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THE GENERAL BOARD

United States Forces, European Theater

PROCEDURES FOR THE CONTROL OF SUPPLY AND
PERSONNEL MOVEMENTS

MISSION: To make a detailed examination of procedures and documentation necessary for the efficient control of movements of supplies and personnel and to submit comments and recommendations for the standardization thereof.

"The General Board was established by General Orders 128, Headquarters European Theater of Operations, US Army, dated 17 June 1945, as amended by General Orders 182, dated 7 August 1945 and General Orders 312 dated 20 November 1945, Headquarters United States Forces, European Theater, to prepare a factual analysis of the strategy, tactics, and administration employed by the United States Forces in the European Theater."

File: R 315/1 TGBSY

Study Number 124

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THE GENERAL BOARD
UNITED STATES FORCES, EUROPEAN THEATER
APO 408

PROCEDURES
FOR THE CONTROL OF SUPPLY
AND PERSONNEL MOVEMENTS

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R E S T R I C T E D

PART ONE

SUPPLY MOVEMENTS

CHAPTER 1

DOCUMENTS AND INFORMATION PERTINENT TO ALL SUPPLY
MOVEMENTS ORIGINATING WITHIN THE EUROPEAN THEATER

SECTION 1

MONTHLY SUPPLY MOVEMENT PROGRAM

1. Development and Background -

a. The most important document devised for the overall control of movements within the European Theater was the Monthly Movement Program, an instrument for allocating in advance the available transportation among the tonnages proposed for haul. (See appendix 1) The first attempt at establishing a movements program was the original program from which the Red Ball truck highway was evolved. This had its inception in the request of the armies around 20 August 1944 to build up approximately 100,000 tons reserve in the Paris area for an offensive by 1 September. This plan was almost immediately dropped as the front moved at an unexpectedly fast pace east across France. With a wide rail net in good condition east of Paris transfer points were established in Paris whereby the tonnage capacity of this net could be filled by supplies moved to Paris by road and there transferred to rail. A movements plan (which was really only a tonnage target in broad outline) was instituted at this time to indicate the total tonnage lift available on this road and rail system.

b. System Prior to the Monthly Program - The actual programming of the tonnage to be moved over the combined truck and rail system was done at a meeting held every night in G-4 Communications Zone with the various Supply Services. At this meeting bids were accepted from the supply services to fill the daily allocations to each army of the available transportation lift. These bids were put into the daily program, given a priority, and forwarded to the Normandy Base Section depots, ports and beach dumps for movement commencing thirty hours after the meeting. This system of priority allocations, combined with the monthly changes to the overall tonnage plan (prepared by Movements Division of the Office Chief of Transportation in conjunction with G-4, Communications Zone) continued in effect until the German Ardennes offensive in December 1944.

c. Final Evolution - By December 1944 it became clear that the programming of supplies on a daily basis by G-4 Communications Zone was no longer warranted by the supply situation and was in fact undesirable, because of the difficulty in predicting to both shippers and the carrying agencies sufficiently far in advance, transportation requirements of all shipping points.¹ The establishment of a monthly program, which commenced on 1 January 1945, provided the necessary basis for the control by the Chief of Transportation of all movements. The "hand to mouth" system was abolished with the establishment of this program, and the priority system, which had previously governed all movement of supplies, was also eliminated except during periods when there was a shortage of railroad cars.

2. Function - The Monthly Supply Movement Program was to provide a general overall central control of the use of the entire transportation system in relation to the needs of the armies and the supply services. It was to serve, also, as a forecast to transportation agencies of actual movements to be performed in the near future. More specifically, it imposed maximum tonnage limitations on all possible shippers for the various means of transportation. Control was effected by requiring all appreciable movements which were not in the program to be cleared through the Chief of Transportation. By this means the program, which was in itself an imperfect document, was used to permit the maximum movement on an automatic (i.e. programmed) basis with an overall control of that smaller percentage of movement which had not been foreseen when the program was prepared. In order to prevent the over-burdening of facilities, the Chief of Transportation required, when necessary, that all non-programmed movements be counter-balanced by an equivalent reduction of programmed movement along the same line of communication. The program document or form was issued to all concerned as a command directive.

3. Difficulties and Subsequent Changes -

a. Allocation of Inbound Shipments - It was generally recognized the program could not be carried out in detail. At first, it was considered that the program would be used as a general guide for the supervision of freight movements. Accordingly various changes in the program were made each month at the top transportation command level to meet necessary changes in the supply and transportation situation. In February 1945 a system of shipping allocation meetings was established for the purpose of re-allocating the tonnage arriving on each convoy to the final depot destination and placing ships to ports to obtain the most economical movement to that destination. These meetings, presided over by the Control and Planning Division of the Office Chief of Transportation, adjusted the desires of the Supply Services as stated by the supply representatives - with the traffic condition at supply depots and the backlog of shipments at the ports for these depots. This system provided a means of adjusting the movement program with the actual arrival of tonnages on ships.²

b. Embargoes - When the control of the movement program was placed in the hands of the Chief of Transportation the power to embargo depots remained in the hands of the Assistant Chief of Staff, G-4 Communications Zone. Therefore, the sensitivity of the control provided by the system was to a certain extent nullified by delays involved in going through general staff channels to obtain action when depots became over-crowded with rail cars, barges, or trucks. A compromise solution was achieved. When it appeared necessary to the Chief of Transportation or to a Section Transportation Officer to embargo a depot, the Section Transportation Officer concerned was requested to have the Section Commander forward a request to the Commanding General, Communications Zone, to have an embargo placed on the depot. An information copy was sent to Chief of Transportation who then took immediate action without waiting for confirming orders to be issued by G-4.¹

c. Control of Inter-Depot Movements - The monthly movement program proved to be inadequate in controlling inter-depot movements, since these varied from day to day in accordance with shifting supply availabilities and requisitions. The curtailment of such movements became increasingly necessary as railway cars were shifted into Germany, thereby creating a temporary shortage of freight cars at ports and in rear areas. Since depots were one of the principal creators of empty freight cars, the effect of uncontrolled inter-depot movements was to give depots first priority in obtaining empty rail cars

for desired shipments. A solution was finally worked out whereby it was agreed to curtail drastically the inter-depot movements program and to require all non-programmed moves to be cleared through the Chief of Transportation, co-ordinating with E-4 Communications Zone. Later, it was required that all non-programmed movements in excess of 150 tons per week (whether initial movement, reconsignment or diversion) between two given points should be cleared through the Chief of Transportation. The latter, then taking the position that the movement program represented the maximum commitment of the transportation system, insisted that the Supply Service concerned eliminate an equivalent tonnage from its program before the non-programmed movement would be authorized.

d. Solo Remaining Difficulty - The chief obstacle remaining in the enforcement of the program was the difficulty of insuring that RTO (Road/Rail Transportation Office) personnel were familiar with the details of the program and the procedure, and would insist on compliance by all concerned. The constant turnover and shifting of RTO's complicated the matter. The only solution was constant policing of movements by the Chief of Transportation and sending command directives to Section Commanders pointing out deficiencies.

SECTION 2

MISCELLANEOUS FACTORS CONTRIBUTING TO THE OVERALL CONTROL OF MOVEMENTS

4. Installation Directory - In the early phases of the Normandy campaign and the rush across France there was no accurate nor widely distributed locator list of supply installations. Transportation Headquarters of the Advance Section, Communications Zone, took it upon itself to make up such a list in the face of a very urgent need for one. The list was by no means complete, but was of considerable help in the control of supply movements. As the advance finally slowed and a depot system was established with adequate communications, Headquarters Communications Zone began to publish a periodic Installations Directory. This directory indicated all Communications Zone depots, classified as to mission and class of supply handled, and was distributed throughout the theater specifically for the purpose of facilitating the systematic submittal of requisitions by regulating stations and issue depots on the proper filler depots. This publication included the consignment addresses for rail and truck shipments, RTO teleprinter number, RTO telephone number and location of RTO serving the installation. In addition, consignment addresses for regulating stations were contained in the directory. Shipping directives or shipping orders thereafter issued by the Chiefs of Services were to furnish the exact and complete consignment addresses listed in the directory. Also, all consignors/shippers were to use the directory to obtain the exact geographical addresses of consignees for use in consigning supplies. This is essential when transportation is performed by civilian railroad operators.

5. Operation of the Civilian Transportation Network - The kind of movement control to be established in any theater is greatly influenced and sometimes determined by the control system in operation by local civilian agencies for civilian movements. Thus, in England there was a strong, centrally controlled system of transportation that necessitated the establishment of U.S. Army movements control along almost exactly the same lines in order to effect thorough coordination. On the continent, however, civilian transportation organizations were initially disrupted and weakly controlled. Such civilian traffic as existed was superimposed on the system after military requirements

had been met. Later, as the French began to take over much of the actual operations, some alterations were of course necessary. In both situations, however, (United Kingdom and the Continent), it was proven that close coordination and cooperation with civilian transportation agencies resulted in increased operational and control efficiency.

6. Priorities

a. Relationship to Movement Control - The inevitable result of a priorities system (which is adopted as a result of a shortage of transportation to meet all requirements) is that control of movements reverts to the hands of G-4, Communications Zone since all shippers must obtain a G-4 priority. The adoption of a periodic movement program, which is within the bounds of transportation capacity, eliminates the priority system and enables the Transportation Corps and the Supply Services to make the most flexible use possible of current variations in supply requirements and movement capacities.

b. Traffic Priorities - In February 1945 the Chief of Transportation issued a directive setting up a system of traffic priorities. In periods of car shortages at ports it was directed that the following priorities of traffic would be followed: first priority was destinations that were in the program and not congested; second priority was destinations not congested but not in the program or not fully taxed by the program; third priority was programmed destinations slightly congested.

SECTION 3

DOCUMENTATION OF SHIPMENTS

7. Introduction - Regardless of the tactical or supply situation there are certain documentation procedures pertinent to all supply movements originating within a theater of operations. Most of these are essential to, and all are contributory to adequate movement control. The basic documentation procedures as planned underwent very few changes in actual operations.

8. General Documentation Development

a. In the United Kingdom - Documentation of rail traffic in the United Kingdom tied in completely with the British military practice. Prior to the arrival of any U.S. units the British railroads were quite experienced in the handling of all types of military traffic and British Movement Control had instituted the use of certain specific documents to cover such moves. U.S. traffic moved under similar arrangements with the exception that car labels of a distinctive type were added in order that U.S. traffic might be quickly identified throughout its course. In general, with the British transportation system as efficient as it was and with no language difficulties to be surmounted, documentation of freight traffic did not present a problem.

b. Continental Operation - The planning of rail documentation on the continent was of a very general nature. Some consideration had been given to the question of freight warrants (for the payment of transportation charges to civilian agencies) and it was planned to use our own form of documentation to cover our shipments. Chief lack of preparation was in the employment of multi-lingual forms. This did not hamper operations in the early phases of the traffic movement, but when civilian operations (Phase III) were inaugurated, it became a glaring weakness. Immediate remedial steps were taken,

but printing difficulties prolonged this condition at a time when waste of transportation and loss of time could be ill afforded. Contacts were made late in September 1944 with the French Railway to institute a uniform system of rail documentation but negotiations were prolonged and an agreement was not reached until January 1945. The result was that the U. S. Army was unable to give accurate verifications of tonnage figures prior to 1 January 1945.¹ The British, however, profiting from experience earlier in the war, maintained accurate records of all tonnages moved over civilian carriers and thus were possessed, regardless of a written agreement with the French Railways, of all detailed figures necessary to effect an accurate settlement.

9. Documentation for Inland Shipments³-

a. By Rail - When the consignor/shipper received instructions to prepare certain supplies for shipment (these instructions coming on a Shipping Order from the Chief of Service) and the shipment complied with the current movement program, the following documentation was necessary:

(1) Wagon or Car Waybill - This was the basic document for shipment identification and description. The form planned for use on the Continent was to be the same as that used in the United Kingdom. In subsequent operations, however, this form proved to be inadequate, chiefly because the document made no reference to requisition numbers. It was recognized that at times the consignee would receive no other information concerning a shipment other than that on the documents arriving with the supplies. Consequently it was devised that the waybill should identify a shipment completely as to place and time of origin, contents and identity of the requisition, and shipping directives or order against which the shipment was made. Hence, as finally devised, the following information was to be shown on all waybills: Identity of consignor/shipper; exact identity and geographical location of the consignee in the Communications Zone (for shipments to armies, army number was indicated, but the shipment was consigned to or through the regulating station serving the army); date of shipment (date of loading); car number; freight symbol and train number when known (to be furnished by the RTO); waybill number; code number of ship from which cargo was unloaded (for shipments from ports only); consignee's requisition numbers or daily telegram number; number of shipping directive or order issued by the Chief of Service; number and type of package of each item; total weight contained in the conveyance; specific, itemized description of the contents for each car to the maximum extent possible (if waybill inadequate for entire load, the complete description was shown on an attached "tally-out"). Difficulties were still encountered, however, because of the fact that the waybill did not indicate specifically where the requisition numbers were to be entered. This difficulty was also due partly to the failure of personnel to adhere strictly to the existing standing operating procedure. It is therefore deemed necessary that the waybill make specific provision for the inclusion of the requisition numbers. The preparation and distribution of the document was by the consignee or shipper. A separate waybill was made for each car, with one copy placed inside the car, one on each side of the car under a clip, one to the RTO for the train conductor and one for the shipper's file.

(2) Shipper's Tally-Out and/or Packing Lists - These were also prepared by the shipper with one copy attached to each copy of the waybill. They were necessary, as mentioned previously, only in the event there was not space for a complete description on the waybill.

(3) Car Label - Chief function of the car label was to provide at a glance ready identification of service and class of supplies loaded in freight cars. The label also facilitated quick checking by RTO personnel and easier switching operations. Those functions were served by having the label printed with a color band sufficiently broad to be recognized at a reasonable distance, the color indicating the Service and Class of supply. Data such as consignor, consignee, date of loading, number of cars in consignment, service and class of supply (as an added precaution), tonnage of car's contents, train number or freight symbol (if known) was also entered on the label. This document was prepared by the shipper in duplicate, and one copy was placed under the clip on each side of the rail car. It was found essential that the car label be in the language used by the civilian operators. On the continent a tri-lingual (English, French, German) label was finally devised that resulted in distinct improvements in movement control. (See appendix 3). An "Urgent Expedité" label was also devised to be used for high priority traffic only and to be used only on authority of the RTO at origin. The RTO received his instructions for urgent shipments from the Chief of Transportation, who made the decision upon requests for high priority movement by the Chiefs of Services.

(4) Freight Warrant - This document was used in both the United Kingdom and France to provide an accurate accounting system for transportation charges involved in the use of civilian agencies for the transporting of U. S. Army supplies. Failure to use freight warrants or to have some accurate control system for this purpose resulted in the U. S. Army being unable to account accurately for all movements made by civilian carriers prior to 1 January 1945. The freight warrant finally used on the Continent was called a "Lettre de Voiture" and was bi-lingual. It was prepared by the RTO at origin and distributed as follows: one copy to the civilian station master at origin, one to the train conductor, one by post to RTO at destination, and one kept in file of origin RTO. One devised the form used proved satisfactory and remained unchanged. (See Appendix 4).

b. By Road - Documentation for road shipments was fundamentally the same as for rail shipments. Procedures planned for this documentation proved to be adequate - when adhered to - and few changes were made throughout operations. A brief outline of the documentation follows:

(1) Vehicle Waybill - The vehicle waybill differed slightly in form but contained the same information and served the same purpose as the car waybill for rail shipments. There were four copies to be made of the vehicle waybill by the shipper and all copies were to be signed by the driver before start of movement. There was a separate waybill for each truck. One copy was carried in the glove compartment of each truck for delivery to consignee with the cargo; a second copy was carried by the convoy commander to be delivered to the commanding officer of the truck unit after securing consignee's signature and notations showing shortages or overages. These same notations were also made on the first copy. A third copy was to be sent via fastest courier mail available direct to consignee. The last copy was retained by the consignor/shipper.

(2) Shipper's Tally-Out - This form was used exactly the same and served the same purpose as described for rail shipments. A copy was to be attached to each copy of the waybill.

