

THE GENERAL BOARD

United States Forces, European Theater

SERVICE OPERATIONS OF THE QUARTERMASTER CORPS

MISSION: Prepare Report and Recommendations Covering the
Operation of Quartermaster Services in the
European Theater of Operations.

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.

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THE GENERAL BOARD
UNITED STATES FORCES, EUROPEAN THEATER
APO 408

REPORT ON
SERVICE OPERATIONS OF THE QUARTERMASTER CORPS

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SERVICE OPERATIONS OF THE QUARTERMASTER CORPS

PART ONE

INTRODUCTION

1. General. The purpose of this study is to make certain recommendations for changes in policies, procedures, organizations and equipment pertaining to Quartermaster Salvage, Laundry and Bath Services primarily in the Combat Zone. The supply of spare parts for and the maintenance of Quartermaster equipment, as well as the handling of Quartermaster type captured enemy material, has also been analyzed and certain recommendations made. An effort has been made to select and present representative comments from field force units on experiences encountered by personnel or units concerning salvage, laundry and bath activities during operations in the European Theater of Operations. Certain of these comments and experiences support specific conclusions and recommendations. Extracts have been presented from certain publications bearing on the subject. As an example, an extract from a Ninth U.S. Army Administrative Instructions has been presented to show how the Quartermaster Laundry Companies (Semi-Mobile) were used in the prevention of trench foot. It is intended that such presentations serve as a guide for those engaged in providing Quartermaster Salvage, Laundry and Bath Services in the future.

2. Scope. This study covers the phases of Quartermaster Service activities as indicated below. Certain methods and procedures peculiar to the United States Air Forces are covered in General Board Study Number 109, file 401/11, Chapter 7, title: "Supply and Services for the United States Air Forces and the Supply of Other Than United States Army Forces".

a. The mission, organization, equipment and capacity of Quartermaster units engaged in salvage, laundry and bath activities in the Combat Zone.

b. The assignment and employment of such units in the European Theater of Operations.

c. The adequacy of the troop basis for assignment of the above mentioned units and the adequacy of organic personnel and equipment.

d. The need for Quartermaster salvage, laundry and bath facilities as organic parts of Infantry, Armored and Airborne Divisions.

e. Spare parts supply for and the maintenance of Quartermaster general and special purpose equipment.

f. The handling of captured enemy material.

QUARTERMASTER SALVAGE OPERATIONS, SPARE PARTS SUPPLY
AND CAPTURED ENEMY MATERIAL

CHAPTER 1

QUARTERMASTER SALVAGE COLLECTION AND
REPAIR OPERATIONS

SECTION 1

MISSION, ORGANIZATION AND FUNCTIONS OF THE
QUARTERMASTER SALVAGE SERVICE

3. Mission. The mission of the Salvage Service is the prompt saving or rescuing of serviceable and unserviceable material abandoned or worn out in warfare, the exploitation of captured supplies, and the utilization of waste materials.¹

4. Organization and Functions. The Commanding General, Army Service Forces, is responsible for formulation of policies and the coordination and supervision of all matters pertaining to salvage. The chiefs of technical services are charged with the execution of the salvage service as it applies to their respective services.² The commander of a theater of operations determines the general principles governing the operation of salvage establishments within his theater.¹

5. The Quartermaster Salvage Service in the European Theater of Operations.

a. General. The Salvage Service of the European Theater of Operations consisted of units engaged wholly or in part in collection, evacuation, classification, reclamation, and disposition of waste materials, abandoned property, and unserviceable supplies.³ The Quartermaster Corps was responsible for all salvage activities not assigned to other services and was charged with collection and segregation at salvage collecting points and dumps and the turning over to the service concerned all salvage other than Quartermaster. The Quartermaster Corps operated salvage repair units and installations for the repair of Quartermaster Salvage.⁴

b. Communications Zone. The Chief Quartermaster, European Theater of Operations, as Quartermaster on the staff of the Theater Commander was specifically charged with the operation of the Quartermaster Salvage Service in the European Theater of Operations. He was also Chief Quartermaster, Communications Zone, and in that capacity was charged with the operation of the Quartermaster Salvage Service in Communications Zone. His responsibilities for both offices were discharged through the Installations Division, Office of the

Chief Quartermaster, European Theater of Operations. The Quartermaster Salvage Service in sections of Communications Zone was under the supervision of the respective Section Quartermasters. In addition, Communications Zone served as the central point for receipt of all non-reparable Quartermaster property and scrap in the European Theater of Operations, and for the repair of salvaged Quartermaster property when such was beyond the scope of Quartermaster Salvage Repair Companies. A depot located at Reims, France (T-3070) was the principal Quartermaster salvage and spare parts depot in the European Theater of Operations.^{1 & 4}

c. Army Group. Each U.S. Army Group in the European Theater of Operations included on its staff a Quartermaster Section which acted on matters pertaining to Quartermaster salvage in subordinate commands. Quartermaster activities in the 6th Army Group were under the Quartermaster Sub-section of the Office of the Assistant Chief of Staff, G-4.⁵ The 12th Army Group included a Quartermaster Special Staff Section.⁶ Salvage activities were limited to the dissemination of technical information and the rendering of assistance where required to subordinate commands.^{5 & 6}

d. Army. The operation of the Quartermaster Salvage Service in each United States Army in the European Theater of Operations was essentially the same as provided in ETO-SOP #30, Maintenance and Salvage, 31 July 1944. The Army Quartermaster was specifically charged with the operation of Quartermaster salvage establishments in the army area.¹ His responsibilities were discharged through the Field Service Branch in the Office of the Army Quartermaster and consisted of the following:⁷

- (1) Control and supervision of the technical functions of the Quartermaster Salvage Service in the army area, including the employment of Quartermaster Salvage Collecting Companies and Quartermaster Salvage Repair Companies (Semi-Mobile).
- (2) Maintenance of an office of record on activities of Quartermaster Salvage units in the army.
- (3) Control of salvage flow through the establishment of salvage collecting points and salvage dumps.
- (4) Coordination with various supply agencies in the return of salvaged property to army stocks.
- (5) Coordination with Communications Zone on the evacuation of property requiring major repairs, non-reparable property and scrap to base salvage depots.

e. The Quartermaster Salvage Collecting Company and the Quartermaster Salvage Repair Company (Semi-Mobile) constitute the principal agencies through which the Quartermaster salvage Service functioned. Quartermaster Laundry Companies also played a part in the salvage scheme. The mission of both the Salvage Collecting Company and the Sal-

vage Repair Company is the direct implementation of the Quartermaster Salvage Service.¹

f. The Quartermaster Salvage Collecting Company supervises the collection, classifies, stores temporarily, and disposes of all classes of salvage within its area of operation. It operates primarily in corps and division areas, picking up salvage at salvage collecting points, salvage dumps and railheads, and evacuating it to Quartermaster repair units and depots and to the dumps, depots and repair shops of other arms and services. Additional labor troops may be assigned if the job in an area becomes too large.¹

g. The Quartermaster Salvage Repair Company (Semi-Mobile) is responsible, within the limits of its facilities, for the repair of all Quartermaster clothing and equipment received. It operates primarily in the vicinity of a salvage dump in the army or corps area, receiving property for repair from a Quartermaster Salvage Collecting Company or from other sources.¹

h. Other Echelons. The collection of salvage does not rest entirely with Quartermaster Salvage Collecting Companies, but is a responsibility of all unit commanders. Corps and Division Quartermasters are responsible for furthering the efficient operation of the Quartermaster Salvage Service within their areas. Troops collect salvage in the fighting zone and bring it back to designated points, where the Quartermaster Salvage Collecting Company picks it up. Unit commanders are charged with seeing that trucks returning empty from the front are utilized to transport salvage to the rear. All able friendly troops and enemy prisoners of war moving to the rear from combat areas should bring salvage with them. Since salvage personnel is not sufficient to collect and return to dumps all the routine salvage of an army, unit commanders are further charged with seeing that their troops assist in collecting and finding transportation for salvage.¹

