

Rev. of 15-7-23

THE INFANTRY SCHOOL,
DEPARTMENT OF GENERAL SUBJECTS
MILITARY HISTORY SECTION
FORT BENNING, GA.

3-13

ADVANCED OFFICERS' CLASS

1922 - 1923

ORGANIZATION AND OPERATIONS OF THE DIVISION TRAINS, FIRST
DIVISION, FROM DECEMBER, 1917 TO JANUARY, 1919.

Ralph E. McLain, Captain, Infantry.

1

ORGANIZATION AND OPERATIONS OF THE DIVISION TRAINS,
FIRST DIVISION, FROM DECEMBER, 1917 TO JANUARY, 1919.

A detailed treatment of this subject would require a large volume, therefore it will only be possible to touch briefly on the organization and give a very general account of the principal operations, with only sufficient detail to illustrate certain lessons that were learned.

Only the operations under the Commander of Trains will be dealt with and no attempt made to consider the various trains separately.

Although the infantry of the First Division landed in France late in June, 1917, it was not until five months later, about December first, that a Commander of Trains was appointed and Division Trains Headquarters organized. At this time the division was in training in the Gondrecourt area. Train Headquarters was complete as to assigned personnel and units, having two military police companies. The Ammunition Train had all its units, a Motor Battalion of four companies, and a Horse Battalion of three companies. The Motor Battalion was equipped with ~~quad~~ trucks having special ammunition bodies. It had no baggage trucks and no mobile kitchens. The Horse Battalion was equipped

entirely with wagons and had no rolling kitchens. The Sanitary Train was complete as to units, one Ambulance Section and one Field Hospital Section, each having four companies of which three were motorized and one animal-drawn. The motor equipment was varied, there being three makes of ambulances: Service, G.M.C., and Ford; and old Packard and White baggage trucks. The Engineer Train of two sections, one motor and one horse-drawn, was completely organized and well equipped. No Supply Train existed at this time.

✓ Upon the movement of the division about the middle of January, 1918, to occupy the sector north of Toul the trains did not move as a unit. Such portions of the various trains as were needed moved individually under orders from Division Headquarters. During the occupation of this sector the Supply Train of six companies was organized. This was the only completely motorized train in the division, and was equipped with 3-ton Riker and British A.E.C. trucks, all new.

✓ On April 4, 1918, the relief of the 1st Division in the sector north of Toul by the 26th Division was completed and the division assembled around Toul. On April 7th the motorized portions of the divisional trains commenced their first movement as a unit. The route was via Ligny, Vitry, Chalons, Epernay, Montmirail, La Roche, Meaux, Beaumont, to a training

area around Chaumont-en-Vixen. This was a distance of 310 miles and was made in three days, except by the Ammunition Train which required five. Chalons was reached the first night and La Ferte the second. The Ammunition Train, by travelling until midnight, reached Chalons the first day, but thereafter travelled daily only about one-half the distance made by the balance of the trains.

This first operation of the divisional trains brought out more defects in organization, personnel, and equipment than any other one of the numerous movements made. This

~~was, of course, quite natural.~~

First as to organization. With the exception of the Supply Train every organization consisted partly of motor and partly of animal-drawn vehicles. Therefore every commander's unit was split as soon as the movement commenced, part going over land and part by rail. This splitting of units was true on every occasion even when the division moved by marching, since motor vehicles and animals could not march in the same column.

Second as to personnel. Up to this time no officer in the trains had had experience with so large a column of motor vehicles, and few had had experience with convoys of any size. Little study had been given the subject and many preliminary measures which would have decreased the difficulties were not thought of. In general, officers rode

comfortably in their cars enjoying the scenery and permitted their trains to string out over an unbelievable amount of road space. Drivers were likewise inexperienced in handling their trucks in a long column. Losing distance while going up hill they would allow their trucks to coast rapidly down hill to catch up. Instead of having the desired result of closing up the column this ultimately had exactly the opposite result. Drivers also lacked the necessary skill and nerve to keep their trucks at a minimum distance from the one ahead, likewise leading to undue lengthening of the column.