(3) Driver Control Record - This was a separate form until it was finally included as part of the vehicle waybill. This form was executed by drivers of vehicles when drivers were changed

between point of origin and destination. A separate form was executed in duplicate for each truck, one copy being attached to each of the first two copies of the waybills. This form was merely an endorsement by the new driver indicating receipt of the vehicle load of supplies and further indicating any shortages and overages noted at this change-over of drivers.

c. By Inland Waterways - Here again the documentation is essentially the same as that for rail shipments.

(1) Bill of Lading - The bill of lading served primarily in the accomplishment of transportation charges made by the civilian barge operators. It was prepared in sextuplicate by the port commander or inland waterways RTO and distributed as follows: one copy to the consignee with the cargo, one to Fiscal Branch of the Chief of Transportation, one to the originating port commander's file and the last three copies to the barge authorities of the country of origin.

(2) Waybill or Shipping Tally-Out This document was used merely to give a more complete description of the barge contents to the consignee and was attached to each copy of the bill of lading. Since it differed from the bill of lading only by giving a more complete listing of the cargo, it was not always used, and was in fact unnecessary when a complete description of the cargo could be given in the bill of lading.

10. Advance Notice for Inland Movements

a. Traffic Dispatch Advice (TDA) This form served throughout the European Theater as a fundamental and essential aid to the control of supply movements. Its function was to notify the consignee in advance of shipments dispatched to his destination (depot, dump, regulating station, or transfer point) so that he could make preparations for handling the shipment when it arrived. Thus, the TDA served to prevent congestion at destinations and facilitated spotting of cars for rapid unloading. The TDA was made out by the RTO at the origin of the shipment and was sent by telephone or teletype (if by telephone, to be confirmed) to the RTO serving the consignee, who immediately informed the consignee and the Transportation Officer of the Communications Zone section having jurisdiction over the consignee. Minimum information in a traffic dispatch advice included origin, date of dispatch, method of shipment, contents and consignee. Other information pertinent to the shipment was included depending on the kind of movement (e.g. code number of ship from which supplies were off-loaded if the movement was from a port). The number of cars, vehicles or barges in the shipment was usually included, and finally, the actual car numbers were included when the movement was by rail. This latter information facilitated the tracing of cars lost enroute. Chief difficulties encountered in the TDA procedure were: lack of adequate communications; personnel improperly trained in handling this form; and too frequent directives changing the contents or distributions of the TDA, resulting in confusion. Regarding communications, whenever an RTO did not have his own teletype machine the dispatch advices were sent to the nearest district or section Transportation Officer for relay to the RTO. Sometimes this resulted in the delay of deliveries to the RTO because of slow message center operations, lack of personnel or lack of telephone facilities to give the TDA quick relay service.

b. Copy of the Shipping Order or Directive - This document or directive was issued by the Chiefs of Services, Communications Zone to initiate shipments of supplies from depots, transit areas, transfer

points, ports or other places. Each Chief of Service sent to the appropriate consignees also, a copy of all such instructions at the time of issue. This advance notice of coming shipments went direct to the consignee and helped him prepare for the receipt of the supplies.

c. Advance Supply Shipment Advice - This was a direct notification from the consignor to the consignee describing each shipment after its dispatch. Information included was the consignor, requisition number assigned by requisitioner; shipping order number issued by Chief of Service; train or motor convoy number and symbol; number of railway cars, barges or trucks in the shipment; numbers of these conveyances; and description of contents of each conveyance. This document and shipping order or directive do not directly involve the Transportation Corps, but nevertheless are further aids in the control of supply movements.

SECTION 4

OPERATIONAL RECORDS FOR THE ANALYSIS AND CONTROL OF MOVEMENTS

11. Information Necessary - Prior to the stabilization of a supply situation and the establishment of a communications network, especially during a fast moving situation, there could be few centrally kept reports on movement operations in the field and as a result firm centralized control was difficult. As a depot system was built upon the Continent and communications improved, however, overall supervision of movements by the Chief of Transportation became possible. Certain information from the field was of course necessary for this central control. This information grouped itself into two general categories from a transportation standpoint: (1) the capacity of the transportation system, both as to road and rail networks, etc., and to rolling stock; and (2) the traffic situation at the supply installations in the theater. The former information was provided in the European Theater by the road, rail and water operating agencies within the Transportation Corps and is not included in this study. The traffic situation, however, involved some specific reports bearing directly on the control of movements.

12. Daily Situation Report - This report was devised to furnish daily the traffic situation at every port and depot on the Continent. The information was totalled as of 1800 hours and the reports telephoned nightly from the port and section Transportation Officers to the Operational Records Branch, Movements Division, Chief of Transportation's Office. This report was actually made up of two sub-reports. The first was a "Daily Depot Rail Movement Report" and the other a "Daily Depot Truck & Barge Movement Report." (See appendices 5 & 6). The former, and most emphasized, since long supply operations were carried on chiefly by rail, was to indicate for each port and depot the number of cars loaded, reconsigned, dispatched, and awaiting dispatch for the 24-hour period; the number of loaded cars received, unloaded, and awaiting unloading at end of period; and the number of empties on hand. The truck and barge report was to indicate roughly the same information for these two methods of transportation.

13. Daily Tonnage Forwarding Report - This report merely reflected the total forwardings from each port and depot for a twenty-four hour period. The forwardings were broken down for each individual shipment to show the means of transportation, the number of conveyances, the train or convoy number, the destination and the tonnage and class of supply. This report served as a check on the

adherence to the Monthly Supply Movement Program, as indicator of how much tonnage was on the move throughout the transportation system at any given time, and a valuable aid for tracing purposes. (See appendix 7)

14. Empty Car Reports - Quite late in the war a report was instituted to indicate the type and number of empty cars ordered, received and on hand at the end of each day in each port and depot. Such a report was necessary to control the use of empty rail cars during times of shortages of empties. Separate reports regarding the location and use of specialized rail cars such as reefers and tank cars were also used in order to ensure maximum economy in their use.

15. Difficulties Encountered - Although the required data remained nearly constant throughout operations, the forms for these reports changed at various times. These changes were devised to make the reports more accurate and easier to prepare and check, but nevertheless caused some confusion and considerable ill-will among personnel in the field. Another primary difficulty was the lack of control and standardization of forms and data required in army areas. During the Rhine assault loaded cars began to pile up in the army areas, largely because transportation headquarters both in the Advance Section Communications Zone and in Communications Zone were unable to obtain accurate reports on the number of loaded cars on hand in the army areas.⁴ Lack of education on the part of lower echelon personnel in preparation of the forms accounted for other difficulties. Finally, a heavily taxed communications system during operations caused delays in transmission of data, which had a short time limit on their value in facilitating control.

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CHAPTER 2

CONTROL OF INBOUND MOVEMENTS AT PORTS

SECTION 1

ADVANCE NOTICE OF SHIPMENTS COMING FROM

ZONE OF INTERIOR

16. Obtaining General Forecast of Shipments - To be prepared to handle special equipment in particular, the Chief of Transportation in the United Kingdom arranged with the Signal Center that a copy of all teletypes exchanged between Supply Services in the United Kingdom and the United States concerning supplies be furnished the Freight Branch of the Office, Chief of Transportation. These messages were analyzed for any proposed movement of supplies which would require special handling because of weight, dimensions, classification, quantity, or ultimate destination. When such items were noted, the Service concerned was contacted for detailed information regarding the item and its destination. Special instructions were then forwarded to the War Department and the New York Port of Embarkation relative to the stowage of such items and to the forwarding of information regarding the number of vessels in each convoy which were to carry these items.

17. Specific Advance Documents on Ship Sailings -

a. Cargo Loading Cable - Cargo Loading Cables were prepared and dispatched by ports of embarkation in the Zone of Interior immediately upon completion of the loading of a vessel. These cables furnished ship's data and a general description of cargo and tonnage aboard each vessel. This document was distributed to all the Services, as well as the Chief of Transportation in the theater of operations.

b. Ship's Manifest - This document showed a complete description of all cargo on the vessel to which it pertained and indicated markings and tonnage for each item. This was prepared by ports in the United States and was scheduled to be dispatched by air so as to arrive in the overseas Office Chief of Transportation five days after the sailing of the ship. It was likewise distributed to all Supply Services in the overseas theater.

c. Initial Difficulty with the Manifest - During the early period of operations in the United Kingdom, considerable confusion was caused by the fact that these manifests were arriving by such indirect routes that often they did not reach their destination until after the ship had arrived in port. Resulting correspondence led to further delay. The problem was finally solved, however, by having the necessary ship information flown by plane directly to the United Kingdom.

SECTION 2

DECISION AS TO THE PORT OF UNLOADING

18. Basis of Decision - Three factors entered into the determination of the port of unloading for supply shipments. These were the port traffic situation, the inland destination desired by the Services, and the transportation facilities available at the port. The port traffic situation was learned primarily from the "Daily Rail,

Truck and Barge Movement Report" previously mentioned; the desired destinations came from the Supply Services; and the information regarding transportation facilities was furnished by the transportation operators (Military Railway Service, Motor Transport Service and Inland Waterways Transport).

19. Making the Decision - The procedure for determining the port of unloading was essentially the same both in the United Kingdom and on the Continent.

a. In the United Kingdom the decisions were made by the British transportation authorities at a Diversion Meeting conducted by the British Ministry of War Transport and held for each convoy enroute from the United States.¹ Briefly, all agencies interested and informed on the importing, warehousing, shipping, receiving, handling and transportation of supplies into the United Kingdom were represented at these meetings. Type of cargo on each vessel and its ultimate destinations were considered separately. Vessels were then allocated to the ports best suited for receiving, handling and transporting these incoming supplies.

b. On the Continent a system of shipping allocation meetings was finally established, which functioned the same way and for the same reason as the Diversion Meetings mentioned above.¹ The shipping allocation meetings were presided over by an Assistant Chief of Transportation, with representatives from the Supply Services and Transportation Corps movement control offices in attendance. Allocations of tonnage to various depots was checked from the standpoint of the traffic condition at those depots and of the backlog for each given depot which existed in the particular ports at which ships were to be placed. This system provided a means of adjusting the movement program to accord with the actual arrival of tonnages on ships.

c. No great difficulties were encountered in the above procedure. Situation reports and other forms of information played a vital role in the decisions made.

SECTION 3

PORT CLEARANCE

20. Dispositions Furnished by Supply Services - The form on which the Supply Services directed the shipment by the Chief of Transportation of supplies from ports to designated depots was called a "Shipping Directive." Through coordination with the Supply Services, the Chief of Transportation ensured that cargo was consigned so as to entail the least possible sorting at ports, to effect the most efficient land movement, and to ensure that the amount of cargo consigned to installations was in proportion to the ability of the installations to accept. With the establishment of the movement program this meant that the shipping directives had to conform to the current movement program.

21. Translation of Dispositions into Movement Instructions -

a. Cargo Disposal Instructions - Description - A document used throughout operations in the European Theater by the Chief of Transportation was "Cargo Disposal Instructions" (CDI's). These constituted instructions issued through technical channels to port commanders by the Chief of Transportation, giving the destinations of all supplies moving through the ports. CDI's were based on the shipping

directives furnished by the Chiefs of Services and were in effect translations of these directives into transportation terms.

b. Function of the Cargo Disposal Instructions. - These instructions were scheduled to be in the hands of the port commander and all others concerned forty-eight hours prior to the berthing of the vessel. This was necessary in order to give port commanders and transportation agencies sufficient time to plan their operations for unloading the vessels and clearing the supplies from the ports. A separate cargo disposal instruction was issued for each vessel and was broken down to show name, number of vessel, port of discharge, date of berthing, description and complete markings for each item, and total tonnage broken down by Service, allocated to each depot.

c. Development - Prior to the inauguration of the movement program for all theater supply shipments the Cargo Disposal Instructions contained a greater detail of information than afterwards. This information included the method of transportation to be used and the assignment of an index number to each individual item. This latter was to facilitate identification of particular items and reduce time and space in communications. Specific instructions were also given relative to that cargo requiring special handling. In effect, therefore, the Cargo Disposal Instructions were at this time the port clearance program, and no deviation, alteration or change could be made without a specific authorization from the Chief of Transportation. With the advent of the monthly movement program, the manner of shipment from the port - except in special cases - became the port commander's decision. This decision, from an overall standpoint, was to be in conformance with the current program. Changes in destination after issuance of the Cargo Disposal Instruction, however, still could be made only through the Chief of Transportation.

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CHAPTER 3

MOVEMENT CONTROL OF SHIPMENTS ENROUTE

SECTION I

TRANSFER POINTS

22. Road-To-Rail Transfer Points -

a. Function - The function of transfer points is to ensure the maximum use of a transportation network. For example, during the rapid advance east of Paris in the European war, the railroads east of Paris were in better condition and had an operating capacity considerably in excess of those from Normandy to Paris. In order to obtain maximum utilization of transportation facilities for delivery of supplies to the advancing armies, transfer points were established in the Paris area. Here supplies trucked from Normandy were transferred to rail for further eastward movement. Only such tonnage as exceeded the rail capacity east of Paris plus those shipments of urgently required commodities were carried on to the armies by truck.

b. Operational Set-Up - To avoid confusion and expedite the flow of supplies to the armies the transfer points were established so that there was one for each of the armies. They were also located at the Paris yards best adapted for this operation and which normally fed rail traffic in the directions corresponding to the locations of the army regulating points. To ensure the movement of the right convoys to the right transfer points a Traffic Control Regulating Point was established just west of Paris on the express highway (Red Ball) over which all trucked supplies were moving. Transfer point operations were under the Transportation Corps, and this organizational arrangement proved best.³

c. Documentation - Except as noted below, documentation practice at a transfer point was exactly the same as at any initial loading point. Car waybills and labels had to be made out for the newly loaded rail cars and traffic dispatch advices were sent to the receiving Regulating Stations for the armies concerned. The documentation here, however, was of course based on the documentation arriving with the supplies. Consequently, there were two additional phases of documentation at transfer points. It was necessary to make note of overages and shortages on the truck shipments and report same in recurring cases. Further, for close control, the transfer points kept copies of both the incoming truck waybills and the outgoing car waybills, the two forms filed with cross reference to each other. This phase of the transfer point operation proved satisfactory throughout.

23. Rail-to-Road Transfer Points - Transfer points were also established in the forward areas to effect the transfer of supplies from rail cars to trucks for delivery to army dumps. Two such points, for an example, were in operation in the Continental Advance Section (CONAD) to support the Seventh U.S. Army and the First French Army in their advance into Germany. Regarding documentation at these points, care was taken that trucks were identified by ex-car numbers to simplify tracing. The ex-carload identity was maintained until the trucks reached their final destinations. Only one tally was made for each carload regardless of the number of trucks in which this carload was carried forward. Each tally carried the number of the truck or trucks into which the carload was tallied. The dispatch orders and movement instructions for convoys originat-

ing at these transfer points were issued by the transfer point personnel.

SECTION 2

PASSING POINTS

24. Traffic Control Regulating Points - At principal junctions, intersections and road bottlenecks it was necessary to establish Traffic Control Regulating Points (TCRP's), which not only kept the flow of convoys through these points smooth, but also acted as diversion points for supplies which had changed consignees while enroute. These points further aided control in the tracing of shipments. Through reports submitted to the Section Transportation Offices it was possible for the Chief of Transportation by contact with the Sections to learn whether particular convoys had passed specific points. For those convoys arriving at control points without sufficient documentation to indicate the destination of the supplies, the points acted as holding points until dispositions could be obtained from higher authority. Such cases would not have arisen, of course, had documentation discipline been observed at the loading points and along the line of movements. The chief difficulty in operations at traffic control regulating points was that dispositions and diversions of supplies were made upon the orders of unauthorized personnel. Diversions were supposed to have been accomplished only upon the orders of G-4, Communications Zone.

25. Marshalling Yards and Other Rail Points - These places along the rail lines of communications, where transportation personnel were located, functioned much the same in movement control for rail traffic as the regulating points mentioned above did for road traffic. Through passing reports of trains and tonnages at these rail centers it was possible to have information of rail shipments enroute. These points also were used for diversion of supply shipments. In the case of such diversions the car labels and waybills had to be changed and this was done by the transportation personnel located there. These points further served as holding points to regulate the flow of traffic into nearby depots. Car number records were maintained by RTO's at these points and the tracing of specific carloads of supplies was facilitated thereby.

