

THE ARMORED SCHOOL
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ADVANCED OFFICERS CLASS #1

MILITARY MONOGRAPH

TITLE: Supply of Tk Bn (H) Organic in the Infantry Division.

SCOPE: To acquaint officers and senior NCO's of the Infantry Division with the mechanics in supplying the Tank Battalion (H) that has now become organic in the Infantry Division.

41-101

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SUPPLY OF TANK BATTALION (H), ORGANIC

IN THE INFANTRY DIVISION

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Much has been said and written about supply of tanks in an Armored Division, but very little has been laid down in regards to the supply of tanks that have now become organic in the Infantry Division.

During the Normandy and Brittany break-through it was the Armored Divisions that were highly publicized, however, it was the separate tank battalions, working with the Infantry Divisions, that took it on the chin during that period. Separate Tank Battalions were continually switched from one division to another and from one corps to another. Ordnance Maintenance support was unsatisfactory. Parts could not be obtained. Ordnance Heavy Maintenance Company (tank) was not always available to provide continuous supporting maintenance.¹ All this of course made the supply problem a very difficult one to accomplish.

I believe the shape of the new peace-time army is beginning to clear and there is one thing about it that seems quite profitable, and that is, that the officer of today is likely to have a far more rounded training and career than ever in the past. This of course is due to the fact, experiences gained from World War II are being incorporated in all phases of training in order to give the student actual examples of specific points the instructors particularly desire to emphasize.

It is the responsibility of the commander that his unit be completely

1. After Action Report, 712 Tk Bn, August, 1944

equipped and adequately supplied. He is assisted in this responsibility by a staff officer, (S-4, G-4) and service and maintenance personnel within his unit. The Tank Battalion (H), organic in the Infantry Division is identical in organization to the Tank Battalion (H) in the Armored Division, however the service troops within the Infantry Division differ somewhat.

The two units having the most effect on the supply of tanks are: (1) Ordnance and (2) Quartermaster. As a matter of comparison, the Infantry Division has organic to the division one (1) Ordnance Company, consisting of 15 Officers, 4 Warrant Officers, and 289 Enlisted Men. The Quartermaster Company of the Infantry Division consists of 12 Officers and 231 Enlisted Men. The Armored Division has organic to the division an Ordnance Battalion consisting of 42 Officers, 6 Warrant Officers, and 693 Enlisted Men. A Quartermaster Battalion consisting of 21 Officers, 2 Warrant Officers, and 388 Enlisted Men. Nevertheless, I believe that the organization of these two units are adequate to provide immediate support to the elements within. Experience has shown, however, that it will be necessary for the Infantry Division to have an additional quartermaster unit and an additional ordnance heavy maintenance company (tank) from army, assigned the task of backing up the organic service elements organic to the division.

The most prevalent cause for the withdrawal of tanks from the close combat area is the exhaustion of their fuel or ammunition. The common custom has been for the tanks to withdraw to the battalion

dump for resupply. Although the resupply from a mobile reserve has proven successful, it is not a common practice. I believe that the loss of attack momentum will be minimized if this tank withdrawal can be avoided. If the use of a mobile supply facilities is not considered practicable, the use of a reserve of tanks to move up and take over the fight from the exhausted tanks may be feasible. An earnest effort should be made to avoid the discouraging and disheartening effect of the infantryman that results from seeing his supporting tanks move to the rear, leaving him to his own unaided efforts. In many cases it might prove more advantageous to not employ tanks at all rather than to have them disappear before the job is finished.

Supply procedures and channels of procurement are identical regardless of the Arm or Service, but the requirements vary considerably. Class I and II are no greater for Armor than for Infantry, Artillery, or any other Arm, but Class III and V greatly exceed requirements of the Infantry troops alone.

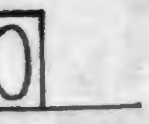
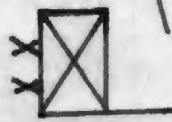
The major problems confronting a G-4 of an Infantry Division in supplying their organic tanks are encountered in supplying Class I, III and V supply. I have outlined below the procedure used in various Infantry Divisions during World War II.

