



## New Ideas for Armor Company Maintenance Plans

by Captain Paul J. Taylor

In today's Army, maintenance has become even more vital in sustaining readiness than ever before. Advancing technology such as the M1A2 increases our lethality on the battlefield but at the same time makes our equipment more susceptible to maintenance problems. But just at the time when maintenance is becoming more critical, many units are struggling with issues such as shrinking budgets and understrength maintenance platoons that make a maintenance program even more difficult.

How can a company commander manage the competing demands of budget, time, and personnel, yet still run an effective maintenance program?

The answer is to not bite off more than each company can chew, so to speak. And although this may seem obvious to many of you, there are many units out in the force attempting to do too much with too little (people, money, time). They ultimately pay the price when it is time to roll out the gate.

A good company maintenance plan consists of two things: accomplishment of scheduled maintenance checks and services, and soldier training on maintenance-related tasks. The first element ensures that all equipment, including stand-alone equipment such as radios and weapons, receive the Preventive Maintenance Checks and Services (PMCS) required by the -10/-20 manuals. These include crew-level inspections, periodic services, and oil analysis (AOAP) sampling. The second element ensures that all

**Table 1 - Sample Maintenance Training Schedule**

	Monday	Tuesday	Wednesday	Thursday	Friday
<b>Week 1</b>	1st Plt- M/A	<b>COMPANY TRAINING</b>	2nd Plt- W	A.M. - SGT's Time P.M. - Family Time	BN Training Holiday
<b>Week 2</b>	1st Plt- AUX	HQ Plt - M/A 3rd Plt - M/A	<b>COMPANY TRAINING</b>		2nd Plt- AUX
<b>Week 3</b>	<b>COMPANY TRAINING</b>	2nd Plt - M/A	3rd Plt - W HQ Plt - W		3rd Plt- AUX HQ Plt- AUX
<b>Week 4</b>	1st Plt - S		RED CYCLE TASKINGS		

M - Monthly PMCS    W - Weekly PMCS    A - AOAP sample    AUX - Weapons, NVGs    S - Services

soldiers are knowledgeable enough on the associated equipment to perform quality maintenance checks.

Planning is critical to any maintenance program. Field training is conducted according to the standards of 25-101, *Battle Focused Training*; there is no reason why maintenance does not deserve the same attention. The commander must consider several factors when planning maintenance periods. First, the old motor stables concept, where the entire company marches to the motor pool weekly and performs maintenance, is an impossibility for many units today. Let's face it: in today's world of red cycle taskings, training holidays, Sergeant's Time, Family Time, and training dictated by higher (to name only a few), it may seem hard to find time to breathe, let alone perform quality maintenance. However, just because the entire company cannot come to the motor pool at one time does not mean that a company cannot have an effective maintenance program. Table 1 outlines a sample monthly maintenance training schedule that works around training, duty cycle, and services.

You will notice in Table 1 that instead of finding one set day for company "command maintenance," the commander plans platoon maintenance periods. This has several advantages. First, the company and platoons still have time to execute other training during the week. It also lightens the work load of the maintenance team, which more than likely is understrength due to critical 63/45-series MOS shortages. Last, it more evenly distributes the work load of the ULLS/PLL clerk, who normally finds it impossible to update an entire company

**A good company maintenance plan ensures that quality maintenance continues when units go to the field. In the photo at right, an M1A2 crew cleans their air filters during an NTC Rotation.**

Photo: Greg Stewart

set of 5988-Es in a timely manner. Of course, this system is harder for the company commander and XO to control, but platoon leaders and platoon sergeants are more than capable of executing this level of training. If they are not, then it is an excellent training tool for the company commander to teach accountability and maintenance concepts to his platoon leadership.

Second, the company commander must ensure that the maintenance platoon can support his plan. While the cavalry troop is a wonderful thing, because the commander actually owns his mechanics, the regular armor community does not have this luxury. The maintenance team is often torn between supporting its assigned company and BMO/HHC commitments. The only way to defeat this problem is to plan maintenance training with the maintenance team chief so that he can deconflict it with his maintenance platoon training schedule. The maintenance team chief is an integral player and should be a regular attendee at company training meetings. The executive officer should provide that critical link between

the maintenance platoon (BMO) and the company to ensure that the battalion's assets adequately support the company maintenance team and that the battalion commander's maintenance priorities are met.

The bottom line is that maintenance training, just like other training, should be planned and resourced at least six weeks in advance. We do this for other training events and should give maintenance training equal priority. Also, by decentralizing maintenance into smaller elements, such as platoons, the company commander makes scheduling easier and lightens the work load of his maintenance team and ULLS/PLL clerk.