SECTION 3

OTHER DOCUMENTARY AIDS TO

CONTROL OF MOVEMENTS ENROUTE

26. Advance Notices - Various documents and procedures previously examined in this study contributed to the control of movements enroute. The advance notices from point of origin to consignees were among these. They were of special value in the case of shipments to regulating stations for the armies. It was essential for these regulating stations to have identifying information in advance of shipments destined to armies in order to be able to inform the armies as to the nature and expected arrivals of incoming supplies. With such data at hand the regulating stations were able to effect timely exchange of information with the armies and secure final destinations for shipments in time to prevent unwarranted delays. This advance information served the same purpose for transfer points by indicating to these points what arrangements had to be planned to handle the incoming shipments. Thus further delays would be prevented.

27. Daily Forwarding Report - This daily report from ports and depots of all traffic forwarded from these points gave the Chief of Transportation an overall picture of the supply shipments enroute throughout the theater at any given time. By identifying each shipment as to means of transportation, convoy or train number, class of supply, time of dispatch, origin and destination, these reports were a considerable aid to the information and control of movements enroute. When it was necessary to locate a particular shipment still on the transportation system the Daily Forwarding Reports furnished the starting point for tracing the shipment.

28. Monthly Movement Program - The movement program served also as a guide to the accomplishment of reconsignments or diversions of supplies enroute. Since a reconsignment or diversion is the same as initiating a new movement, the monthly program acted to control these activities. Consequently, reconsignments and diversions were subject to the same restrictions as loadings. Thus, either of these actions resulting in non-programmed movements in excess of 150 tons per week between two given points were to be cleared through the Chief of Transportation.²

29. Car Records for Tracing Lost Shipments - By the keeping of car number records at principal passing points or marshalling yards along the rail lines of communications it was possible to trace shipments through the numbers of the rail cars in which they were loaded. From the early stages of the Continental operations the Chief of Transportation received numerous requests for tracing rail shipments which destinations had no record of receiving. It was necessary to pass the car numbers to Section Transportation Officers in an effort to determine whether the RTO's at various points along the way had record of the cars. Because passing reports were not kept on a systematic basis such tracings were often a tedious process. In February 1945 the possibility of setting up a system of key passing points at which complete daily reports would be prepared and forwarded to the Chief of Transportation was considered.³ Because of the large number of personnel who would have been required to make such reports and maintain centrally located master car records, it was decided that the value of such a system did not warrant the allocation of such a large staff. Instead, a list of key passing points was furnished to the sections of the Communications Zone with a directive that each section maintain its own passing records at those points and such other points as the Section Transportation Officers might consider necessary. All tracing requests were then handled by the Chief of Transportation directly with the Sections through which the traffic moved. It should be noted, however, that in many instances after tracings had been requested and initiated and before they were completed the shipments arrived at destinations thereby resulting in considerable effort being expended unnecessarily.

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CHAPTER 4

MOVEMENT CONTROL FROM DEPOTS TO PORTS FOR A CROSS-WATER INVASION

SECTION 1

INITIAL DEVELOPMENT OF DOCUMENTATION AND CONTROL PROCEDURES

30. Publication of an Overall Procedure - A series of attempts was made to provide a procedure for documentation to cover U.S. Army cargo shipments from the United Kingdom. The first of these made in September 1942, was hurriedly prepared, primarily because of security measures, and was inadequate. For the most part the documentation conformed to British Army practice and procedure. In December 1943 another publication was issued by Theater Supply Service headquarters. This document greatly expanded the previous publication on the subject and was the first attempt to include under one cover, complete U.S. Army documentation practice and procedure for the United Kingdom. At the time of this publication, however, thinking was in the direction of a long sea voyage and there was not sufficient information then available with respect to special documentation necessary to fit the special requirements of the "OVERLORD" operation. On 13 April 1944, however, a final procedure was adopted and completely covered in one standing operating procedure.¹ This cancelled all previous publications on the subject and for the first time took into consideration the fact that coasters would be employed during the early stages of the operation along with barges and landing craft; that certain of these craft and ships would be pre-stowed and loaded prior to D-Day and that the build-up for the early stages would take place in coasters operating on a shuttle service between the United Kingdom ports and the ports and beaches on the European Continent. It proved extremely valuable to have all the documentation and movement control procedures outlined in one standing operating procedure based on a careful analysis of the problems involved.

31. Supplies Shipment Index Number - To identify each shipment with the number of a particular vessel or type of vessel into which it was to be loaded a Supplies Shipment Index Number was assigned thereto. Preliminary studies developed that the United Kingdom ports available to the U.S. Army were not adequate for the normal U.S. Army procedure, which contemplates moving traffic into ports, sorting, shedding and segregating same prior to loading aboard ship. Virtually all cargo at United Kingdom ports would have to be loaded aboard ships directly from freight cars and several ships would be working at one port simultaneously. Additionally, the names of the ships would not necessarily be known at the time the traffic was dispatched from the depots to the port of loading. In order to overcome these difficulties it was conceived that a code number would have to be assigned to each separate shipment (i.e. each shipment covered by a shipping document). In this manner all of the shipments bearing the same serial number could be readily identified for loading into one particular ship without the necessity of examining all the elaborate markings on the packages. The Supplies Shipment Index number was devised to provide this identification. It consisted of three parts: (1) A series of letters to identify the port of loading and the port or beach of destination; (2) a serial number (the Movement Instruction number); and (3) a consecutive number to correspond to the entry on the Movement Instruction.²

32. Movement Instruction - This was a document used in the United Kingdom by the Chief of Transportation to call supplies forward from depots to the ports for loading. The Movement Instruction for each shipment made reference to the shipping document number; briefly described the shipment, giving weight and measurement; indicated overseas address

and/or name and address of consignee; assigned a Supplies Shipment Index number to each shipment; and designated the means of transportation to be used, the port of loading, time of departure from the depot and the time and date of arrival at the port of loading. The particular distinction in its use in the United Kingdom was that it was issued by the Office, Chief of Transportation. This procedure, whereby movement instructions were issued from a central transportation headquarters rather than from the ports of loading, was necessitated by two factors. One of these was that the United Kingdom transportation system was a strong, compact, centrally controlled operation and for movement control it was decided best to parallel the British system. The other factor causing centrally controlled movement instructions was that this procedure facilitated the planning of loading and stowage operations during the period when it was necessary to pre-stow supplies for the combat assault and follow-up operations. This system, however, necessitated constant communications between the ports and the Chief of Transportation to avoid port congestion. Some congestion did develop, however, and it is believed now that some of the port congestion could have been eliminated if the issuance of movement instructions had reverted back to the ports after the pre-loading operations had been completed.

33. Documentation for Ship's Cargo

a. Manifest - A British form was adopted as the manifest (the document giving pertinent data of cargo aboard a given ship), but was not entirely adequate since it did not provide for segregation by Service and Class of supplies. Items were entered on the manifest as tallies were received from shipside. Regarding distribution of the manifest, it was visualized that the initial operation would be over beaches at a time when communications were extremely limited and unreliable. Thus provision was made for the dispatch of copies of the manifest to the beach or port commander by the quickest available means. It was planned that certain copies would be delivered to the beaches by motor launch or plane. In addition, copies were to travel with the vessel to which it pertained, while other copies were to be dispatched to the transportation section at destination.

b. Breakdown of Manifest - In view of the anticipated difficulty in the dissemination of information to the Services pertaining to cargo loaded aboard specific vessels, it was decided to inaugurate the use of the breakdown of the manifest. This was merely the preparation of a manifest separately by Service and Class for each vessel to portray immediately to each Service or Agency its particular cargo aboard each vessel. All items were identified by the Supplies Shipment index number, which was the connecting link between the shipping document originally prepared and the manifest itself. The necessity for both a ship's manifest and a breakdown of manifest can be eliminated however with the inauguration of a "Supply Manifest" which in itself lists cargo by Service and Class.

c. Graphic Stowage Plan - This document portrayed graphically to the beach or port commander the exact location of the different cargo within the ship, and thereby facilitated selective discharge. Its distribution was the same as that of the manifest, to which it was closely allied.

d. Hatch Tally - This was a simplified form for the purpose of identifying and controlling the movement of cargo unloaded from ships offshore onto lighters or amphibious trucks. As the cargo was unloaded items were entered on the hatch tally which was made in triplicate. The third copy was kept aboard ship while the original

and duplicate were given to the craft commander or amphibious truck driver to deliver ashore. The craft commander was to give both copies to the port representative on the beach, whereas the drivers kept one copy to be delivered at the dump.

34. Identification of Lost Cargo - It was expected there would be considerable loss of shipping due to enemy action and marine risks. For that reason a procedure was established whereby the Chief of Transportation would, immediately upon notice of a casualty to shipping, notify the Services concerned, attaching to such notification the waybills and packing lists covering the shipments involved.

35. Other Documents - Although other documents were of course involved in the movement operation supporting the invasion, they were primarily those used in every normal movement and not just peculiar to this one situation. For that reason they are not given special attention in this section of the study.

SECTION 2

FURTHER DEVELOPMENTS BASED ON

OPERATIONAL EXPERIENCES

36. Dissemination of Information - Although the documentation procedure as planned (the parts of which peculiar to this operation are described above) was reasonably adequate from the overall point of view, the dissemination of information was hampered to some extent by lack of coordination between the parties handling the documents. Difficulty in maintaining contact with beach headquarters was experienced. Further, ships were not discharged in the order in which they were loaded and planned for discharge, and not infrequently vessels were used as floating warehouses. This "selective discharge", from a transportation point of view, hampered the cross-channel turn-around of shipping and this reduced the tonnage actually handled below the planned figure.² Furthermore, although no documentation procedure was substantially changed during the early stages of "OVERLOAD," the distribution of documents and dispatch of information was continually subject to radical change and consequently caused confusion.

37. Information on Shipments Enroute - On 14 June 1944 it was decided that some additional means would have to be found to furnish the Chiefs of Service in the United Kingdom as well as in Normandy with information pertaining to the status of shipments enroute. The decision was partly based on the fact that procedures for advance information had almost completely broken down during the early days of the invasion because of failures in communications.³ Consequently, a system was devised whereby the shipping document (called the "Depot Supplies Shipment Data" form in the United Kingdom) was distributed to the potential receiver on the Continent, as well as to those concerned in the United Kingdom, and then to supplement that, advice was transmitted by electrical means on a daily basis, giving reference to the shipping document number and the ships into which the cargoes covered by such documents were loaded at each United Kingdom port. This proved to be a distinct improvement, did not involve a considerable amount of work, and was of inestimable value to the operation.

38. Identification of Lost Cargo - On 12 July 1944 this procedure was revised so that the Chief of Transportation, upon receipt of notice of loss or damage to shipping, would inform the Theater G-4 Section in the United Kingdom, giving reference to the vessel concerned

and the manifest involved. It was then the G-4 Section's responsibility to notify the services affected and authorize replacements to the extent necessary.²

39. Traffic Dispatch Advice - A special feature was added to this document (previously examined in this study) in the United Kingdom that proved of considerable value. The word "complete", "partial", or "remainder" was included in the message to indicate whether a large shipment of component parts was complete with that train, whether it was only a part of the entire shipment, or whether it was the remainder of the shipment the parts of which had previously gone forward.

40. Firm Supply Commitments from the Task Force Headquarters -

a. General Statement - To effect an efficient supply and movements control it is extremely necessary that the task force for any prospective assault very carefully plan its supply needs and operations beforehand and then keep changes in that plan to the absolute minimum. Experience to bear out the value of this policy was gained in the European Theater during the pre-stowing of supplies into assault vessels some time prior to the actual invasion.

b. Original Plans - It was found that the First U.S. Army contemplated a separate set of requisitions for each day's discharge on the European Continent, and in the case of requisitions for D-Day and D plus One, requisitions were prepared separately for each type shipping. The execution of this plan involved the movement of a vast volume of small packages. This placed a tremendous burden on the railroads and the British ports to ensure that each package found its way to the proper vessel. After the assault and follow-up were completed, it developed that the First U.S. Army intended to continue the daily requisitioning procedure throughout approximately the first ten days. In fact, it was ultimately extended far beyond that. Under this procedure, it became necessary to employ coasters of all types and sizes and to plan the stowage of cargo in such a way that a certain number of tons would be available for discharge each day. Thus, for example, if it would take three days to discharge a certain vessel, it was necessary to stow the third day's cargo first, the second day's on top of that, and the first day's discharge last. Such problems as these, combined with numerous other special ones, involved a tremendous amount of planning.

c. Subsequent Changes and Resultant Difficulties - These problems were not considered insurmountable, however, until it became evident that the First U.S. Army required certain changes in the stowage, increasing amounts at one time and decreasing amounts at another. Then it developed that certain of the requisitions had not been processed, and after the planning had been completed and stowage actually begun, additional shipping documents filtered in, some of them arriving after the vessel had sailed.² This one experience indicates that if supply commitments by a task force are intelligently prepared and allowed to stand firm, there is no reason to assume any undue difficulties in the execution of such a supply plan. It is realized that the perfect supply plan can be nullified by a sudden unexpected change in the tactical situation. It must be appreciated by a task force headquarters however that the more often a supply plan is changed, the greater is the possibility for failure to meet requirements. Adjustments in the supply plan resulting from tactical requirements must be weighed against the confusion resulting from major adjustments to a plan that is predicated on maximum capacities of depots and ports, to say nothing of transportation facilities between such points.

41. Priorities

a. Factors Involved - In almost any tactical situation there is likely to be a supply demand by the armies in excess of the ability to transport such tonnages. Thus, inevitably arises the problem of priorities. Priority information is, of course, essential to the adequate control of supply movements. This part of the study, however, is to point out some of the factors based on experiences in the European Theater which apparently are not always considered in the establishment of priorities. The injection of priorities into the normal program, which is operating at maximum peak, had a tendency to reduce the flow of that particular Service's supplies rather than increase the flow. Frequently, a depot would be operating at maximum capacity on a normal program and would suddenly find itself faced with a priority movement. This necessarily retarded, and sometimes completely stopped, the normal flow of traffic from that depot, by requiring a switch-over of labor from one job to another. Occasionally this would occur during the course of the depot's unloading of a large shipment, part of which had gone forward. Thus, the consignee was left with a large portion of a given shipment on hand incomplete with the remainder not to come forward for several days until the priority shipment had been completed at the depot. Consequently, the port was forced to hold the part shipment until the remainder arrived, and this tended to create congestion at the port and to cause split shipments.

b. Results of Excessive Priorities - It was proven beyond any reasonable doubt that any effort on the part of the Services to displace regular program with so-called "priority" shipments inevitably reacted to the disadvantage of all the Services.⁴ It disorganized movements, upset packing and marking at the depot, tended to cause congestion at ports and/or other transfer points and required cancellation of trains previously scheduled for movement. This latter caused further congestion at the depots and contributed to the amount of rolling stock held immobile for an abnormal length of time. The indiscriminate setting of priorities prevents adequate planning, and without adequate planning, particularly where a large amount of traffic is involved, only chaos can result. It is appreciated that the use of priorities can never be entirely eliminated; they will inevitably result from changes in the tactical situation, but if they are confined to justifiable requirements, they will be few and far between. The vast preponderance of priorities established during the latter part of 1944 proved to be in effect not "priorities," as evidenced by the fact that some of the ships carrying this so-called "priority" cargo were allowed to lay at anchorage off the Normandy Beaches for weeks at a time.⁴

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CHAPTER 5

MOVEMENT CONTROL IN SPECIAL SITUATIONS

SECTION 1

OVER A SINGLE LINE OF COMMUNICATIONS

42. Introductory Statement - During one phase of operations in the European Theater the Transportation Corps gained experience in moving supplies to a forward area over a single line of communications. This situation developed and existed for several months following the invasion of Southern France. Supplies were moved inland through the beaches and Marseilles and forward over a single supply line up the Rhone valley to support the Sixth Army Group. The control headquarters for this supply operation was Southern Line of Communications (SOLOC).

