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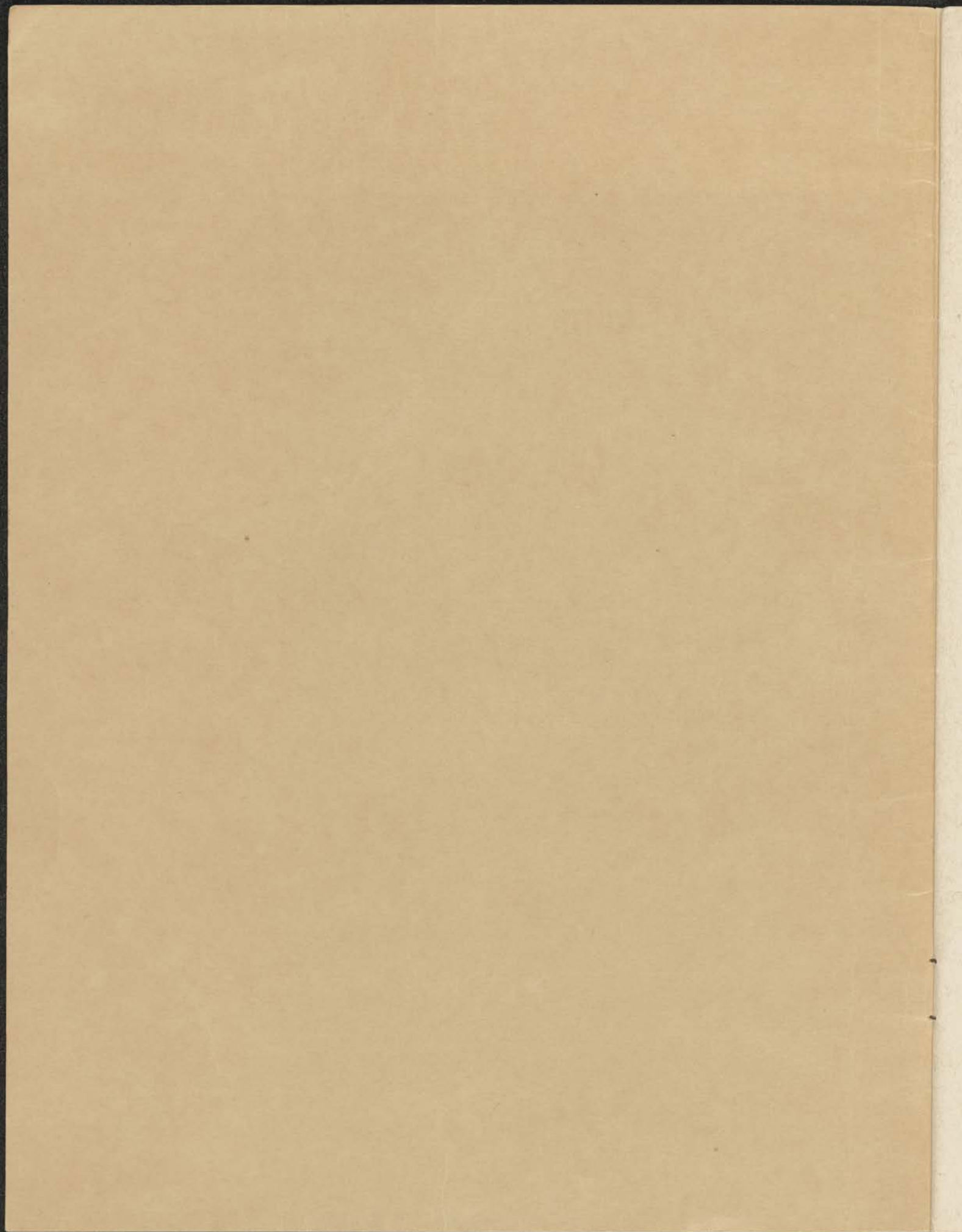
WAR DEPARTMENT TECHNICAL MANUAL

NON-CIRCULATING

QUARTERMASTER
BASE DEPOT COMPANY

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WAR DEPARTMENT TECHNICAL MANUAL

TM 10-367

QUARTERMASTER
BASE DEPOT COMPANY



WAR DEPARTMENT



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TM 10-367, Quartermaster Base Depot Company, is published for the information and guidance of all concerned.

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BY ORDER OF THE SECRETARY OF WAR:

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DISTRIBUTION:

As prescribed in paragraph 9a, FM 21-6; B (1); R (1); IC 10 (10); ASFTC's (QM) (5).

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For explanation of symbols, see FM 21-6.

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CHAPTER 1

THE COMPANY

1. Mission

The mission of the quartermaster base depot company is to furnish technical personnel for the receipt, storage, and issue of classes I, II, and IV quartermaster supplies at a base general depot, or a branch quartermaster depot in the communications zone. Necessary labor and transportation for handling and moving supplies must be obtained from the labor and transportation pools, under control of the station quartermaster. (See "Functions" under T/O & E 10-387.) The company provides personnel to augment headquarters and headquarters company, quartermaster base depot (T/O & E 10-520-1).

2. Control of the Company

The quartermaster base depot company, in its operational capacity, is designed to function in conjunction with and under the administration and supervision of the supply division of a headquarters and headquarters company, quartermaster base depot. The company itself is a basic operating unit. The company commander is responsible for the proper administration, training, and discipline of the unit's personnel. The base depot company is one of several quartermaster units normally attached to the quartermaster section of a base general depot, or to a branch quartermaster depot. Figure 1 shows the position of the base depot company in a base general depot.

3. Organization

a. THE COMPANY. The base depot company is composed of a company headquarters, a depot headquarters staff section, a clothing and equipage section, a general supplies section, and a subsistence section. The personnel of these sections augment the personnel of the respective branches of the supply division, headquarters and

headquarters company quartermaster base depot. (See fig. 1.) T/O & E 10-367 lists the company's personnel. Additional labor will be furnished by the depot labor pool. The depot motor pool will provide transportation. One company is usually assigned to a depot when requirements do not exceed service for 100,000 troops. Additional companies may be assigned as required.

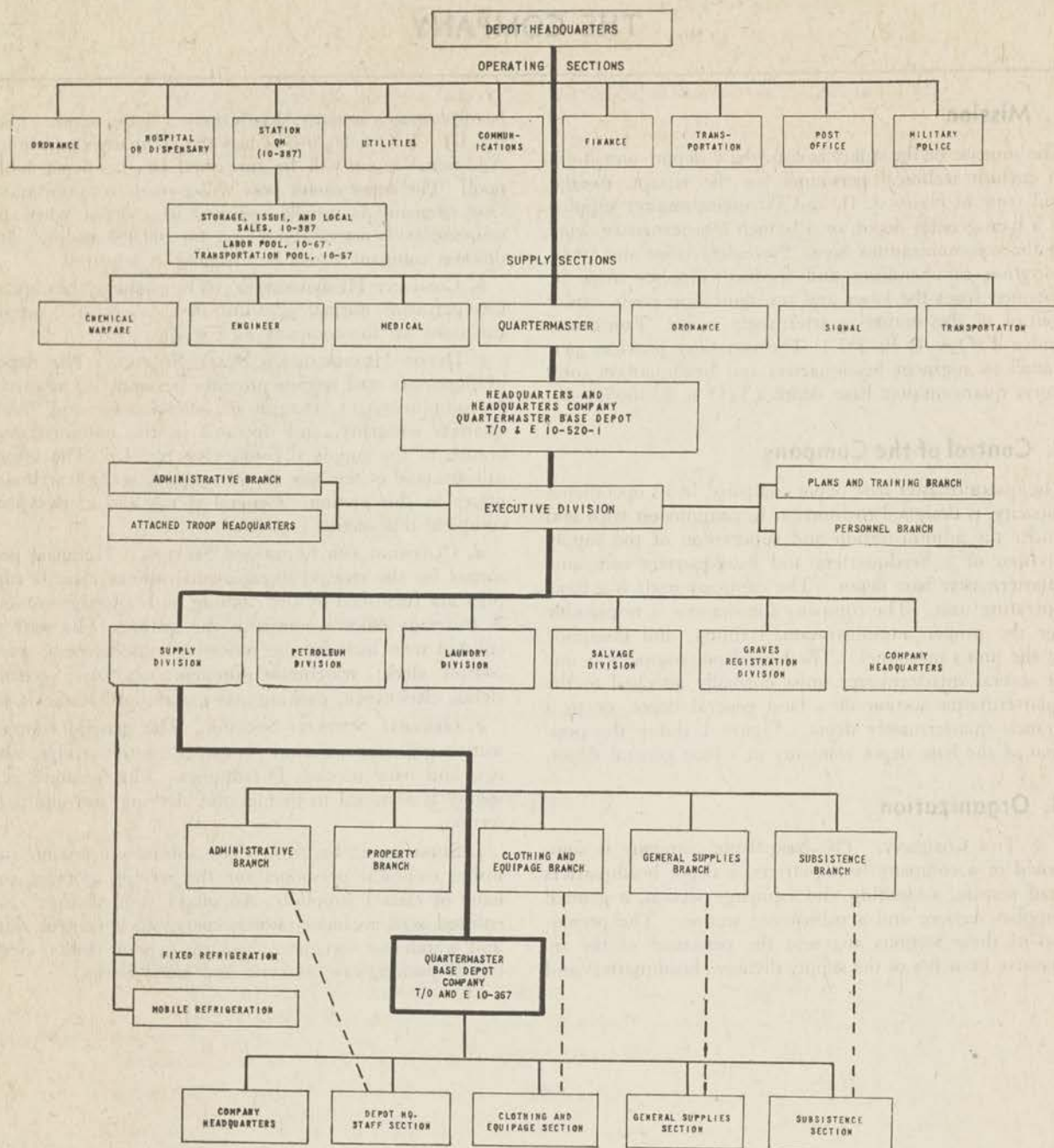
b. COMPANY HEADQUARTERS. The company headquarters performs normal administrative, mess, and supply functions for the company as a whole.