Finally as to equipment. Counting passenger cars, there were in the trains at this time twelve makes of motor vehicles, constituting, as to normal speed, seven different types. The Ambulance Section, Sanitary Train was equipped with old Packards and Whites for baggage trucks, and with heavy Service and G.M.C., and light Ford ambulances. The old and heavily loaded baggage trucks, travelling immediately in rear of the ambulances of their respective companies, forced the Fords behind them to run in low speed for considerable distances, with consequent overheating and undue wear on transmissions. The Field Hospital Section, Sanitary Train, was also equipped with old Packard trucks, capable of good speed on level roads but very slow in climbing hills. This section continually oversped downgrade in an effort to make up lost distance. The Supply Train, well equipped, as it was, would have been capable

of maintaining a steady rate, but following in rear of the Sanitary Train was held up on hills and lost distance on down grades, so that there was frequently a long gap between these trains. The Motor Battalion, Ammunition Train, was equipped entirely with Quad trucks having special ammunition bodies. The ammunition carried was prescribed by G-1, and the amount had been computed so as to load every truck with ammunition except one per company and one for battalion headquarters for baggage. Two important items had been overlooked. First, the weight and the space required for forty ammunition handlers per company, in addition to cooks, mechanics, and other special personnel, had not been considered. These men had to be distributed throughout the train, slightly overloading every truck. Second, the train had no mobile kitchen trailers, so that the amount of baggage must be in excess of that contemplated by tables of organization, and the narrow ammunition bodies did not provide sufficient space for the amount of baggage that would have loaded the trucks to weight capacity. This made it necessary to further overload certain trucks with portions of the baggage. This overloading, combined with the fact that the Quads, travelling in convoy, could not sustain an average speed of more than nine miles an hour, explains why the Ammunition Train required five days for this move.

The division remained in training until April 18th, when it commenced its movement, by marching toward the Montdidier

Sector. The trains moved each day, starting generally at 1:00 or 2:00 P.M. In spite of these late starts the trains nearly always overtook the artillery before the end of the day's march and were delayed on the road so that billets were not reached until dark.

The occupation of the Montdidier Sector was begun April 22nd and the division remained in until July 4th. During the occupation of this sector the 2 ton Quad trucks in the Ammunition Train were replaced by 3 ton British A.E.C.s, the number of trucks being reduced so as to leave the total tonnage the same. At the time of the preparations for the attack on Cantigny the Horse Battalion, Ammunition Train, was used for the first time to transport ammunition forward. Its work could have been as effectively and more easily performed by trucks, as was the case on each of the few occasions where this unit was called upon to perform its normal function. Up until June 5th the Supply Train was stationed in the town of Noyers St. Martin. This town, like many others in the rear area, was very frequently bombed at night by enemy aircraft. No anti-aircraft weapons could be provided for the town, so the Commanding Officer, Supply Train, secured authority to station six groups of eight riflemen each around the outskirts of the town, hoping by their fire to imitate machine gun fire closely enough to drive the enemy plane up. On the first, and only night that these groups were placed in position, an enemy plane came over quite early in the evening.

The rifle

groups opened up as soon as it was apparent that the plane was hovering over the town. Unfortunately the rest of the command had not been warned of the experiment and in a very short time nearly every rifle in the town was blazing away. Far from being frightened into taking a higher level the Boche swooped lower than ever, dropped all of his bombs, and in addition threw over about twenty hand grenades. Only when his ammunition was exhausted did he return to his own lines. This proved beyond a doubt that rifles are not effective against aircraft, certainly not at night. Needless to say this method of defense was not tried again.

On May 9th Mobile Veterinary Section No. 1, an attached unit of Division Train Headquarters, provided by tables of organization, reported to the Commander of Trains. The function of this section was the evacuation of sick and wounded animals, and the securing and distribution of replacements. This section did much to improve the animal transport of the division and functioned effectively in all sectors and during all offensives of the division except the final one, when the rapid advance and early withdrawal of the division prevented its keeping up.

Upon being relieved in the Montdidier Sector on July 4th, the division was assembled in the area around Beauvais where it remained until July 12th. On that date the movement to the vicinity of Compiègne was begun, all arrangements

being made at night. The Division Trains made their first night movement on the night July 14-15th. Much had been learned during and since the last march, and it was found possible to keep the trains well in hand and to travel at a steady rate. The placing of all baggage trucks of the Ambulance Section in rear of that section, the equipping of the Ammunition Train with larger bodied, faster trucks, the grouping of each train into groups of five trucks each, and the increased skill of drivers were all factors in the improvement over the last march. One unusual incident occurred. ~~It was seen from a study of the map that the new bil-~~ ~~leting area of the Sanitary Train was beyond that of the~~ Ammunition Train, so that, to avoid confusion, the Sanitary Train must precede the Ammunition Train in column. At this time the Sanitary Train was north of Beauvais, while the Ammunition Train was west of the town, so the order of the Commander of Trains directed that the Sanitary Train pass a given point in Beauvais at a stated time, and that the Ammunition Train pass it twenty minutes later. This order was not carried out, due to the fact that the Sanitary Train was late and the Commanding ^Ufficer, Motor Battalion, Ammunition Train, miscalculated the time his unit would require to travel from its billeting area to the designated point. Consequently the two trains formed in reverse order and it was necessary to put one train ~~passed~~ ^{past} the other on the road, a procedure strictly forbidden by French regula-

