



## The Crux of the Problem

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Many articles have been written in recent years extolling the virtues of the Division 86 organization. It does provide certain long-needed improvements, and many mechanized infantry commanders see it as a dream come true. The command and control organization of the maneuver forces within the mechanized infantry battalion has been greatly improved, for example. Unfortunately, though, the organization of its logistics elements once again has been given short shrift.

The support structure of the mechanized infantry battalion needs command and control assets *just as much* as the battalion's maneuver units do, but the Division 86 organization, like so many that have gone before it, fails to provide those assets in anything approaching the number needed. To emphasize this point, the discussion here will focus on MTOE 07245JFC11 for the mechanized infantry battalion (equipped with the Bradley fighting vehicle), under which several FORSCOM units are reorganizing. This document is a derivative of TOE 07-246J, and there are no major differences between the two for purposes of this article. (In fact, the supply aspects of the logistical picture will be examined here, because this is where the crux of the problem lies; to include the other logistical elements such as maintenance and mess would only cloud the central issue.)

Logistical command and control

within the Division 86 mechanized infantry battalion has been short-changed in four major areas: its leader-to-led ratio, its span of control, its complexity of control, and its communications.

The leader-to-led ratio is least favorable in the support platoon. A rifle platoon leader, for example, is responsible for 4 vehicles and 34 men, while the antiarmor platoon leader controls 5 vehicles and 19 men. Yet in the support platoon — the battalion's primary operating agency for all of its resupply functions except class IX — the platoon leader is responsible for 35 vehicles and 45 men. He has twice as many vehicles as an entire line company.

### CONTROL

As for span of control, a rifle platoon leader has only three squad leaders to control, while each squad leader has only one vehicle team leader (BFV gunner) and one ground team leader (assistant squad leader). The antiarmor platoon leader has only two section leaders, and each section leader has only his vehicle and one squad leader to control. The support platoon leader, however, has an ammunition chief (sergeant first class), two truck squad leaders (staff sergeants), and one POL squad leader (sergeant) to handle 34 trucks and 43

drivers. Thus, a truck squad leader can be responsible for controlling as many as 14 trucks and 15 drivers with no NCO assistants to help him.

To compound this span of control problem, the complexity of control is also greater for the support platoon leader. A rifle platoon works with all of its elements relatively close to each other and works as a complete unit — no one squad gets very far from the platoon leader. Although the antiarmor platoon's operating radius is somewhat larger, even its dispersion normally does not exceed three kilometers. But the support platoon often has sub-elements of constantly varying composition strung out from the tail of a rifle company all the way back to a brigade support area, and possibly even farther. Thus, a distance of 25 to 30 kilometers between the sub-elements is not uncommon.

In the matter of communications, a rifle platoon has one AN/GRS-60 and one AN/VRC-46 radio in each of its vehicles, plus one AN/PRC-68 portable small unit transceiver in each squad and two more in its headquarters section. The antiarmor platoon has two AN/VRC-46 radios for the platoon leader and one AN/GRC-160 in each ITV. The hapless support platoon, on the other hand, has only two AN/VRC-46 radios in the platoon leader's jeep (or HM-MWV), one backpack AN/PRC-77, and eight AN/PRC-68 small unit

transceivers. The AN/PRC-68, with its range of between 400 and 3,000 meters, is of little use to a platoon that is spread out over a 30-kilometer distance and is constantly on the move.

Given the tasks the rifle and antiarmor platoons must accomplish, their command and control assets are certainly not excessive. Far from it. These improvements have been needed for years. But it is glaringly apparent — even from a superficial examination of the TOE — that the battalion's supply establishment has been given very little with which to accomplish its complex and demanding mission. It would be rare to have a captain (S-4) and a lieutenant (support platoon leader) who could make such an unwieldy apparatus work in anything that resembled a smooth and efficient manner.

The doctrinal field manuals do not help much. They only superficially discuss the organization and the mission of the equipment in the battalion's support structure. Neither does the new FM 101-5 shed much light on a small unit's logistical problems. And trying to deduce the intended organization and equipment from an MTOE or TOE can be an amazingly involved and inexact process.