SECTION 2

COLLECTION, SORTING AND CLASSIFICATION

6. Routine Salvage is the collection, classification and disposal of normal salvage, including enemy material, in all areas occupied by troops.¹ Routine salvage was conducted in all areas occupied by troops in the European Theater of Operations, including Communications Zone, army service areas and such divisional and corps areas as were in a static condition. A constant and systematic search for salvage materiel was conducted in rest areas, camps, billets and other buildings used by troops, and in towns that had been evacuated. Inhabitants of towns were instructed to turn in all government property they had located or had in their possession. Quartermaster Salvage Collecting Companies, however, were not to do the police work of organizations evacuating an area. This was to be done by the respective organizations. Prior to leaving for the front, all clothing and equipment in the possession of enlisted men, above that authorized to be worn or carried on the person or in trunks, was turned in to the nearest salvage collecting unit. Unit supply officers maintained a sal-

vage program for the repair or replacement of unserviceable items in the hands of the troops. Except in the case of shoe repair, which was done on an individual basis, unserviceable items were usually turned in as salvage and replacements requisitioned through normal supply channels.⁹

7. Battlefield Salvage.

a. Battlefield salvage is the collection, classification and disposal of salvage, including enemy material, from battle areas. During offensive operations in the European Theater of Operations, the primary object of battlefield salvage was to collect and repair those particular items which were in constant demand, and return them promptly to supply channels for reissue. Some articles, such as arms and ammunition deteriorated with exposure; consequently, rapidity of collection was essential. When necessary, labor troops, civilian laborers and prisoners of war, with additional motor transportation, were assigned to assist the personnel of Quartermaster Salvage Collecting Companies.¹ Salvage officers were charged with reconnoitering the battle area in order that:

- (1) Those areas where salvage existed in large quantities; such as hospital areas and cemeteries, would be worked first.
- (2) The proper amount of labor could be allocated to each locality.
- (3) Proper arrangements could be made for the evacuation of salvage.
- (4) Priority could be given to those categories of salvage of most importance at the moment.⁹

b. The following comments give an account of how battlefield salvage was conducted by combat elements:

- (1) 35th Infantry Division..... "At no time during Continental operations had this division enough personnel to aid in collecting salvage. Battlefield salvage was left up to each unit with such personnel as might be spared from other duties".
- (2) 75th Infantry Division..... "Each company has a reclamation squad which picks up all useful and salvageable articles from the battlefield. These articles are passed from company, to battalion, to regimental supply, each withdrawing all items which can be used by organizations within the unit. Remaining equipment is turned in to the salvage collecting point at the Quartermaster Class I truckhead".
- (3) 83d Infantry Division..... "At the beginning of combat very little salvage was evacuated to the division collecting point. About one week after action began, on two separate occasions, all available person-

nel from the Quartermaster and Ordnance Companies were sent out to search directly in the rear of regimental zones of action. The results obtained were negligible. As operations went on, units set up salvage systems whereby much clothing and equipment was salvaged and put back into service within regiments. For example, one infantry regiment had two $\frac{1}{2}$ -ton trucks and trailers canvass directly in the rear of battalion zones of action for salvage of all services. The salvage was brought back to the Service Company areas, sorted, placed in lots and either sent to the laundry to be washed or evacuated to division salvage collecting point".

- (4) III Corps "An intensive program of battlefield recovery was initiated in the area south and east of Bastogne, Belgium (P-5658). Melting snow uncovered a considerable amount of salvage. Divisions were instructed to initiate vigorous programs in the corps areas in rear of division areas. Seventy-two civilians were hired to collect salvage and 12 $2\frac{1}{2}$ -ton trucks were dispatched daily to haul salvage collected in the corps area. During the period 1-12 February 1945, division and corps salvage teams had recovered 214 truckloads of all types".

8. Salvage Collecting Points and Dumps. In the European Theater of Operations the Quartermaster Salvage Collecting Company was the hub of the army salvage service. Normally a Quartermaster Salvage Collecting Company serviced a type corps of three divisions. Salvage collecting points were established at or in the immediate vicinity of Class I railheads or truckheads and were operated by personnel from Salvage Collecting Companies. All U.S. Armies in the European Theater of Operations used the collecting point system of salvage collection though the actual deployment of the Salvage Collecting Company varied with each army as did the system of salvage dumps.¹⁰ The following are systems used in various armies:

a. In the First U.S. Army a central dump was operated where all salvage activities were centered. One of the three assigned Quartermaster Salvage Collecting Companies operated the dump and received all salvage and processed it for delivery to the laundry or salvage repair companies. The second company was utilized for salvage patrols and for classifying, sizing, and preparing clothing, canvas and webbing for shipment to the Army Quartermaster Class II & IV depot. The third company was employed at Class I truckheads to receive and make hasty segregation of salvage, to search for salvage and, when necessary, search for, inventory and guard captured material.¹⁰

b. In the Third U.S. Army the Quartermaster Salvage Collecting Companies were disposed one (less platoons when necessary) in support of each corps. They operated the corps salvage point, routing serviceable material to

the Army Quartermaster Class II and IV depot, unserviceable material to an adjacent Quartermaster Salvage Repair Company, and all possible clothing and other washable items to adjacent laundry platoons. Details, each with a truck, were kept at each Class I rail or truckhead in the vicinity to receive salvage from unit ration vehicles. When possible these details sorted salvage on hand before evacuating it to the Quartermaster Salvage Collecting Company.¹⁰

c. In the Ninth U.S. Army the Quartermaster Salvage Collecting Companies were allocated on the basis of one per corps, and the units set up salvage collecting points in the vicinity of Class I truckheads. No salvage dump was established. Shipment of salvage to nearby Quartermaster Salvage Repair Companies or to Communications Zone was done by each company.¹⁰

9. Sorting. Normally in each army only superficial sorting of salvage was attempted at collecting points. More careful sorting was reserved for the main dumps where the following was accomplished:⁷

a. All ammunition removed from clothing and belts.

b. Clothing was searched for personal property. Enemy clothing was searched for documents to be turned over to intelligence officers.

c. Salvage was separated according to arm or service. Personnel from the Ordnance Department, the Chemical Warfare Service and the Signal Corps assisted in this classification. The Ordnance Department personnel examined and neutralized any bombs, grenades or explosives collected.

d. Clothing, shoes and individual equipment were sorted by item.

e. Parts of unserviceable articles were salvaged if they could be used in remanufacturing. In this class are included copper, brass, and parts of firearms and automobiles.

10. Classification.

a. Quartermaster items of salvage collected were classified for utility as follows:⁴

- (1) Serviceable items not requiring laundering which could be returned immediately to stock.
- (2) Serviceable items which, after laundering, could be returned to stock.
- (3) Unserviceable items requiring repairs and laundering before being returned to stock.
- (4) Non-reparable items.

b. All Quartermaster salvage was divided into the following general types:⁴

- (1) Clothing and textiles.

- (2) Canvas and webbing.
- (3) Regular supplies.
- (4) Footwear.

