overall. LTC Anderson and MAJ Cobb postulated that a better defined maintenance event, with full unit participation, can be much more effective at gaining subordinate buy-in and lead to greater overall readiness across an organization. Enter Assembly Area Operations, or AAO. (See Figure 1)

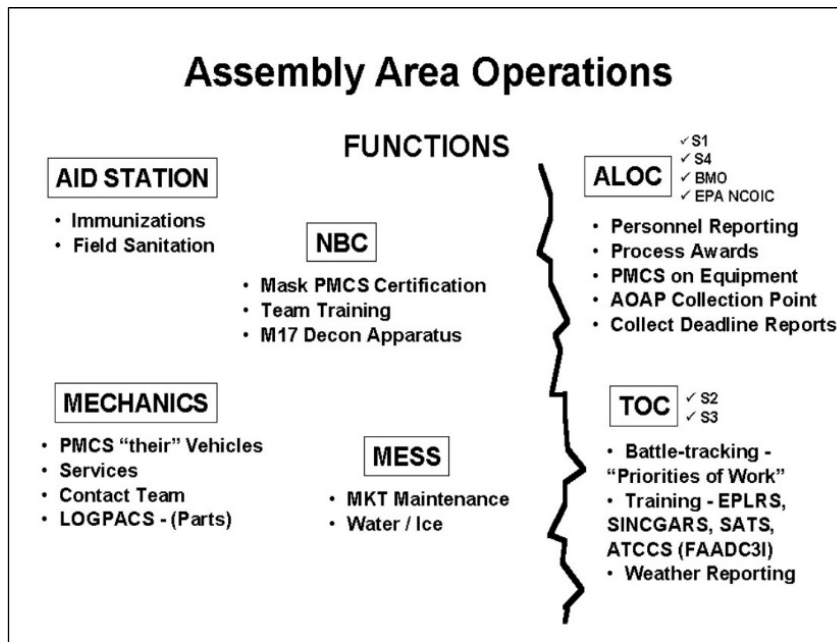


Figure 1

(Source: *ARMOR*, September-October 1998, pg 35.; Assembly Area Operations: A Paradigm Shift to Warfighting Maintenance, LTC Charles A. Anders and MAJ Jeffrey A. Cobb)

The authors prescribed AAO as a commander priority event, focused on operationalizing the maintenance day, fully focusing a unit on the execution of maintenance activities, and ensuring absolute maximum participation by subordinate commanders, staffs, leaders, and Soldiers. Here in the 37th Brigade Engineer Battalion, we experienced exactly the situation that LTC Anderson and MAJ Cobb predicted would happen when leaders began seeing command maintenance as a chore instead of an operation, with limited manning in the motorpool past first formation, mechanics working on vehicles without operators, and generally desynchronized maintenance activities among our companies. To mitigate these issues, our incoming battalion commander introduced AAO and directed the battalion to implement a version of it into our battle rhythm. Below, I will discuss what we planned to do, what we actually executed, and provide a critical review of what went well and what did not. I hope that this will empower other Field Grade leaders to initiate their own version of AAO and to learn from our mistakes.

Planning for AAO began like any other mission. Over the course of three days, the battalion staff conducted abbreviated MDMP, including mission analysis, COA development, COA approval, and orders production. Inputs to mission analysis consisted of a graphic of our motorpool, an EQUIPSIT report from GCCS-A showing all of the battalion's equipment, and the 1998 AAO reference article. Each planner read the article to understand how AAO can be implemented, then the staff broke down the EQUIPSIT to determine the number of pieces of equipment by type, whether shoot, move, communicate, own-the-night, CBRNE, or medical, and created their running estimates to identify facts, assumptions, specified and implied tasks, resources available, and constraints/limitation. With these inputs and commander's guidance after the mission analysis brief, the staff completed COA development, COA approval, and created and published the OPORD to the companies.