Logistics coordination is centered on the battalion S-4 and his staff of enlisted assistants. He has one supply sergeant (sergeant first class) and four general supply specialists (one sergeant, one specialist fourth class, and two privates first class). One of these enlisted supply specialists also serves as the driver of the S-4's one (and only) dedicated vehicle — a jeep (or HMMWV), which has two AN/VRC-46 radios mounted in it. (These radios are the S-4's sole communication assets.)

Although it is not really spelled out in any manual, most battalion S-4s share the use of the M577 command post carrier that is allocated to the S-1 section. This vehicle also has two AN/VRC-46 radios. It is widely believed (and in most cases practiced) that the S-1/S-4 track should be located in the combat trains area. For the time being, let's assume this is so.

Thus, to quickly recap, the S-4 is the primary coordinator and controller of

the battalion's supply effort. To help him, he has a jeep with two radios and a driver, and a supply sergeant with three clerks who share an M577 carrier and two radios with the S-1 section. This small group of soldiers must manage a 24-hour-a-day, constantly moving logistical train.

The battalion support platoon supposedly contains all the people and equipment it needs to get the supply job done. Its headquarters consists of a lieutenant, a platoon sergeant (sergeant first class, 11M40), and a driver (private first class) for the platoon leader's jeep, which is equipped with two AN/VRC-46 radios. The MTOE/TOE lumps the rest of the platoon into a transportation section and five mess teams.

## LEADERS

Within the transportation section, if all the noncommissioned officers are ferreted out, the following leaders can be identified: one ammunition chief (sergeant first class, 11M40), two squad leaders (staff sergeants, 64C30), one squad leader (sergeant, 76W20), and one petroleum heavy equipment operator (sergeant, 76W20). This organization, of course, raises several questions:

- Is ammunition management the ammunition chief's only function?
- Since he is the senior NCO in the transportation section, is he also the section leader?
- Does he directly supervise the drivers who haul ammunition, or is their supervision left to the truck squad leaders?
- Since two of the squad leaders have a truck MOS, and one a POL MOS, does this mean that the seven POL trucks are under the POL squad leader's control, with the remaining 27 being divided between the two truck squad leaders?

Looking quickly at the remaining enlisted force in the platoon, we find that there are 2 specialist fifth class truck drivers, 12 specialist fourth class truck drivers, 16 private first class truck drivers, 3 specialist fourth class POL specialists, and 1 private first class decontamination equipment operator (54E) for the skid-mounted,

power-driven, decontamination apparatus in the platoon.

To construct an organization chart from these two groupings of soldiers, we must make certain assumptions.

First, because anyone with experience in logistically supporting a mechanized infantry battalion knows that the management of ammunition supply is a full-time job, let's assume this is the ammunition chief's sole function.

Second, let's assume that the skid-mounted decontamination apparatus will get a truck designated to haul it and that this truck, its driver, and the decontamination operator will be placed under the operational control of the battalion chemical officer and NCO in the S-3 section. With these two assumptions, the organization of the support platoon falls into place as shown in Figure 1.

Note the difficult control problem this organization presents to the squad leaders whose trucks may be grouped into widely assorted packages depending on the supply needs of the battalion at any particular time. This problem is increased by the almost total lack of command and control aids (mainly communication equipment) available to them. There is only one AN/PRC-77 and eight AN/PRC-68 small unit transceivers in the entire transportation section. Since the range of the AN/PRC-68 is from 400 to 3,000 meters, and the support platoon operates over distances four or five times as great, an AN/PRC-68 is about as useful to a support platoon as two tin cans and a string.

Doctrinally, the support platoon leader has two more jobs as well. He is designated the assistant S-4 and is also supposed to act as officer-in-charge of the battalion field trains. This presents him with an interesting problem. Because there is no "base station" in the field trains, as there is in the combat trains — the S-1/S-4 track — how does the battalion communicate with its field trains? The so-called "officer-in-charge" — the support platoon leader — is often on the road trying to keep a handle on all of his elements. The maintenance elements that are located in the field trains have very limited communication facilities, and their radio-equipped vehicles are also

