

# Assembly Area Operations:

## *A Paradigm Shift to Warfighting Maintenance*

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*It's maintenance day in your unit. Soldiers and their first line supervisors head to the motor pool to conduct their weekly preventive maintenance checks and services (PMCS). The unit is present for duty and stands ready for action in the motor pool.*

*The traditional, motivational speech on quality PMCS in accordance with up-to-date technical manuals falls on deaf ears. The formation ends, and the exodus begins, as soldiers head off to appointments, details, small arms ranges, classes, and meetings — anyplace but the motor pool. The remaining soldiers head to their vehicles, search for the most recent copy of their 5988E, and discuss their weekend adventures. Commanders, first sergeants, and platoon leaders all head off to check on the issues of the day. Staff officers and soldiers head for the shelter and the 5000 btu heater or air conditioner of the battalion and company headquarters. Perhaps a few soldiers, under the supervision of an NCO, stay behind to complete the PMCS(s) on the unit's equipment. At the end of the day, the ULLS clerks face a stack of 5988Es. The battalion reassembles and pats itself on the back for another great maintenance day.*

The above paragraph paints a picture of an eventual decline in unit readiness. Let's change the scene to the Central Corridor at the National Training Center (NTC). Soldiers, supervisors, and leaders are conducting maintenance on all assigned equipment. Tactical operations centers at the platoon, battery, and battalion level are manned and operational. Commanders at all levels have issued priorities of work for the day, and are tracking the progress of the crews in executing these priorities. All communications are executed using SINCGARS (in frequency hop secure) or EPLRS (from the net control station down to simplified hand-held terminal units [SHTU] over the FAADC3I network). The unit controls access into and out of the assembly area. Senior leaders, both officers and noncommissioned officers, are visible and supervising the operations. The logisticians (BN XO, BMO, S1, S4, btry XOs, supply sergeants, and maintenance technicians) all meet to coordinate and verify logistical actions. Mechanics are on their own equipment, ensuring that it is mission capable prior to deployment

from the area, and are a radio call away to assist other operators who identify non-mission capable faults. PLL clerks build logistics packages consisting of parts identified on the "parts received/not installed" printout and push them down to the platoons and sections. The status of 5988Es is tracked and the documents are turned in to the ULLS clerks in a timely manner for processing. Leaders are out checking the status of the priorities of work, and in return they get a feel for the combat readiness of the unit prior to LD. This sounds like a unit setting itself up for future successes. Imagine picking that unit up from the Central Corridor and placing it back in its home-station motor pool. However, you tell the soldiers and leaders to replicate the same tasks under the same conditions. Well, the Renegades of the 4th Battalion, 5th Air Defense Artillery Regiment of the 1st Cavalry Division at Fort Hood, Texas, took the challenge issued to them from Brigadier General Honore, then ADC(S) of the 1st Cavalry Division, and have been executing assembly area operations in what was once our motor pool ever since.

The Renegades implemented AAO in February 1997. The cornerstone of this program is the application of the Army's 8-Step Training Model. Assembly area operations include several key components. First, they integrate all steps of the training model into maintenance operations; second, they require and enforce leader involvement at all levels, from vehicle commanders to the battalion commander; third, they sustain perishable skills through repetitive execution; and fourth, they effectively link training and maintenance.

AAO is not limited to vehicle PMCS; it is focused on maintenance of all unit equipment, to include communications, NBC, small arms, crew-served weapons, operations centers, and command and control systems. Commanders at all levels set and enforce their priorities of work for the day in any or all of these areas. Units conducting recoil or deployment preparation operations execute the assigned tasks for the day as their priorities.

### **8 Step Training Model**

The 8-Step training model is the basis for all training in the Army. Leaders can apply this model to all areas in a unit.

**1. Plan the Training.** The commanders and staff officers plan the training by analyzing the training calendar, training guidance, safety messages, and other documents that require the performance of tasks on the unit's equipment. The battalion commander may set battalion level priorities of work for AAO at least 2 to 3 weeks out during the battalion training meeting. The commander may choose to limit these priorities to allow the batteries to execute their tasks, or the commander may set the priorities for the battalion as a whole. Priorities may be as simple as operator PMCS, or be specifically stated, such as water trailer purification. AAO doctrine is for platoon sergeants to identify the priorities of work, and these priorities are planned and coordinated at platoon, battery, and battalion training meetings.