CLASS I: (See Chart No 1, Page 4.)

The Tank Bn S-4 made out a daily ration request and forwarded this request to the division quartermaster who in turn consolidated the unit request into a single request for the entire division. The

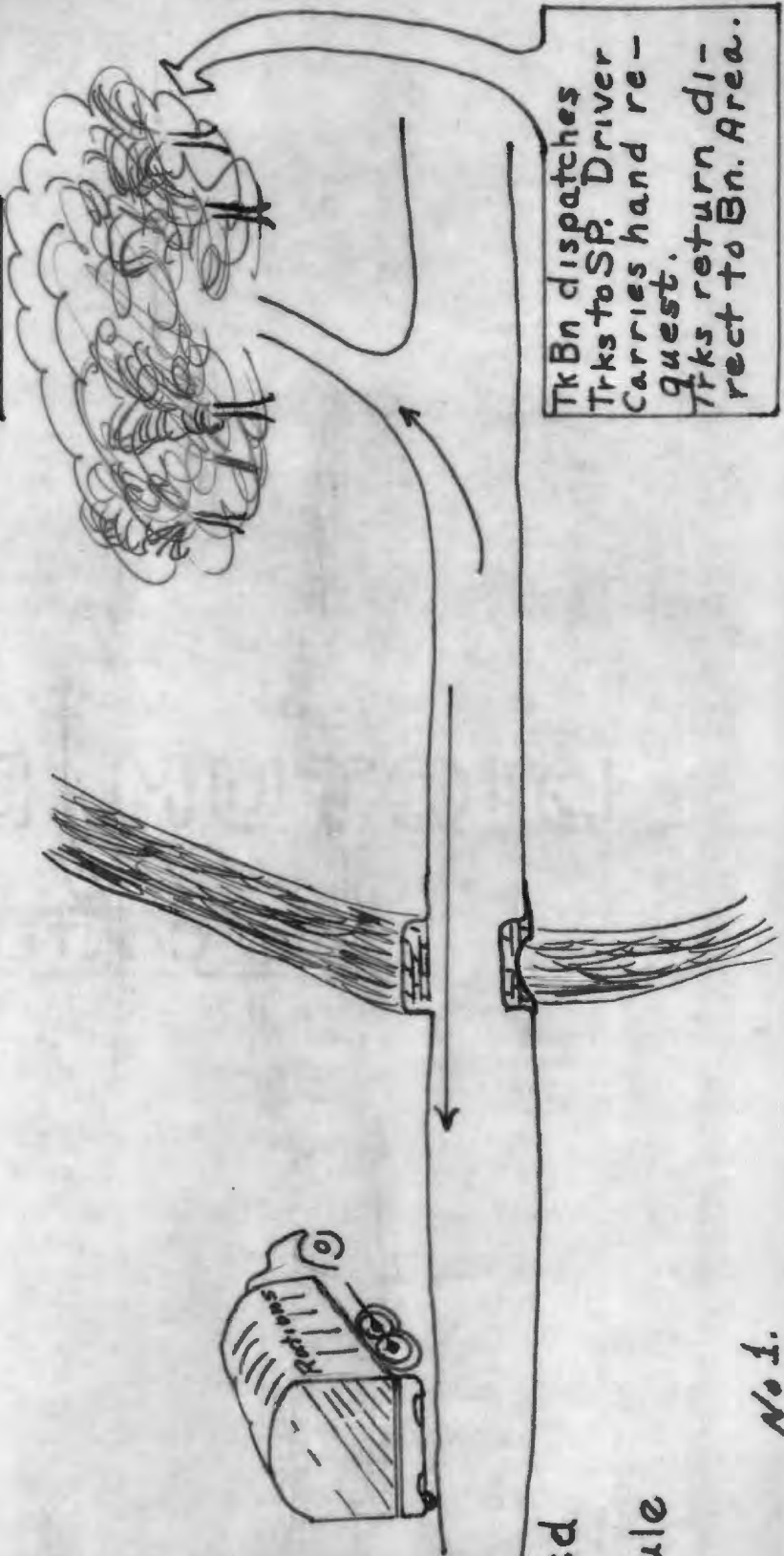
CLASS I SUPPLY

Div. QM Consolidates.
Submits daily telegram



Tk. Bn.
Submits
Request.