c. DEPOT HEADQUARTERS STAFF SECTION. The depot headquarters staff section provides personnel to augment the administrative strength of headquarters and headquarters company, and operates in the administrative branch of the supply division (See fig. 1.) The officer in command of the base depot company is the warehouse officer in this section. General clerks and clerk-typists complete this section's roster.

d. CLOTHING AND EQUIPPAGE SECTION. Technical personnel for the receipt, storage, and issue of class II supplies are furnished by the clothing and equipage section. A company officer commands the section. His staff of enlisted men includes the following: storekeepers; stock control clerk; warehouse foreman; checkers; general clerks, clerk-typist, packing-case maker, and stock clerks.

e. GENERAL SUPPLIES SECTION. The general supplies section provides technical personnel for the receipt, storage, and issue of class IV supplies. This section's personnel is identical to that of the clothing and equipage section.

f. SUBSISTENCE SECTION. The subsistence section furnishes technical personnel for the receipt, storage, and issue of class I supplies. An officer is in charge. His enlisted staff includes: storekeepers; stock control clerk and warehouse foremen; checkers; general clerks; clerk-typist; packing-case makers; and stock clerks.



Note.—Broken line indicates direct operational relationship.

Figure 1. Base General Depot.

CHAPTER 2

DUTIES OF PERSONNEL

Section I. COMMISSIONED OFFICERS

4. Company Commander

The company commander is both the administrator of the company and in command of its operations except when it is broken up for employment among various sections of the depot. He is the warehouse officer, and is responsible to the commanding officer, headquarters and headquarters company of the quartermaster base depot, for the efficient receipt, storage, and issue of supplies handled by the company. As the warehouse officer, he is in charge of the depot headquarters staff section which operates in the administrative branch of the supply division of headquarters and headquarters company, quartermaster base depot. His duties as a company commander are to—

- a. Command the company and provide for the discipline and efficiency of its personnel.
- b. Provide for the proper administration of the company.
- c. Provide for the proper supply of the company.
- d. Provide for inspections which insure that company personnel are properly clothed, fed, and sheltered, and that organizational equipment is properly employed and maintained.
- e. Carry out training schedules in accordance with directives from higher authority.
- f. Provide for an organized physical conditioning program, and to promote recreational activities.
- g. Assist all men under his command to solve their problems, personal and otherwise.

5. Section Leaders

Officers act as assistant warehouse officers. Each commands one of the operating sections, and directs and supervises the receipt, storage, and issue of the supplies peculiar to his section. Specific duties of the section leaders are to—

- a. Supervise the receipt, storage, and issue of all supplies under their jurisdiction.
- b. Supervise all labor personnel assigned to their sections.
- c. Conduct and supervise the tactical and technical training of the personnel in their sections.
- d. Assist the company commander in the training, administration and welfare of the unit.
- e. Be leaders, by example, in the attainment of all military skills, including use of weapons, mastery of technical duties, the practice of self-discipline.

Section II. KEY NONCOMMISSIONED OFFICERS

6. General

The efficiency of the company as an operating unit is dependent upon the efficiency of the key personnel. Duties must be clearly defined and mastered. In general, the key personnel will be employed as directed in the paragraphs below.

7. First Sergeant (585)

The first sergeant is the senior noncommissioned officer of the company, and is the administrative assistant to the company commander. His duties are to—

- a. Supervise the preparation of all routine company reports and correspondence.
- b. Maintain the various rosters required within the company.
- c. Assist the company commander in maintaining discipline and morale.
- d. Form the company (or separate details) for drill, fatigue, guard, or other military formations.
- e. Transmit all orders of the company commander to the enlisted personnel, and to act as the liaison between them and the company commander.
- f. Perform any other duties the company commander may designate.

8. Mess Sergeant (824)

The mess sergeant is in immediate charge of the company mess under the supervision of the company commander, or of a mess officer. The state of morale of the unit depends largely upon the mess sergeant's ability to operate a good mess. His duties include—

- a. The procurement and storage of food, and the preparation and serving of meals.
- b. The supervision of the cooks, and of the men detailed as kitchen police and table waiters.
- c. Keeping the kitchen, the mess halls, and all equipment used in their operation in a clean and sanitary condition.
- d. The daily inspection of kitchen, mess hall, store-rooms, and the mess area. (See TM 10-205.)
- e. Supervision of the loading of all mess supplies and equipment on company movements.

9. Supply Sergeant (821)

The supply sergeant is in charge of unit supply activities, and is the enlisted assistant to the company supply officer. The company commander will designate one of the lieutenants as company supply officer. This officer will have the responsibility, while the supply sergeant will be in direct charge of the actual accomplishment of the requisitioning, drawing, storing, and issuing of supplies. Specific duties of the supply sergeant are to—

- a. Supervise all labor details in the handling of supplies.
- b. Maintain records of organizational and individual property issued to the men.
- c. Keep a complete and up-to-date property book, file of requisitions, and memorandum receipts and other documents pertaining to supplies.
- d. Initiate action in case property is lost, damaged, or destroyed.
- e. Supervise the loading of company equipment on movements.

10. Company Clerk (405)

The company clerk is the unit's secretary. Normally, he will be detailed to the military personnel section established within the personnel branch of the depot headquarters. His duties are to—

- a. Make reports, keep company records, and handle company correspondence.
- b. Assist in preparing reports and personnel records.

11. Administrative Clerk (055)

This clerk is located in the depot headquarters staff section, and works in the administrative branch of the supply division of headquarters and headquarters company, quartermaster base depot. He is in charge of the work of this staff section, the personnel of which includes other general clerks and clerk-typists. The section's principal duties will be concerned with the keeping of administrative records pertinent to warehousing operations.

12. Chief Storekeeper (769)

Chief storekeepers, one for each of the operating sections, are assistants to the section leaders in the coordination of the work of receiving, storing, and shipping of supplies. A chief storekeeper's duties are to—

- a. Maintain necessary warehouse records including an adequate warehouse locator system for the supplies over which he has control.
- b. Supervise warehouse foreman, storekeepers, and other workers in receiving, checking, and storing supplies and equipment in warehouses in such a manner as to permit ready inventory and availability for shipment.
- c. Fill requisitions and to issue supplies and equipment.

d. Direct periodic inventories of stock on hand and to request resupply as needed.

e. Supervise clerical workers in the preparation of shipping papers, requisitions, stock record cards, tallies, receiving reports, and other property forms.

f. Be familiar with regulations governing property accountability and responsibility.

g. Be familiar with the nomenclature, appearance, classification, and source of the specific supplies and equipment handled.

13. Stock Control Clerk (374)

A stock control clerk is assigned to the company, one for each operating section. The duties of a stock control clerk are to—

a. Coordinate information resulting from periodic inventories as a check against the entries in the stock record cards.

b. Prepare inventory adjustment reports in order to adjust discrepancies between actual inventories and amounts recorded.

c. Anticipate and prevent stock depletions by estimating required amounts for future use.

d. Working with the property branch of the headquarters and headquarters company, maintain an effective stock control system which will assure that stock records show actual stocks on hand.

14. Warehouse Foreman (252)

Each operating section has a warehouse foreman, whose primary duty is the supervision of the warehousing of supplies by his particular section. His duties are to—

a. Handle all consignments and to direct their storage in such a manner as to permit inventory, issuance, or shipment without confusion.

b. Supervise the taking of inventories when necessary.

c. Be familiar with the classification of all property he is required to handle and with the regulations governing the receipt, storage, and issuance of Army property.

d. Enforce all regulations governing the operation of the warehouse.

e. Issue instructions and orders for fire prevention and control.

f. Prepare storage plans to meet emergencies.

g. Supervise the preparation and maintenance of a locator system.

15. Storekeeper (769)

The noncommissioned officers designated as storekeepers are assigned to clothing and equipage, to general supplies, or to subsistence. They are assistants to the chief storekeepers. Their duties are to—

a. Assist in supervision of receipt and issue of supplies and equipment.

- b. Handle paperwork incident to making issues.
- c. Care for the supplies under their control and to supervise the work of the clerks assigned to them.

16. Assistant Warehouse Foreman (252)

An assistant warehouse foreman assists each warehouse foreman. His primary function will be supervision of labor gangs in the warehousing of supplies, which includes unloading, storing, and issuance. These assistant warehouse foremen will assist in the taking of inventories.

Section III. KEY PERSONNEL

17. Clerk, General (055)

These clerks and clerk-typists (405) perform the general clerical work necessary for the operation of the various warehousing sections. They will do the actual work in keeping records for the warehouses and in making out reports for their particular sections.

18. Checker (186)

A checker's duty includes the preparation of tallies and the checking of incoming and outgoing shipments. He will assist, when necessary, in the unloading, warehousing, and loading of supplies. Correct loading is one of his most important responsibilities.

19. Packing-Case Maker (203)

He will construct shipping boxes or crates for the protection of supplies from damage in transit. In addition, he will build bracing and framing to hold supplies in place in freight cars and perform simple carpentry around the warehouse.