S-4 SECTION							
S-4 Driver	CPT PFC	(M151 w/2 VRC-46)		Supply sergeant Supply clerk Supply clerk Supply clerk	SFC SP5 SP4 PFC	(Shares S-1 M577 w/2 VRC-46s)	
SUPPORT PLATOON HEADQUARTERS							
	Platoon Leader	LT	(M151 w/2 VRC-46)				
	Driver	PFC					
	Platoon Sergeant	SFC					
TRANSPORTATION SECTION							
Ammo chief	SFC	Squad leader	SSG	Squad leader	SSG	Squad leader	SGT
Decon operator	PFC	Driver (8-ton)	SP5	Driver (8-ton)	SP5	POL operator	SGT
Driver (5-ton)	PFC	Driver (8-ton)	SP4	Driver (8-ton)	SP4	Driver (2,500-gal tanker)	SP4
		Driver (8-ton)	SP4	Driver (5-ton)	SP4	Driver (2,500-gal tanker)	SP4
		Driver (5-ton)	SP4	Driver (5-ton)	SP4	Driver (5-ton TPU)	SP4
		Driver (5-ton)	SP4	Driver (5-ton)	SP4	Driver (5-ton TPU)	PFC
		Driver (5-ton)	SP4	Driver (5-ton)	SP4	Driver (5-ton TPU)	PFC
		Driver (5-ton)	SP4	Driver (5-ton)	SP4	Driver (5-ton TPU)	PFC
		Driver (5-ton)	PFC	Driver (5-ton)	PFC	Driver (5-ton TPU)	PFC
		Driver (5-ton)	PFC	Driver (5-ton)	PFC		
		Driver (5-ton)	PFC	Driver (5-ton)	PFC		
		Driver (5-ton)	PFC	Driver (5-ton)	PFC		
		Driver (5-ton)	PFC	Driver (5-ton)	PFC		
		Driver (5-ton)	PFC	Driver (5-ton)	PFC		
		Driver	PFC	Driver	PFC		
						5-tons have POL pod trailers	
		5 trailers		5 trailers			

Figure 1

often out on the road. Teletype communication to the field trains area is dependent upon the battalion's rig, which usually is not conveniently located for the S-4 and which — given the state of the art (or lack thereof) of our field RATT equipment — is often inoperable anyway. The brigade's rig presents the same problems, so the brigade S-4's clerks must take the messages and call on a land-line to the battalion field trains.

But who should get the messages? The "OIC" is probably on the road. Is the support platoon sergeant the NCOIC? What about the maintenance warrant officer and the master sergeant, who are often positioned there? Also, who interacts with the various supply agencies in the brigade support area from which most of the supplies actually come? The support platoon leader? The battalion supply sergeant or clerk? If it is the supply sergeant, what does he work out of, a support platoon truck? A tent?

In short, our doctrine has left the field trains scrambling to devise a coherent command and control system. Needless to say, every battalion works somewhat differently,

thus compounding the problems in an era of rapid and multiple unit cross-attachments.

If it is to succeed, the mechanized infantry battalion's logistical effort must have adequate command and control; it does not have that now.

Effective command and control is achievable, however, and at relatively little expense. The key to the logistical effort with its two focal points — the combat trains area and the field trains area — is to set up an effective logistical control center in each area, and to give the support platoon a more realistic structure.

We should start by organizing the battalion S-4 section into two elements — the Logistics Control Center (LCC) Forward, and the LCC Rear. The LCC Forward would be housed in the S-1/S-4 M577 carrier with the already allocated two AN/VRC-46 radios (battalion and brigade logistical nets) plus one AN/VRC-64 radio to monitor the battalion command net in the secure mode and to serve as a backup for the other two radios. The LCC Forward would be staffed by the battalion S-4, the senior supply clerk (specialist fifth class/sergeant), and

one additional clerk (specialist fourth class). The S-4 would have his jeep or HMMWV with two radios and a driver. This element's mission would be to pass the requirements the S-4 has formulated on to the rear, and to coordinate the forward movement of supplies that pass through the combat trains to the forward companies or the designated supply drop points.

The LCC Rear would be housed in an M109 van (or its equivalent) and would have one AN/VRC-46 radio. It would be staffed by an assistant S-4 (lieutenant, quartermaster), the battalion supply sergeant (sergeant first class), two clerks (private first class), and the ammunition chief (staff sergeant), who would be made part of the S-4 section. This element's mission would be to get the S-4's requirements, translate them into appropriate supply actions (coordinating with the various supply elements located in the brigade support area), and prepare the supplies for forward movement.