SECTION 3

QUARTERMASTER SALVAGE REPAIR AND DISPOSAL

11. Quartermaster Salvage Repair Company (Semi-Mobile).

a. Organization. The company is organized into 2 platoons, each consisting of a shoe repair section, a clothing repair section and a textile repair section. Each section consists of a van with appropriate equipment.¹¹ In the European Theater of Operations, one textile section in each company was replaced by an equipment maintenance platoon organized for the repair of Quartermaster special and general purpose equipment.

b. Functions. Repairable items of clothing, shoes, canvas and webbing received by Quartermaster Salvage Collecting Companies were routed to the nearest Quartermaster Salvage Repair Company (Semi-Mobile). Items beyond the repair capability and in excess of that which could be handled by the Quartermaster Salvage Repair Company were evacuated directly to Quartermaster installations in Communications Zone, where facilities existed for large scale repair work.⁴ The Quartermaster Salvage Repair Company (Semi-Mobile) normally operated in rear areas of the Combat Zone. It received clothing and equipage for repair from either Quartermaster Salvage Collecting Companies or from Quartermaster Laundry Companies (Semi-Mobile.) Repaired items were returned to army stocks, with the exception of footwear which was returned to the individual. Quartermaster Salvage Repair Companies, in addition to the normal repair work, also manufactured certain items to meet emergency requirements. Among such items were laundry bags, woolen booties, canvas work gloves, tent blackouts, and typewriter covers.¹²

c. Employment. As with Quartermaster Salvage Collecting Companies, the method of employing Quartermaster Salvage Repair Companies varied with each army. The employment generally paralleled that of the Quartermaster Salvage Collecting Companies, and was as follows:¹⁰

- (1) In the First U.S. Army all three companies were employed at the army salvage dump under control of the Quartermaster Battalion which controlled all army salvage operations. Items were received from Quartermaster Salvage Collecting Companies or Quartermaster Laundry Companies, and upon repair were taken to the Army Quartermaster Class II & IV depot.¹⁰
- (2) In the Third U.S. Army one Quartermaster Salvage Repair Company, in conjunction with a Quartermaster Salvage Collecting Company and two laundry platoons, normally supported each corps.¹⁰

- (3) In the Ninth U.S. Army a Quartermaster Salvage Repair Company operated in support of each corps. Thus, three separate salvage repair points were operated in the army area. As a rule, the Quartermaster Salvage Repair Companies, with the exception of the equipment maintenance platoons, were located further to the rear than the salvage collecting points.¹⁰

12. Repair in Various Combat Units. Many factors precluded the institution of extensive repair programs within units in the Combat Zone. The chief factors were lack of skilled personnel and materials. As a result, other than an individual effort on the part of the soldier to preserve the serviceability of his clothing and equipment, the repair of Quartermaster property in the Combat Zone was generally non-existent outside of the regularly constituted Quartermaster Salvage Repair Company. Exceptions were the unit equipment maintenance teams.

13. The Salvage Center.

a. Planned. The Quartermaster Salvage Repair Battalion as outlined in War Department Technical Manual 10-260 was not employed in the European Theater of Operations. The integral units comprising the Quartermaster Salvage Repair Battalion were employed by the Salvage Service, but not as a defined organization. There were not sufficient Quartermaster units in the European Theater of Operations to implement the planned Quartermaster Salvage Repair Battalion without correspondingly limiting Quartermaster Service in other operations.¹³

b. Use. The salvage center as employed in Third U.S. Army proved the most efficient method of operation and was as follows:

"One Quartermaster Salvage Collecting Company per corps operated a Salvage Center which also included one Quartermaster Salvage Repair Company and a minimum of two laundry platoons (8 trailers). The Quartermaster Salvage Collecting Company maintained details of three or four men at all supported rail and truckheads. These details received and sorted salvage evacuated on unit ration vehicles and shipped to the Salvage Center by their own transportation. Details usually had ample time for sorting prior to loading on their own trucks. The Salvage Center also received salvage from local units direct. The salvage received was sorted and then classified. Material pertaining to other services was immediately shipped to the proper service. Of the Quartermaster material, Class "A" and useable Class "B" were shipped direct to the Army Quartermaster Class II & IV Depot; Class "B" which was soiled only and Class "C", where applicable was routed to the laundry portion of the Salvage Center. The Class "C" was routed, after laundering, to the Quartermaster Salvage Repair Company. Class "X" was shipped to the designated Communications Zone depot. In addition to normal work, the Quartermaster Salvage Repair Company at the Salvage Center received material directly from units for repair. The location of the Salvage Center was published in Administrative Orders for this purpose. The laundry platoons, in addition to sal-

vage, handled work for hospitals and troops in the vicinity whenever the salvage load permitted. Control of each Salvage Center was by:

- a. One Quartermaster Battalion Headquarters from army (also controlling other Salvage Centers); or
- b. One Quartermaster Battalion Headquarters from corps (also controlling other corps Quartermaster activities); or
- c. The commanding officer of the Quartermaster Salvage Collecting Company, under direct operational supervision of the Salvage Section of the Office of the Army Quartermaster.¹³

14. Flow of Salvage.

a. Routing. Salvage upon receipt at the salvage center or dump was sorted into types, according to its route through the repair process. Clothing, blankets and web equipment went to the sterilization or fumigation chambers, or if not infested, to the laundry instead. If repairs were required such items were sent to the appropriate repair unit. Canvas and metals which required neither sterilizing nor laundering were sent direct to the appropriate repair unit.¹⁴

b. Disposal. Clothing, blankets and web equipment not needing repairs were fumigated or laundered and returned to army stocks. Serviceable items of canvas and metal were returned direct to army stocks. Repaired articles were sent to the Army Quartermaster Class II & IV Depot for reissue. Irreparable items and waste materials, and salvage in excess of that which the armies could repair with facilities available, were shipped to base salvage depots in Communications Zone. Decisions as to reparability were made by the repair units concerned.¹⁴

SECTION 4

RECORDS AND REPORTS

15. Quartermaster Salvage Collecting Company. Although neither the Army Quartermaster nor the salvage officer is held accountable for salvaged property, a record of the salvage collected must be kept in such a manner that an inspecting officer can trace the salvage from the date it is received to the date of disposition.¹⁵ In the European Theater of Operations Quartermaster Salvage Collecting Companies reported weekly to the Army Quartermaster, by type, the amount of salvage collected; the amount returned to army stocks, either direct or after laundering; the amount shipped to or taken over by Communications Zone; and the amount on hand at the end of the report week. These reports were consolidated by the Army Quartermaster for his own records covering the operation of the Quartermaster Salvage Service in the army area.¹⁴

16. Quartermaster Salvage Repair Company. Quartermaster Salvage Repair Companies submitted reports weekly to the Army Quartermaster. Reports listed salvage property re-

paired by type and showed whether the repaired items were sent to army depots or returned directly to units. The reports from the Equipment Maintenance Platoons of the Quartermaster Salvage Repair Companies included a detailed breakdown of the type of equipment repaired, such as field ranges, fire units, typewriters, etc.¹⁴

17. Army. The Office of the Army Quartermaster maintained consolidated records of the operations of all Quartermaster Salvage units in the army area. These records provided means for analyzing the operating efficiency of the Quartermaster Salvage Service in the army area. They also were of value in the appraisal of Class II & IV requirements and the status of maintenance of Quartermaster equipment.¹⁴

SECTION 5

THE ORGANIZATION AND ADEQUACY OF QUARTERMASTER SALVAGE SERVICE UNITS

18. Quartermaster Salvage Collecting Company (T/O and E 10-187).

a. Personnel. The Quartermaster Salvage Collecting Company is organized under Tables of Organization and Equipment 10-187 has a strength of four officers and 200 enlisted men. Included are 96 enlisted men trained as Quartermaster salvagemen. Also included are seven enlisted men each from Ordnance, Chemical Warfare Service, and the Signal Corps. They are attached for sorting and classifying technical equipment of their respective services. The company is organized into three platoons of two sections each.¹⁵

b. Equipment. Included in the organizational equipment are 14 trucks, 2½-ton, cargo; one truck, ½-ton; seven trailers, 1-ton; and three 4-ton wreckers. This transportation is used for the evacuation of salvage from forward dumps and collecting points to salvage dumps located in the army service area. The vehicles are also used for salvage reconnaissance patrols. The three 4-ton wreckers were intended for use in the recovery of heavy items of salvage, including Ordnance and Engineer equipment.¹⁶ In the European Theater of Operations the wreckers were seldom, if ever, employed for this purpose since the Quartermaster Salvage Collecting Company did not normally handle heavy material. Heavy salvage material was normally handled by the Ordnance Department and the Corps of Engineers for their respective services.