tions governing the conduct of trains on national highways. It was decided to make the change at once while it was still twilight and the movement was successfully accomplished before any opposing traffic was met. While it was underway a colonel of the French C.R.A. Service arrived on the scene and expostulated with the Commander of Trains, and the latter only avoided argument by keeping his interpreter out of sight and failing to understand French. The trains finally left Beauvais at about 8:00 P.M., were delayed enroute at two places by the passing of a portion of a French cavalry corps over ~~parts of same road, and arrived at their stations in the~~ Dammartin area at 2:00 A.M., July 15th, travelling 60 miles.

During the day of July 15th it was generally supposed that the division was to rest in the Dammartin area and it was not until the morning of the 16th that it was known that the division was to participate in an offensive. The first movements were made on the night of July 16-17th and the divisional trains were moved to the vicinity of Crepy. Every road in the area traversed was crowded with traffic and the trains, which left Dammartin at 10:00 P.M. did not reach their destinations until 2:00 A.M., although the distance was only 25 miles. ~~During the night the enemy bombed Crepy and vicinity, but this~~ was routine work and there was nothing to indicate that he suspected any unusual movement in the area.

On the morning of the 17th the trains were released from control of the Commander of Trains, preparatory to the advance

of the division to the attack. On July 20th, after the division had been engaged for two days, its reserve had been committed to action. The formation of a new reserve battalion was directed, and for this purpose the greater portion of the Horse Battalion, Ammunition Train, was used as a nucleus. To this were added 180 replacements, one-half of a Military Police Company, and about thirty stragglers which had been rounded up by the military police near the Division C.P. This assemblage of troops was concentrated at Missy and organized into a battalion of three companies ~~under the Commanding Officer of Military Police. It remained~~ at Missy until the beginning of the relief of the division on July 23d, when it was used to bury the dead and to salvage equipment.

✓
On July 24th the division was withdrawn to the Dammartin area, where it remained until July 28th. On that date orders were put into effect for the return of the division to the vicinity of Toul. All of the motorized units of the Division Trains moved together and in addition the Division Machine Gun Battalion was attached. Having profited by previous experience the trains made their second long overland march much more easily and in better order than the first one. To avoid the difficulties due to differences in types of vehicles the Machine Gun Battalion led, followed immediately by the ambulances of the Sanitary Train. This permitted the

Fords to travel at a speed more suited to their motive power, thus avoiding undue wear. The baggage trucks of the Ambulance Companies were grouped in rear of all ambulances, and were followed by the Field Hospital Section. The Ammunition Train and Supply Train followed, with the Engineer Train, which was equipped with Quad and FWD trucks, in rear. Thus no heavy, slow-moving truck was placed in front of one capable of maintaining a fairly rapid rate. Gaps in the column due to differences in type were closed by occasional halts, but gaps within units were practically eliminated by the adoption of this order of march.

~~Within companies into groups of five, and the distribution~~
of officers throughout the column also did much to keep the trains in a uniform column. The movement to a billeting area east of Toul, a distance of 240 miles, was made in two and one-half days, nightly halts being made near Fere Champenois and Void. The route followed was via Meaux, Coloumiers, Vitry and Ligny.

From July 31st to August 5th the division remained near Toul. Then a quiet sector west of the Moselle was held until August 22d. After a period of training in the vicinity of Vaucouleurs from August 23rd to September 2nd, the division began its movement into and occupation of the position from which its attack was launched on September 12th. All of the movements during this period were so short that the ~~various trains~~ moved individually on orders direct from

Division Headquarters. Just prior to the St. Mihiel offensive one military police company was taken from the division as a result of the military police reorganization throughout the A.E.F.