20. Stock Clerk (324)

There is a stock clerk in each of the operating sections, who assists in the actual work of making issues. Each of these stock clerks has several checkers and stock clerks under his supervision.

CHAPTER 3

COMPANY MISSIONS IN DEPOT OPERATIONS

21. General

The primary mission of the base depot company is divided into three phases: the assembly of quartermaster supplies (classes I, II, and IV) from various sources; their protection until needed; and their issue on time to meet requirements of the theater of operations. Constant training and teamwork are important factors in dove-tailing operations and in keeping a steady flow of supplies through the warehouses. The manner in which supplies are received determines the efficiency of storage operations. Warehousing effectiveness decides the degree of shipping proficiency.

22. Depot Headquarters Staff Section

Records pertaining to warehousing operations are kept by this branch under the direction of the supply division and the commanding officer of the base depot company.

23. Operating Sections

The Army handles a huge variety of supplies. Depot

operations must be flexible, taking the peculiarities of each item into account. For material requiring special handling, instructions will be issued. Officers in charge will use the methods of handling and warehousing which experience has shown to be the best for speed of movement, conservation of space, and efficient use of manpower. Initiative and resourcefulness are needed to devise new techniques and to adapt old techniques to new problems. The operating sections of the base depot company and the supplies they handle are:

a. The clothing and equipage section will handle class II supplies, those articles for which allowances are established by Tables of Allowances and Tables of Organization and Equipment, such as clothing, tents, and tools.

b. The general supplies section is concerned with class IV supplies, such as machinery, office supplies, and cleaning and preserving materials which are not covered in Tables of Equipment.

c. The subsistence section takes care of class I supplies, such as rations and forage, which are consumed at an approximately uniform daily rate.

CHAPTER 4

SERVICE TROOPS AND/OR CIVILIAN LABOR

24. General

Labor requirements for the quartermaster base depot will be filled from the labor pool (civilians and one or more service companies) operated by the station quartermaster (see fig. 1) at both base general depots and branch quartermaster depots.

25. Civilian Labor

Local labor should be utilized in oversea depots whenever possible. Provisions for furnishing civilian labor are made under T/O & E 10-520-1. Careful hiring, constant supervision and training are requirements for efficient depot operations. An understanding of local situations and customs is of great advantage to officers dealing with native labor.

26. Estimating Labor Needs

For planning purposes, labor requirements for handling supplies are computed on the average of $\frac{1}{2}$ ton per man per hour for 10 hours each day. Eleven men is the maximum number that can be employed efficiently in

loading or unloading one freight car (1 foreman and 10 laborers). A truck can be unloaded in 20 minutes regardless of tonnage when personnel is available. (See FM 101-10.)

27. Use of Service Troops and/or Civilian Labor

When personnel of a service company and/or civilian labor are working under the supervision of a base depot company, they will perform the following duties:

- a. Loading and unloading railroad cars (including refrigeration cars).
- b. Loading and unloading all types of motor vehicles.
- c. Handling freight.
- d. Sorting, stacking, stowing, and unstowing supplies by hand, or assisting in the operating of mechanical materials handling equipment.
- e. Performing housekeeping duties for the depot company warehouses.
- f. Performing any other labor details required.

CHAPTER 5

RECEIVING SUPPLIES AT THE DEPOT

28. Importance

The first phase of the base depot company's mission begins with the arrival at the depot of the freight car or motortruck loaded with supplies. Initial receipt of supplies may also be at the docks or directly from lighters. The manner in which supplies are received governs the efficiency of the company in its subsequent operations. Supplies improperly received cannot be stored properly, and supplies improperly stored cannot be shipped properly. The receiving operation must always be managed with the storage and issue operations in mind.

29. Responsibility

The receiving department of each section of the company (the chief storekeeper, assistant storekeeper, checkers, and receiving clerks) is responsible for the receipt of all property shipped to its particular section and for the maintenance of necessary records.

30. Procedure

Receiving procedure is modified by many factors: classes of supplies, types and sizes of packages, method of shipment (whether by rail or motortruck), physical characteristics of warehouses and storage areas, kind and amount of handling equipment, amount and efficiency of labor personnel, and other factors. Efficient receiving procedures always follow the same routine: thorough advance planning, careful checking at every stage of the operation to insure that the plan is carried out in all its details, and full and exact maintenance of all necessary records. Sound, workable plans depend upon correct and complete information. The steps to be taken in receiving procedure are:

a. The assistant warehouse officer, working in close cooperation with the transportation officer, finds out from the manifest the number and contents of the rail cars, and the numbers of the cars due to arrive for his section on the following day.

b. The assistant warehouse officer provides the transportation officer with the track numbers, and the order in which he desires the cars spotted on the tracks. He also informs the chief storekeeper.

c. The chief storekeeper informs the storekeeper of his section, provides the necessary foremen, laborers, and equipment, and issues orders to insure proper functioning at the unloading platform. He also notifies the receiving clerk (the assistant warehouse foreman) that the cars are

to be received and gives him a list of the car numbers and contents.

d. The receiving clerk (the assistant warehouse foreman) assigns checkers to each car, and authorizes a sufficient number of laborers to assist the checkers in the unloading.

e. The storekeeper, who is to receive the property, contacts the chief storekeeper and arranges for the labor necessary to warehouse the property when it reaches its place of storage.

31. Receiving from Trucks

Receiving from cargo trucks is substantially the same as receiving from railroad cars. The storekeeper, knowing the contents of the load, and having decided on the point of storage, has the driver back in to the door closest to the point of storage. Checking and unloading procedures are the same, but it must be remembered that it takes fewer men to unload a truck than it does to unload a railroad car.

32. Checking

Checking, as applied to depots, is the process of comparing the quantity and quality of supplies shown on the shipping papers with the actual supplies. After supplies are received and stored, the identity of each individual shipment is lost. Therefore, shipments must be checked immediately upon receipt and before storing.

33. Inspection

Receiving and inspection of supplies go hand in hand. Supplies obtained from the zone of the interior have already been inspected there by the procuring and receiving depots. Nevertheless, they are inspected again to prevent the issue of damaged items to the troops and to fix the responsibility for supplies which have been damaged either during transit or elsewhere. Supplies procured in the countries in which a theater of operations exists will be inspected in accordance with the provisions of official War Department publications. Emphasis is placed upon the following:

a. TM 10-210, Inspection of Subsistence Supplies.

b. TM 10-225, Inspection of Textiles.

c. TM 10-226, Classification, Processing and Inspection of Leather and Leather Equipment.

d. TM 10-610, Refrigeration.

e. Publications which contain the principles of inspection of other items will be found listed in FM 21-6 and in AR 1-5.

CHAPTER 6

STORAGE IN DEPOTS

34. General

The term storage, when applied to Army warehousing, means that phase of supply procedure in which products are assembled into logically related groups, safeguarded, and timed for issue to troops as situations in the theater of operations may demand. Storage can hardly be termed a separate operation. Actually, it is a continuation of the receiving operation and a preparation for shipping.

35. Principles

The principles governing good storage apply whether warehouse operations are being conducted in the zone of the interior, communications zone, or at an advance supply point. Changing conditions force changes in methods. Even though materials may have to be stored in scattered areas, they can be stored there efficiently. The lack of mechanical equipment does not excuse slipshod materials handling. Time, men, and space are even more critical overseas than in the zone of the interior. All three must be conserved and fully utilized. The following general principles govern storage operations:

- a. Conservation of space by efficient use of all storage facilities, and by maximum use of open storage.
- b. Conservation of labor by constant supervision and training, by utilization of civilian labor in preference to troop labor, and by familiarity with handling methods and efficient use of available materials handling equipment.
- c. Expeditionary handling of shipments by proper allocation of space, and by proper planning and supervision.

36. Indoor or Outdoor Storage

In a theater of operations, storage facilities may range from a hole in the ground to a large, multi-story warehouse with all modern conveniences. The shortage of storage space is chiefly a shortage of buildings. As a general rule, therefore, supplies should not be stored indoors if they can stand the weather outdoors. Certain supplies will arrive specially packed for open storage. Others can be protected by various methods. (See par. 41.) The storage officer must use his own judgment in this matter. He must remember that when warehouse space is exhausted, new receipts must be stored in the open regardless of their nature, unless supplies which could and should have been stored outside originally are wastefully rehandled. Whether supplies are stored under a roof or in the open, the arrangements should be worked out carefully along these general lines:

- a. Hauling distances from unload points to storage points should be kept short.

- b. Aisles and runways should be arranged in such a way as to promote straight-line flow of supplies between carrier and storage point.

- c. Rehandling should be avoided. If the area is well arranged, one move puts the item where it belongs, to remain there until it is shipped out.

- d. Preparation of a good locator system.

37. Space Selection

The major factor in warehousing efficiency is the location of items, considering the nature of articles, the quantity, frequency of issue, density, and type of package. Generally, the following rules will apply:

- a. Place fast moving items near doorways, delivery points, or transport facilities.
- b. Reserve no specific space for incoming supplies. Store each shipment in the best available space at the time of receipt.
- c. Store high-density items in areas of greatest allowable floor load. Place low-density items in warehouses with high ceilings.
- d. Conduct receiving and shipping operations in areas close to doors and elevators.
- e. Locate the packing, crating, and cooperage activities near the shipping space.