Tk. Bn.
Bivovac Area



Tk Bn dispatches
Trks to SP. Driver
Carries hand re-
quest.
Trks return di-
rect to Bn. Area.

Rations Issued
on daily
Schedule

division ration request was then forwarded thru the G-4, to the Army QM who operated the supply point supporting the division. The army, Class I supply point issued the rations to the division in bulk at the scheduled time and requested replacements from the rear. The schedule for deliveries or availability at the army supply point was published by the army quartermaster to divisions in the administrative order.

When the rations for the division were picked up, at the army supply point they were returned to the division quartermaster bivouac, or the division ration break-down point, and were broken down for units of the division. The Tank Battalion ration trucks reported to the ration break-down point at scheduled times and hauled the rations to unit areas, where they were in turn subdivided into battalion or company lots.

This system proved to be very effective and soon became SOP. The only orders necessary were the schedule for delivery or pick-up.

The reserve level of Class I supply for emergency use, was prescribed by higher commander. As a basic principle of supply this level was kept at a minimum, consistent with effective operations. It must be remembered, that the more rations that are kept on hand, the more transportation that is tied up. It must also be remembered that too much supply is often more detrimental than too little.

CLASS III: (See Chart No 2, Page 7.)

A status report, showing the amount of gas on hand at the end of

a specified period and the amount the tank battalion used was submitted daily to the division quartermaster or to the Division G-4 as prescribed. Reports were then consolidated and forwarded to army quartermaster who made that amount of gas available at the army Class III supply point, supporting the division. The quartermaster then sent trucks to the army supply point, picked up the gas for the division in bulk and returned to the division area. Units of the division then picked up gas to meet their requirements at this point. This system proved to be sound within the division due to the fact the quartermaster trucks were adequate to haul sufficient gas for the entire division. In cases where the Infantry Division had a Tank Battalion attached, the Class III was greatly increased to the extent that the trucks in the quartermaster battalion were not sufficient to transport sufficient gas to service the Tank Battalion. Due to the fact the Tank Battalion is capable of furnishing its own transportation to draw Class III supplies directly at the army Class III supply point, the division G-4 authorized this procedure. This proved to be the most efficient.

For purposes of comparison of Class III, the chart below compares a Tank Battalion with the Infantry Regiment as to requirements of Class III, to move the particular unit 100 miles.

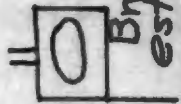
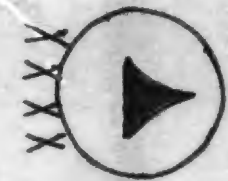
UNIT

Tk Bn (H)	48,500 gallons (cross country)
Inf Regt	8,560 gallons

You can see from the figures shown, that the G-4 of the division

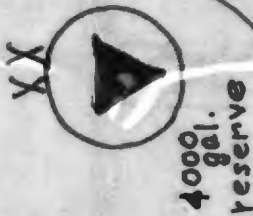
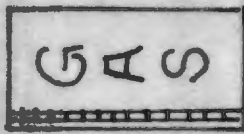
CLASS III SUPPLY

Division Quartermaster
Consolidates Estimates.
Maintains Reserve.



Bn. Trks. Bivouac
Submits estimate
needs

Army CI III
SP
(7)



Bn. Trks. Bivouac



Bn. Trks. dispatched
direct to
Army CI III SP
and return.

No 2.

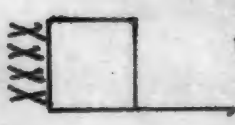
should include in the division SOP instructions for the Tank Battalion to draw its supply of gas direct from Army Class III supply point. In addition, if the supply lines from division to Army Class III supply point are short, it may prove more effective and efficient for the regiments within the division to go direct to the Army supply point.