43. Factors Governing this Type of Operations -

a. Base Depots Established Near the Major Ports - All supplies went directly to the base depots in most cases and were unloaded and stored. When requisitions were received for supplies being unloaded at the port, they would be consigned directly to the using army or service.

b. Priority of Movement Meeting - As bids from sections and armies usually exceeded line capacity, a priority of movement meeting was held each month. All bidders were represented at this meeting, which was conducted by the Transportation Section. The agreed decisions constituted the movement program for the period concerned. This procedure continued in effect until the institution of the overall monthly movement program for the Communications Zone.

c. Control of Supplies to the Army and Forward Area - A site or sites were selected for classification and holding yards in rear of the armies or forward area. This permitted Transportation Corps finally to control the rate of flow to bidders and to prevent congestion. The proper balancing of supplies could be regulated at these points also;

44. Success of the Operation - The headquarters for this single line of communications in France was SOLOC (Southern Line of Communications), which consisted of one base section and one advance section. The success of the operation was the result of a close control on the operations of these two sections and the armies which they supported, plus the existence of large marshalling yards at the forward end of the single rail line.¹

SECTION 2

FAST MOVING SITUATIONS

45. Sudden Advance - During the fighting in the European Theater unusually fast forward moving situations developed at two different times. The first followed the breakthrough at St. Lo in Normandy with a rapid sweep across northern France and Belgium. The second was the advance to the Rhine followed by the rush across Germany. This part of the study is a brief

examination of the movement control factors in these two situations.

a. Motor Movements - A Motor Movements Branch was established in the Office Chief of Transportation to coordinate truck hauls from a movements standpoint and to originate any special motor moves which could not be handled effectively on a base section level. This was especially necessary during the stages in which the large proportion of total tonnage carried was moved by truck and during the build-up of supplies behind the armies when many critical items were not always available in forward areas and had to be moved forward by truck as express shipments. A central motor movements traffic office, properly staffed and with coordinated information, is considered valuable in the processing of requests for truck hauls and the obtaining of maximum utilization of road transportation.

b. Common Rail Lines Serving Two Armies - A problem of control arose whenever a common railroad line serving two armies had insufficient capacity to fill all the requirements of both armies. It developed in such situations that cars were called forward by regulating officers, officers of the army supply services, and other agencies all working independently. Thus, it was necessary to establish a controlling agency superior to the regulating officer to determine priorities. It was the opinion of the Chief of Transportation, as a result of these experiences, that the advance sections of the Communications Zone should be responsible for the movement of supplies forward of the army rear boundaries, even beyond the point where the common line branched out in divergent directions to the separate army railheads.²

c. Lack of Documentation and Control in the Advance Across France - Convoys were loaded at the beach, put on the Red Ball Highway and started eastward. Insufficient control was exercised over these convoys from the time they left the beach until they reached the diversion point, where the trucks were directed onto the separate roads serving the two armies. In the rapidly shifting situation of this period with the long lines of transportation and the difficulty of maintaining convoy discipline, a considerable number of split convoys arrived at the diversion points with either no destination instructions or incorrect documentation. It was frequently impossible to tell, insofar as the records were concerned, to which army the convoy should be dispatched. By maintaining check lists the Advance Section G-4 Control Group endeavored, with some success, to maintain proper allocation of supplies between the two armies at these diversion points. This same lack of documentation and control also existed in train movements. There were numerous reasons for this situation having developed. These ranged from confusion and congestion in the Normandy supply dumps, squeezed together from the compact situation existing prior to the break-out, to the attitude of "get the stuff rolling and worry about the paper work later."²

d. Control of Truck Convoys - Benefiting from experience on the Red Ball Highway operation, steps were taken for the sweep across Germany to insure that no convoys would be diverted by tactical units, disrupting the line of communication. Specific orders were given that no convoy would be diverted without authorized written instructions from responsible headquarters. The success of this final phase of operations against the enemy could not be, and was not jeopardized by any laxity on the part of the

unit commanding officers, who kept their trucks under control.²

e. Reports from the Field - Another obstacle overcome during the final offensive was the securing of timely performance reports from units operating in the field. Getting these accurately and promptly it was necessary for making proper decisions and allocations. The chief difficulties were the increasing distances of hauls, constant changes in bivouacs, and insufficient communications. Despite this, by the use of radios and couriers and through the initiative of unit commanders, a notable response from the field provided enough information to enable operations to proceed promptly.

f. Accumulation of Reserves on Wheels - During the pause between the securing of the Rhine bridgeheads and the final eastward offensive, a congested situation developed through the accumulation of reserves in railcars. These reserves included army supplies and the advance section engineer rail construction materials. A tighter control on requisitioning was felt desirable so as to hold mobile reserves to the minimum essential items. As for rail construction supplies, although sometimes impeding the forwarding of other supplies, they aided considerably in expediting rail construction further on.

g. Disregard of Transportation Bottlenecks - Throughout the month of March 1945, as the armies advanced into Germany, the number of cars on hand in the army areas and held back owing to forward congestion showed an increasing trend, resulting from the tendency of the armies to order more than could be moved through transportation bottlenecks into forward areas. This tendency was the manifestation of the natural desire of field armies to be prepared for any eventuality. In an effort to prevent a continuance of the upward trend of freight cars under load, embargoes were placed on excessive movements to all the armies, but because of difficulty in disseminating information to the Regulating Stations in time for them to take effective action, the results were negligible. The situation was finally eased only by the end of the war and the constant pressure from the Chief of Transportation to obtain unloading of freight cars and the return of empties.

h. Air Shipments - To support the rapidly advancing armies in Germany by air shipments of supplies and to coordinate these moves with surface movements, an air branch was established in the Movements Division of the Office Chief of Transportation. Arrangement of movements to and from airfields involved in this operation, maintenance of records and reports necessary to control and prevent congestion in overall supply shipments, and close coordination with the Combined Air Transport Operations Room and the Supply Services were necessary to the implementation of this phase of supply movements in fast moving situations.

46. Sudden Reverse. Experience with respect to movements in a rearward fast moving situation was gained in the European Theater during the German Ardennes offensive in the winter of 1944-1945. Congestion was widespread during this period. The critical situation which threatened both Liege and Verdun, the great forward supply centers, necessitated the immediate cessation of shipments into those areas, the evacuation of certain sensitive and critical stocks therefrom, and in the north the evacuation of the bulk of the First U.S. Army's supplies to the rear of Liege. This movement of the First U.S. Army with its supplies congested the depot area roads and rails in that vicinity. The cessation of

receipts at the depots caused clogging of the rail lines, since there were no intermediate installations into which trains could be diverted for unloading. Port clearance stopped while ship unloading continued and so the congestion reached right back onto the quays. Another overall factor causing this congestion was that there was no evacuation plan whereby it would have been immediately known - in the event of such circumstances - what supplies were to be evacuated and to where they were to be dispatched, what supplies were to be destroyed, and what to be abandoned.³ If such a plan had been available and followed, transportation could have been much more effectively used.

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CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

SECTION 1

CONCLUSIONS

47. Monthly Supply Movement Program -

a. The movement program cannot be a rigid control instrument, but must possess a certain degree of flexibility. This can be accomplished through the allowance of a certain leeway on the part of shippers and through clearing of sizeable excesses above the program with the theater transportation headquarters in conjunction with the Supply Services.

b. The program, to be of greatest benefit, must be in the complete control of the theater Chief of Transportation. Thus, the power of embargoes, clearances of excess shipments, and other deviations from the program should rest in his office, which is working in coordination with G-4 and the Supply Services.

c. To conserve transportation equipment, especially empty rail cars, a close control of inter-depot movements is necessary.

d. Thorough education of all transportation personnel is essential to the successful execution of such a control program.

48. Locator List - A definite need exists for the early compilation of a locator list of supply installations and the prompt posting of changes in this list, both to receive wide distribution.

49. Coordination with Civilian Operations - Where transportation operations are carried on in allied and liberated countries - and possibly even in conquered enemy territory - where a civilian operation and system exists, it is important that movement control procedures follow to a great extent the same lines already in effect by the civilian agencies.

50. Priorities and Transportation Control - Priorities, the result of a shortage of transportation capabilities, inevitably leads to the control of movements by G-4. A periodic movement program, however, nearly eliminates the priorities system and permits a flexible control by the Transportation Corps in coordination with the Supply Services.

51. Documentation of Shipments -

a. Experience in the United Kingdom clearly indicated that military documentation should conform to the maximum degree with the practice with which the civilian railways are familiar. Experience on the European Continent proved that it is also essential that documentation be multi-lingual.

b. One of the greatest lessons learned in the European Theater is that documentation procedures will nearly always break down without adequate communications, documentation training and emphasis, and firm documentation discipline.

c. In any theater wherein tonnages are to be hauled on

civilian carriers adequate records must be kept by the Army in order to effect accurate settlement of transportation charges and to reduce losses.

d. Specific Documents.

(1) Waybill - The waybill as merely a transportation document is adequate. With modifications, however, it can be used as a valuable supply document. The way bill is the fundamental and most valuable document in the inland shipment of supplies, and as such, must contain completely the vital data regarding the shipment of supplies in each conveyance to which the waybill pertains.

(2) Traffic label - The label permits ready identification of contents of freight cars without close scrutiny of the documents. To be of value, therefore, the identifying color band must be sufficiently broad to permit recognition from a reasonable distance. An adequate supply of labels on hand is essential so that the correct label can always be used for the supplies which it designates. For adequate civilian handling this document must be multilingual, depending on the situation.

(3) Freight Warrant - An early agreement with civilian transportation agencies regarding this document facilitates a closer control on transportation operations for both fiscal and loss accounting. Language is of vital importance here, also.

(4) Driver Control Record - This document, if carefully executed at the change-over of drivers, preserves a continuity of driver responsibility for delivery of shipments and facilitates a control of supplies while in transit.

(5) Shipper's Tally-Out - For a complete description of contents in a conveyance this document was necessary in the European Theater. The execution of both this and the waybill, however, could be made unnecessary with the combining of the two in one document.

(6) Inland Waterways Transport Bill of Lading - This document serves for barge movements the same purpose as the freight warrant for railroads. The conclusions for that document apply here also. In addition, it can be used as a combination waybill and Tally-Out.

e. Traffic Dispatch Advice (TDA) - The TDA must describe the shipment to which it refers in sufficient detail to enable the addressee of the TDA to take action necessary to handling the shipment covered thereby upon its arrival. Its value depends entirely on the consignee receiving it prior to the arrival of the actual shipment.

52. Operational Records and Reports

a. For an overall supervision and control of supply movements from the transportation standpoint certain current information regarding the traffic situation at ports, supply installations and other critical transportation centers must be received and analyzed at a transportation headquarters.

b. This information should include, especially for rail transportation, the number of cars loaded, dispatched, and awaiting dispatch at end of period; the number of loaded cars received,

unloaded, reconsigned, and awaiting unloading; and the number of empties on hand. Equally important is information from the ports and depots as to daily forwardings, with each individual shipment broken down as to number of conveyances, tons, class of supply, train or convey number, and destination.

c. To be of most value these reports should be standardized in advance as much as possible and used the same way both in the Communications Zone and the army areas. The effectiveness of these documents also depends on adequate communications.

53. Advance Notices from Zone of Interior - The cargo loading cable and the ship manifest proved generally satisfactory throughout operations in giving advance information regarding shipments coming from the Zone of Interior. A long term forecast of shipments requiring special handling was of value in the United Kingdom by permitting Transportation Corps overseers to issue instructions to the ports of embarkation regarding the storage of such items.

54. Decision as to Port of Unloading for Incoming Supplies - A system of ship allocation meetings held under the auspices of the Transportation Corps with the Supply Services and others concerned represented, proved most adequate in the assigning of ships to ports and their cargo to theater depots. The final decision made depended on the port traffic situation, inland destinations desired by the Services, the traffic situation at these proposed destinations, and the available transportation facilities. This system provided a means of adjusting the movement program to accord with the actual arrival of tonnages on ships.

55. Port Clearance - The system whereby the Supply Services indicated the destinations for incoming supplies on a "shipping directive" and the Chief of Transportation subsequently issued movement instructions to the ports for those supplies on "cargo disposal instructions" was used satisfactorily throughout operations in the European Theater. It was proven, also, that a movement program simplifies and expedites this procedure considerably.

56. Transfer Points. - Transfer points can effect the maximum use of a transportation network by serving as a link between two areas marked by different transportation facilities. Documentation initiated at the point of transfer must be based on documentation arriving with the shipments supplemented by an actual check of the supplies as they are transferred. Service representatives with proper knowledge and authority can also make timely changes at these points.

57. Passing Points. - Traffic Control Regulating Points for road traffic and marshalling yards for rail traffic facilitated movement control by acting as holding and diversion points, as well as check points to provide information on passing traffic. Diversions ordered by unauthorized personnel constituted a problem at road traffic points.

58. Specific Documentary Aids to Control of Movements Enroute -

a. Advance Notices - These provided the basis of communications between army regulating stations or points and the armies for the disposition of supplies enroute to these points for use by the armies. They also facilitated the diversion of shipments between any two points in the Theater.

b. Daily Forwarding Report- This report, giving data on all shipments dispatched each 24 hour period, furnished the starting point for the tracing of shipments by the Chief of Transportation.

c. Monthly Movement Program - This document provided an overall control of reconsignments and diversions by treating such changes as new shipments and thus necessitating equivalent reductions in programmed shipments.

d. Car Number Records - By furnishing a history of each car passing through rail yards these locally kept records facilitated the tracing of lost shipments.

59. Publication of an Overall Procedure - The centralization of all marking and documentation instructions in one carefully planned standing operating procedure proved to be of great value in packing, loading and movement operations during the weeks just prior to the invasion of the Continent from the United Kingdom. There is no substitute for a carefully planned procedure. Frequent modifications tend to cause further confusion.

60. Shipment Index Numbers - In instances when the ports of loading have no facilities for shed storage and sorting of shipments prior to their being loaded into ships, the assignment of an index number to each shipment readily identifies it with other shipments and with the particular type of ship into which these supplies are to be loaded.

61. Central Issuance of Movement Instructions - The issuance of movement instructions from a central theater transportation headquarters had a value in a situation like that encountered in the United Kingdom, because of a centrally controlled civilian transportation system and the necessity to pre-stow vessels for the invasion assault and follow-up. Ordinarily however, it is the function of the ports to call forward supplies from depots for loading into ships.

62. Ships Documentation and Advance Notices to Far-Shore - Documentation of ship's cargo should include a manifest which breaks the cargo down according to Service and Class of supplies, and a graphic stowage plan which indicates graphically the position in the ship of the various parts of the cargo. Failure of the manifest to reach the far shore in advance of the ships arrivals resulted in confusion, congestion and ignorance of beach commanders as to what supplies were in the ships already off-shore as well as to supplies enroute. This situation was ameliorated by the advance distribution of the shipping documents to the parties concerned on the far shore, supplemented by electrically transmitted messages indicating the specific documents covering shipments loaded into each ship.

63. Identification of Lost Cargo - In the event a vessel is lost through enemy action or adverse weather it is necessary to have a means whereby G-4, Communications Zone, can be quickly informed as to what supplies are involved.

64. Traffic Dispatch Advice for Ports - When there are no facilities for sorting and segregating shipments at the ports it is advisable to include in the dispatch advice to the ports whether a shipment is complete in itself, part of another shipment, or the remainder of a large shipment, the other parts of which have gone forward earlier.

65. Supply Commitments of a Task Force Headquarters.

a. Too many changes in the supply commitments after a supply system based on the original commitments has been organized and put into operation, can result in chaotic congestion.

b. Supply and supply movements in modern warfare are of such proportions as to necessitate a careful and stable plan of operations. It must be known before such a plan is devised that it is to be based on a firm supply commitment by the task force.

c. The more frequently a supply plan is changed, the greater is the possibility of failure to meet requirements.

d. Major changes in a supply plan, once in effect, must be weighed against the resulting confusion and congestion in carrying them out.

66. Priorities. - Priorities inevitably result in a slow-down and disruption of normal supply functions. They must be kept at a minimum and must represent actual "priorities."

67. Movement Control over a Single Line of Communications - General documentation and control procedures in such a situation are roughly the same as those existing in any supply line situation. The utilization of classification and holding yards at the forward end of this single line and the supplementing of the overall movement program with a detailed ten-day program, however, were key-notes in the movement control successfully maintained in this situation as it occurred on the Continent.

68. Common Rail Line Serving More than One Army - In such a situation a problem of determining quantity of supplies for each army to be called forward arises and there is consequently a need for the establishment of one superior controlling agency to determine priorities.