38. Methods of Piling

In order to conserve space, the block system of stowing will be used whenever possible. Principles of the block system of stowing are:

- a. Packages will be arranged in solid blocks two or more packages wide, starting at the wall and ending at the aisle, except in center sections where stacking starts at the center and ends at the aisle. If more than one type of property is to be stored in the center sections, the packages are stacked back to back. A new shipment is never stored in front of an old shipment.

- b. Each vertical layer of a block must contain the same number of packages, and each package must contain the same number and size of the article. Markings on all packages in the block face toward the aisle, and in any one block all markings consistently read in one direction, except where conditions of containers make it necessary to cross-pile containers to build solid layers to provide self-supporting stacks. Lateral aisles are used only when absolutely necessary.

- c. When supplies are issued from blocks, withdrawals are made from the front of the stacks beginning at one end of a row in that block. Withdrawals are continued until the row is fully removed before any packages are

taken from the next row. Old supplies are invariably issued first, thereby maintaining rotation of stocks.

d. Supplies issued or transferred must be in serviceable condition, properly packed, and, in the case of subsistence items, fit for human consumption.

e. Stacking heights will be selected to utilize all cubical space possible considering floor-load limits, bursting strength of packages, ceiling heights, and available handling equipment.

f. Packages are piled on the largest side whenever possible; thus the nomenclature will not face toward the front of the stack. Packages which can be piled only one high are stored on end.

g. Barrels containing dry materials are piled on bilgenested; that is, each barrel in the second tier rests in the hollow between the two barrels below. In case the barrels are too frail to sustain many tiers of barrels so piled, they are stacked on end as high as practicable. Barrels containing flour or sugar are always piled on end. Barrels containing liquids are piled with skids or dunnage between the tiers of barrels.

39. Floor Plans

Floor plans should be prepared to show aisle systems and space allocations in order to make the best use of the floor areas. The bays on the main aisles should be numbered and the floor plans posted conspicuously. They should be revised promptly as soon as any changes become necessary. The aisles should be straight and wide enough for easy materials handling without wasting space. The width of aisles will be determined by the equipment used. Unnecessary aisles will be eliminated, especially fire and inventory aisles. When these are necessary they will not exceed 18 inches. Painted lines facilitate the maintenance of tidy stacks. The determining factors are economy of space and ease of handling stores.

40. Locator System

An accurate, workable locator system is essential for every storage area. The locator system should contain only as much information as is necessary to find stored supplies. Its primary function is the quick and precise locating of any lot of supplies. A good locator system contains a plan of the warehouses, and a file of 5-inch by 8-inch or 3-inch by 5-inch cards. The plan subdivides

the warehouse into numbered sections and bays. The cards list the following:

Item No.	Nomenclature	Unit of Pack			
Date Received	Receiving Reference	Quantity	Location	Remarks	
10/5/43	N.Y.C. 138942	890	5-1-A		
10/27/43	P.R.R. 24810	1057	6-6-B		

In order to go directly to any one item of supply, it is necessary only to match the location number on the card with the location number on the plan. Subsequent receipts of identical supplies are entered on the same locator card, even though assigned to different locations. As soon as stock in any one location has been exhausted, that listing is crossed out on the card.

41. Open Storage

The arrangement of supplies on an open storage area should be as carefully worked out in advance as when the supplies are under a roof. Arrangement of storage areas, aisles, and roadways must be based upon a study of the requirements of each individual problem. Open storage areas should be divided into areas, and subdivided into blocks, with each area and block numbered. A good locator system is as important outdoors as in. The most important factors in open storage are:

a. Advance planning, with emphasis on available space, characteristics of terrain, transportation facilities to be employed, location of areas in relation to rail and road network, types of supplies to be stored, and handling methods to be employed.

b. Security requirements, including fencing, guarding, and protection against pilferage.

c. Protection of supplies from the weather is very important in open storage. Dunnage is necessary to keep the supplies off the ground, and must be of sufficient height to protect them against accumulated surface water. It is the depot commander's responsibility to obtain a sufficient number of paulins to provide coverage for supplies. Paulins are provided in standard sizes 12 feet by 17 feet, and 17 feet by 40 feet. Tents, flies, and building paper may be used to protect supplies. All these protective coverings must be lashed securely.

d. Ventilation is essential, and all stacks are to be uncovered periodically, weather permitting, to allow aeration and full inspection of the supplies.

CHAPTER 7

SHIPPING

42. General

The entire supply system, from the original procurement, through manufacture, shipment overseas, receipt, and storage, has been preliminary to the final function of delivery. Idle supplies in a warehouse are of no value to troops. Supplies that are damaged or spoiled in shipment take up valuable cargo space and arrive unfit for the purpose for which they were intended. Every individual concerned must feel the vital responsibility of getting supplies out on time and loading them properly for transport.

43. Procedure

The method of preparing a shipment will vary with the type and quantity of supplies to be shipped. Normally, however, the procedure follows a fixed routine. The authority for shipment comes through the stock control officer of the depot. In the case of the base depot company, the authority will emanate from the property branch of the supply division of headquarters and headquarters company, quartermaster base depot. The assistant warehouse officer receives the instructions to ship, and passes them on to the storekeeper. The instructions will be in the form of shipping papers or the actual requisition, if there is a rush shipment. The storekeeper plans the operation so that supplies will move in the most direct line from stock to point of delivery. Whatever the method of delivery, the same principles apply as for receiving: straight-line flow, and conservation of manpower. Other routine matters involved in the shipping process are:

a. SCHEDULING OF WORK. The actual scheduling of work will depend upon advice from the transportation office as to the time when the freight cars will be spotted, or trucks available.

b. PICKING OF SUPPLIES. When transportation is available, the storekeeper's assistant, or checker will pick the supplies to be shipped. These supplies will be pointed out to the labor gang, and moving instructions will be given.

c. INSPECTION OF CAR. If the shipment is going by rail, the checker examines the interior of the car, or cars, to make sure that the floor, walls, and doors are sound and suitable for the shipment. He looks for nails that might injure the supplies, and sees that each car is cleaned.

d. UNSTOWING. The labor gang, supervised by the assistant warehouse foreman, must draw supplies off the stacks in such a way that space will be created for new lots. The storekeeper, or his assistant, follows through to make sure that unstowing is not done at random, that all items are accurately selected, and they go direct from stack to carrier.

e. CHECKING. As the material is loaded into the car or truck, the checker makes a count of the items and quantities. This count is checked against the shipping document. Every item called for must be loaded.

f. BRACING AND BLOCKING. When all items are loaded into a car and checked off, the assistant warehouse foreman braces and blocks the load to prevent shifting.

44. Loading

The actual loading procedure will vary with the nature of the supplies, the storage method, the storage location, and transportation facilities. Certain of the more important considerations in loading are:

a. Cars and trucks should be loaded to capacity whenever possible in order to save valuable cargo space.

b. Cars which have transported volatile liquids, acids, or other commodities which contaminate food, should never be used for class 1 supplies. Food should be shipped only in clean, sound cars.

c. Cars with leaky roofs or defective doors should never be used when loss or damage to property can result.

d. Improper loading of trucks endangers personnel and shortens the life of the vehicle. Cargo weight must be evenly distributed and loaded so that it cannot be shifted.

CHAPTER 8

MATERIALS HANDLING

45. Definition and Aims

Materials handling is the physical moving of supplies into and out of storage. Materials handling equipment is scarce in most theaters of operations, and the warehousing of supplies normally will be accomplished by manual labor and improvised equipment. The aims of materials handling are conservation of time, labor, and space to the maximum degree consistent with safety of men and materials.

46. Personnel

There is a "right" number of men for every handling operation. An extra man is in the way and the lack of a man breaks the handling rhythm. This is true of both mechanical and hand operations. Balanced operation is the fundamental principle of materials handling. Overseas, the problem of personnel is a critical one. A minimum of enlisted men can be spared from combat duty, and, when enlisted men are used, it is a common error to put too many on the job on the theory that they will make up in numbers what they lack in practice. Native civilian labor normally is scarce and untrained. The officers and technicians in charge of operations cannot merely tell the workers what is to be done; they must demonstrate each operation. Training is a continuous procedure.

47. Mechanical Equipment

Mechanical materials handling equipment saves time, labor, and space. Fork lift trucks, cranes, conveyors, and other modern mechanical equipment can load and unload faster than men. Heavier unit loads can be handled faster, and with greater safety by mechanical equipment. Fork lift trucks, for example, are capable of a variety of operations, such as carrying, lifting, and stacking.

48. Hand Equipment

The lack of modern materials handling equipment, or the use of buildings in which such equipment cannot be used, often will force the storage officer to rely upon two-wheel hand trucks and improvised equipment. In such a situation, it is particularly important that the men be properly trained and the equipment put to its fullest use. Hand truck pallets are easily made from scrap lumber, and they step up the capacity of the hand trucks by about four times. The importance of skill in the use of hand trucks cannot be overemphasized if work is to be done quickly, efficiently, and without excessive fatigue. The secret of easy transportation of heavy loads is the ability to balance the weight of the load on the axle of the hand truck, and not on the arms.

CHAPTER 9

PROPERTY RECORDS AND ACCOUNTS

49. Property Responsibility

In theaters of operations the same care should be taken of all equipment, supplies, and matériel, and the same economy in their use should be observed as in the zone of interior, even though accounting for supplies may be on a less formal basis. Organizational and individual responsibility is in effect overseas as well as in the zone of the interior.