c. Troop Basis and Employment. Tables of Organization and Equipment 10-187 states that the normal assignment of Quartermaster Salvage Collecting Companies to armies is one company per corps and one company per army. In the European Theater of Operations an average of three companies per army was available; these were allocated on the basis of one per corps. In general, this limited assignment handicapped the salvage program in the armies, since the load was invariably more than the three companies could handle.¹³ Appendix 1 contains a statistical analysis of salvage collection activities in 12th Army Group.

d. Discussion. The necessity for a troop basis of one Quartermaster Salvage Collecting Company per corps, plus one for army troops, is definitely indicated. That this will pay dividends is evidenced by the excessive quantities of salvage carried on hand by the armies in the European Theater of Operations (Appendix 1) With transportation available to evacuate salvage from collecting points to army and Communications Zone repair installations, salvage on hand in army areas should not exceed handling limits provided sufficient means to accomplish such handling exist.

19. Quartermaster Salvage Repair Company (Semi-Mobile).

a. Personnel. The Quartermaster Salvage Repair Company (Semi-Mobile) as organized under Tables of Organization and Equipment 10-237 has a strength of three officers and 198 enlisted men. The enlisted strength of the company is composed principally of skilled personnel for the operation of the repair machinery. Included are harness makers; metal workers, sewing machine operators, utility repairmen, shoe repairmen and tailors.¹¹

b. Equipment. In the European Theater of Operations a semi-trailer for the equipment maintenance platoon replaced the semi-trailer in one of the textile repair sections of the company. For moving the semi-trailers two 4-5 ton tractors are included in Tables of Organization and Equipment 10-237. Movement of the entire company is accomplished by shuttling.¹⁰

c. Troop Basis and Employment. In the European Theater of Operations allocation of the Quartermaster Salvage Repair Companies (Semi-Mobile) was on an average of three companies per army on a similar basis as Quartermaster Salvage Collecting Companies. This quantity was not sufficient to meet the demands for repair of Quartermaster equipment in the armies.¹⁰ Appendix 1 contains a statistical analysis of salvage repair activities in 12th Army Group.

d. Discussion. The necessity for a minimum basis of one Quartermaster Salvage Repair Company (Semi-Mobile) per corps, plus one for army troops, is definitely indicated. The Quartermaster service in the 12th Army Group with four armies was able to repair and return to service 11% of the total salvage collected (Appendix 1). To return the unprocessed balance to Communications Zone and then bring it forward after processing is an obvious waste of transportation and in-transit stocks.¹³

20. Salvage Problems in Divisions. That the lack of trained salvage personnel in combat units prevented the institution of extensive salvage collection and repair programs within those units has already been discussed. Only a small percentage of the salvage collected in army areas was repaired by army salvage facilities and returned through supply channels for further use. Additional facilities should be provided and placed in combat units where maximum salvage expectancy occurs. It is an obvious waste of transportation to evacuate all salvage to Communications Zone installations for repair with the idea that the repaired salvage will eventually be placed in depot stocks for reissue. This system leaves combat units temporarily without critical equipment and entails the requisitioning of new items and a resultant decrease in depot stocks. By providing salvage collection and repair means organic with all combat divisions it will

reduce battle losses of equipment, save transportation and relieve army and Communications Zone depots of replacing a large percentage of equipment lost through various causes.

21. Results of Studies and Recommendations from Combat Units.

a. Studies and recommendations being currently prepared by The General Board contain recommendations that means for collecting and repairing salvage be incorporated organically with all types of divisions. In this connection the comments of the Quartermaster, Third U.S. Army, are quoted:¹⁷

"Laundry units, and recovery and repair units, properly equipped with mobile repair trailers, should be incorporated in the division. This combination would make possible the recovery and repair of clothing, shoes and equipment in the forward areas. The savings in property, money and transportation would be great. Divisions would be in a position to operate their own clothing exchange system, and clothing and shoes could be repaired for return to the original wearer. The duffle bag should be eliminated as a normal piece of field equipment for troops serving in the forward areas."

b. To provide the means for salvage and repair facilities organically in divisions, it was recommended that a salvage collection and repair platoon be included as an element of a proposed utilities company of divisions (Appendix 2). However, it is proposed that the platoon be designated the "Recovery and Repair Platoon". The word "salvage" should be discarded since it is generally misinterpreted and has become synonymous with the word "junk".¹⁷ This same view was expressed by the Quartermaster, 12th Army Group, who recommended that the Quartermaster Salvage Collecting Company and Quartermaster Salvage Repair Company be redesignated "Quartermaster Recovery Company" and "Quartermaster Maintenance Company", respectively.¹⁸

SECTION 6

CONCLUSIONS AND RECOMMENDATIONS

22. Conclusions:

a. That the troop basis for the allocation of Quartermaster Salvage Collecting Companies and Quartermaster Salvage Repair Companies (Semi-Mobile) to armies in the European Theater of Operations was inadequate (Appendix 1).

b. That the Quartermaster Salvage Collecting Company, as presently constituted, is capable of performing its primary mission. However, two of the three 4-ton wreckers should be deleted from the Tables of Organization and Equipment and two 2½-ton trucks substituted therefor.

c. That the Quartermaster Salvage Repair Company (Semi-Mobile) with an Equipment Maintenance Platoon replacing one Textile Repair Section is an improvement upon the unit as originally constituted.

d. That Quartermaster Salvage Collecting and Salvage Repair service should be made organic in all divisions.

23. Recommendations.

a. That Salvage Collecting and Repair facilities be made organic in the Infantry, Armored and Airborne Divisions.

b. That the proposed "Recovery and Repair Platoon" be adopted as an element of a Quartermaster Utilities Company as presented in Appendix 2.

c. That pertinent doctrines, techniques and Tables of Organization and Equipment be amended by appropriate agencies of the War Department.

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MAINTENANCE AND SPARE PARTS
FOR QUARTERMASTER EQUIPMENT

SECTION 1

MAINTENANCE

24. Organizations.

a. Prior to D-Day it was realized that the maintenance of Quartermaster general and special purpose equipment presented a tremendous problem. To overcome this problem, Tables of Organization and Equipment 10-237, (Quartermaster Salvage Repair Company, Semi-Mobile), was provisionally revised in the European Theater of Operations to include an equipment maintenance platoon. The platoon functioned in the field as a mobile repair team servicing Quartermaster equipment. It was composed of two repair sections; one for general purpose repairs, and one for special purpose repairs. A 30-day stock of spare parts was carried and "on-the-spot" repairs were made.¹

b. The fixed salvage depot at Reims, France (T-3070) organized, manned and equipped field service teams for the purpose of performing highly specialized repair of Quartermaster equipment. These teams were available for use by armies and were specifically charged with:

- (1) Temporary augmentation of local repair facilities to relieve excessive burdens.
- (2) The correction of difficulties experienced in the maintenance of Quartermaster Corps equipment.
- (3) Assurance of an orderly flow of spare parts and operating supplies.
- (4) Technical inspection of Quartermaster equipment in the field.²

25. Maintenance Procedure. In the European Theater of Operations the normal maintenance procedure with respect to Quartermaster equipment was as follows:²

a. The using unit performed all maintenance within its own capabilities.

b. Quartermaster Salvage Repair Companies (Semi-Mobile) and local salvage depots performed maintenance beyond the capabilities of the using unit.

c. The fixed salvage depots performed all maintenance beyond the capacity of local facilities and made final disposition of all equipment that was not reparable.

d. The equipment maintenance platoon of the Quartermaster Salvage Repair Company (Semi-Mobile) and the field service teams functioned as outlined in the above paragraph.