69. Accumulation of Reserves on Wheels - To provide release of captives and the forwarding of essential items it is necessary that cars and trains not be used as warehouses, especially in forward areas. This causes congestion and rolling stock shortages. When it is occasionally necessary, however, to maintain some mobile reserves, a rigid control must be maintained.

70. Lack of Documentation in a Fast Forward Moving Situation - Lack of adequate documentation is one of the situations likely to result in the development of a completely unexpected situation. This difficulty can be largely overcome, however, by specific fore-planning and by emphasizing documentation discipline on the part of all personnel concerned.

71. Control of Truck Convoys - Convoy discipline and the diversion of convoys only upon proper instructions from responsible headquarters are indispensable to the control of truck convoys. This is especially so in fast moving situation.

72. Transportation Bottlenecks - The calling forward of supplies by the armies in disregard of existing bottlenecks results in congestion and confusion with the further result that essential items have increased difficulty in getting through.

73. Air Shipments - In modern war sudden advances must be supported by air shipments to supplement slower moving surface shipments. A close coordination among the Supply Services, the Chief of Transportation, and the air transport operators is essential for the maximum use of this mode of transportation.

74. Movements in a Sudden Reversal - Congestion resulting in the fast rearward moving situation experienced in the European Theater during the German Ardennes offensive pointed out the necessity of having intermediate depots or dumps and an overall evacuation plan.

SECTION 2

RECOMMENDATIONS

75. Supply Movement Program.

a. A movement program is recommended for the provision of both a forecast of planned supply shipments to all concerned and an overall control of movements. It provides, also, for the restriction of priorities to real emergencies and thus, properly maintains movement control under the jurisdiction of the Transportation Corps.

b. The program must possess a certain degree of flexibility, but appreciable deviations must be controlled by the theater transportation headquarters. The degree of flexibility depends, of course, on the capacities of the transportation system.

c. The program must extend to shipments between all points and by all means of transportation.

d. The shifting and transfer of transportation personnel should be kept to a minimum. This, coupled with adequate education and training of all personnel, is necessary for full compliance with any long-range schedule of movements.

e. A month is a satisfactory time span for an overall G-4 program for supply shipments, but for transportation operators a ten-day span is considered better. It is therefore recommended that a monthly movement program be amended by short-term plans, with a tight restriction on changes in the overall supply commitments.

76. Locator List - In future operations it is recommended that a definite trained section within G-4 be provided to compile and maintain a supply installations locator list almost immediately at the start of operations and to give it a wide distribution.

77. Civilian Operations - Intelligence reports should include not only the conditions of the transportation system in areas of proposed operations, but also the general civilian control organizations as well.

78. Depot Sites - Selection of depot sites should be made in consultation with transportation, construction engineer and Signal Corps representatives.

79. Documentation of Shipments.

a. Documents in English and the languages of the countries in which operations are proposed should be planned and printed in advance.

b. A very important part of the training of supply and Transportation Corps personnel must be devoted to the function and importance of correct documentation and of documentation discipline.

c. Plans should be made in advance for records to be maintained for the accurate settlement of transportation charges with civilian agencies and control of losses.

d. Specific Documents

(1) Waybill - It is proposed that one form of way bill be employed for all types of movement, i.e. import, export and internal, and further that such waybill be equally suitable for use in connection with the movement of freight cars, highway vehicles, airplanes or barges. With modifications in form the waybill can also be used as a shipper's tally-out, thereby consolidating two forms into one. Finally, to be thoroughly versatile, the waybill must also be a suitable document for the payment of transportation charges to civilian agencies. Specifically, therefore, the waybill should provide for a complete listing of the contents of the conveyance to which it pertains and a reference to the requisition numbers or daily telegram number. It should also be multi-lingual in those parts necessary for fiscal control with the civilian agencies.

(2) Traffic Label - It is essential that this document be linguistically adapted (in advance) to the countries in which operations are proposed. An adequate supply of these labels must be maintained so that the use of wrong colored labels will be kept to a minimum. Special labels for special shipments are recommended. These labels should show in heavy faced type such words as "Explosive", "Inflammable", "Corrosive", or "Dangerous". Labels with "URGENT" should be used to denote priority traffic,

(3) Driver Control Record - It is recommended that this information be placed on the back side of the waybill in properly indicated spaces provided therefor.

e. Traffic Dispatch Advice - It is recommended that the form for this advice be carefully fore-planned and be changed as seldom as possible. It should have a high priority in its transmission and handling.

(4) INT Bill of Lading - It is recommended that this document be combined with the waybill or shipper's tally, so that only one document is necessary for the movement, documentation, fiscal and physical control of supplies in barge movements,

80. Operational Records and Reports

a. The information given by these reports is vital to the control of traffic movements. As finally developed in the European Theater (viz., "Daily Depot Rail Movement Report - CZTN 10", "Daily Depot Truck & Barge Movement Report - CZTN 12", and "Daily Tonnage Forwarding Report - CZTN 41"), the forms as they now stand are considered the most satisfactory. (See Appendices 5, 6, & 7). The information required and the forms on which this information is given are therefore recommended for standardization - in forward areas as well as in the Communications Zone.

b. On the basis of transportation intelligence, other necessary or special reports should be foreseen and fore-planned with subsequent changes kept to a minimum. Frequent changes in Standing Operating Procedures and forms inevitably result in loss of interest

and cooperation on the part of operating personnel in the field.

81. Authority of Chief of Transportation - The Chief of Transportation should have general staff authority to establish movements policies, issue movement instructions and exercise complete control over military freight traffic. This would include the power to embargo. The effect of this would be to establish a "movements" channel in addition to command and technical channels.

82. Advance Notice from Zone of Interior - The cargo loading cable and the ship manifest are recommended for continued use. A procedure should be established, however, whereby the Services will automatically advise the theater Transportation Corps whenever they are planning the importation of equipment that will require special handling. Thus, the theater Chief of Transportation will be able to make preparations for this handling and instruct the ports of embarkation regarding the loading of these items.

83. Decision as to Port of Unloading - A system of shipping allocation meetings in which the desires of the Services and the traffic situation are coordinated is recommended as the most satisfactory manner in deciding the destination ports for incoming shipments.

84. Port Clearance - The use of shipping directives from the Chiefs of Services and "cargo disposal instructions" from the Chief of Transportation can be recommended, on the basis of experiences in the European Theater as satisfactory for directing port commanders in the clearance of inbound supplies. The manner of shipment from the port should be the port commander's decision in conformance with the current movement program.

85. Transfer Points - The operation of transfer points should be under the jurisdiction of the Transportation Corps. A cross-reference file of waybills for the conveyances involved in the transfer of supplies should be maintained at these points. Properly informed and authorized supply service personnel should be present to make timely changes in destination.

86. Passing Points - It is recommended that the Chief of Transportation indicate to Section Transportation Officers the key points at which passing reports should be kept. These should be supplemented by such other points as deemed necessary by the Section Transportation Officers for efficient control and regulation. Car number records should be kept at these points on all military traffic passing through them.

87. Publication of an Overall Procedure - In future operations, especially those which involve a single special objective such as an invasion, it is recommended that all marking and documentation instructions be carefully analyzed before hand and published in one overall standing operating procedure. Subsequent changes should be kept to a minimum.

88. Issuance of Movement Instructions - The central control and publication of movement instructions is recommended for the calling forward of supplies from depots to ports during the pre-loading phases of invasion preparation. When the cross-water shipping reverts to a shuttle or turn-around system, however, in which it is not possible to know in what ships supplies are to be loaded, it is recommended that the calling forward of supplies revert to the port commanders.

89. Advance Notices to Far Shore - Because communications and contacts are likely to be uncertain and non-dependable during the early phase of a cross-water invasion, it is recommended that the advance arrival of ship's papers not be depended upon. Instead, it is recommended that the far shore beach commanders be given copies of all existing shipping documents prior to the invasion assault and thereafter these documents be delivered to them by any means available. At the time the supplies covered by these documents are loaded into vessels and dispatched, a brief radio message can be sent to the beach commanders indicating the ship number and the shipping document numbers involved. By reference to his shipping document file, therefore, he will know what each ship contains as it arrives off-shore.

90. Identification of Lost Cargo - Reference to the manifest concerned, which indicates the shipping documents involved, is the quickest and easiest way for the Chief of Transportation to notify G-4 as to what cargo has been lost at sea.

91. Supply Commitments of an Invasion Task Force Headquarters.

a. Transportation representatives from both the armies (task force) and the Communications Zone should be consulted in the planning of supply operations.

b. A tight control on changes in a supply plan, once put into operation, must be established.

92. Priorities in Cargo Planning and Depot-to-Port Movements.

a. Requisitions should be screened to insure that only the most vitally needed supplies are set up for shipment.

b. There must be provision of adequate transportation to lift the most urgently needed supplies.

c. Expeditious discharge and turn-around at destinations are recommended as the best way for providing full use of transportation for priorities and all needed supplies.

93. Recommended Documentation for Ship Loadings.

a. Daily Loading Report. This is a report to be made daily by the Port Commanders to indicate to the Services, as well as the Chief of Transportation, both at the origin and destination, what supplies have been loaded aboard specific ships within the past 24 hours. No specific form is necessary since reference is made merely to ship numbers and shipping document numbers rather than actual supplies. It can be distributed in normal message form but must be expeditiously transmitted.

b. Hatch List. This is merely a listing of supplies, shown by service and class, which are stowed in the various holds of a given ship. Hatch lists are to go with the vessel as part of the ship's papers, with additional copies to be dispatched in advance with the stowage plan (see below). The purpose is to enable the stowagers at destination to identify the cargo to be discharged from each hold and to facilitate the spotting of railway cars.

c. Stowage Plan. This document is to portray graphically the relative location in which cargo is stowed in the ship. It should be a printed side elevation drawing of the contour of the ship, with the location of each shipment indicated by colored areas (the colors

used, to be those used for the marking of the various Services' supplies) and by reference to shipping document numbers. The stowage plan and the hatch list should be dispatched in advance to the Beach or Port Commander at destination, with additional copies going with the ship.

d. Manifest The purpose of the manifest is to describe on one set of papers the entire cargo in the ship. When the shipping documents are attached to the manifest sheets to which they apply, the resulting supply manifest contains a very detailed description of the cargo. Copies should be dispatched immediately upon completion of loading to the destination port commander, with additional copies to the Services and the Chief of Transportation at both the origin and destination and others to go with the ship.

e. Forecast Cable - This is an advance forecast of sailings and is to be dispatched expeditiously to the destination port commander. The information should include name number of the vessel, port of loading, date loading commenced, estimated sailing date, destination code, and convoy identification where applicable.

f. Sailing Cable - This is to advise the destination port commander of the actual departure of a vessel from the port of loading. It supplements the forecast cable.

94. Common Rail Line Serving More than One Army - It is essential that the advance section assume control of movements over the portion of the line which is common to two or more armies. In addition, it is recommended that the advance section be responsible for movement control even forward of the point where the lines for separate armies diverge, thereby eliminating the Regulating Officers' function as it is described in FM 100-10.

95. Accumulation of Reserves on Wheels - It is recommended that a control agency be designated in the advance section to nominate priorities and regulate the forwarding of a proper balance of combat and construction supplies with other items. This is essential to prevent the accumulation of reserves on wheels in the forward areas, which results in not only rolling stock shortages, but confusion and difficulty in getting even the most vital items through.

96. Documentation in Fast Moving Situations - From solely the standpoint of documentation, it is recommended that documentation procedures be explicitly planned in advance and that the importance of at least minimum documentation be emphasized and re-emphasized in the training of all personnel concerned. Thus, in the development of a fast moving situation, documentation discipline is not so liable to break down. The basic document is the waybill and no shipment should go forward without it.

97. Transportation Bottlenecks - It is recommended that the maximum capacities of transportation bottlenecks, e.g. bridges, be determined and that a control be established whereby only that tonnage which can be handled through these bottlenecks is called forward and that this tonnage represent the most essential needs of the armies.

98. Air Shipments - Since air traffic is another method of transportation it is recommended that for an overall control of movements a close working relationship be established between the Transportation Corps and the Air Forces. The actual operation of air transportation should of course remain the function of an air transport command with movement control related to this operation in the

same way as it is related to the operating agencies of Military Railway Service, Motor Transport Service, and Inland Waterways Transport Service.

99. Movements in a Sudden Reverse - The establishment in advance of an evacuation plan by G-4 is recommended for the avoidance of considerable congestion in a fast rearward moving situation. This plan should indicate what forward supplies are to be destroyed and what supplies are to be evacuated, with destinations given for the latter. This plan, carefully prepared in advance and given a code title, could be put into operation immediately by reference merely to this code title should a sudden widespread tactical reverse arise.

PART TWO

PERSONNEL MOVEMENTS

CHAPTER 1

THE IMPLEMENTATION OF OVERALL CONTROL

SECTION 1

MONTHLY PERSONNEL MOVEMENT PROGRAM

1. Definition and Description - (See appendix 2) The Monthly Personnel Movement Program was a command directive issued by Communications Zone Headquarters allocating the available transportation lift for one month among the various categories of personnel proposed for movement. It was compiled each month at the same time as the supply movement program and the two were published simultaneously as one document, entitled: "Continental Personnel and Supply Movement Program." Briefly, it indicated or forecast the average daily movement of personnel for a month's period, broken down as to type of personnel, origin, destination and number of personnel.

2. Basic Cause for its Development - The basic cause for the development of a personnel movement program was essentially the same as that for a supply movement program. With the theater comprising a large land mass marked by a rather elaborate transportation network, it became increasingly necessary to have a forecast of expected movements so that, from the transportation point of view, the available transportation equipment and transportation facilities could be coordinated to effect their maximum use.

3. Function - This program was developed in order that the Transportation Corps could have advance information regarding the movements which were to occur during the succeeding month. A firm commitment such as this is vitally necessary in order that the Transportation Corps may prearrange available transportation and utilize it to the best advantage in accomplishing the program as submitted. In the movement of personnel the program did not furnish as rigid a control as in the movement of supplies. It served more as a general, loose guide indicating to the Transportation Corps the general types and localities of personnel movements for the month. As in the supply program the personnel movement program was based on monthly bids by all concerned of their movement requirements for the succeeding month -- or the most essential ones if the available transportation could not handle them all (the essential ones to be decided by a G-4 "Priorities Meeting") -- fitted into the transportation capabilities by the Transportation Corps. The preparation of the actual Movement Program was the responsibility of the Chief of Transportation. The completed program was submitted to the G-4, Communications Zone for final review and publication. The Chief of Transportation prepared and distributed through technical channels necessary supplemental data and schedules to facilitate the implementation of the program.¹

4. Difficulties Encountered - Since the monthly program was not a rigid restriction or control on personnel movements, but more of a general guide for forecast for the Transportation Corps, no major difficulties were encountered in its function.

SECTION 2

OTHER MEANS FOR OVERALL CONTROL

5. Information on Inbound Troops - From information concerning personnel arriving from the United States, the Movements Division of the Office Chief of Transportation was aware in detail of the types of personnel arriving in the theater and their destinations. This information was gained from advices from the Zone of Interior and the destination assignments furnished by those concerned within the theater. Documents and procedures involved in this phase of movement control are analyzed later in this study.

6. Documentation and Passing Information of Military Trains - By control of the issuance of "main numbers" for movements of large groups of personnel (over 39) the Chief of Transportation was able to know what troop moves by rail were being initiated. Through the phoning of passing information from passing points to the Office Chief of Transportation, current and detailed information was centrally available on unit movements. This latter control measure was of particular importance in the movement of hospital trains and special troop moves. This phase of rail movements is also treated more thoroughly later in this study.

7. Centralized Control of Special Moves - In the event that a section commander was unable to obtain clearance and cooperation from other sections through which special or urgent moves were necessary, he could appeal to the Chief of Transportation. The latter would then declare a "Through route" for such a move and thereby assure the proposed convoys of clearance through the areas or sections concerned.²

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Capt P. L. Johnson, Pass Br, Movts Div. CGOT

CHAPTER 2

THEATER-WIDE DOCUMENTATION AND CONTROL PROCEDURES

SECTION 1

GENERAL PROCEDURES

8. Movements of Individuals or Groups of 99 or less - Such movements were accomplished in the European Theater upon the presentation by personnel of competent travel orders, leave orders, furlough certificates or passes. Such travel was by any available means of transportation, including that which could be furnished by an RTO or other Transportation Corps representative, who was to make the necessary arrangements with the local railway and/or motor transportation agency. When rail transportation was used, travel warrants were issued. This latter document, dealt with in Section 2 of this Chapter, served to accomplish the payment of transportation charges of the civilian railroads.