50. Property Records

The commanding general of an active theater of operations is authorized to prescribe the types of property records which are maintained to record property received and issued by supply establishments of the communications zone. (See part 3, TM 38-205.) The system of records should be as simple as is consistent with the maintaining of an accurate account of quantities of property received, issued, and on hand. Procedure should follow that in the zone of the interior as far as practicable.

51. Receiving Papers

Supplies received by the depot will be accompanied by shipping tickets, which will state the quantity and type of supplies shipped. When a shipment arrives, the supplies will be checked. If the check is consistent with the items listed, the shipping tickets will be forwarded to the stock record section of the property branch of the supply division, headquarters and headquarters company, quartermaster base depot, where the items will be picked up on the stock record account. If the check is not in reasonable agreement with the listings on the shipping tickets, a report of survey will be initiated.

52. Issuing Forms

When authority for issue has been received and items checked for availability, supplies normally will be issued on shipping tickets, although issue slips or improvised forms may be used as directed by the theater commander. The forms used will show the designation of the consignee, date of issue, and quantity of each item issued. Supplies issued will be dropped from the property record.

APPENDIX I

ACCOUNTING IN EUROPEAN THEATER OF OPERATIONS

Commanders of active theaters of operations are authorized to prescribe their own property accounting procedures. Such commanders are urged to adopt as much of the simplified property accounting procedures in use within the continental limits of the United States as may be practicable under the conditions existing in their respective commands, in order to insure uniformity of procedure so far as is possible, and to minimize confusion in the maintenance of property records. These simplified procedures are currently contained in the War Department publications on this subject.

The two sections of this appendix are extracts from Depot Operations Manual HQ SOS ETOUSA OCQM, 1 Dec. 1943 (as amended by Supplement No. 1, 1 Mar. 1943). These extracts have been included to give an idea of how some of the problems of property accounting are actually being dealt with in one active theater. Such information is of potential value to the organization described in this manual.

Section I is concerned with the major aspects of property accounting as conducted in the European Theater of Operations. The instructions given are based on procedures which, by zone of the interior standards, are largely outmoded. In the zone of the interior new forms and revised procedures are employed to cover the requisitioning, shipment, receipt, issue, and return of supplies, and the adjustment of discrepancies. New stock record cards have been developed and distributed. However, property accounting at oversea installations is informal, and is not required to conform to changes established for the zone of the interior. The system described in Section I is in effective operation, and it is doubtful whether use of the new procedures would be considered desirable by authorities overseas. Nevertheless, in order that the nature of the changes might be apparent, the extract has been annotated with comments.

Section II concerns subsistence. It is fragmentary, indicating perhaps, that established commissary procedures are rather closely followed in the European theater, these notes indicating important departures therefrom.

Section I. PROPERTY ACCOUNTING

1. Accountability and Responsibility Defined

a. Accountability applies to those persons who have public property intrusted to them for which they are required to maintain a property account, subject to audit.

b. Responsibility applies to all persons in possession of or handling public property, whether or not they have signed a receipt for the property.

2. Prescribed Records

a. WAR DEPARTMENT DIRECTIVES. FM 100-10 prescribes that property records will be maintained in a theater of operations. It is further prescribed that the system of accountability will be as simple as is consistent with keeping a record of stocks on hand, prompt delivery of supplies, and reasonable provision for protection against loss or theft.

b. HQ ETO DIRECTIVES. Cir 26, Hq ETO, 8 March 1943, prescribed instructions for property accounting based on the fact that *formal* accounting is not required in a theater of operations but that this policy does not relieve officers from *personal and official responsibility* for government property, and its care and protection from loss, damage, or destruction.

c. As the instructions in Cir 26 do not apply to depots and other similar establishments, the directives pertaining to property accounting laid down in this memorandum will apply to all quartermaster depots and to quartermaster supply officers of general depots. These are issued to conform to the rulings of the War Department and to maintain consistent and uniform accounting systems in all quartermaster installations.

d. Additional reference pertaining to property accounting are: AR 35-6520, 35-6620, 35-6640, 35-6660, 35-6720, TM 10-215, and others.

3. Forms Used

a. The forms hereby prescribed for maintenance of property accounting for quartermaster supplies are:

- (1) Tally Sheet—Incoming _____ WD, QMC Form No. 489
- (2) Tally-out _____ WD, QMC Form No. 490
- (3) Over, Short, and Damaged Report _____ WD, QMC Form No. 445
- (4) Report of Survey _____ WD, AGO Form No. 15
- (5) Warehouse Tally Record _____ OCQM Form
- (6) Stock Record Card _____ WD, QMC Form Nos. 423, 424; or OCQM Form
- (7) Authority for Issue _____ OCQM Form
- (8) Register of Vouchers to Stock Account _____ WD, QMC Form No. 480
- (9) Requisition Register _____ WD, QMC Form No. 479

(10) Such other forms as may be administratively required and as may be desirable to facilitate interior operation will be used for multiple purposes and accepted in lieu of receiving reports, shipping tickets, and memoran-

dum receipts. Each must be properly annotated to identify its purpose.

b. Blank forms listed in Cir Ltr 5, OCQM, 7 Jan 1943 are available for issue at all class II quartermaster and general depots. Blank forms other than those listed in Cir Ltr 5, for which the QM Corps is responsible, are available at General Depot G-30, APO 887.

c. The following visible index equipment and record stationery is to be ordered by depots in the UK from Storage and Distribution Division, OCQM, APO 871, to assure control:

12 tray visible index filing cabinets.

6 tray visible index filing cabinets hangers, metal. Stock record cards (see note below).

Sheets, overhang authorization for issue forms warehouse tally record cards.

Note. The printed stock of these show Tally No. for posting whereas they should indicate Voucher No. for posting. The number of the *voucher* to the stock account will be the only number posted to the Stock Record Card.

d. The allowance of blank forms will be the number required plus 5 percent for wastage.

e. **VOUCHERS TO STOCK ACCOUNT.** The origin of accountability (gains) must be supported by *debit voucher* to stock account and the cessation of accountability (losses) must be validated by *credit voucher* to the stock account. The use of specific forms will be as indicated in following paragraphs. The origin of accountability and the cessation of accountability will apply in principle to the salvage stock account and to some sales stores operations. In the latter case, such procedures will be in addition to those prescribed to maintain full money accountability.

f. **ORIGIN OF ACCOUNTABILITY (GAINS).** Gains occur from property received—

- (1) In turn over from predecessor.
- (2) By shipment from a port, depot, post, or station.
- (3) From British or other allied government as local procurement on reciprocal aid basis.
- (4) From a dealer through British or other allied government as local procurement on reciprocal aid basis.
- (5) From turn in by organizations and/or individuals.
- (6) After being reconditioned or reclaimed.
- (7) "Found at Post."
- (8) As result of miscellaneous occurrences not included above.

g. **CESSATION OF ACCOUNTABILITY (LOSSES).** Losses occur from property disposed of—

- (1) Complete turn over of all accountability to successor.
- (2) Property shipped to ports for task forces.
- (3) Property shipped to another depot, post, or station.
- (4) Property issued to US Navy and Marines and/or other coordinating US Armed Forces.
- (5) Property issued to organizations.
- (6) Property issued to authorized individuals.
- (7) Property transferred to British or other allied government on lend lease basis.

- (8) Property issued to authorized groups of individuals.
- (9) Property destroyed.
- (10) Property turned in to salvage.
- (11) Property lost as the result of theft or fraud.
- (12) Property lost as the result of errors of issue or bookkeeping.
- (13) Transfers of property to sales operation.
- (14) Transfers of property to prisoners of war.
- (15) Miscellaneous shortages.
- (16) As result of miscellaneous occurrences not included above.

4. Use of Property Record Forms

a. **TALLY SHEET—INCOMING** (WD, QMC Form No. 489). The War Department Shipping Document (WD Form No. 450) is used in the zone of the interior as a combination shipping ticket and tally. Both tally-ins and tally-outs may be indicated on the form.

(1) The tally sheet, incoming is a written record of receipt of supplies showing the commodity, quantity, and unit. When tally sheets incoming are made by a receiving warehouse they will be numbered consecutively, using a block of numbers assigned by the depot. This number is used for interior operational purposes only and is not to be confused with the "voucher number" assigned by the stock records section.

(2) Detailed notation will be made on the tally of any shortages or damaged supplies.

(3) When the tally covers supplies received by cash purchase from US appropriated funds, it will contain quantity, unit, article description, unit price, and total cost, in order to support payment of the account involved.

(4) The "voucher number" is the numerical sequence of all debit and credit vouchers received and so recorded on Register of Debit and Credit Vouchers to Stock Account (WD, QMC Form No. 480). The tally then becomes a voucher to the stock record account and the "voucher number" is posted to the stock record card, not the tally number.

(5) Each voucher will have attached thereto all pertinent shipping papers, etc., and the related documents will be cross referenced by notation of identifying numbers on each of the others.

(6) Vouchers will be filed numerically by the voucher number.

(7) When documentation is such that it does not identify shipment as to nomenclature and quantities to the extent that a determination can be made as to any actual and definite losses, the actual commodities and quantities thereof, as disclosed by physical count upon receipt at destination, will be taken up on stock record account. Since under such circumstances there is no true basis for a report of survey or other drop voucher no further action will be taken in so far as the property account is concerned. The usual claim paper will, however, be executed.

b. **TALLY OUT** (WD, QMC Form No. 490). (1) The tally out will be used to record the issue and transfer of supplies and equipment and generally will contain the article description, quantity and unit.