The control of issue was on a can for can basis. By this, it is meant that the empty gas tank, or empty can is its own requisition. Units received full cans in exchange for empties at the supply point. It was necessary to enforce this system strictly throughout the units in order to maintain the can population in the division area. As a matter of interest the General Board Report for the European Theater, states that it was originally planned to support the operation in Europe with 7,000,000 gasoline cans for the theater. By the end of the war 35,000,000, five gallon cans had been imported, not counting the captured cans which were also utilized. It goes on to state that, although there were few shortages, except in isolated instances, strict control measures necessary to keep the can population at a high level in units to provide for continuous operation and prevent maladjustments.¹ This astronomical figure is indicative of the magnitude of this problem, and may give some idea of the reason for strict enforcement of the can for can exchange rule.

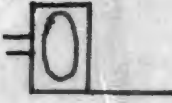
To provide a reserve level of gas, the division normally carried 4,000 gallons on the division quartermaster trains. As gas was expended

1. European Board Report - European Theater of Operations

CLASS IV SUPPLY



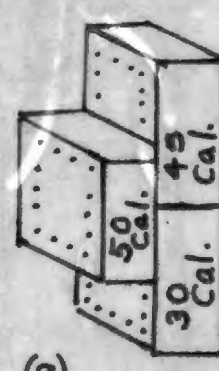
Daily Reports of Expenditures



Bn. Ammo.



Army SP V



convoy

Munitions Officer stops & gets T.O.

S-4 dis-patches Trucks To SP

Bn trucks load here & return

from this reserve the level was restored at once. This did not mean that this reserve was drawn on, for day to day operations, but only that the level of reserve was maintained at all times for emergency use by the organizations within the division, other than the Tank Battalion.

The G-4 coordinated requirements of units within the division with the G-3 so that if there were any special requirements that were forthcoming, the G-4 had an opportunity to plan in advance.

CLASS V: (See Chart No 3, Page 2)

The system of Class V supply was established and supervised by the Division Ordnance Officer. Control over the delivery and requisitions for ammunition was exercised through the Division Ammunition Officer, a Warrant Officer, the Assistant Division Ammunition Officer and five (5) enlisted men. The Division Ammunition Officer was usually located along the Division Main Supply Route.

When the Tank Battalion needed ammunition, the ammunition officer made out a request on a standard form and even in some cases a message blank. The Ammunition Officer of the Tank Bn or his representative took this request to the Division Ammunition Officer, where the request was checked. The Division Ammunition Officer informed the Tk Bn Ammunition Officer what supply point to go. This served as a directive to the Ammunition supply point to release that amount of ammunition to the Tank Battalion. The Battalion Ammunition Officer would rejoin the convoy and guide it to the army supply point he was directed to go to.

Most of the time the convoy proceeded directly to the army supply point where they met the unit Ammunition Officer with the approved request.

ORDNANCE SUPPORT

Ordnance support for an Infantry Division during World War II was sound. The Ordnance maintenance company of the Infantry Division under the new T/O is capable of supporting the Tank Bn in situations when tank casualties do not rise above the normal attrition, however it was found necessary to have an additional Ordnance Heavy Maintenance Company (tk) from army troops assigned to each corps to back up the Ordnance Company in the divisions. This includes the Armored Divisions as well as the Tank Battalions of the Infantry Division. This again was adequate to do the job, but difficulties were encountered due to the continuous changing from one division to another and from one corps to another. Tanks that were evacuated to the supporting Ordnance were not returned due to loss of contact or liaison. We found it extremely necessary to keep one Warrant Officer or an NCO back at the supporting Ordnance Company at all times. His duties at this company would be to keep the supply office of the Tank Battalion informed as to the availability date when, his tanks were expected to be ready to fight and also to keep crew members of tanks intact doing such jobs as 1st echelon maintenance on their specific tanks and equipment, checking tools, cleaning of weapons, checking spare parts, sights, grease, changing oil, etc, so that when ordnance completed their 3d echelon work the tank was

fully equipped, serviced and ready to go. I found that when a good responsible man was put on this job, more efficient work and better coordination and cooperation was maintained with the Ordnance Company. This supervisory job can be rotated among the NCO's of the battalion.