9. Responsibilities in the Initiation of Movement - The following responsibilities pertaining to all personnel moves were established for the implementation of efficient movement, flow and control.¹

a. The Communications Zone Section Commanders were responsible for the administrative and operative supervision of debarkation and movement programs.

b. Unit commanders were responsible for furnishing RTO's or Transportation Corps representatives pertinent information relative to the movement of their units (authority, date and destination of move, unit strength and present location, baggage, unit equipment, etc.) and for compliance with verbal or written instructions covering debarkation or movement.

c. The RTO at the point of origin, receiving the above information from the unit representative, relayed the details to the Section Transportation Officer requesting authorization and instructions for the movement. After the authorization and instructions had been established by the Section Transportation Officer the RTO was to coordinate with the unit in effecting the movement as indicated in the movement instructions.

d. Section Transportation Officers were responsible for the preparation and distribution of movement instructions, covering movements originating within their sections; including debarkations. The means of transportation was subject to the approval of the Chief of Transportation.

SECTION 2

RAIL MOVEMENTS

10. Development of Decentralized Control - The trend throughout operations both in the United Kingdom and on the Continent was decentralization of operations and control. In the United Kingdom long term rail programs were planned and published far in advance of troop arrivals in order to portray overall rail requirements for two to three month periods. Trains were actually laid on in conjunction with the British War Office and British Civil Railway representatives at special conferences. With the establishment of Base Sections and the

strategic location of US RTO's, however, rail movement was decentralized to enable Section Transportation Officers to set up a maximum of two special trains per day from one location without clearance from the Chief of Transportation. On the continent this decentralization developed in the same way. The actual arrangements for rail transportation became the responsibility of the Base Section transportation officers, with an overall supervision and control obtained through certain documentation procedures explained below and - when finally developed - the monthly movement program. Special large moves were always handled by the Passenger Branch of the Office Chief of Transportation.

11. Documentation and Control Procedures.

a. Travel warrants - A travel warrant was a military ticket or auditing device for the purpose of payment of transportation charges to the civilian agencies concerned. It was accomplished whenever military personnel moved on civilian rail transportation. This document was used with little change throughout the European Theater. The only exceptions to this practice were moves within an Army area over rail transportation operated exclusively by military personnel. Warrants were issued locally by RTO's upon presentation of competent orders for travel. These warrants were accomplished in triplicate with one copy for the local station master; one for the train commander, officer in charge of groups, or the individual; and one for the local RTO's file. On the continent it was of course necessary that this document be bilingual (English and French). Two forms of the travel warrant were used, depending on the size of the movement (see appendices 8 & 9). Form 494 was issued to individuals or small parties, while Form 495 was used for special troop train moves and hospital trains. If sleeping accommodations were to be utilized, a separate form was indorsed, "FOR SLEEPING ACCOMMODATION ONLY", showing the compartment assignment in the "Remarks" column. These forms indicated all necessary information on personnel, origin, destination, RTO at point of origin, class of transportation, authority for travel, baggage information, etc. These travel warrants proved to be adequate from the standpoint of being expedient and yielding clear and concise information. No difficulties were encountered in their use and no changes were made in the forms.⁴

b. Main Numbers - A main number was merely a number or combination of numbers and letters assigned to each movement of 40 or more persons. This method of documentation was adopted in October 1944 as a means of controlling and identifying large or special personnel movements.³ Originally the numbers were composed of four digits followed by the identifying letter of the Section originating shipment. These later developed, however, into combinations of prefixes, digits, and suffixes to indicate details concerning place and date of origin and other data relative to the shipment. For a time main numbers were assigned individually by the Passenger Branch of the Chief of Transportation. Although this procedure provided exact centralized control of personnel movements, the volume of traffic became too great and communications caused too many delays. As a result main numbers were issued in blocks to the Section Transportation Officers. Upon assignment of the main number to an individual move, the Section Transportation Officer by reference to this main number advised all concerned of the details regarding the movement including the Chief of Transportation. Main numbers facilitated control by providing ready identification of movements. This was particularly helpful during hostilities when it was essential to furnish current information regarding the progress of unit movements.

c. Dispatch and Passing Information on Movements - It was the responsibility of the Section Transportation Officer at origin of troop movements to telephone the dispatch and passing times to the Section

Transportation Officer of the next section to or through which the train was routed, indicating the main number, passing point and time and date of arrival and departure; or if the destination were within the section, advise the RTO at destination. Each Section Transportation Officer through whose section the movement was passing was to telephone the passing information to the next Section Transportation Office along the route of the train. These conversations were confirmed by teleprint with an information copy to destination and intermediate section Transportation Officers and the Passenger Branch of the Office Chief of Transportation. During hostilities passing information on troop trains and hospital trains was also telephoned to the latter office, since it was constantly being called upon to report the status of movements, particularly red ball (urgent express) shipments of personnel. Up to the minute information on the movement of hospital trains was essential since the Passenger Branch of the Office Chief of Transportation was responsible for notifying the Chief Surgeon as to the location of all hospital trains in operation, so that detraining could be arranged immediately to coordinate with their arrivals at destinations.

d. Specific Accomplishment of Documentation¹ - The following were the responsibilities of the RTO at origin:

- (1) Issuance and distribution of travel warrants.
- (2) Furnishing copies of "SQP for Train Commanders" to and obtaining a receipt to that effect from the train commanders.
- (3) Inspection of train for damage and completing a Train Inspection Report to be certified by the train commander.
- (4) Indicating by labels or chalk the cars to be allotted for baggage.
- (5) Indicating by "CO TRAIN" label the car in which the Train Commander would travel.
- (6) Marking the assigned main number on both sides of the first, second and last cars of each train.

e. Documentation Procedures at Destination - The destination RTO was to:

- (1) Inspect the train with the train commander for damage and complete the Train Inspection Report.
- (2) Obliterate the main numbers marked on the equipment by the origin RTO.
- (3) Advise the Chief of Transportation as to the date and time of completion of movement and the release of equipment.

SECTION 3

ROAD MOVEMENTS

I2. The Development of General Control Procedures - In the initial phase of operations on the continent (until September 1944) road traffic was regulated and controlled by the armies and Advance Section Communications Zone Headquarters. The tactical situation was the governing factor in traffic control. The overall plan for traffic control supervised by the Highway Branch of the Office Chief of Transportation, however, was gradually worked in on the Continent with the

establishment of a Communications Zone as the armies advanced. After the arrival of the Office Chief of Transportation on the Continent, Highway Branch assumed all responsibility for road traffic regulation and issued directives and overall procedures applicable to operations. For three months, until Base Sections could completely assume the operational responsibility, Highway Branch of the Chief of Transportation continued issuing Motor Movement Instructions and sending its personnel into the field to make specific road reconnaissances with the purpose of establishing a road network. The information obtained was distributed to all interested parties, enabling them to have current road data at all times. In October 1944 the movement of an infantry division with attached troops was accomplished from the Office Chief of Transportation. This was the first of several moves of division size handled from central headquarters and the procedure proved satisfactory. A generally more improved organization for the accomplishment of road traffic regulation on the Continent was effected with the adoption of SOP No. 50 in October 1944.⁴

13. Centralization of Road Intelligence - Road intelligence was a major function of the Road Traffic Branch of the Chief of Transportation, and in conjunction with Base Sections a system of gathering essential road information was instituted. The information was secured by actual road reconnaissance in the Base Sections. It was then sent to the Office Chief of Transportation where it was compiled and reissued in the form of a current summary of the existing road networks. Periodic reports and maps were issued, showing road networks by classification together with bivouac, medical, POL and other facilities available in all Communications Zone territory. Specific routes in direct support of the armies were also designated by number, letter or name.

14. Responsibilities for Road Traffic Regulation - Regulation of road traffic within army areas and within the Communications Zone was the responsibility of the respective area commanders. Regulation of road traffic between army areas and the Communications Zone was effected by arrangement between the Army transportation officer and the Office Chief of Transportation.

15. Specific Documentation and Control Procedures

a. Convoy Numbers - All organic movements of personnel consisting of ten or more vehicles were assigned a convoy number as means of identification. Application for a convoy number was made to the Section Transportation Officer by submitting all the pertinent data on the proposed road movement. The number was then issued by this Transportation Officer in conjunction with the movement instructions. The head and tail of every serial in the convoy was then clearly marked with the convoy number so located as to be easily noticeable by Military Police and other traffic personnel. The number was further used as a means of identifying the particular move in all communications pertinent thereto. The number itself consisted of three parts; the first three letters of the month; a letter combination indicating whether the convoy was inter- or intra-section, intra-district, or operational convoy arranged by the Chief of Transportation; and a number indicating its sequence in moves of that category during the current month. This system proved satisfactory throughout operations on the Continent and no changes were made.

b. Movement Instructions - Movement Instructions, constituted authority for the convoy commander to move onto the area road net. They were issued after road clearance had been obtained through the areas concerned. These instructions were prepared by the Section Transportation Officer at origin (except in special or large road movements, in

which cases the information for the instructions came directly from the Office Chief of Transportation) and were based on the unit's movement orders and the data submitted regarding the proposed convoy when application for convoy number was made. The movement instructions set forth the initial point, time of departure, routes, timings, halts, density, restrictions, etc. These instructions were issued on a prepared form, to parts of which reference was made in all subsequent communications regarding movement.

c. Dispatch Information - In the case of inter-section convoy movements, for which convoy numbers had been assigned, the Section Transportation Officer at origin advised the Section Transportation Officer at destination of the pertinent details appearing in the Movement Instructions. In the case of convoys scheduled to bivouac enroute, the Section Transportation Officer concerned was also advised. In the event of inability to make direct communication for this message, the advice was telephoned to the Highway Branch of the Office Chief of Transportation for relay. These messages were considerably expedited and a certain degree of security was achieved through the use of a "key letter" system in their communication. This involved merely relating the convoy data to the corresponding letters on the Movement Instruction form from which the data was obtained. These messages were confirmed by teleprint in which the same key letter system was used. The chief difficulty encountered with this system was the fact that it could not be used in communications with the Armies, since they were not familiar with the letter meanings. Upon receipt of the dispatch information, the destination Section Transportation Officer relayed the message to the receiving organization.

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CHAPTER 3

CLEARANCE FROM PORTS OF INBOUND TROOPS

SECTION 1

ADVANCE NOTICE OF TROOPS TO ARRIVE

16. Long Term Forecast - This was the name of a document based on War Department priority lists and advance shipping information which was published by the Assistant Chief of Staff, G-3, Communications Zone, to show tentative station assignments for units expected to arrive over a three to six months period. The forecast failed to measure up to expectations, however, because of the extreme difficulties encountered in securing accurate advance information from the War Department. Marked by continuous revisions, this document did not contain substantial information on which to base a definite movement program. This document was used by the Transportation Corps for a time in the United Kingdom, but was of so little value in the control of movements, it was abandoned for this purpose.

17. Forecast of Troops to Arrive - This was the name of a document published by the Passenger Branch of the Office Chief of Transportation to provide a short term forecast of troops to arrive from the United States. This document was based on forecast cables (pre-embarkation reports) received from the United States ports of embarkation. Upon receipt of these cables, the Passenger Branch identified from War Department Movement Orders all units and casualties appearing thereon and delivered two copies by messenger to the Assistant Chief of Staff, G-3, Communications Zone, who indicated the major subordinate command assignments for each unit. One copy of the cable was then returned to the Passenger Branch for publication and distribution as the "Forecast of Troops to Arrive." The document was distributed to major subordinate commands who provided station assignments.

SECTION 2

DETERMINATION OF TROOP DESTINATIONS

18. Assignments by Major Subordinate Commands - The procedure for the determination of troop destinations and the dissemination of such information remained essentially the same throughout the period in the European Theater. The above mentioned document, "Forecast of Troops to Arrive," was distributed by the Chief of Transportation to the major subordinate commands, who were, upon receipt of the document, to indicate the initial destinations for the incoming troops. Prompt action on the part of the subordinate commands to give this information to the Transportation Corps was necessary so that the movement of the troops from the ports could be planned and arranged. Considerable difficulty was encountered in securing these station assignments, however, and this difficulty was never wholly surmounted. In the United Kingdom a deadline date for reply by the subordinate commands was established and on the Continent it was frequently necessary for the Chief of Transportation to contact the major subordinate commands by telephone to obtain these inland destinations.

19. Confirmed Destinations and Strengths - This was the name of the final document published and distributed by the Chief of Transportation. This document was based on the destination assignments received from the major subordinate commands and the sailing cables received from the United States ports of embarkation at the time of

troop ship sailings (the sailing cables listed the exact troop units, with their final strengths, which had embarked for the Theater). This procedure proved to be very satisfactory. The only difficulties which arose were the instances in which the text of a cable was garbled in transmission or in which receipt of information was delayed because of operational difficulties or misrouting through message channels. The destinations listed in this document may have been training areas, staging areas near the port of debarkation, or final destinations.

SECTION 3

MOVEMENT FROM THE PORTS

20. Staging Areas - Through experience in the United Kingdom and on the Continent it was learned that the presence of staging area facilities near the ports of debarkation greatly enhanced the control of personnel movements. With no staging area serving the United Kingdom ports, it was necessary to plan numerous rail movements in great detail for the transportation of troops direct from shipside to final destination. Centralized control was essential. On the Continent, however, staging areas were established and troops were usually moved from ship-side to the staging area or other initial temporary destination. Further transportation from these locations to final theater destinations was the responsibility of the Section Transportation Officers in whose sections staging areas were located.

21. Movement Control - All the arrangements for movement of units from the ports to their final theater destinations were made by the Transportation Officers of the sections in which the debarkations occurred. It was the responsibility of the Communications Zone Section of debarkation to furnish the Chief of Transportation a daily report of the units in the staging area, their strengths, numbers and types of their organic vehicles, number of personnel requiring additional transportation, destinations, and movement readiness dates. A procedure for the establishment of priorities of movement from the ports was also instituted to resolve conflicts in demands. ²

SECTION 4

CROSS-CHANNEL MOVEMENT

(After the establishment of Communications Zone Headquarters on the Continent)

22. General Control - The movement of troop units from the United Kingdom to the Continent was handled as an inter-section movement. In brief, therefore, the United Kingdom Base Section provided the continental base section concerned with the expected and actual departure times of units by the most expeditious means possible.

23. Documents Involved - A "Troops Due to Arrive" list, based on four daily telephone calls from the United Kingdom Base to the Continental section of debarkation, was published daily by the debarkation section. It showed ship numbers, units, destinations and expected times of arrival. An "Arrival and Confirmed Destination List" was also published by the section of debarkation and which included temporary staging area and final destinations of arrived units. Another document which gave advance notice of expected shipments was the "Daily

Report of Loading", prepared by the United Kingdom Base and indicating the ship number, unit index number, unit designation, strength, debarkation point, and expected time of arrival. This document was distributed to the sections of debarkation and the Chief of Transportation.