26. That units in the European Theater of Operations were "maintenance-conscious" is evidenced by the extent to which improvisations were employed when the supply of spare parts became critical. Many organizations developed their own repair teams, utilizing such tools, equipment and personnel as were available.³

SECTION 2

SPARE PARTS

27. General. In the early phases of the European campaign a low transportation priority was placed on the shipment of spare parts. As a result, shipments were not received on the continent or if received, they were often left in rear areas of Communications Zone due to insufficient transportation to move them forward. Units used a large part of their reserves of spare parts. Consequently, many of the most needed spare parts were soon placed in a critical category.⁴

28. Classification. In the European Theater of Operations spare parts for Quartermaster equipment were divided into the following groups:²

a. Parts for general purpose equipment which included those for field ranges; heaters, water, immersion type; lanterns, gasoline; stoves, cooking; office machinery; typewriters; duplicating machines; and other office machines.

b. Parts for special purpose equipment which included those for laundry equipment, sterilization and bath equipment, fumigation and bath equipment, refrigeration equipment, salvage repair equipment, bakery equipment, coffee roasting equipment, and gasoline dispensers.

29. Methods of Supply. During the early phases of the European campaign spare parts were requisitioned in the normal manner. This resulted in inequitable distribution and shortages in some units as a tendency to draw established allowances and hoard stocks existed. All spare parts were later concentrated in a base depot at Reims, France (T-3070) and a credit system for supply was instituted. By this system, the armies were allocated definite quantities of spare parts for a prescribed period of time. Spare parts were furnished as requisitioned and were charged against the allocated credits. The allocations were based on troop strengths.²

30. Local Procurement. To supply the spare parts which were badly needed, local production facilities were exploited. The following comment was made by 12th Army Group -- "Action has now been initiated to secure critically needed parts by means of local manufacture on the continent".⁵

SECTION 3

CONCLUSIONS AND RECOMMENDATIONS

31. Conclusions. That the supply of spare parts for and the maintenance on Quartermaster equipment was not entirely

satisfactory during the period of operations in the European Theater.

32. Recommendations. That the War Department give special attention to review of the following factors which restricted the supply of spare parts for and the maintenance on Quartermaster equipment:

- a. Maintenance factors.
- b. Levels of supply of spare parts.
- c. Priorities given for the transportation of spare parts.

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CAPTURED ENEMY MATERIAL

33. Definitions.

a. Captured enemy material was deemed to include war material taken from or surrendered by the enemy.¹

b. War material was defined as any arms, equipment or other property belonging to, used by, or intended for use by any enemy military or para-military formations or any members thereof in connection with their operations.¹

34. Importance. In the European Theater of Operations enemy material was important for the following reasons:²

a. The relief afforded to rail and motor transportation and the resulting economy in overseas tonnage.

b. The conservation of United States stocks.

c. Intelligence value.

d. Financial saving.

35. Safeguarding. In the European Theater of Operations armies and separate units were charged with the protection and safeguarding of captured material and equipment so long as such stocks remained within their respective areas or until:³

a. Such time as the forward movement of the army rear boundary placed the location of such stocks outside the army area.

b. Communications Zone removed all of such stocks to Communications Zone controlled depots.

36. Disposition. Army commanders were authorized to retain any captured material, equipment or supplies for the use of the forces under their respective commands, including Civil Affairs requirements, except items required for technical research. All surplus requirements were turned over to Communications Zone for disposal.³

37. Procedures employed by armies. To handle efficiently captured enemy equipment and supplies classified as Quartermaster items, the Army Quartermaster normally organized a Captured Enemy Material Division within the Army Quartermaster Section. This Division was charged with locating, safeguarding, classifying and inventorying all Quartermaster type captured enemy material in the army area. Inventories, by class of supply, were circulated within the Army Quartermaster Office and in some cases to the Army Assistant Chief of Staff G-5 for recommendations as to retaining any or all of the items for army use. If the recommendations were approved by the Army Quartermaster, it was the responsibility of the appropriate supply section within the Office of the Army Quartermaster to make immediate use of or transfer the captured enemy material needed. All captured enemy material not used by the armies was released to Communications Zone.

All such releases were forwarded through the Army Assistant Chief of Staff, G-4, to the Commanding General, Communications Zone, showing items, quantities, location and time of availability. The Captured Enemy Material Division was not a supply agency nor did it function as such. It did not become involved in actual physical transfers of captured enemy material. However, it maintained records of all inventories, transfers, and releases. The officer in charge of the Captured Enemy Material Division assisted intelligence agencies from the War Department, Theater Headquarters, and from within the army when called upon to do so.⁴

38. Discussion. Experiences in the European Theater of Operations indicate that prior planning at all levels was not definite in outlining responsibilities and procedures with regard to captured enemy material. The policies were general in nature and were not specific enough to provide for the contingencies that arose throughout the European Campaign. The armies were not prepared, and hence not organized, to handle the tremendous volume of captured supplies uncovered during operations. A small amount of personnel from the Office of the Army Quartermaster was delegated to deal with a problem that normally would have required the services of personnel equivalent in number to any army special staff section. As a result, enemy stocks in the army area were not exploited to the maximum. There was a lack of coordination between the supply services and the Assistant Chief of Staff, G-5. A clearly defined policy at this point regarding the use of captured enemy supplies by Civil Affairs and Military Government agencies within the army area would have eliminated a good portion of the difficulties encountered.

39. Conclusions. That all echelons engaged in handling captured enemy material were handicapped by a lack of specific written information outlining policies, procedures and responsibilities.

40. Recommendations. That pertinent doctrines and techniques be amended by appropriate agencies of the War Department to define policies, procedures and responsibilities in handling Captured Enemy Material.

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PART THREE

QUARTERMASTER LAUNDRY AND BATH SERVICE

IN THE COMBAT ZONE, EUROPEAN THEATER OF OPERATIONS

CHAPTER 4

QUARTERMASTER LAUNDRY SERVICE

SECTION 1

THE QUARTERMASTER LAUNDRY COMPANY (SEMI-MOBILE), TABLES OF ORGANIZATION AND EQUIPMENT 10-167.

41. Mission. The mission of the Quartermaster Laundry Company (Semi-Mobile) is to provide facilities to troops, to evacuation and field hospitals, and facilities for the processing of salvage and the decontamination of permeable protective clothing when required.¹

42. Organization. The strength of the unit is five officers and 265 enlisted men. It is divided into four platoons, each consisting of two sections.¹ The most important point to be noted in the organization is that each squad, section or platoon is designed to operate separately.⁴

43. Equipment. The unit is equipped with 16 laundry vans, on the basis of four for each platoon or two for each section. Each van is a complete operating unit. The company is provided with only four truck tractors 4-5 ton. Movement of the unit must be accomplished by shuttling, or by borrowing truck tractors from other units.¹

44. Capacity. The Quartermaster Laundry Company (Semi-Mobile) is designed to provide laundry service for 48,000 troops weekly when operating eight hours a day, seven days a week. Three eight hour shifts or two 10 to 12 hour shifts may be substituted when necessary. The Table of Organization is designed to provide personnel for two shifts. A section operating two laundry vans is the basic operating unit and can provide service for 6,000 troops in the two eight hour shifts on a seven days per week basis. On the same basis, the platoon has a weekly capacity for servicing 12,000 troops. The above estimate is based on an average bundle weight per man of four and a half pounds. The production rate of each van is about 120 pounds an hour. For the entire unit with all 16 vans operating, the hourly rate is 1,920 pounds.²