OUR PLAN

The 37th Brigade Engineer Battalion plan revolved around a six week cycle, in which all equipment categories were further combined into Shoot, Move, and Communicate; two consecutive weeks were assigned Shoot, two for Move, two for Communication, then restart the rotation. During each week, the morning was to be dedicated to pacing item and mission essential rolling stock PMCS and repair, with the afternoon allocated for the assigned equipment category of that week. Each AAO day the battalion was to assemble at 0930 in the motorpool with 100% of personnel, including all command teams up to the battalion level. After formation, a Platoon of the Week was to be chosen and given a no-notice mission to execute convoy operations to a location 5-10 miles away that afternoon. Entry control point guards were to be dispatched to secure gates and track who entered and exited the motorpool. All vehicle operators were to link up with their company leadership to receive 5988s and determine which parts were available for installation. Companies were directed to establish their command post (CP) in their company motor pool footprints and establish communication with the battalion Tactical Operations Center (TOC). Lastly, the battalion staff was to be split, part to establish the TOC and the others to begin maintenance on their assigned equipment.

Lunch would be provided at 1130; MREs for five out of six weeks and Heat and Serves prepared by our Forward Support Company via the Combat Kitchen every sixth week. At noon, we were to conduct our battalion maintenance meeting, with all company XO's, the maintenance platoon leadership, and battalion S4/S6 representatives. Starting no earlier than 1300, the Platoon of the Week was to depart from the motor pool on their mission after providing the TOC, via the company CP, the convoy trip ticket and mission back brief. The remainder of the battalion would then either continue maintenance on rolling stock on "Move" weeks, or shift gears and execute maintenance on shoot or



communicate category equipment as per the six-week plan. At 1330, all platoon sergeants and above were to assemble to receive a maintenance Leader Professional Development (LPD) class. No later than 1530, the Platoon of the Week was to return to the motorpool and provide a back brief to the battalion S3 or commander, then address any last minute equipment issues and recover equipment. Finally, at 1600, the battalion would conduct close out formation and dismiss the units to close out the motor pool and leave for the day.

WHAT REALLY HAPPENED?

As is true in war, our plan for AAO did not completely survive first contact but we did see some incredible successes. Herein below are some of the key successes and friction points that I hope will smooth other battalion's transition out of command maintenance and into AAO:

1. **Food, Food, Food!** We faced push-back almost immediately on the feeding plan from junior Soldiers through company level leadership. Historically, Soldiers leaving the motorpool for lunch resulted in a significant drop in the number of personnel returning to the motor pool each afternoon, as the break served as a convenient opportunity to take on other tasks outside of maintenance. We intended to offer all personnel MREs or Heat and Serves at the motorpool in an effort to keep Soldiers on site, allowing them to return to maintenance without distraction. Our BN S4 worked with the BDE Food Service Warrant and was notified that Basic Allowance for Subsistence (BAS) recoupment was required and more notably, that the entire day's BAS value was recouped even if only one meal was provided. Obviously our Soldiers were up in arms as no one wants to pay a whole day's BAS for a single Army MRE. After significant back and forth with our BDE DFAC managers, we eventually discovered that we could get DFAC provided mermite meals free of charge when considering AAO as field training of under 3 days in duration. Today, providing food at the motor pool has increased our afternoon maintenance participation to almost 100%, as there is no excuse to leave for lunch.

2. **Guard the gate!**

As stated earlier, simply keeping personnel in the motorpool is half the maintenance fight. We originally completed a company DA6 for entry control guards, managed by 1SGs, who were to question people attempting to flee the motorpool! This was perhaps a bit draconian and made the motor



pool seem more like a prison than a training area. We discovered that management of the ECPs would be a significant battle tracking situation. Reporting and recording SP and RP times for every individual entering or leaving would definitely provide training on security operations and mission command systems, but as the emphasis was more on success in maintenance, we decided the additional effort on the companies and battle staff was not worth it. We ended up not emplacing guards and instead increased the presence of our battalion leaders in the company motor pool footprints. The battalion commander asking a platoon leader why they only have 30% of their platoon working on vehicles proved to sufficiently motivate supervisors to keep their troops on the line.