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CHAPTER 4

EVACUATION

SECTION 1

WOUNDED

24. Hospital Trains. - The control of hospital train movements was the responsibility of the Theater Surgeon. A Section Surgeon or Medical Regulating Officer, responsible for initiating such movements, would submit a request in writing to the Section Transportation Officer concerned for the movement of a hospital train or car. This request was on a form which indicated all the data pertinent to the move. The Section Transportation Officer then alerted the train commander through the local RTO and made the operating arrangements with the local Military Railway Service or civil railway agent. To facilitate the expeditious handling of patients at destination it was necessary to have accurate information of the progress of the movement while enroute. This was accomplished by a system of advance advice and passing information. The Transportation Officer of the originating section alerted the destination Section Transportation Officer by telephone as to pertinent details of the move, including estimated time of arrival. Upon dispatch of the train, both the destination and intermediate Section Transportation Officers were to be advised of the actual departure time, personnel aboard and the destination. This dispatch advice was confirmed by teleprint with an information copy going to the Chief of Transportation. The intermediate Section Transportation Officer was responsible for telephoning passing times on hospital trains to the next and/or destination Section Transportation Officer. All passing times were to be phoned to the Chief of Transportation, also who was responsible for keeping the Chief Surgeon informed at all times on the movements of hospital trains. Because that office could be more easily reached by telephone, the passing points called their information to the Chief of Transportation, who relayed it to the intermediate Section and destination Section Transportation Officers concerned. To complete this close control on hospital train movements so that Medical Corps could efficiently handle the patients the Transportation Officer of the destination Section advised the Section Surgeon at destination of the estimated arrival time and the personnel on board. The Chief of Transportation (Passenger Branch) was then advised by teleprint of the actual time of arrival.¹

25. Cross-Channel and Port Evacuation in the United Kingdom.

a. Initial Plan and Operation - The system as first inaugurated in the United Kingdom provided for the establishment of transit hospitals adjacent to south coast ports. Movement from ports to these hospitals was to be made by truck and ambulance. The transit hospitals prepared the patients for evacuation by hospital train to General Hospitals located throughout the United Kingdom, and were to be cleared at least once every twenty-four hours. A detailed time table was prepared showing the running times of the hospital trains between the transit hospitals and the General Hospitals to insure the most advantageous use of hospital trains. Hospital trains were stabled at various holding points in the vicinity of the transit hospitals to be available on call by the Chief Surgeon through the Chief of Transportation.

b. The System as Finally Devised - In November 1944 consideration was given to the possibility of evacuating all patients

through Southampton in hospital trains direct to the General Hospitals. It was agreed that the Port Commander at the port of origin would advise the Movements Division of the United Kingdom Base Transportation Office of the number of patients, separately by category, embarked on each vessel, time and date of sailing, and time and date of expected arrival at Southampton. Based on this information, arrangements were made in conjunction with the Chief Surgeon, United Kingdom Section, to move such patients by hospital trains directly to the General Hospitals. Normally six hospital trains were held in readiness for this movement from the port. Once arrangements had been made for the use of these trains to handle a disembarkation, the precise timings were arranged locally between the Port Commander and the Transportation representative (civilian in the case of the civilian operated British railways). This proved to be a much more expeditious manner of handling sick and wounded and thereafter all the evacuation of patients was handled through this one port to the General Hospitals.²

SECTION 2

PRISONERS OF WAR AND MISCELLANEOUS CIVILIANS

26. Rail Movements of War Prisoners - All rail movements of prisoners of war were accomplished by the Section Transportation Officers, upon the request of their Section Provost Marshals. In requesting a movement, the latter were to furnish all the pertinent details, upon which the Section Transportation Officers made detailed movement arrangements, including schedules of halts, etc. When these details were completed they were given to the Section Provost Marshal and all Transportation Corps personnel concerned with the movement. The RTO at point of origin was then responsible for furnishing the details of the movement to the commander of the prisoner of war enclosure, arranging to have the equipment spotted for train inspection and loading, and furnishing the train commander with complete information concerning the movement, including route, schedule, and halts.

27. Miscellaneous Personnel - Special movements of civilians, refugees and displaced persons across the Section boundaries under the auspices of the U. S. Army were to be approved by the Chief of Transportation, Communications Zone, with the concurrence of Assistant Chief of Staff, G-5. Details of these movements were arranged in the same way as ordinary troop moves.

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Capt P. L. Johnson, Psgr Br, Movts Division, OCOT

CHAPTER 5

UNIT EQUIPMENT AND UNACCOMPANIED BAGGAGE

SECTION 1

UNIT EQUIPMENT

28. Unit Locator Lists

a. Experience in the United Kingdom - A "Code Marking Section" was established in the Passenger Branch of the Office Chief of Transportation to maintain records concerning the whereabouts of all units stationed in the Theater. The purpose was to compile a list of units for publication and distribution to all Transportation Corps agencies in the field to expedite the flow of force marked supplies, equipment and personnel. The information contained in the list, called a "Code Marking List," included the unit serial number, designation and location listed in numerical-alphabetical order. This data was compiled from various sources, originating with extracts from War Department orders and concluded by information extracted from "Confirmed Destinations and Strengths," published by the Passenger Branch (see Chapter 3, Section 2, paragraph 2). A cross index locator file was also maintained, which recorded pertinent information relative to the arrival of units including vessel number, port of discharge, units' stations and strengths, and subsequent internal movements after arrival in theater. Considerable difficulty was encountered in securing copies of theater movement orders, cables, etc., but through numerous requests to agencies concerned this problem was partially alleviated and a record maintained which was considerably more accurate than that compiled by any other agency.

b. Experience on the Continent - There was an extremely urgent need for an accurate unit locator list on the Continent so that units and their equipment could be joined. By August 1944 there was no reliable list of unit locations available. A mobile Machine Records Unit attached to Advance Section Communications Zone had published several short listings, but these included only a portion of units on the Continent and because of the delay in distribution were inaccurate by the time they were received.¹ Passenger Branch, therefore, again found it necessary to compile its own locator card file on the basis of all sources of information. Great difficulty was encountered in securing current data and attempts were made to obtain locations direct from Chiefs of Services, but this proved futile since their own files were also incomplete. Originally it was planned to utilize reports of arrival instigated by unit commanders upon arrival at new locations, but the plan never materialized because of the intricacies of the communications system. Letters were dispatched to all headquarters requesting that this office be placed on distribution of all material concerning the location of units, including station lists published by the Base Sections and Chiefs of Services. Finally, a list was published, giving the units in serial number sequence, and was used principally in identifying force marked equipment and supplies.

29. Cross-Water Shipment of Unaccompanied Equipment

a. Planned Procedures - Because of the type of shipping employed in the cross channel movements for the invasion of the

Continent, it was decided that for expeditious discharge at destination these landing craft would be loaded with only troops and unit vehicles. The units were therefore to load their most essential unit equipment into their organic vehicles to accompany the troops. The remainder of the equipment was packed and marked and was to be shipped as freight by the unit to its destination just prior to movement of the unit into the Marshalling Area (temporary holding areas for units moving to embarkation points).

b. Actual Operations and Difficulties Encountered - The constantly changing priorities for the movement of units made it utterly impossible to anticipate the dates on which the unit would be embarked. Therefore, the date on which the organizational equipment should be shipped from the United Kingdom to the Continent could not be determined.² Too early shipment of this equipment would likely have resulted in its loss. Considerable confusion also resulted in the reluctance of unit commanders to be separated from part of their unit equipment and many attempts at subterfuges were made to ship all of the equipment with the unit. Other difficulties arose from units neglecting to ship their equipment to destination prior to movement to Marshalling Area; or from other units turning their equipment into supply depots where, through misunderstanding, it was placed in stock and subsequently reissued to other units.

30. Shipment of Hospital Assemblies

a. Factors Causing Split Shipments - It was discovered during the period of pre-stowage of vessels for the assault upon the Continent that certain portions of hospital assemblies had been loaded on different vessels. Investigation disclosed several reasons for these split shipments.²

(1) The bid for shipping (shipping document) was received by the Chief of Transportation after the deadline date and hence was not available when the vessel loading was originally planned.

(2) Pre-storage of coasters was faulty and there was discrepancies in both loading and unloading of the freight cars.

(3) There were errors in the calculation of dead-weight and measurement tonnage on shipping bids, which resulted in shut-outs at the ports.

(4) Some assemblies were shipped from more than one depot without cross reference on the various shipping papers to indicate that the shipments from several depots would have to be consolidated at the port.

b. Corrective Action Taken - A procedure was agreed upon between the Chief Surgeon and the Chief of Transportation whereby the Surgeon's office would concentrate all the components for a hospital assembly at one location and not until the assembly was complete would the bid for shipping be submitted. The Surgeon's Office agreed to exercise extreme care in preparation of the shipping papers, and to tally the shipment carefully into the freight cars. The Chief of Transportation arranged to give preferred handling to shipping papers covering hospital assemblies and the ports were instructed to do everything possible to stow the entire assembly in one vessel. Thereafter, little difficulty was experienced in the shipment of hospital assemblies from the United Kingdom depots.

c. Split Shipments from the United States - The same difficulties were encountered, however, in the shipment of hospital assemblies from the Zone of Interior. Numerous shipments were split over vessels, some of which discharged at different United Kingdom ports and some at ports in both the United Kingdom and on the Continent. This situation was finally resolved by the shipping ports in the Zone of the Interior setting up detailed procedures whereby the shipment of parts of hospital assemblies were segregated at the United States port and not released for overseas shipment until certified by the Port Surgeon that the assemblies were complete.

SECTION 2

UNACCOMPANIED BAGGAGE

31. Unaccompanied Baggage Arriving from the United States- The greatest difficulty arising in the movement of this baggage was the arrival of baggage in the theater on different vessels and at later dates than the owners. Numerous policy cables were dispatched to the United States ports requesting that certain procedures be adopted regarding the marking and consignment of unaccompanied baggage, since most of it arrived with incorrect or illegible information on the tags. Since the bulk of unaccompanied baggage for enlisted men consisted of government issued equipment carried in "B" barrack bags, the shipment of this equipment was discontinued and it was issued to the troops upon their arrival in the Theater.

32. Tracing of Lost Baggage - Throughout the entire operation in this theater the Baggage Section of the Passenger Branch of the Office Chief of Transportation traced thousands of pieces of lost baggage for individuals inquiring in person or by letter. Many schemes were tried by which to decrease the amount of strayed or unclaimed baggage by having it routed to a single depot. In spite of these efforts, however, the tracing of lost and routing of unclaimed baggage continued throughout to be a major problem.

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Chapter 5

1. "Movements Division in the UK and on the Continent," 5 August 1945, (an informal historical critique of the movement control and functions of the Movements Division, Office Chief of Transportation).
2. "Historical Critique of the United Kingdom Overlord Movements," Lt. Col. M. J. Frachie, Operations Branch, Movements Division, OCOF (in UK) 1 November 1945.
3. Communications, oral and written, with

Major G. A. Muffor, Page Br, Movts Div, OCOF
Capt. P. L. Johnson, Page Br, Movts Div, OCOF

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

SECTION 1

CONCLUSIONS

33. Allocation of Rail Equipment - Tremendous backlogs of personnel in replacement depots and transit areas became prominent as the majority of rail equipment was devoted to the movement of supplies. Consequently movements of reinforcements to the armies were seriously hampered.

34. Movement Program - A movement program provides advance information as to the movement problems to be met in a given period. It also furnished a general allocation of transportation facilities to the various movement needs. In summary a movement program furnishes a guide to movements personnel so that the available transportation can be used to the best advantage. The program afforded the Transportation Corps opportunity to state existing facilities before demands were placed.

35. Overall Control - A general overall supervision and control by the theater Transportation headquarters is necessary for the efficient use of transportation and the prevention of congestion. In addition to the movement program, this overall control can be facilitated by the receipt in the Office Chief of Transportation of information from other commands and from field transportation representatives pertaining to movement of personnel.

36. Decentralization of Operation - Except for large or special personnel movements, transportation arrangements should be made locally, with the movement instructions coming from the local area or Section Transportation Officer.

37. The Travel Warrant - This document is necessary in the accomplishment of payment of transportation charges to civilian railway agencies and in the fiscal control thereof. The warrant acts as a military ticket and is issued by the local Transportation Corps representative only upon presentation of proper authority. The form used on the Continent indicated all necessary information on personnel, authority to travel, baggage information, etc. It proved to be expedient, the shape and size were satisfactory, and it furnished clear and concise information. It must be multi-lingual. (See Appendix 8 and 9)

38. Main Numbers - These provided a ready identification of major personnel movements and facilitated overall control of such moves. They were a handy reference in all communications.

39. Dispatch and Passing Information - This is necessary on personnel movements so that close coordination in the quick handling of the troops can be accomplished at the destination and at scheduled meal and relief halts. This is especially important in the movement of hospital trains. This control is dependent on adequate communications facilities.

40. Specific Documentation - The specific documentation procedures as described in Chapter 2, Section 2, paragraph 2, d, proved satisfactory.

41. Decentralized Control of Road Moves - In road movements both centralized and decentralized control was tried and the latter was found better in a situation comparable to the European Theater where there is a large land area, an elaborate road network, and only average communications facilities. General overall supervision, however, is of course necessary.

42. Movement Instructions - Movement instructions for road moves served as a basic document in movement control. It acted as a road clearance and guide to the convoy commander, and -- prepared on a given form -- a basis for all future references to the particular movement. Chief difficulty regarding the form arose from the fact that the armies did not use the same one as Communications Zone. Thus, information to them regarding a movement could not be made by reference to the form.

43. Convoy Numbers - These served the same purposes in road movements as "main numbers" did in rail movements, facilitating identification, control, and reference in communications.

44. Obtaining Station Assignments in Advance - Difficulty in obtaining station assignments in sufficient time to allow advance planning for troop arrivals results in considerable confusion in establishing firm train schedules and completing billeting arrangements.

45. Staging Areas - The lack of staging areas in the vicinity of embarkation ports results in moving troops direct to ship's sides, and this does not allow sufficient time for port commanders to inspect baggage, complete a physical inspection of personnel and prepare required documentation.

46. Evacuation of Hospital Patients - Fairly adequate control was achieved on the movement of hospital trains, the only major difficulties arising when communications were inadequate. Through close coordination between the Continent and the United Kingdom Base Section, hospital trains were able to evacuate all patients from one port directly to General Hospitals.

47. Station List - Because the station lists of units published by Machine Records of the Communications Zone Adjutant General's Office were not dependable for the movement of supplies and personnel, the Transportation Corps was obliged to compile and publish a similar document for the use of transportation agencies in the field. This list, although far superior to that of the Machine Records Unit, was lacking certain information. The result was misrouting of a considerable amount of force marked supplies.

48. Coordination of Units and their Equipment - Confusion arose in the cross-water shipment of unit equipment in the early days of the invasion, because changing priorities for the movement of units made it uncertain as to when the equipment should be shipped, and because misunderstanding arose on the part of unit commanders regarding the procedures for handling unit equipment which could not go with the units.

49. Hospital Assemblies - Poor documentation and discipline, combined with some handling errors, contributed to the split shipments of hospital assemblies. The careful preparation, coordination, and handling of shipping papers for hospital assemblies contributed later on to the surmounting of these difficulties.

SECTION 2

RECOMMENDATIONS

50. Allocation of Rail Equipment - A movement program is recommended to serve both as an allocation of a part of the transportation facilities to required personnel movements and as a forecast and control document for the guidance of all transportation personnel.

51. Information from the Field - Basic pertinent information on the movements of personnel should be received by the Chief of Transportation from the field to accomplish an overall supervision and control of transportation facilities. This information must be consistent with the capabilities of the communications system.

52. Decentralization of Operations - In the occupation of a large land mass marked by an elaborate transportation network, movements must be arranged and controlled locally. Special, urgent or large moves, however, must be handled from a central transportation headquarters.

53. Travel Warrant - When the use of local civilian transportation agencies is contemplated immediate steps should be taken for the control of transportation charges by instituting a travel or general railway warrant. This document should be multi-lingual.

54. Main and Convoy Numbers - The use of "main numbers" for rail and "convoy numbers" for road movements is recommended as furnishing an easy reference and identification, as well as facilitating control procedures.

55. Passing Information - This is a great movement control factor and is recommended. It is of special importance in the movement of hospital trains.

56. Specific Documentation - Documentation procedures as described in Chapter 2, Section 2, paragraph 2,d is recommended as standard practice.

57. Advance Station Assignments - It is recommended that one theater agency be established to collect and submit to the Chief of Transportation firm station assignments by a specified deadline date.

58. Staging Areas - To accomplish inspection, control and necessary documentation it is recommended that port installations be augmented by inclusion of sufficient space to stage both incoming and outgoing personnel.

59. Station List - The Machine Records Unit of the Adjutant General's Office should be stringently held to its responsibility for the preparation and distribution of an accurate station list.

60. Shipment of Unit Equipment - In their shipment, organizational equipment and supplies should be force marked and block stowed in cargo vessels of the same convoy as the troops. More preferably, if possible, they should be scheduled so as to arrive at the overseas base or theater ten days to two weeks in advance of the arrival of the troops. The loss of stowage space by block loading, if any, is compensated by the saving in time and effort in sorting the equipment at the destination port and expediting the equipping of the unit. Under no circumstances should the organizational equipment of a given unit be spread over several convoys.