Following its active participation in the St. Mihiel offensive the division was reassembled in woods near Nonsard and on September 19th began its movement toward the new offensive which was to begin September 26th. The infantry was moved on French truck trains, the animal drawn elements marched direct over secondary roads, and the motorized units travelled via main roads. ~~The first movement was to an assembly area in the vicinity of Benoitte-Vaux where the division remained in army reserve.~~

The motorized trains made their move on the night of September 19-20th. This was the last march of the combined trains under command of the Commander of Trains prior to the Armistice and was the most successfully conducted of all its movements. This success was due principally to the experience gained by officers and men on previous movements. The individual organizations moved by converging routes to Gironville, where they were met by the Commander of Trains and the column formed without confusion or loss of time. The route followed was through Commercy, Ligny, Bar Le Duc, to the vicinity of Souilly, where the column was broken up as each unit moved to its billeting area. On this march an order to halt at five minutes before each hour for five minutes was adopted.

This proved to be of great assistance in keeping the column closed up and it was found that five minutes was time enough for a messenger from the rear of the column to reach the Commander of Trains with a report as to the condition of the column. On no occasion did this halt serve to delay the movement of any other trains. The distance of about 80 miles was covered in 10 hours, from 7:00 P.M. to 3:00 A.M.

During the exciting days from September 26th to November 11th the First Division made many movements and engaged in two offensives, or phases, of the American drive in the Meuse-Aargonne sector. In fact it seemed to those who had to do with transportation and traffic control that all divisions were continually moving forward or to the rear. All movements were short as to distance, and, as the division was always engaged, or on the verge of becoming engaged, in battle, the trains did not return to control of the Commander of Trains until November 14th.

On that date the division, which had been assembled in Remagne Woods following its withdrawal from in front of Sedan, commenced its march to the vicinity of Verdun. It reached its area east of Verdun on November 15th where it awaited orders for the march into Germany, which could not begin, under the terms of the Armistice until the 17th. During the wait near Verdun the trains received some replacement trucks from other divisions and the two animal-drawn units of the Sanitary Train, one Field Hospital Company and one Ambulance Company, were

or in small convoys, delivering supplies. In many instances, due to dangerous hills and steep curves, it was necessary for trucks delivering supplies at night to wait until daylight before making the return trip, thus losing to the Supply Train the services of those trucks for several hours. In the Sanitary Train a serious shortage of trucks existed so that it was necessary to use the trucks of two Field Hospital companies to transport the equipment of one, thus doubling the mileage required of those trucks. The Ammunition Train, which had been re-equipped with special bodied Quads, likewise had difficulty in moving its required load and several ~~trucks always had to make extra trips.~~

The distances at which troops had to be supplied and sick evacuated added to troubles of the Supply and Sanitary Trains. These distances were frequently so great that a full 24 hours was required for trucks of the Supply Train to load, reach their destinations, unload, and return to the train. Under such circumstances, of course, twice the normal number of trucks are required for supply. The fact that several divisions were supplied at the same railhead frequently delayed loading of trucks until late in the day. Several infantry commanders also caused difficulty by refusing to unload trucks which arrived late at night and keeping those trucks with them until the next day's halt. One item which was by no means small was the fact that every time Division Headquarters moved it was necessary to furnish fourteen

motorized. The excessive strain to which transportation had been subjected during the operations in the Meuse-Argonne sector made replacements essential, but unfortunately the divisions from which these trucks were secured had also been engaged so that they were little, if any, better than those already in use. In fact many of the replacements were towed into Verdun where they were received by the First Motor Repair Section. Consequently the motorized trains did not find themselves in the best condition to take up their first long march behind a marching division, at the same time supplying the troops, often at long distances from a railhead.

~~A detailed account of the march into Germany would be~~
of no value here. It is sufficient to state that it took from November 17th to December 13th and that the route was from Verdun, through Audun Le Tiche, Esch, Bettembourg, southeast of Luxembourg, through Gravenmacher, Trier, Wittlich, Zell, Treis, and Coblenz to bridgehead positions around Montabaur. Motorized trains moved in bounds, covering in one day the distance marched by the balance of the division in the two or three preceding days.

It may be of interest to discuss some of the difficulties encountered. First as to the condition of equipment. During active operations lights had been prohibited and all lighting equipment had either been removed or permitted to become un-serviceable. This proved a great handicap, particularly to the Supply Train which generally had trucks out at night, singly

trucks for the transportation of office equipment, personnel, and baggage.

The roads along the Moselle Valley had many steep, curving grades which severely tested the power of trucks and skill of drivers. After dark and in rainy weather these presented positive dangers.