3. **Command the fight!** Establishing a battalion command and control node during AAO activities is essential to AAO success. Knowing that units in garrison rely almost solely on the Department of Defense Information Network (DODIN) for daily communication, we planned to stress our own unit communication equipment each AAO day by establishing our full battalion and company command posts. The plan included setting up the battalion TOC, including TCN and STT, and the full suite of mission command systems. Here, we bit off more than we could chew. Our signal company would have to begin TCN and STT setup prior to first formation and the battalion staff would need to spend the first hour or more of AAO doing something other than maintenance. As was true with the gate guards, setting up the TOC every week took too much time and effort away from maintenance. We adjusted our plan to establish the full TOC just twice per six week cycle on the Communicate weeks, which proved to be more suitable. For the other four weeks we established a TAC in a spare outbuilding and leveraged wireless internet pucks, our JBC-P TOC Kit, and FM radios which still enabled the staff to manage AAO, including the Platoon of the Week operation, and retain connectivity to the rest of the garrison world.

4. **Attack, now!** While there were typical growing pains, we experienced major success in our Platoon of the Week concept. The battalion S3 issued no-notice operations orders to the selected platoon immediately after first formation, and provided the platoon approximately three hours to PMCS their equipment, issue a convoy brief, and complete a trip ticket prior to the tactical mission. The intent is to build a mindset of constant readiness as well as provide junior leaders an opportunity to train on their equipment sets. Throughout the process the battalion commander, sergeant major, and S3 conducted spot checks such as validating convoy briefs, checking for completed PMCSs, and assessing

leaders' load plans and preparations. At the onset, some platoons quickly discovered they were not ready; from lack of licensed operators and mission capable vehicles to identifying that no one in the platoon could confidently load and operate a radio. The Platoon of the Week construct truly motivated companies and platoons to strive towards constant readiness.

5. **No appointments today!** From the onset, our battalion modified our battle rhythm to completely remove all training distractors on the first duty day of each week, clearly signaling to the companies that AAO was the battalion main effort. We achieved great success by doing this. We experienced a massive improvement in attendance, both before and after lunch, and saw that when leaders were required to be present, Soldiers naturally were present and supervised. This resulted in more maintenance man-hours and a reduction in overdue services and non-mission capable equipment. By strategically scheduling events, such as 1130 unit-provided lunch, 1200 maintenance meeting, 1330 maintenance LPD, and 1600 BN close out formation, we required consistent leader presence in the motorpool which helped focus personnel on equipment readiness.

CONCLUSION

In total, Assembly Area Operations has resulted in a substantial mental shift across the 37th Brigade Engineer Battalion. We have protected the schedule, maximized leader and Soldier participation, incorporated valuable training, and thus far have seen a drastic improvement in our overall maintenance enterprise and equipment readiness. We did not do anything magical and by no means am I suggesting that other units must incorporate every facet of our plan to successfully improve their ability to fight tonight. Instead, I urge leaders to leverage my battalion's lessons learned to craft a maintenance strategy that works for them. We have found that engaged leaders that stay in the motorpool lead to engaged Soldiers staying in the motorpool. Everything you plan should strive to achieve this; add your bells and whistles after. Best of luck to all current and future field grade leaders out there on your readiness fight!

MAJ James Jones was the 37th Brigade Engineer Battalion S3 and XO and is currently the Geospatial Engineering Branch Chief in the Office of the Chief of Engineers. As an Engineer officer, he has served in Infantry Brigade Combat Teams and Echelon Above Brigade engineer units with operational experience in Iraq and Afghanistan. He is a graduate of the Army Command and General Staff College and Maneuver Captain's Career Course and holds a Masters of Geospatial Information Science from North Carolina State University and Project Management Professional certification.