(2) Numbering of tally outs in the warehouse and subsequent assignment of a voucher number follows the same procedure as stated in *a* above.

(3) Copies of tally outs covering shipments between U. S. Armed Forces activities no longer require the signature of the receiving officer. The signature of an enlisted man or other authorized assistant to the receiving officer may be accepted except as follows:

(a) Transactions involving sales accounts and/or where money accountability is involved.

(b) Shipments of Government-owned property to the British or other allied government.

(c) Shipments to contractors (whether from regular stock or from salvage).

(4) One copy of the tally out will be retained by the shipping officer as a voucher to his stock account. One copy will be sent to the receiving officer along with or prior to shipment of the items.

(5) The receiving officer may assign a voucher number from his own series to the tally out and it will then serve as a debit voucher to his own stock account. In this case the tally out becomes, in purpose, the tally sheet incoming for the receiving officer. Extreme care must be exercised to distinguish between receipts and issues on such forms and to post them correctly. The receiving officer, should he desire, may prepare a tally sheet incoming for his own posting and attach the tally out thereto.

(6) Normally it will be the responsibility of the receiving officer to clear any discrepancies in shipment by the prompt initiation of a Report of Survey supported by an Over, Short and Damaged Report. Where it is obvious to the commanding officer of a depot and/or the quartermaster supply officer from a comparison of the number of units entered on the shipping papers, and the number on the tally out, that the items listed on the tally out were not shipped, the responsibility for clearing the shortage will rest with the shipping officer. If circumstances so warrant the shipping officer may approve an Over, Short and Damaged Report, otherwise he will send it through for action by a surveying officer.

(7) If the supplies are issued to sales stores or similar sales facilities, the tally out must show article description, quantity, unit, unit price and total cost. It thus becomes a receipt voucher to the sales store or Army Exchange and a copy must be furnished the Finance Officer, SOS, for audit purposes.

(8) Supplies and equipment issued for office and warehouse use at depots or headquarters, including supplies and equipment acquired by purchase or reciprocal aid will be dropped from regular accountability on tally out. Write under the words "Tally Out", in parentheses, "Issued on Memorandum Receipt Basis." The property involved will be taken up on separate depot or headquarters stock account which will be subject to audit. Though not specifically prescribed for intradepot use, a form has been developed to replace the tally out for such transactions as these. The form, the Property Issue Slip (WD,

AGO Form No. 446) makes provision for memorandum receipt issues.

(9) Subsistence supplies furnished veterinarians for inspection and sampling will be dropped from accountability on tally outs bearing the certificate, "I certify that the supplies enumerated hereon are for inspection and sampling under authority of Cir Ltr No. 434, WD, SOS, OQMG, 12 Dec 1942" followed by signature of veterinary officer, grade, serial number, organization, and APO address.

(10) Supplies used by the government in manufacturing, testing, and for experimental purposes will be dropped from accountability on tally outs bearing the certificate, "I certify that the materials enumerated hereon were used in manufacturing and/or for testing the experimental purposes and are dropped from regular accountability under the provisions of AR 35-6620. I further certify that suitable records will be maintained thereon to prevent any illegitimate uses of the articles" followed by signature of a commissioned officer, serial number, organization and APO address. The use of supplies for testing or experimental purposes is limited to the OCQM Supply and Subsistence Division, and to the Veterinary Service.

(11) Tally outs will be used to cover all disposition of public property to others whether or not such property had previously been dropped from regular accountability. Under statutory laws supplies and equipment considered as without value and of no use to the government must be completely destroyed and disposed of in the presence of disinterested officers. All parties witnessing and partaking in the act must furnish a certificate of the destruction and disposition. Such property when turned over to others immediately regains "value" regardless of how small, and thus must be accounted for in the usual manner. There is no authority for gratuitous turnovers. For example, if deteriorated subsistence items have been dropped from regular accountability on certificate of a veterinarian and are then transferred to the British, the tally out must be used to cover the transfer.

c. OVER, SHORT AND DAMAGED REPORTS (WD QMC Form No. 445). Under new procedures, adjustment of loss or damage in shipment is covered by a Report of Survey—Loss or Damage in Transit (WD, AGO Form No. 15-1).

(1) Over, Short and Damaged Reports will be completely filled in on the front and will have details in full on the reverse side as provided for in the instructions at the bottom of the front page. This form will be used in the following situations:

(a) To adjust overages found upon inventory. (See *j* below.)

(b) To clear shortages in shipment when the shipping officer feels that the circumstances so warrant and he will approve the O.S.&D. involved. (See *b*(6) above.)

(c) To support report of survey by receiving officer to clear any discrepancies in shipment, as specified in *b*(6) above and *d*(1) below.

(d) To correct errors in nomenclature, one copy of an O.S.&D. report will be prepared. The report will show the overages in one or more items corresponding to like shortages in one or more items. The relativity must be clearly indicated. Offsetting money valuations of shortages and overages are not acceptable elements in the matter of correcting errors in nomenclature. An O.S.&D. to adjust errors in nomenclatures may be used when container markings as to contents are found to vary from actual contents. Full explanation of circumstances must be given in such cases to justify the action of employing a voucher for adjustment of nomenclature.

(e) Shortages, indicated on O.S.&D.'s for adjusting errors in nomenclatures are not *actual or true losses* and therefore are not required to be placed on reports of surveys. In case of corresponding overages or in the case of errors because of variations from container markings and actual contents upon examination, a full statement of details to clearly indicate error in nomenclature must appear on the voucher involved. No money value need be shown on this type of O.S.&D. report.

(2) Approved O.S.&D. Reports will be accepted as authorized vouchers to stock record accounts.

d. REPORT OF SURVEY. (1) This form will be used to cover all losses and/or damages, including losses and/or damages en route which are considered chargeable to the common carrier, losses, damages, or destruction of property through negligence or culpability; to adjust shortages in inventories (see j(2)(b) below); and to clear discrepancies in shipments. It will be the responsibility of the receiving officer to clear discrepancies in shipment by the prompt initiation of a Report of Survey supported by an Over, Short and Damaged Report. The possibility that both an over, short, and damaged report and a report of survey will be required is eliminated by use of WD, AGO Form No. 15-1. The Over, Short, and Damaged Report will be prepared by the receiving officer immediately upon the discovery of the discrepancy and a copy bearing the notation, "Information Copy Accountability for this Discrepancy will be Adjusted at this Station," promptly dispatched to the shipping officer. This copy is intended only for the shipping officer's information, and he is not authorized to use it as a property voucher for taking credit for any overages that may be reported thereon.

(2) Money values will be placed on reports of surveys in accordance with instructions contained in WD, AGO Form No. 15, (Report of Survey) and in compliance with the provisions of AR 35-6640. The commanding officer of a depot, wholesale storage point or establishment, and initial distribution point or establishment is authorized to approve reports of survey providing the aggregate money value for each class of supplies (class I, II, III, IV or V) during a 3-month period conforming approximately to an inventory period, does not exceed \$5,000. The \$5,000 limitation includes all property losses whether found on inventory, occurring in shipment through fault of common carrier, or apparently shipped short. Reports of survey which do not come within these restrictions require the approval of the base section commander.

(3) Under the provisions of AR 35-6640 commanding officers at stations, depots, and similar supply installations are authorized to approve reports of survey to relieve all concerned subject to the limitations indicated in (2) above, without the action of a surveying officer, unless the loss or damage occurred—

(a) In transit.

(b) In a sales account.

(c) Under circumstances which indicate that a claim exists in favor of the Government due to negligence, pilferage, willful acts of destruction, culpability, etc.

(d) As a result of death, desertion, or insanity of an enlisted man.

(4) Surveying officers will be appointed by base section commanders.

(5) Appointing officers will also act as reviewing officers.

(6) Since the revised short form of Report of Survey (WD, AGO Form No. 15) is most simple to execute and may be approved by commanding officers as specified above without action by a surveying officer, providing the promise is acceptable and the action justified, it is appropriate to use this form for losses of both expendable and nonexpendable supplies. This is in line with the policy to use fewer types of forms.

(7) For the purpose of supplying the commanding officer with the complete picture of adjustments necessary to bring the stock record card into agreement with the physical inventory, O.S.&D. reports for overages should be submitted together with the Report of Survey covering the shortages. The commanding officer or the accountable officer may find it desirable to have prepared extra copies of O.S.&D. Reports, and Reports of Survey concerning inventory adjustments and to maintain a separate file of such documents in order to study more readily the causes of excessive overages and shortages.

(8) The disposition of copies of approved Reports of Surveys will be—

(a) Originals of Reports of Survey will be forwarded by the reviewing authority, with supporting papers to CG SOS ETOUSA, for final review and filing. Only in case of disagreement with the recommendations of the approving authorities will the CG SOS ETOUSA take any action, in which case the approving authority will be notified of the action of CG SOS ETOUSA, whose action will be final.

(b) One copy to base section commander.

(c) One copy to the commanding officer of the depot for the stock record account.

(d) One copy to the Office of Chief of Service concerned.

(e) Local distribution as may be administratively required.