45. Assignment. In the combat zone 20 complete laundry companies were allocated to 12th Army Group comprised of four armies, 32 Infantry Divisions, 13 Armored Divisions, and 11 Corps, all operational. These companies were further allocated to the armies by 12th Army Group based on the proportionate combat unit strength of each army. Frequent transfers were necessary due to changes in tactical dispositions among the armies.³

46. An analysis of the methods of employment of Quartermaster Laundry Companies (Semi-Mobile) in the various armies is outlined as follows:

a. In the First U.S. Army on 6 March 1945 six companies were operating and utilized as follows:⁴

- (1) One in support of each of three corps.
- (2) One split into eight sections serving evacuation and field hospitals.
- (3) One processing salvage.
- (4) One serving Army troops and reinforcing corps laundry units.

b. In the Third U.S. Army, the Quartermaster Laundry Companies (Semi-Mobile) furnished laundry facilities required by Medical Corps and salvage installations and provided limited service to troops. One section operated with each Army Evacuation Hospital and one platoon with each Army Medical Depot. Quartermaster Salvage Centers were normally furnished with three sections each. Platoons, as available, were allocated to corps to provide laundry service for division and corps troops, while army troops utilized any remaining facilities.⁵

c. In the Ninth U.S. Army the Quartermaster Laundry Companies (Semi-Mobile) were operated as complete units rather than as separate platoons or sections. The general operation of laundry service within this army is more clearly outlined by the following excerpt from Administrative Instructions Number 2, Headquarters Ninth U.S. Army, 4 January 1945:⁴

"1. In the operation of Quartermaster Laundry Companies (Semi-Mobile), laundry service will be allocated on the following priorities:

- (a) Hospital requirements.
- (b) Laundering of socks for troops.
- (c) Salvage installation requirements.
- (d) Organizational and troop laundry.

2. In accordance with Section IV, War Department Circular No. 312, dated 22 July 1944, subject "Trench Foot", Circular No. 108 Headquarters European Theater of Operations, United States Army, dated 26 October 1944, subject "Care of the Feet", and Section II, Memorandum No. 127, this headquarters, dated 1 November 1944, Ninth U.S. Army Quartermaster Laundry Companies (Semi-Mobile) will provide a special service for the laundering of socks to aid in the prevention of trench foot.

3. This service will be given priority next to hospital requirements and each laundry unit will serve troops presently allocated to it.

4. Division Quartermasters and Unit Supply Officers for corps and army troops will collect wet and dirty socks from their units and transport them to the Quartermaster Laundry Company (Semi-Mobile) allocated to serve them. The companies will launder the socks and have them clean and dry and ready to return in 24 hours.

5. It is the responsibility of the Quartermaster Laundry Company (Semi-Mobile) operating under a corps to provide laundry service to all Ninth U.S. Army hospital units operating within that corps' area.

6. In the event that excessive hospital requirements preclude the granting of adequate service to all organizations and troops, the overflow of work within the Corps concerned will be given to the Quartermaster Laundry Companies (Semi-Mobile) serving army troops".

47. Adequacy of Laundry Service. The following comments from unit reports indicate that laundry service as provided was insufficient to meet requirements in the combat zone:

a. In the 12th Army Group the availability of Quartermaster Laundry Companies (SM) was under requirements due to the late arrival on the continent of laundry units after combat units. A recommended factor chart indicative of the number of companies required by armies is as follows:

<u>Each Army</u>	<u>Each Infantry Division</u>	<u>Each Armored Division</u>	<u>Each Army of 11 Divisions and Three Corps</u>
1.0	0.5	0.4	6.2

The requirements for laundry service was particularly acute during the winter months when an exchange system for socks was instituted to reduce trench foot. With 20 companies assigned to the 12th Army Group, allocation was made on the basis of one company for each army and 0.3 companies for each division. The use of the factor 0.5 per division would have been more satisfactory.³ While generally five companies per army were provided by the troop basis, it is believed that seven could have been used advantageously. The basis for planning is for field laundries to handle 37½% of troop laundry. Actually they did only 5-10%.⁴

b. In the 6th Army Group considerable supporting evidence to the fact that there was a definite need for additional laundry facilities in field armies was accumulated by various organizations that operated under 6th Army Group.⁶

c. In the Third U.S. Army the allocation of laundry units to field armies was inadequate. The number of laundry units in support of Third U.S. Army throughout the campaign was always short of requirements. In order to adequately fulfill all requirements, ten laundry companies could have been utilized.⁷

d. In the Seventh US Army there never were enough laundry units to meet requirements. Many combat units had to improvise and do the best they could.⁸

48. The Quartermaster Laundry Company (Semi-Mobile) as presently constituted has certain undesirable features. The unit lacks mobility and its equipment is too bulky for use in forward areas in most cases. Considerable comments on these deficiencies were advanced in the European Theater of Operations. A representative series of such comments is set forth below:

a. In the First US Army extra tractors were needed for Quartermaster Laundry Companies (Semi-Mobile). The unit had great difficulty in keeping up with the units it served.⁹

b. In the Third US Army the movement of laundry units was found to be difficult with the number of tractors allowed. The present type unit is too large. Small, self-sustaining units with two or four less bulky trailers would be more suitable. Tractors are required on the basis of one per trailer.⁷

c. The following is a comment from the Office of the Chief Quartermaster, European Theater of Operations: "A continuing effort is being made to secure additional tractors for laundry units in an effort to make them mobile enough to keep up with fast moving units such as evacuation hospitals, field hospitals, salvage installations and combat units".¹⁰

d. VI Corps. "It is believed the equipment used by laundry units is too bulky for use by combat divisions. It should be simple, fully mobile and compact".¹¹

e. 36th Infantry Division. "Simple, maneuverable, equipment is necessary".¹²

f. 84th Infantry Division. "It is felt the present equipment in the Quartermaster Laundry Company (Semi-Mobile) is too bulky. Full mobility at all times is absolutely necessary".¹³

g. 3d Armored Division. "Simple and mobile laundry equipment is desired for use in Armored Divisions".¹⁴

49. The need for laundry service organic to combat units.

a. Among those concerned with the problem of providing laundry service to combat troops, there has long existed the belief that the needs of combat units could be more efficiently and economically met by adding laundry equipment to the Tables of Organization and Equipment of Divisions. A series of comments on this idea have been gathered and are presented as follows:

- (1) 6th Army Group. The Quartermaster, 6th Army Group, has closely studied and observed this problem throughout the North African, Italian and Southern France Campaigns. It is recommended that mobile trailer type laundry equipment be authorized and included

in the Tables of Organization and Equipment of Infantry, Armored and Airborne Divisions.⁶

- (2) Third US Army. Laundry units should be incorporated in divisions. The savings in property, money and transportation would be great. Divisions would be able to operate their own clothing exchange system. It is recommended a laundry unit of the proper size be included in a proposed Quartermaster Battalion for divisions. The unit should be self-supporting from a housekeeping standpoint.¹⁵
- (3) Seventh US Army. "It is recommended laundry equipment be placed at division level. It should be operated under the Division Quartermaster".⁸
- (4) VI Corps. "There is a definite need for laundry equipment at division level. The division laundry unit should be under the control of the Division Quartermaster. The platoon or its equivalent is ample for a division".¹¹
- (5) XXI Corps. "Recommend laundry units be placed at division level. It is felt the equivalent of a laundry platoon would be sufficient".¹⁶
- (6) 36th Infantry Division. "It is recommended laundry services be placed at division level under the control of the Division Quartermaster".¹²
- (7) 84th Infantry Division. "The laundry unit serving any division should be an organic part of that division. It should be trained with the division. The efficiency of attached laundry units to this division was very low since they were not trained to operate under battle conditions".¹³
- (8) 100th Infantry Division. "Recommend laundry units be placed at division level".¹⁷
- (9) 1st Armored Division. "It is recommended laundry equipment be placed at division level under the control of the Division Quartermaster".¹⁸
- (10) 17th Airborne Division. "Attached laundry facilities were generally unsatisfactory. It is recommended a laundry unit be placed at division level".¹⁹

b. Additional laundry facilities should be provided to serve organically with combat divisions where maximum expectancy occurs. Studies and recommendations being currently prepared by the General Board contain recommendations that means for providing laundry service to divisions be incorporated organically with all types of divisions. To provide this service, it was recommended that a laundry platoon be

included as an element of a proposed Utilities Company (Appendix 2). It would be designated "Laundry Platoon".