The support platoon should also be overhauled. Its headquarters would consist of a platoon leader (lieutenant, transportation corps), a platoon

sergeant (sergeant first class, 64C40), and two drivers. It would have two jeeps, each with one AN/VRC-46 radio. Relieved of this assistant S-4 function, the platoon leader, along with the platoon sergeant, would be free to manage the complex tasks of matching movement assets to requirements, coordinating their use, and managing the operator maintenance on 35 vehicles.

The remainder of the platoon would be divided into five squads. The heavy cargo squad would have the five eight-ton trucks, a squad leader (staff sergeant, 64C30), and six drivers (one of whom, a sergeant, would double as an assistant squad leader). There would be three medium cargo squads, each of which would have seven five-ton trucks (four with trailers), a squad leader (staff sergeant, 64C30), and eight drivers (one being a sergeant who would double as an assistant squad

leader). The fifth squad would be a POL squad that would have the five five-ton tank and pump-equipped trucks with pod trailers, and the two 2,500-gallon tanker trucks. It would have a squad leader (staff sergeant, 76W30), a driver/assistant squad leader (sergeant, 76W20), a senior driver for the other 2,500-gallon tanker (specialist fifth class, 76W20), and five driver/POL handlers (76W10). Each of the five squads would have two AN/PRC-77 radios with modified LS-454 loudspeakers for its communication needs. These radios could be shifted from truck to truck according to a squad leader's needs.

These squads would provide a "single system" unit of manageable size in peacetime. In the field, or in combat, these squad organizations would also provide the framework for tailoring up to five logistical packages

for movement around the battlefield to fulfill the battalion's various logistical requirements (see Figure 2).

The decontamination apparatus and its truck are conspicuously absent from this organization. These would be assigned to the S-3 section and would operate under the direct supervision of the chemical officer and his NCO. If for tactical reasons the S-3 did not want the decontamination truck to be in the forward area, it could be placed under the temporary control of either the assistant S-4 (in the field trains), the S-4 (in the combat trains), or any other suitable person.

Under this proposed solution, the support platoon leader would have more manageable squads and five squad leaders directly under his control. Freed of his assistant S-4 duties, he could concentrate on commanding and controlling these five elements. The squad leaders themselves would

S-4 SECTION					
LCC Forward		LCC Rear			
S-4	CPT, IN	Asst S-4	LT, QM		
Driver	PFC	Supply Sergeant	SFC		
Senior Clerk	SGT	Clerk	PFC		
Clerk	SP4	Clerk	PFC		
		Ammo Chief	SSG		
S-1/S-4 M577		M109 van			
2 VRC-46 radios		1 VRC-46			
2 OE-254 antennas		1 OE-254 antenna			
1 VRC-64					
M151					
2 VRC-46s					
SUPPORT PLATOON HEADQUARTERS					
Platoon Leader		LT, TC			
Platoon Sergeant		SFC			
Driver		PFC			
Driver		PFC			
2 M151s, each with 1 VRC-46					
Heavy Cargo Squad		Medium Cargo Squad (3 each)		POL Squad	
Squad leader	SSG	Squad leader	SSG	Squad leader	SSG
Driver (8-ton)	SGT	Driver (5-ton)/		Driver (tanker)/	
Driver (8-ton)	SP4	Asst Squad leader	SGT	Assistant squad leader	SGT
Driver (8-ton)	SP4	Driver (5-ton)	SP4	Driver (tanker)	SP5
Driver (8-ton)	SP4	Driver (5-ton)	SP4	Driver (5-ton TPU)	SP4
Driver (8-ton)	SP4	Driver (5-ton)	SP4	Driver (5-ton TPU)	SP4
Driver	PFC	Driver (5-ton)	PFC	Driver (5-ton TPU)	SP4
		Driver (5-ton)	PFC	Driver (5-ton TPU)	PFC
		Driver (5-ton)	PFC	Driver (5-ton TPU)	PFC
		Driver	PFC		
		2 PRC-77 (mod)		2 PRC-77 (mod)	
		4 trailers		TPUs have pod trailers	

Figure 2