Immediately upon arrival in the bridgehead area every effort was made to place equipment in the best possible condition and improve its appearance. Strict discipline as to uniform, which had necessarily somewhat relaxed during active operations, was enforced. Within a short time the trains reached and maintained a standard of discipline and efficiency equal the rest of the division, which was not to be surpassed by the troops of any nation.

ANALYSIS AND CRITICISM.

As the operations discussed in this monograph were not tactical, it is rather difficult to analyse and criticize. Moreover all were successful, the only difference being that some were carried through more easily than others. Certain errors that were made, however, deserve some special comment.

Prior to the first movement of the combined motor trains no special study had been made by officers concerned as to the special requirements of such an operation. It is true that the loads to be carried and distances to be covered per

day were prescribed by G-1 without consultation with the Commander of Trains, but had the latter been consulted it is doubtful whether he could have given any advice of value. To this is traceable most of the difficulties of that first movement, the long hours travelled each day, the falling behind of the Ammunition Train, the unusual amount of road space occupied by the trains, and the undue strain which fell upon many of the vehicles.

On the occasion of the movement of the trains from ~~Beauvais~~ to Derwentin on the night of July 14-15th, 1918, it will be recalled that two units formed on the road in reverse order, necessitating the passing of one by the other on a main route, a manoeuvre which might have caused serious delay, not only to the First Division Trains, but to others. This error was directly due to mistakes on the part of the two unit commanders concerned, but could not have happened had the assembly point been designated at the junction of converging routes north of Beauvais, instead of on a main route south of the city. At such a place the trains could have halted without danger of delaying other units leaving or entering a supply center.

Some criticism is due unit commanders for not having kept lighting equipment in repair so that it could have been used on the march into Germany. This failure is not to be too harshly commented on however, in view of the fact that continual use and lack of spare parts made it difficult to keep

trucks in serviceable condition at all. In fact the personnel of all trains is deserving of much praise for keeping them in constant operation in spite of the many difficulties encountered. It must be remembered that throughout all operations none of the trains were equipped with rolling kitchens; that some lacked proper baggage trucks; that no gasoline tank trucks were provided until after the armistice; and finally, that the animal drawn sections proved of little or no value so that the motorized sections performed nearly all of the work for which the entire train was designed.

LESSONS.

There are many lessons to be drawn from a study of the operations of these divisional trains. The first is the old one that to enter a war unprepared greatly increases the difficulties to be overcome by those who must win the battles. It is astonishing, but none the less true, that the nation which has always led the world in motor vehicle development sent its first division into action with its trains incomplete and inadequately equipped and maintained this division in Europe for more than two years without ever completing its train equipment.

Secondly, it is easily seen that the proper handling of trains requires experience and training. Officers who are to command divisional trains should be selected sufficient time in advance to enable them to take some special training

before entering active operations. Officers cannot be taken from the line, placed with trains, and expected to obtain immediate success.

Third, the matter of equipment must be constantly studied with a view to being prepared to send a division into the field with its trains equipped with a reasonably uniform type of motor vehicle. If this is not done it will be found that on those occasions when the trains must move in one column, and these occasions will arise, disorganization and confusion will result.

Finally, the experience of the First Division Trains shows that the placing of animal drawn transportation with motor transportation in divisional trains is not necessary and results in waste of personnel and animals, as well as disorganization. Wherever the animal drawn sections were used it was to supplement the motor transportation, never to replace it. The forward movement of supplies by truck was always successfully made to within easy reach of regimental field and combat trains. This was as true in the approach to open warfare conditions in November, 1918, as it was in quiet sectors. Wherever mined roads were encountered the craters proved nearly as much of an obstacle to wagons as to trucks, and whatever time was lost in making detours possible for trucks was soon made up by the increased speed of the trucks after the obstacle was passed. In fact the divisional trains were necessarily so far in rear at the opening of an attack, and

were required to let artillery move forward ahead of them, that the engineers generally had the necessary repairs made before the trains arrived on their forward movement. It therefore appears to the writer that divisional train organization for completely motorized trains and for complete animal-drawn trains should be made, provisionally, and the decision made as to which type to adopt when it is known where the theater of operations is to be. If road conditions necessitate animal-drawn transport, the trains should be completely animal-drawn, and the division supplied at the limits of motor transportation by corps or army trains.

References: The only references used were a personal diary kept at the time, and notes made during the Spring of 1919. Therefore no marginal notes as to references appear.

Operations First Division Trains

Routes { *Trains Combined* ———
Trains not Combined - - -
Assembly Areas ○ (hatched)
Defensive Sectors □ (hatched)
Offensives →