61. Discipline in Handling Unit Equipment - In future operations of the nature of the invasion of the Continent it must be made clear to unit commanders that only the minimum essential equipment can be expected to travel with the unit and that this must be loaded in the unit vehicles. The remainder of the equipment will have to be packed and marked and shipped by the unit to its overseas destination well in advance of the movement of the unit itself. This organizational equipment should be given the highest priority and very careful records should be maintained to insure the delivery of the equipment intact to its rightful owners.

62. Shipment of Hospital Assemblies - Hospital Assemblies, regardless of the number of pieces, should be shipped intact. If a given assembly is shipped partly on two different vessels and one of the vessels becomes a casualty, the other portion of the equipment, arriving at destination, is virtually useless. Adequate planning and a complete understanding of transportation problems by all concerned will tend to alleviate difficulties of this nature in the future.

63. Increased Peace Time Attention - Since many of the difficulties encountered in the movement of both supplies and personnel in the European Theater were directly traceable to lack of planning of documentation and movement control procedures and lack of training of transportation personnel, concentrated specialized attention to these problems in peace time is therefore recommended. Such action would not only obviate many of these strictly transportation difficulties, but would instill in the other Supply Services and Combat Arms an appreciation of the problems and procedures peculiar to the expeditious transportation of mass supplies and personnel.

PLANNED DAILY MOVEMENT
 PERIOD 1-31 MAY

CHANNEL BASE SECTION

(Excluding Coal & Bulk POL)

TYPE of TRANS.	ORIGIN	TONS	CLASS of SUPPLY	DESTINATION
Rail	Q-179, Bressoux	1100	QM I	1st U.S. Army
"	"	400	"	15th U.S. Army
"	Q-183, Charleroi	900	"	Q-179, Verdun
"	"	400	"	Q-179, Bressoux
"	"	100	"	Q-130, Reims
"	"	200	"	Q-186, Nancy-Metz
"	"	1100	"	9th U.S. Army
"	Channel Base Sect.	20	QM I P)	Charleroi
"	"	10	"	Lille
"	"	10	"	Amiens
"	Q-185, Lille-Mons	150	QM II, IV & PX	Q-186, Nancy-Metz
"	"	200	"	Q-183, Charleroi
"	"	350	"	1st U.S. Army
"	"	350	"	9th U.S. Army
"	"	100	"	15th U.S. Army
"	Channel Base Sect.	300	II & IV	Liege
"	"	180	"	Brussels
"	"	10	"	Charleroi
"	Q-179-P3, Herstal	500	Lubricants	1st U.S. Army
"	"	500	"	9th U.S. Army
"	Q-185-P7, Brussels	500	"	Q-178-Pl, Verdun
"	"	500	"	Q-179-P3, Herstal
"	"	750	"	Q-180-Pl & 2, Reims/Muizon
"	"	600	"	Q-183-Pl, Charleroi
"	"	200	"	59rd Base Depot, Ebrang
"	"	200	"	56th Base Depot, Mehlem
"	E-511-G, Mons	150	EG II & IV	E-523/4, Toul-Domgermain
"	E-519, Brussels	150	"	"
"	"	300	"	1st U.S. Army
"	E-519-A, Stenay	300	"	3rd U.S. Army
"	E-519-B, Bressoux	400	"	9th U.S. Army
"	E-530, Antwerp	350	"	E-519, Brussels
"	"	200	"	E-519-B, Bressoux
"	"	400	"	E-511, Laon
"	"	200	"	E-523/4, Toul-Domgermain
"	Quinost Quarries (near Brussels)	1000	Crushed Rock	Airfields in Channel Base Section, Advance Section, O.I.S., 1st & 9th Armies.
"	Belgium	1500	"	Belgium
"	"	430	Lumber	"
"	"	500	Struct. Stl	"
"	"	400	Coke	"
"	"	835	Cement	"
"	France	50	Asphalt	France
"	O-656, La Louviere	25	ORD II (3S)	Q-6/4, Paris
"	"	30	OKD II	921st Ord Bn. Huy
"	"	100	"	1st U.S. Army
"	"	25	"	3rd U.S. Army
"	"	25	"	7th U.S. Army
"	"	75	"	9th U.S. Army
"	"	15	"	15th U.S. Army
"	O-654, Hofstade	250	ORD II(CV)	1st U.S. Army
"	"	250	"	3rd U.S. Army
"	"	50	"	7th U.S. Army
"	"	250	"	9th U.S. Army
"	"	50	"	15th U.S. Army
"	O-610, Landen	600	ORD V	1st U.S. Army

S E C R E T

* E X T R A C T *

PERSONNEL PROGRAM

MAY 1945

DEBARKATION

Origin	Port of Entry	Classification	Number	Destination
U.S.	Le Havre	Reinforcements	42,004	Forward Depots
U.K.	Le Havre	Reinforcements	5,880*	Forward Depots
U.S.	Le Havre	Recuperation Forms	7,000	Forward Units
U.K.	Le Havre	Leaves Returns	21,700	Forward Units
U.S.	Le Havre	Units	10,000	Staging Area
U.K.	Le Havre	Units	10,000	Staging Area
Sub-total, Le Havre			96,584	
U.S.	Marseilles	Reinforcements	3,665	Forward Depots
U.S.	Marseilles	Recuperation Returns	1,000	Forward Units
Sub-total, Marseilles			4,665	

TOTAL

101,249

* Estimated on basis of figure of 2,940 furnished by G-1 for first half of month

PORTS TO DEPOTS AND FORWARD UNITS:

Port	Destination	Classification	Number
Le Havre	Reinforcement Depots	Reinforcements	48,000
Le Havre	Armies and Interior	Recuperation Returns	7,000
Le Havre	Armies and Interior	Leave Returns	21,700
Le Havre	Armies and Interior	Units	36,000
Sub-total, Le Havre			112,700
Marseilles	Reinforcement Depots	Reinforcements	3,665
Marseilles	Armies and Interior	Recuperation Returns	1,000
TOTAL			117,365

INTERIOR MOVEMENT:

Origin	Destination	Classification	Number
Com Z Sections	16 Rein. Dep., Compeigne	Reinforcements	6,500
Com Z Sections	6960 Rein. Dep., Nailly-la-Camp	"	3,000
Interior	Brussels & Return	Leave	31,000
"	Riviera & Return	"	14,000
"	Paris & Return	"	83,500
"	Interior Points	Prisoners of War	100,000
Army Areas	Continental Hospitals	Casualties	20,000
Army Areas	Staging Areas & Interior Points	Recovered Allied Mil. Personnel	250,000

TOTAL*

508,000

Movement of additional displaced persons from Army areas to Communications Zone is anticipated, the number moved to depend on the available transport remaining after higher priority commitments have been met.

RESTRICTED

U.S. ARMY

Railway
Chemin de fer
Eisenbahn

19

From
De
Von

Station
Gare d'origine
Bahnhof

Tons Hundredweights
Tonnes
Tonnen Zentner

Weight of Contents
Poids du Chargement
Gewicht des Inhalts

Number of Wagons in consignment
Nombre de Wagons par chargement
Zahl der Wagen der Sendung

Train Number
No. du Train
Zug Nummer

Consignor
Expéditeur
Absender

Consignee
Destinataire
Empfänger

To
Destination
Nach

To
Destination
Nach

Railway
Chemin de fer
Eisenbahn

Via
Par
Ueber

Owner and No. of Wagon
Propriétaire et No. du Wagon

Eigentümer und Nummer
des Wagens

Sheets in or on Wagon
Nombre de Baches dans
ou sur le wagon
Wagendecke in oder an
dem Wagen

MUTATIONS ET INCIDENTS (pertes et avaries, etc.) survenus en cours de transport, doubles tractions, utilisation de nuit des sections de ligne normalement fermées la nuit et itinéraire parcouru.

Le Chef de la Gare d'arrivée ou le Chef de train,

Le destinataire,

Date

PARTIE RÉSERVÉE A LA GARE

Éléments du calcul des taxes

Poids taxé	Distances de taxes	Tarifs ou No.'s de prix	Séries-Chapitres ou Barèmes	No. de Code de la marchandise	Prix par unité (tonne M 3 etc.)	Enregistrement et timbre (Nbrs d'unités)

Chargement par sur	Décompte des frais divers taxés ou départ (en plus de la taxe de transport)
Déchargement par sur	
Temps pendant lequel l'expéditeur a fait usage de la grue H	

Détail des frais

Débours 2		Transport 3		Au-delà 4		5		Port dû 6	

Gare destinataire	No. du Code	No de zone de taxation	No de la page du compte d'arrivage	Numéro d'arrivage	Date d'arrivage

Partie réservée au Service Financier du Chemin de Fer

Provenance réelle

Gare destinataire

Région destinataire

Destination définitive

Gares de transit successives / de l'itinéraire à suivre)

Pour le Transport a Executer par train.....

For the movement by..... train.

Exemplaire No. 2
Copy

De à

From to

Par d'un Détachement. Commandé par

Via of a party. Under the command of

	Nombre. Number.	Poids. Weight.	Essieux. Axles.	Observations. Remarks.
Officiers. Officers				
Hommes de Troupe. Other ranks				
Animaux. Animals				
Voitures Hippomobiles. Horsed vehicles				
Voitures Automobiles, Camions, Tracteurs et Remorques. Motor cars, trucks, lorries, tractors and trailers				
Vehicules Chenilles. Tracked vehicles (carriers, tanks, L. dragons)				
Canons. Guns				
Bagages. Baggage				
Matériel, Denrées. Stores, supplies, etc.				

Timbre de la Gare de Depart.
Departure station stamp.

Date d'expédition.
Date of departure.

PRESRIPTIONS.

On se sert de ce bon de chemin de fer pour tout élément voyageant sur une seule destination, sauf lorsqu'on emploie l'ordre de transport A.B. 495A.

Exemplaire No. 1. Chef de Gare.
Exemplaire No. 2. Chef de Détachement ou gradé le plus ancien. Cette copie sert de billet et doit, être rendue au commissaire Britannique à la Gare (ou en l'absence de ce dernier au chef de Gare) à l'arrivée à la destination.

Exemplaire No. 3. Souche.

INSTRUCTIONS.

This Warrant is to be used for all parties of personnel travelling to one destination by any train, unless the train warrant A.B. 495A is used.

Copy No. 1. Station Master.
Copy No. 2. O i/s party or senior passenger. This serves as a ticket, and is given to the R.T.O. (or in his absence to the Station Master) at destination on arrival.

Copy No. 3. File.

Certifié

Signed R.T.O. Chef de Gare.

At A

Date Date

R.T.O. to fill in for statistics. Traffic loaded in area.

Le Chef de la gare d'arrivée, A le 19.....
 ou le Chef de train, Le Chef de détachement,

PARTIE RESERVEE AU SERVICE FINANCIER DU CHEMIN DE FER

Itinéraire suivi.....		PRIX	DECOMPTE Kilométrique
Distance.....			
.....Places de 1° classe.....			
..... „ 2° classe.....			
..... „ 3° classe.....			
..... „ 3° classe $\frac{1}{2}$ tarif.....			
..... „ en compartiment.....cl.....			
Frais de gare.....			
Frais enregistrement.....			
Chevaux $\frac{1}{2}$ tarif.....			
Voiture à la pièce.....			
Voitures au poids.....			
Excédents de bagages.....			
Matériel.....			
Désinfection { ..Têtes.....			
{ ..Wagons.....			
Manutention (Chevaux) { ..Têtes.....			
TOTAL.....			

DECOMPTE DU TRANSPORT PAR LA GARE DE DEPART.

Itinéraire suivi.....	
Distance.....	
Places 1° cl. à.....	=
Places 2° cl. à.....	=
Places 3° cl. à.....	=
Places 3° cl. $\frac{1}{2}$ tarif à.....	=
Frais de gare à.....	=
Enregistrement.....	=
Chevaux $\frac{1}{2}$ tarif à.....	=
Voitures à la pièce.....	=
Voitures au poids.....	=
Excédents bagages $\frac{1}{2}$ tarif.....	=
Matériel.....	=
Désinfection { ..têtes à.....	=
{ ..wagons à.....	=
Manutention (Chevaux) { ..têtes à.....	=
TOTAL.....	

APPENDIX 8

US - Army

Exemplaire
Copy No. 3
Teil

ORDRE DE TRANSPORT. TRAIN WARRANT. GROSSER BESATZUNGSFAHRSCHEIN

- Nature de l'élément transporté.
Description of units, etc., moved
Truppenart oder Truppenteil
- Train No.
Zug Nr.

3. Effectif prévu Strength Stärke	Nombre Number Zahl	Observations Remarks Bemerkungen
Officiers Officers Offiziere		
Hommes Other Banks Manschaften		
Animaux Animals Tiere		
Voitures Hippomobiles Horsed Vehicles Bespannte Fahrzeuge		
Voiture automobiles, camions, tracteurs, remorques Motor cars, trucks, lorries and trailers		
Kraftfahrzeuge und Anhänger		
Véhicules chenillés, canons Tracked vehicles (carriers, tanks, dragons guns)		
Tanks und andere Kettenfahrzeuge		
Bagages, matériel, denrées Baggage, stores, supplies Gepäck, Vorräte, Proviant		

- Embarquement à
Entraining at
Verladen in
- Destination
Destination Km
Bestimmungsbahnhof
- Certifié
Signed R. T. O.
Gezeichnet
A Date
At Date
Ort Datum

- Itinéraire Marche du jour
Route Path day
über

- Matériel prévu
Rolling stock
Wagenzusammensetzung
- | | |
|--|--|
| Voitures à voyageurs
Passenger coaches
Personenwagen | |
| Couverts aménagés
Covered wagons for personnel
Gedeckte Wagen für Mannschaftstransport | |
| Couverts non aménagés
Covered wagons for animals or stores
Übrige gedeckte Wagen | |
| Wagons plats et wagons spéciaux
Flat and special wagons
Offene Wagen und Spezialwagen | |
| Fourgons
Brake vans
Bremswagen | |
| TOTAL / ZUSAMMEN | |

PRESCRIPTIONS.
On se sert de cet ordre de transport pour tout train militaire ou sanitaire utilisé pour le transport; en outre pour tout train vide constituant un train toujours affecté à l'Armée.
Exemplaire No. 1. Chef de la Gare de Départ.
Exemplaire No. 2. Chef de Détachement, Conducteur de train vide. Cette Copie sera rendue au commissaire de Gare (ou en l'absence de ce dernier au chef de gare) à l'arrivée à destination. Toute modification d'itinéraire, retrait ou addition de véhicules, pertes, avaries, etc., seront inscrites au verso de cet ordre de transport.
Exemplaire No. 3. Chef de la Gare de Destination.
Exemplaire No. 4. Souche.

Timbre de la Gare de Départ.
Despatching station stamp.
Stempel des Versandbahnhof.

Date d'expédition.
Date of departure.
Datum der Abfahrt.

INSTRUCTIONS.
This warrant is to be used for loaded ambulance and troop trains; also for any empty train running as a made up set for Army purposes.
Copy No. 1 to Station Master of Origin.
Copy No. 2 to O.C. Train, or to guard of empty train. This will be given to the R. T. O. (or in his absence to the Station Master) at destination or arrival. Changes of route or in the composition of the train, casualties, damage, etc., will be noted on the reverse of this warrant.
Copy No. 3 to Station Master of destination.
Copy No. 4: File.

BENUTZUNGSBESTIMMUNG.
Dieser Schein ist für beladene Lazarett- und Truppenzüge zu verwenden; ebenso für Leerzüge, die für Heerzwecke bestimmt sind.
Teil 1 erhält der Versandbahnhof.
Teil 2 der Transportführer oder der Zugführer des Leerzuges. Er wird auf dem Bestimmungsbahnhof dem R.T.O. (in seiner Abwesenheit dem Bestimmungsbahnhof) übergeben. Änderungen des Befahrungsweges oder der Zusammensetzung des Zuges, Unfälle, Schäden usw. sind auf der Rückseite des Scheines zu verzeichnen.
Teil 3 er Alt der Bestimmungsbahnhof.
Teil 4: Akten.

R. T. O. to fill in for statistics. Traffic loaded in area

Réseaux System	Gares Stations	Jour Day	Heures Time		Observations Remarks Bemerkungen
			Arrivées Arrive	Départ Depart	
(a)	(b)	(c)	(d)	(e)	(f)