SECTION 2

CONCLUSIONS AND RECOMMENDATIONS

50. Conclusions.

a. That the allocation for Quartermaster Laundry Companies (Semi-Mobile) to armies in the European Theater of Operations was inadequate, which resulted in the establishment of priorities for their use.

b. That the Quartermaster Laundry Company (Semi-Mobile) should be made fully mobile and its equipment redesigned to afford compactness, lightness, simplicity and maneuverability.

c. That laundry service in the form of a laundry platoon should be made organic in Tables of Organization and Equipment of all divisions and operate under the control of the Division Quartermaster.

51. Recommendations.

a. That present type laundry equipment be redesigned by appropriate agencies of the War Department.

b. That laundry service under the control of the Division Quartermaster be made organic with all types of divisions.

c. That the laundry platoon be made an element of the proposed Utilities Company as presented in Appendix 2, and be adopted.

d. That pertinent doctrines, techniques and Tables of Organization and Equipment be amended by appropriate agencies of the War Department.

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QUARTERMASTER BATH SERVICE

SECTION 1

THE QUARTERMASTER FUMIGATION AND BATH COMPANY (MOBILE).

TABLES OF ORGANIZATION AND EQUIPMENT 10-257

52. Mission. To bathe and delouse personnel, fumigate clothing and equipment, and supply clean clothing to personnel being processed.¹

53. Organization. The unit is composed of a company headquarters and two platoons. Each platoon consists of a supply section and an operating section. The operating section provides shower facilities with a portable bath unit and fumigates clothing. The supply section issues clean clothing to the personnel processed.¹

54. Equipment. In addition to the normal organizational equipment, the unit has bath units, field, mobile (24 shower head) on the basis of one per platoon and chambers, fumigation, methylbromide, portable, on the basis of three per platoon. The unit is mobile. It has seven 2½-ton cargo trucks (three per platoon; one per company headquarters), one 3/4-ton truck, weapons carrier, and one ½-ton truck. In the platoon two trucks are used for hauling equipment and one truck for transporting supplies when the unit moves; all three trucks are used for transporting supplies and salvage when the unit is operating.¹

55. Capacity. The unit is designed to provide fumigation and bath service for approximately 36000 men in 12 hours.¹

56. Assignment. As required.¹

SECTION 2

QUARTERMASTER BATH FACILITIES IN THE COMBAT ZONE IN THE EUROPEAN THEATER OF OPERATIONS

57. General. Armies in the European Theater of Operations generally employed Quartermaster Fumigation and Bath Companies as organized under Tables of Organization and Equipment 10-257. There were several Quartermaster Sterilization Companies in the European Theater of Operations organized under Tables of Organization and Equipment 10-177; and, as organized, they used large, heavy, van-type semi-trailers with the steam sterilizers and showers built into one unit. These units were too clumsy for effective mobility under combat conditions. The Quartermaster Fumigation and Bath Company, on the other hand, used a portable, collapsible fumigation chamber which was easily carried on a 2½-ton cargo truck. The bathing unit was mounted on a trailer and was also mobile. The Quartermaster Fumigation and Bath Company has a strength of 88 men as against 149 in the Quartermaster Sterilization Company. The capacities of the two units were the same.^{1&2}

58. Assignment. As an example of the assignment of Quartermaster Fumigation and Bath Companies in the combat zone in the European Theater of Operations, 16 complete companies were allocated to 12th Army Group which had four armies, 32 Infantry Divisions, 12 Armored Divisions and 11 Corps all operational.² These companies were further allocated to the armies by 12th Army Group on the basis of one per army and 0.3 per division. In practice, normally four units were assigned to an army consisting of three corps.³

59. Employment. Generally, the four companies allocated to an army were employed on the basis of one for each corps and one for the army service area. The units with the corps were usually placed under the Quartermaster Battalion Headquarters which controlled the corps quartermaster troops.³ Normally a system of clothing exchange was operated at bath points. Two to four sections of a laundry company operated adjacent thereto and also handled troop laundry for divisions in the vicinity. Bath points operated under tentage provided the company in Table of Equipment; however, buildings were considered more satisfactory. One platoon operating separately at a bath point and using twenty-four showerheads could bathe one division in four days if the division was in a temporary non-combat status. Efficient operation of bath points, along with the system of clothing exchange, was one of the most important responsibilities of the Army Quartermaster. Fumigation chambers were used to a limited extent at salvage points.²

60. That a shortage of bath facilities existed in combat units during the European Campaign is indicated from numerous requests made by various headquarters and units for additional bath equipment. The quartermaster, 6th Army Group, gathered considerable evidence to support the fact that combat units did not have sufficient bathing facilities. It was recommended that mobile trailer type bath equipment be authorized and included in the Tables of Organization of Infantry, Armored and Airborne Divisions in addition to that provided by the troop basis for combat units.⁴ In 12th Army Group it was found that the need for bath facilities increased during winter weather when at least five quartermaster Fumigation and Bath Companies per army were required. It was also recommended by 12th Army Group that the troop basis for bath units be augmented by providing bath equipment organic to divisions.^{2,3} The quartermaster, Third US Army, stated that six Quartermaster Fumigation and Bath Companies were needed during the winter of 1944 and that the troop basis was inadequate.⁵

61. It was found that the Quartermaster Fumigation and Bath Company had certain deficiencies. Mainly, the equipment was found to be too bulky and little need existed for the fumigation chambers.^{5,6,7}

62. The need for shower equipment organic to combat units.

a. Among those concerned with the problem of providing bathing facilities to combat troops, there has long existed the belief that the needs of combat units could be more efficiently and frequently met by adding shower equipment to the Tables of Organization and Equipment of Divisions. In addition to the recommendations made by 6th Army Group and 12th Army Group, outlined above, similar recommendations were made

by the Chief Engineer and the Chief Quartermaster of the European Theater of Operations.^{8&9} In March 1945, First US Army requested bath units to augment the Tables of Organization and Equipment for each division in the army at that time.¹⁰ It was found that the majority of Quartermasters of divisions in Seventh US Army desired extra shower equipment.¹¹ The opinion that divisions actually required organic shower equipment was also expressed by several corps Quartermasters.^{6&7} Interviews were held with the Quartermasters of the 36th Infantry Division and the 84th Infantry Division and both recommended that divisions be authorized organic shower equipment.^{12&13} The Quartermaster, 84th Infantry Division, analyzed the problem in the following statement:¹³

"Recommend that shower units be placed in a division under the Division Quartermaster. If shower equipment is placed below division level it will be a waste of personnel and equipment. There are distinct disadvantages to shower units at regimental level, namely, usually not enough water points and too close proximity to the front. The Division G-4 and Quartermaster are in a position to know the tactical situation, consequently, they can employ shower units to better advantage. A clothing exchange could easily be established. The individual combat soldier should have only the clothes he wears".