(f) See par 8e if subsistence is surveyed.

e. Warehouse Tally Record is a form especially prepared for use in this theater as combination warehouse stock record and stock locator record. This card con-

tains the stock location, receipts, issues, balance, and inventory balance. The warehouse tally record will be posted from the tally sheet incoming and tally out and will be maintained at a suitable central location for each individual item. If the depot is a multiple floor or multiple building operation, a card will be maintained on each floor or separate storage building for each item on the floor or in the particular building. A consolidated warehouse tally record will then act as a recapitulation of the various floor or building tally records. Inventory balances will be entered on the warehouse tally record in such manner as to be readily identified for facilitating checking with inventories.

f. Stock Record Card (WD, AGO Form No. 421) will contain certain information similar to the warehouse tally record except that posting thereto will be from debit and credit vouchers to the stock account. Postings will be by smallest units, "lb", "can #2", "ea", etc., and in case of sized items there will be a separate card for each size. Also, there will be separate cards for each branch or type of a commodity. The stock record cards will be so maintained as to reflect true balances of stocks on hand for each item. Maintenance of these property records will be supervised by the commanding officer of a quartermaster depot and the quartermaster supply officer of a general depot. It is mandatory that all postings to the stock record cards be made within 24 hours after supply transactions. The stock record card will contain after "MAC" the model stock under full scale operations and after "MIN" a figure based on present troop strength for guide purposes only. Quantities *ordered shipped* on distribution directives, task force shipments, and unusually large requisitions will be immediately deducted. A subsequent entry will be made to adjust the differences. Should amounts actually shipped differ from quantity so deducted, a subsequent change will be made to adjust the differences. See sub par j for instructions on entering inventory balances.

g. Authorization for Issue is a directive for issue prepared by the property officer and signed by the quartermaster supply officer or the commanding officer after requisitions and/or distribution directives (including ration returns) have been received and edited, checked for availability, and the voucher number assigned. The purpose of the form is to prevent removal of any items from a depot without the knowledge and authorization of the commanding officer or the quartermaster supply officer. Issuance of rations must not be delayed pending approval of the Authorization for Issue but confirmation should be made later on this form and it must be signed.

h. Register of Vouchers to Stock Accounts will be used to give the auditor the number and type of voucher employed during the particular audit period involved. It is likewise a control to the stock account.

i. Requisition Register will be utilized to record date of receipt, requisition number, to whom routed, remarks, and completion.

j. INVENTORY ADJUSTMENTS. Whenever an inventory is

taken (see AR 35-6520) any adjustment necessary to bring into agreement the quantity shown on the stock record account and the quantity of property actually on hand is made as follows:

(1) (a) The inventory balance will be entered on stock record cards in red ink immediately after the physical inventory and will be the new stock record balance. The inventory balance will be entered regardless of whether or not it agrees with stock record balance. On the same line, in the "Received" and "Issued" columns, the notation "As per inventory" will be written, and in the "Date" column the date of the inventory. If the inventory balance does not agree with the stock record balance the red ink entry will also be given a serial voucher number. No other entries will thereafter be made on the stock record to balance the inventory figures. In each case where the inventory balance does not agree with the stock record balance the necessary vouchers to adjust the discrepancy such as over, short and damaged reports and reports of survey, will be prepared as soon as practicable, and the vouchers required to adjust such discrepancy in full, whether one or several, will be given the same serial number assigned the red ink (inventory) entry and will be filed together in proper serial number order, with the other vouchers to the account. A single form is now prescribed for adjusting inventories in the zone of the interior. This is the Inventory Adjustment Report (WD, AGO Form No. 444).

(b) Inventories will be signed in full by all participating parties thereto whether officers, enlisted men, or civilians. An officer must supervise the inventories and therefore an officer's signature will appear on every inventory.

(2) *Overages and Shortages.* (a) *Overages.* Prepare an O.S.&D. Report for each class of property (class I, II, etc.), listing only the overages. Take up and account for the items as prescribed by AR 35-6520. In a convenient place on the form type the certificate "I certify that the overages listed hereon were discovered as a result of a physical inventory taken between _____

_____ (date)
and _____ (date). I further certify that these items have been taken up on the stock record account of the undersigned.

(Signed)
Accountable property officer."

(b) *Shortages.* Prepare a report of survey without any supporting documents for each class of property.

1. In box 5 (date and circumstances) type the certificate, "I certify that the above shortages, discovered as a result of a physical inventory taken between _____ and _____

_____ (date) _____ (date)
occurred without fault or neglect on the part of any person concerned with the receipt, storage or issue of the items listed hereon.

(Signed)
Accountable property officer."

2. Have the affidavit completed and sworn to before an adjutant or summary court. The certificate (box 6) may be omitted if the oath is subscribed to by the accountable or responsible officer.
3. On the reverse side, type the words "Approved under the provisions of par 9, AR 35-6640, to relieve all concerned of the responsibility and accountability for the listed shortages

(date)

(Signature of commanding officer)

(c) If the above procedure is utilized, the appointment of a surveying officer is not required, but if the commanding officer believes that the shortages are in excess of those which normally might be expected in the operation of the supply installation concerned, or if there is indication that shortages in certain items are too frequent he should appoint a surveying officer to take action in accordance with par 10, AR 35-6640. For the purpose of supplying the commanding officer with the complete picture of adjustments necessary to bring the stock record cards into agreement with the physical inventory, O.S.&D. Reports for overages should be submitted together with the R/S covering the shortages. The commanding officer or the accountable officer may find it desirable to have prepared extra copies of O.S.&D. Reports and R/S concerning inventory adjustments and to maintain a separate file of such documents in order to determine the reasons for excessive overages and shortages.

(d) The foregoing procedure is not applicable to adjusting monthly inventories in sales commissaries.

k. CLAIMS. (1) U. S. Forces and British Army sources.

(a) Claims against the railways on traffic originating with the US Forces or from British Army sources, are processed by the British Army Pay Office, Railways Branch, Aldershot, Hants, on the basis of information supplied by the concerned consignors and consignees.

(b) The consignee (not the RTO at destination) must insure that prompt notification of damage, shortage or loss is furnished on British Army Form G-978 (or letter in lieu thereof) to the local representative of the delivering railway and to the consignor. The time limits for such notification to the railway are:

1. Nondelivery of a consignment or any separately addressed package/s forming a part thereof . . . 28 days from date of *dispatch*.
2. Damage and/or pilferage or partial loss of a consignment other than above . . . 6 days from date of *delivery*.

(c) The consignor's copy of the Form G-978 (or letter in lieu thereof) is to be accompanied by the No. 4 copy of the Carriers' Note (G-980 or G-996) which the consignee will complete and on which he will record all discrepancies. If the shipment is damaged, the details thereof are to be shown, together with either the cost of repair to place in a serviceable condition or the estimated salvage value if repairs cannot be made.

(d) On receipt of the Form G-978 (or letter in lieu thereof) and the No. 4 copy of the Carrier's Note (G-980 or G-996) from the consignee, the proper procedure is for the consignor to determine whether exception was due to faulty documentation or to actual damage or loss in transit. If due to faulty documentation, the consignor so advises the consignee who, in turn, notifies the railway representative that the discrepancy has been adjusted and that no claim is to be pursued. If actual loss or damage is in evidence and liability seems to lie with the railway the consignor promptly forwards a copy of the Form G-978 (or letter in lieu thereof) and the No. 4 copy of the Carrier's Note (G-980 or G-996) to the British Army Pay Office, Railways Branch, Aldershot, Hants, stating the value of the missing or damaged goods. If the information as to value is not available, the No. 4 copy of the Carrier's Note (G-980 or G-996) is so indorsed, with indication thereon of the appropriate Supply Service (and its address) from which information as to value can be secured.

(e) The consignor and consignee should thereafter furnish, promptly and completely, such additional information as may be requested by the British Army Pay Office in conducting its investigation. The fact that a claim has been initiated does not relieve the consignor and the consignee from continuing efforts either to locate the missing supplies or to prove conclusively that they were lost. If subsequently located, all concerned should be so advised.

(f) Complete copies of all claim papers will be sent to Chief of Transportation Service, SOS, APO 887, as notice of existence of claims and for pursuance of such claims.

(2) *Air Ministry, Ministry of Aircraft Production, and other RAF sources.* (a) When supplies originate with the British Air Ministry, Ministry of Aircraft Production, or other RAF sources and there is damage, shortage or loss, the consignee notifies the local representative of the delivering railway within the appropriate time limit shown in paragraph 2b.

(b) A copy of such letter, together with the No. 4 copy of the Air Ministry Carrier's Note (Form 1486 or 1488), on which all exceptions are also to be noted, is forwarded direct to the Air Ministry, Finance Section, Tetbury, Glos., which will process the claim.

(3) *Ministry of Supply consignors.* In the case of damage, shortage or loss of shipments made by British Ministry of Supply consignors, the consignee follows the instructions shown in part 3 of the No. 4 (Advice) copy of the Ministry of Supply Carrier's Note (Form G-996 Supply).

(4) *Ministry of Works consignors.* In the case of damage, shortage or loss of shipments made by Ministry of Works consignors, the consignee follows the instructions shown in part 3 of the No. 4 (Advice) copy of the Ministry of Works Carrier's Note (Form G-980, Works).

(5) *Ministry of Food consignment notes.* Claims for losses and damage to perishable foodstuffs moving for the account of U. S. Forces on Ministry of Food (or its agents), consignment notes are made against the railway

by the Ministry of Food. Notice of loss or damage will be made promptly by the receiving depot or unit to the officer or agent of the Ministry of Food who arranged the movement and whose name and address is shown on the consignment document.

(6) *HM Stationery office consignors.* In the case of damage, shortage or loss on shipments made by HM Stationery office consignors, the instructions are followed which are printed on the reverse side of the delivery note which is posted to the consignee at the time the goods are dispatched.