**2. Train and Certify Leaders.** The unit must then train and certify its leaders at all levels. All leaders in the unit are certified on the PMCS of their assigned vehicles. Occasionally, the unit will identify a priority that requires additional training and certification, which the unit quickly plans and executes. The PMCS certification program is decentralized to battery level and is additionally part of the battalion's in-processing program, and should include a hands-on and written test.

**3. Recon the Site.** For AAO, this recon is focused on establishing tactical operations centers in an area that facilitates their operation, and allows leaders to properly monitor and command and control the operations. All TOCs, from platoon to battalion, are set and operational.

**4. Issue the Plan.** Leaders at all levels issue their plans in the form of priorities of work. These priorities are posted on dry erase boards in platoon leader vehicles, battery TOCs, the ALOC, and the battalion TOC. These priorities include the METL task(s), collective task(s), and priority tasks for the day. It is important that leaders take the time to properly plan for this event, as too few tasks will lead to idle soldiers and will waste the unit's most valuable resource — time; and too many tasks will lead to unfinished requirements and frustrated soldiers and leaders.

**5. Rehearse.** This step is critical to the success of the program. Leaders must ensure that they pick up the COMSEC required to operate SINCGARS and EPLRS radios; issue 5988Es prior to beginning operations (day prior); refine service schedules during briefings to the battalion commander; and conduct PCIs and PCCs prior to the day of execution.

**6. Execute.** The unit conducts AAO in accordance with the stated priorities of work. Operations centers and leaders track the progress of subordinate units to ensure proper execution, and report their status to higher. A key part of the execution of AAO is leader pre-combat inspections. Leaders don't have time to check everything, but they can sample portions of the stated priorities of work.

**7. Conduct AARs.** At the end of the day, key leaders come together and discuss the execution of the operations. Shortfalls are placed on the leader's pre-combat inspection lists to ensure that they are addressed prior to the next AAO.

**8. Retrain.** The leaders correct noted deficiencies and continue to train their subordinate leaders to standard. It is critical that the unit quickly corrects shortfalls to prevent a recurring deficiency.

### Assembly Area Operations

The Renegades conduct assembly area operations on the first work day of every week. Using the 8-Step Model, the battalion begins its preparation for each day in the assembly area by clearing the calendar of all distracters and identifying the priorities of work at all levels. The battalion commander issues his priorities two to three weeks out, and platoon leaders/sergeants develop their priorities during their training meetings and brief them to the commander during the weekly battalion training meeting. Every attempt is made to ensure that no other events are planned on AAO. This includes small arms ranges, meetings (other than the logistics meeting), briefings, and other distracters. Soldiers are strongly discouraged from planning appointments on this day. The idea is to maximize participation. One fifth of the training week is spent on maintenance and we strive to gain the most benefit.

All leaders and soldiers in the battalion are trained and certified on their ability to conduct a proper PMCS on their assigned equipment.

New soldiers are certified during the battalion's two-week in-processing. Soldiers who fail to meet the standard are retrained by the battery motor sergeant. The percentage of trained and certified

soldiers and leaders is tracked and briefed weekly during the battalion training meeting. Units cannot receive a "P" on numerous METL tasks without at least a 75% certification rate.

Special staff officers certify soldiers and leaders on equipment in their areas of expertise. This is accomplished in at least two battalion-level forums. The first is the Renegade Officer Certification program. This program is conducted on a monthly basis, and trains and certifies all officers on a wide range of equipment including SINCGARS, ELPRS, Identification Friend or Foe, TAMMS/PLL operations, small arms and crew-served weapons, and PMCS. The second forum is AAO. A recent example is the chemical officer and all NBC NCOs certifying all leaders on the proper PMCS and cleaning of the M-40 and M-42 protective mask.