Actually finding the time to conduct maintenance training is only half the battle of effective maintenance. The other portion is training subordinates to maintain properly. Focused maintenance training is vital to sustaining the force. A company will not conduct quality maintenance periods if its soldiers are not proficient at performing PMCS, diagnostic checks, and other maintenance-related procedures. All soldiers should receive basic PMCS and administrative skills from the unit's driver training program. But special emphasis is required to teach soldiers the specifics of technical areas such as air induction, mine plows, or the fire control system, that the -10 manual may not cover in sufficient detail. A matrix like Table 2 can help commanders structure maintenance training. Training



should be executed at platoon level by knowledgeable NCOs, unless time does not permit or there is no one qualified to teach the subject. The XO can coordinate for the maintenance team chief or other specialized personnel, such as the battalion maintenance technician, to teach specific subjects if there is no one qualified in the company. Each class should be immediately followed by hands-on application supervised by the platoon leadership. Platoons can be left to schedule these classes independently, ensuring that they meet the suspense listed, and completion can be tracked by the XO (or reported during company training meetings). Monthly intervals are listed here, but depending on the company training schedule and level of maintenance proficiency, the interval could change accordingly. The matrix can be easily focused to support other training events as well. For instance, using Table 2 as an example, the AACs, fire control checks, and prep-to-fire checks might be part of preparation for gunnery in February. Companies can very easily execute these classes in a field environment as well, instead of falling into the all too common trap of performing quality maintenance only in garrison.

In conclusion, it may seem that the result of today's increased OPTEMPO, decreased resources, and many competing demands for an armor company's time is that maintenance suffers. This article discusses several ideas that differ from the traditionally accepted methods of company command maintenance but have proven successful in maintaining equipment and increasing readiness rates. The success of plans like Table 1 depend on the commander establishing maintenance as a priority in his company and scheduling the time for subordinates to conduct effective maintenance. The ability of subordinates to operate somewhat independently is also a crucial factor. Lastly, the success of any maintenance plan depends on the level of proficiency of every soldier in performing Preventive Checks and Services. If a company commander sends his soldiers to the

motor pool for an entire day to check MIAI air induction systems, but does not accurately define the standards for checking them, he has only wasted his most precious resource — time. A maintenance skill training plan like Table 2 can address any weaknesses in the company, allowing them to make effective use of what little maintenance time can be “carved” out of an already hectic schedule. Hopefully, by integrating concepts similar to those discussed above, company commanders can conduct good, quality maintenance and not pause at the LD, waiting for a tank repair.

*Author's Note:* This article is actually an adaptation of the battalion maintenance plan planned and executed by 1-13 AR at

Fort Riley in 1997. The author is indebted to LTC Rick Jung, CW2 (Ret.) Roger Behrens, and MSG Steve Murphy for their assistance in developing this program.

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	Jan	Feb	Mar	Apr	May
<b>TANKS</b>	AACs Fire control system Prep-to-fire checks	Brake system Steering system	Suspension Walk track	Air induction system	NBC system Mineplow
<b>LIGHT TRACKS</b>	Heaters Cooling system	Brake system Steering system	Suspension Walk track	Air intake system Drive lines, prop shafts, U-joints	Check fuel lines
<b>HEAVY WHEELS</b>	Heaters Cooling system	Brake system Steering system	Suspension Tires	Air intake system Drive lines, prop shafts, U-joints	Check seat belts Check lights horn
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<b>SUSPENSE</b>	COB 13 Jan	COB 28 Feb	COB 28 Mar	COB 18 Apr	COB 30 May
	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	
<b>TANKS</b>	Radios and mounts Intercom	Batteries Charging System	C/S gun tube C/S breech	Walk track Suspension	
<b>LIGHT TRACKS</b>	Radios and mounts Intercom	Batteries Charging system	Check weapon mounts	Walk track Suspension	
<b>HEAVY WHEELS</b>	Fuel/Water separator Drive belts	Batteries Charging system	Hose reels Static reels	Crane mechanisms	
<b>LIGHT WHEELS</b>	Radios and mounts Drive belts	Batteries Charging system	Check ring mounts Check troop seats	Gen/Starter brackets Winches	
<b>SUSPENSE</b>	COB 27 Jun	COB 20 Jul	COB 29 Aug	COB 24 Sep	

**Table 2 - Sample Maintenance Focused Training Matrix**