Quartermasters of both the Armored and Airborne Divisions felt that a definite need existed in their type divisions for organic shower equipment.^{14&15}

b. Additional facilities should be provided organically in divisions. Studies and recommendations being currently prepared by The General Board contain recommendations that bath units be provided organically with all types of divisions. To provide this service, it was recommended that a bath section be included as an element of a proposed Utilities Company (Appendix 2). The ten enlisted men assigned to this section are needed to perform preventative maintenance on the bath units. It is believed the Division Quartermaster can furnish personnel as required for operators and clothing exchange.

SECTION 3

CONCLUSIONS AND RECOMMENDATIONS

63. Conclusions.

a. That the allocation of Quartermaster Fumigation and Bath Companies to armies in the European Theater of Operations was inadequate.

b. That the Quartermaster Sterilization Company is not suitable for assignment in the European Theater of Operations. The Quartermaster Fumigation and Bath Company proved more satisfactory.

c. That bath equipment should be simple, compact, light and maneuverable.

d. That the fumigation equipment should be with salvage units.

e. That bath facilities in the form of a bath section, (Appendix 2), should be made organic to all divisions and placed under the control of the Division Quartermaster.

f. That clothing exchange systems operated at bath points proved successful and should be continued in future operations.

64. Recommendations.

a. That a bath section be incorporated in a proposed Utilities Company, (Appendix 2).

b. That pertinent doctrines, techniques and Tables of Organization and Equipment be amended by appropriate agencies of the War Department.

Chapter 5

1. Tables of Organization and Equipment 10-257, The Quartermaster Fumigation and Bath Company.
2. After Action Report, Quartermaster Section, 12th Army Group.
3. Notes on Service Troops, G-4, 12th Army Group, 1945.
4. Letter, Headquarters 6th Army Group, file AG 400-34/3 D-0, dated 20 May 1945, subject: "Laundry and Bath Facilities for Front Line Troops".
5. After Action Report, Quartermaster Section, Third US Army, 1945
6. Notes from conference with Lt Col Hattox, Quartermaster, VI Corps, 17 September 1945.
7. Notes from conference with Lt Col G. B. Eaker, Quartermaster, XXI Corps, 17 September 1945.
8. Comments by the Chief Surgeon, European Theater of Operations, on letter, 6th Army Group, file AG 400.34/3 D-0, dated 20 May 1945, subject: "Laundry and Bath Facilities for Front Line Troops".
9. Comments by the Chief Engineer, European Theater of Operations, on letter; 6th Army Group, file AG 400.34/3 D-0, dated 20 May 1945, subject: "Laundry and Bath Facilities for Front Line Troops".
10. 1st Indorsement, 12th Army Group, 15 May 1945, to letter, Headquarters, European Theater of Operations, file AG 412 Op CE, 26 April 1945, subject: "Shower Equipment for Divisions".
11. Notes from conference with Major S. Stearn, Quartermaster Field Service Officer, Quartermaster Section, Seventh US Army, 10 September 1945.
12. Notes from conference with Major L. G. Henseley, Quartermaster, 36th Infantry Division, 17 September 1945.
13. Notes from conference with Lt Col D. S. Hines, Quartermaster, 84th Infantry Division, 17 September 1945.
14. Notes from conference with Lt Col W. R. Day, Quartermaster, 1st Armored Division, 17 September 1945.
15. Notes from conference with Lt Col R. H. Tiffany, Quartermaster, 17th Airborne Division, 3 November 1945.

STATISTICAL ANALYSIS OF QUARTERMASTER SALVAGE
ACTIVITIES IN 12TH ARMY GROUP

1. Three Quartermaster Salvage Collecting Companies and three Quartermaster Salvage Repair Companies (Semi-Mobile) in each of the three operative armies (First, Third, and Ninth US Armies) of 12th Army Group operated between 1 December 1944 and 7 April 1945 with the following results:

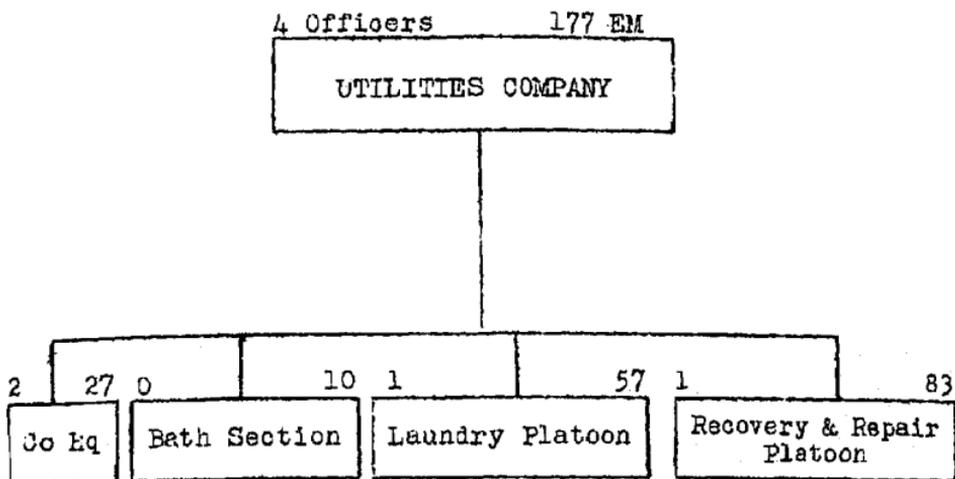
Operations	Pieces Per Week		
	Low	High	Average
Collected	375,000	1,260,000	618,000
Shipped to Communi- cations Zone	212,000	840,000	526,000 (64%)
On Hand in Army Dumps	163,000	420,000	292,000 (36%)
Repaired	40,000	140,000	90,000 (11%)

2. Considerable variation in the pieces collected per week exists, due to tactical moves and other operating conditions such as turn-in of winter clothing, etc. "Shipments to Communications Zone" is simply the total collected by armies less the amount retained (reused direct or after repair). Shipments to Communications Zone during the period covered above were of such magnitude they threatened to swamp the central salvage depot at Reims, France (T-3070), having at one time caused a backlog of 5,000,000 pounds.

3. In each case, "On Hand in Army Dumps" quantities represent total amount in army areas for a given week which it is not possible to repair or evacuate. The excessively large figures are immediate evidence of insufficient salvage repair facilities in army areas. "On Hand" salvage tends to accumulate in large storage piles, sometimes uncovered, inviting mould, corrosion, etc.

4. "Repair" quantities are very definitely too low. When considered in the light of the preceding figures, "Repaired" figures represent the results of full time operations of the three Quartermaster Salvage Repair Companies (Semi-Mobile) per army. Variations are not due to lack of material to be worked on, nor to lack of operating supplies or spare parts, but to factors connected with the tactical situation, principally frequent necessary moves. The low percentage of salvage collected which is repaired indicates the need for additional Quartermaster Salvage Repair Companies (Semi-Mobile) in each army. All salvage repaired for reuse in the army areas saves round-trip transportation of each piece so repaired.

PROPOSED T/O & E FOR: DIVISIONAL UTILITIES COMPANY



MAJOR ITEMS OF EQUIPMENT:

Carbine	17A
Gun, Cal .50, H.E. Flex.	4
Pistol, automatic, Cal .45	2
Rifle, Cal .30, M-1	4
Trailer, 1-ton	3
Trailer, 1/4-ton	2
Truck, 1/4-ton	4
Truck, 2-1/2-ton, cargo	9
Bath unit, fld, mobile, 24 showerhead	5
Truck, 4-5 ton tractor	3
*Semi-trailer, 2-wheel, van type, laundry	4
*Semi-trailer, 2-wheel, van type, shoe repair	1
*Semi-trailer, 2-wheel, van type, clothing repair	1

*NOTE: This type equipment does not have the desired characteristics for employment with combat divisions. Equipment provided the Divisional Utilities Company should be light, compact, and mobile.