One of the major problems a Tank Battalion has to cope with in this procedure, is that the Armored Division also established liaison with the supporting ordnance company and many times the officer was of such rank that he influenced the Ordnance Company to the extent that his unit receives priority on repair of tanks, parts and equipment, thus slowing up repair of the tanks belonging to the Tank Battalion. It must be remembered that a tank, even though it is in excellent running condition, if it is short a periscope or even a small part such as a retaining spring for the weapon, it is not considered ready to fight, therefore a careful and thorough check, while this tank is at ordnance, both by the ordnance crews and tank crews, remaining with the tank, is necessary.

When a tank is evacuated beyond the 3d echelon of repair, it was considered a loss to the battalion and it became necessary to issue either a new tank or one that had been repaired at the 4th or 5th echelon shop. When a unit receives a new tank, it takes approximately 48 hours to put this tank into condition to fight. This is a responsibility of the ordnance, however when a tank is ear marked for the battalion, it was considered SOP for the Tank Bn to send the crew that was to be issued that particular tank back to the Ordnance Company and

assist in preparing it for combat. This procedure proved to be most effective. The crew became familiar with the particular equipment and took meticulous care in preparing this tank for action. It must be remembered that it takes about 48 hours to complete this service. Many times it took from 3-5 days all depending upon how the tank was to arrive, whether by rail, transport or driven individually.

CLOTHING AND EQUIPMENT:

During the middle and latter part of November 1944, the 702 Tank Bn accumulated a sizeable quantity of discarded clothing from the battlefield in the wake of the combat troops. The unserviceable items were turned in through normal channels for salvage while the serviceable pieces were laundered with the intent of ultimately being turned in as excess. At this time the members of the battalion were in dire need of clean clothing, however the tactical situation was such that soiled laundry could not readily be collected from all members. Therefore, the existing clean items of clothing were distributed in exchange for like items soiled, which in turn were turned in for laundering. This suggested the possibility of eliminating the existent difficulties of clothing supply.

At that time each man had a duffle bag containing his extra clothing. Sufficient organic transportation was not available in either company or battalion trains to carry these duffle bags, therefore the extra clothing was carried on the individuals' combat vehicles. If the vehicle encountered enemy fire, some or all of this clothing was

destroyed; if it became necessary for the crew to abandon the vehicle, all of the clothing was lost, or if the vehicle was subsequently recaptured the clothing was totally or partially pilfered by the enemy, civilians or friendly troops. If any or all of this clothing became wet or muddy, there was a tendency to throw it away.

In view of these facts and circumstances this battalion relieved all men of their extra clothing and carried it as bulk in the company trains issuing out only in exchange for like items which were soiled. This change was highly encouraged and carefully watched by the battalion supply officer. Combat loss replacement requisitions of this battalion, during a six-weeks trial period, were approximately twenty-five percent of what they were formerly and amazingly low in comparison with requisitions from like battalions or units of comparable size. As a result, this system was inaugurated in the line companies with the following results:

Combat replacement requisitions were approximately 25% of former totals effecting a corresponding economy.

When tank crews found it necessary to abandon their vehicle, the only individual losses were their toilet articles, since all clothing in their possession was being worn.

The lapse of time required to get replacements of salvage was practically nil insofar as the individual soldier was concerned, since immediate replacement available through the clean clothing supply.

The overall results of this system proved highly satisfactory for

all concerned and effected a great savings in replacement costs, and at the same time keeping the members of this command well clothed and cleaner.¹

I believe every officer and non-commissioned officer in the Infantry Division should understand the basic principles of supply as pertains to the Tank Battalion (H) that has now become organic in the Infantry Division.

Due to the fact the supply of tanks bears directly on the degree of mobility and flexibility of the battalion as a whole, it is felt that exposing the officers and non-commissioned officers of an Infantry Division to the experiences outlined herein will do much toward welding a team capable of performing any given task which is so necessary in attaining ultimate victory in battle.

1. After Action Report, 702 Tk Bn, Nov, 1944

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17 MAY 1954
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