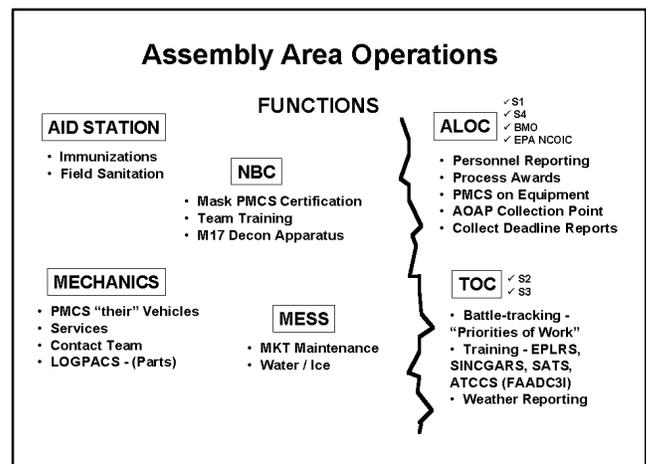
A key component of the operation is the location of the tactical operations centers. They must be visible and accessible in the assembly area. All of the battalion and battery TOCs are parked hub-to-hub near the entrance to the assembly area. Ramps are down, or doors are open, and they are manned by assigned TOC personnel. Each battery posts its priorities for the day on dry erase boards outside the TOC (FIG). The S3 section tracks these priorities for the battalion commander, and the ALOC receives and posts the personnel status for the day. And, by the way, the TOC operators do a PMCS on the command post vehicle, trailer, and associated generators!

Leaders conduct their pre-combat checks and inspections during the week prior to entering the assembly area. They ensure that their subordinates understand the priorities, assemble the necessary equipment, issue the 5988Es, and secure the required COMSEC.

Finally, the day arrives. The Renegades, fresh from a vigorous physical training session, occupy the assembly area. The entire battalion is present (to include the staff), and the assembly area is secured (guards are posted at both gates to control access into and out of the area). The CSM conducts a formation to disseminate any vital information to the soldiers, and releases the units to their ISGs. The sol-

diers and supervisors head for their equipment to execute assigned priorities.

Maintenance personnel head out on line to execute their assigned priorities for the day, and, if required, to troubleshoot non-mission capable faults identified by operators in their units. Maintenance personnel fix all vehicles as far forward as possible. The battalion commander established an evacuation policy of two hours. This means that if the mechanics can troubleshoot and/or fix the vehicle in two hours or less, they do it on line (fixed forward concept). If it requires more than two hours to fix a fault, the contact team evacuates the vehicle or equipment to the unit maintenance collection point located in the unit's maintenance bay. Tool room operators issue tools from their vehicles, and by the way, they do PMCS the tool



truck! ULLS, TAMMS, and PLL clerks conduct maintenance on their equipment. The SOP states that 1100 is the first time that a ULLS clerk may enter his office. PLL clerks build logistics packages and push them to the platoons. Motor sergeants and maintenance technicians are on line supervising their mechanics, conducting maintenance on their assigned equipment, tracking the status of their contact teams, and providing support as far forward as possible.

TOC crews man their vehicles and establish communications. The S3 establishes the battalion FM net using frequency hop secure. All TOCs must enter the net prior to 0930 hours. Battery TOCs establish communications with their platoon leaders, and platoon leaders establish communications with their squads. All reports, to include the PERSTAT (Personnel Status Report), travel over this communications network. This marks the accomplishment of the first task for the day and provides continued training on a

host of perishable skills. During one AAO a month, when the division's EPLRS platoon is operational, the battalion establishes its FAADSC3I network from the NCS down to the Simplified Hand-held Terminal Units. Simulated air tracks are passed confirming operator proficiency and equipment status. The battalion found that when it concentrated on these skills for the ICD Warfighter exercise, soldiers and leaders became very proficient, but they soon lost this skill through lack of use and personnel turbulence. AAO has assisted the unit in maintaining the desired level of proficiency.

The next major task for the leaders is posting the priorities for the day, and visually identifying the status of the unit's weapon systems. TOCs, from battalion to platoon level, post their priorities of work on dry erase boards. Leaders track their progress, mark the tasks off as they are completed, and report to their higher headquarters. Weapon systems commanders post the status of their systems by using range flags — green for fully mission capable, red for vehicle or system non-mission capable, and yellow for communications non-mission capable. This allows leaders and maintainers to easily identify maintenance issues on line.

The battalion executes a "Platoon of the Week" assessment to evaluate the training level of the junior leaders on the 5988E and maintenance management within the platoon. The battalion executive officer identifies a platoon during the first formation to undergo the evaluation. At 1500, the platoon leadership links up with the battalion team (consisting of the BN XO, the maintenance technicians, and battery XOs), and crosswalks each one of his 5988Es to ensure that the faults match the parts on order, and that all parts received are properly accounted for (on the shelf or installed). The team converges on the platoon and conducts further inspections of the platoon, to include technical inspections by sampling the platoon's equipment, and a visual inspection of quadcons or milvans for excess parts, or parts received but not installed. This effort provides a focused look at maintenance management and reinforces training in this area.

At 1200, the battalion XO chairs the weekly, brown-bag logistics meeting. This meeting covers maintenance, supply, and personnel issues facing the battalion, and is attended by battery XOs, supply sergeants, maintenance technicians, the BMO, S4, S1, and the chemical officer. The XO conducts a mid-course

AAR to let the batteries know how the operation is progressing to date, and directs corrections designed to meet the commander's intent and priorities for the day. The BMO covers the O26 report, with the batteries filling in key information, or providing up-to-the-minute updates on the status of their non-mission-capable equipment. The next major order of business is the list of Army Oil Analysis Program samples due. This is a final check on the battalion's system, and requires that the units submit all samples to the BMO prior to departing the assembly area. The BN XO and staff discuss any HAZMAT issues, safety of use messages, and other maintenance or EPA-related issues. The chemical officer identifies CAMS and M-8 alarms requiring wipe tests. The CHEMO projects this data at least 30 days out, and continuously tracks the status of the turn-ins.

The S4 discusses any supply issues facing the battalion and then walks the batteries through the lateral transfer list, line-by-line. The focus of this effort is on transfers or turn-ins due within the next 45 days. The focus then shifts to reports of survey. The XOs are questioned on the status of any surveys due to the battalion, and the progress of investigations being conducted by officers in their unit. Finally, the S4 raises any force modernization issues which the battalion must deal with in the coming months.

The final phase of the meeting, other than issues raised by the batteries and closing comments from the BN XO, involves the personnel aspects of logistics. The S1 works the battery XOs on all OERs, NCOERs, and awards status. Additionally, the S1 covers any other personnel issues such as VHA surveys, CFC, and publications. This meeting improved the logistics readiness of the battalion in several ways. First, battery XOs are more involved in the logistics operations of their units because they must be prepared to address issues in all areas. Second, it is a forum for mentoring the XOs and other logistics personnel. Finally, it improved the readiness of the battalion in several key areas such as lateral transfers, reports of survey, O26 tracking and updating, and efficiency reports and awards by improving the information flow and the focus of the logisticians.

As the day progresses, soldiers complete the assigned tasks and report their status to higher headquarters. Leaders mark off their priorities as their subordinates execute them, and then verify the completion through spot checks. Commanders and key leaders remain in the assembly area supervising the execution of their priori-

ties. They conduct the AAR prior to departing from the assembly area at the end of the day to identify any key shortfalls requiring their attention. The final event of the day is the close-out formation conducted by the CSM.

Assembly area operations has paid great dividends to the Renegade battalion, including:

- Soldiers and leaders are present, and they are more focused in the execution of maintenance operations.

- The battalion effectively links training and maintenance, and is able to train repetitively to standard on perishable skills such as frequency hop secure and EPLRS.

- The leadership is able to capture the hard to get soldiers, including cooks, medics, and staff personnel, and get them into the assembly area, resulting in the headquarters vehicles receiving much needed attention.

- The leadership fences AAO days by limiting distractions, thus allowing maximum participation.

- The battalion is able to focus on one maintenance SOP — warfighting, not garrison.

- The battle staffs at all levels receive training on battle-tracking on a weekly basis.

- The battery-level logisticians are more focused and can train their contact teams every week.

This operation requires a significant investment on the part of the leadership. The leaders and key staff must pull themselves away from their computers and telephones for the entire day. However, the payoff is well worth the investment.

AAO is different than traditional maintenance systems and programs. To improve the results of maintenance in a technologically advanced unit, one must adapt new conditions. The conditions set in the Renegade Battalion are visibly different. On the corner of Hood Road and Park is the Renegade Assembly Area, once referred to as the motor pool. And every Monday, the battalion is conducting high intensity, no-nonsense training, just like they do in the central corridor at the NTC.

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