(7) *NAAFI consignors.* In the case of damage, shortage or loss on shipments by NAAFI consignors, the proper procedure is:

(a) *Subsistence supplies.* The consignee notifies the carrier, in writing, within three days after the receipt of the goods. A copy of such notification is attached to the delivery note and forwarded to the US Accounts Branch, NAAFI, Ruxley Towers, Claygate, Esher, Surrey, which will process the claim.

(b) *Sales store supplies.* The consignee notifies the carrier, in writing, within three days after the receipt of the goods. Discrepancies are reported on O.S.&D. Reports (WD, QMC Form No. 445), which is forwarded to the Chief Quartermaster, SOS ETOUSA, APO 887 (Attention: Procurement Division), who will advise NAAFI, which will process the claim.

(8) *Miscellaneous.* In the case of nondelivery, discrepancy or damage on traffic moving from other than the above sources, the consignee advises the railway, locally, and the consignor, and furnishes such information as may be requested for use in the prosecution of the claim.

5. Initial-Issue Equipment—Records

a. *OFFICE OF THE CHIEF QUARTERMASTER.* (1) OCQM will furnish the base section quartermaster with lists of T/E and T/BA's for units arriving in this theater.

(2) OCQM will furnish the base section quartermaster with blank forms to be used as requisitions.

b. *BASE SECTION QUARTERMASTERS.* (1) Base section quartermasters will prepare requisitions for units based upon T/E's and T/BA's.

(2) Base section quartermasters will furnish the depot with at least four copies of the prepared requisition for the unit.

(3) Base section quartermasters will advise the depot where the unit is to be located; and how, when, and where, the supplies are to be delivered to the unit.

c. *DEPOTS.* (1) Depots will insure that all necessary personnel are familiar with procedure required for the handling of advance initial-issue equipment.

(2) All receipts and issues of T/BA initial issue equipment will be posted to the regular stock record cards and reported on the regular class II and IV inventory submitted to the OCQM.

(3) In addition to (2) above, depots will initiate and

maintain a separate record on each item of T/BA initial-issue equipment. All receipts from ports and all issues to units of advance initial-issue equipment will be posted to these records.

(4) The records as outlined in (3) above will be maintained on a cumulative basis, that is, receipts and issues for each period will be added to those of previous periods.

(5) Depots will submit to the OCQM, Supply Division, APO 871, concurrently with the regular class II and IV inventory, a separate report "Status of Initial Issues and Receipts of T/BA Equipment" showing per item the cumulative issues and receipts since the inauguration of the system.

(6) Depots will forward to the base section quartermaster, not earlier than four days before the deadline set for supplying a particular unit, an extract of items the depot is unable to fill. This delay is necessary to allow supplies directed by the OCQM to arrive.

(7) Depots will forward to the base section quartermaster, after issue to the unit is actually completed, one copy of the requisition showing the items issued to the unit and any remaining shortages.

(8) Depots will forward to the unit one copy of the requisition showing the items issued to the unit and remaining shortages.

Section II. SUBSISTENCE PROPERTY RECORDS AND COLD STORAGE PROCEDURE

6. Standardization of Subsistence Property Records

a. The procedure hereinafter indicated is prescribed for subsistence property records in all depots.

b. Subsistence will be carried on stock record cards by the smallest units such as each can, bottle, etc., except as otherwise indicated on inventory form. For each size can, or other unit, there will be a separate stock record. Warehouse tally records will, however, show required information by cases and similar units, except that a separate record by the smallest unit will be maintained in the break-down section.

c. Stock records covering cold store items will show number of packages received, issued, and on hand, and average weight for package. Supporting vouchers will be required for all issues including those other than full packages and will be extended to cover number of packages and pounds issued.

d. Stock record cards need not be established or maintained to record transactions of perishable subsistence procured from NAAFI for immediate troop consumption. A file of offsetting debit and credit vouchers will be kept in such manner as to be easily checked.

7. Accounting for Coffee

a. Green coffee and roasted coffee will be accounted for on separate stock record cards at depots. Also a stock record account will be maintained at each coffee roasting

plant at a depot. The latter will not make any distinction between green coffee and roasted coffee.

b. When green coffee is received at a depot it will be posted to the green coffee stock account as a debit from the tally sheet incoming. When transferred, regardless to what source, it will be posted to the green coffee stock account as a credit from the tally out.

c. When roasted coffee is received or issued from any source whatsoever, the same procedures will be followed as outlined for the green coffee account.

d. The stock account of the roasting plant will have receipts for green coffee entered thereon in the same manner as prescribed above. The account will not, however, distinguish between green and roasted coffee. The net result of processing green coffee by roasting and grinding will be tallied out, and the voucher will be posted as a credit voucher in the usual manner. Losses through roasting or grinding will be posted like an issue from a certificate placed on a tally-out, showing quantity of green coffee roasted, quantity of roasted coffee produced, and net loss through processing. The allowance for shrinkage in grinding and roasting will not exceed 17 percent for roasting and 1 percent for grinding. Depots will maintain a minimum of 7 days and a maximum of 14 days' supply of roasted coffee at all times.

8. Condemned Subsistence

a. Subsistence items, damaged or deteriorated, may be condemned as unfit for issue and dropped from accountability on a certificate signed by an officer of the Veterinary Service when available and otherwise by an officer of the Medical Service. Upon condemnation of any subsistence items, perishable or nonperishable, the depot will take steps to dispose of them immediately. Items which have no residual value as human or animal food will be disposed of as follows:

- (1) Metal scrap will be recovered from canned items.
- (2) Carton and sack goods, without scrap value, will be disposed of as debris.

b. The commanding officer of each depot will authorize the QMSO thereat and each post commander will authorize an officer of his command to contact the nearest British salvage office to arrange for disposition of condemned subsistence supplies.

c. If the condemned commodities are desired by the British authorities, tentative values will be arrived at by the U. S. officer and so charged to the British on Lend-Lease. No amount of damaged or deteriorated subsistence will be disposed of gratuitously and without Lend-Lease. The tentative values will be subject to adjustment if and when, at a later date, it may be determined that the original values set were unreasonable.

d. A list of British Ministry of Food Salvage offices may be found in appendix III.

e. A copy of Report of Survey (when salvage is not possible) or properly certified Tally Out (when items are turned over to British salvage) will be forwarded to the

Subsistence Division, OCQM, APO 871, in all instances of lost, pilfered, damaged, destroyed, or condemned subsistence.

f. All condemned subsistence will be transferred on a tally out and accounted for as prescribed for transfer of supplies to allied governments under the heading "Reciprocal Aid and Lend-Lease."

9. Tallying

a. Depots will be notified by the Transportation Service, Perishable Freight Section, London, of all dispatches from ports to cold stores of perishable supplies. Notification to depots of inter-cold-store shipments will be made by Subsistence Division, OCQM.

b. A bill of lading accompanies each shipment to the cold store and indicates the quantities of each component in the shipment. On arrival the load is tallied into the cold store by depot enlisted or civilian personnel, and also by the cold store personnel, both groups working independently. If the tally of the cold store personnel does not agree with the tally of the depot personnel, they will recount the shipment until the tallies do agree.

c. All shipments will be tallied into and out of the cold stores on a per case basis rather than by weights. It should be pointed out, however, that it is important that a fairly accurate *average net weight* per case be established for each size and type of package, in order that a fairly close check on weights may be obtained for inventory and issue purposes. Weighing shipments into and out of the cold stores slows up handling.

d. In checking supplies in and out of the stores, tally-ins and tally-outs will be used. Forms will be numbered serially in the depot office before being issued for use.

e. The following data will be included on tally-ins:

- (1) Receiving date.
- (2) Carrier.
- (3) Consignor.
- (4) Name or number of ship.
- (5) Car or truck number.
- (6) Seal numbers.
- (7) Cold store number.
- (8) Type of package (box, crate, etc.).
- (9) Number of packages.
- (10) Description of contents.
- (11) Average case net weights.
- (12) Checker's signature.

(Packages received damaged should be shown as separate items.)

f. The following information should be shown on tally-outs:

- (1) Withdrawal date.
- (2) Consignee.
- (3) Supply depot requisition number or directive number.
- (4) Depot delivery order number.
- (5) Name of carrier.
- (6) Carrier's signature.

(7) Total net weight (average net weight x number of packages).

(8) If case packages are not standard, weights shown on each package (gross, net and/or tare) are to be entered on the tally.

(9) Cold store number.

(10) Checker's signature.

g. When tallying, the checker should proceed as follows:

(1) Stand at a point permitting vision of each article as it passes.

(2) Place a tally on the sheet for each package as it passes.

(3) Carefully observe the condition of each container or package.

(4) Arrange with the cold store manager to set aside all broken containers, dripping packages denoting defrosting, and dirty, damaged or pilfered packages.

(5) Arrange to have all questionable packages placed in storage separately for detailed inspection by an officer of the supply depot.

h. It is desirable for two men to work as a team when tallying, one counting containers to the other who tallies. The attention of neither is distracted from his work and speed of movement is increased. This insures accuracy as well as more careful observance of the condition of the supplies.

10. Advices

All advices and stock statements are to be clearly marked "U. S. Army supplies."

a. WAREHOUSE RECEIPTS. (1) Warehouse receipts will be forwarded by the cold store manager to the commanding officer, U. S. Army depot, on date of receipt of supplies if possible but not later than noon of the following day.

(2) Warehouse receipts are to state the following particulars:

(a) Date of receipt.

(b) Ship's name and port of discharge.

(c) Carrier.

(d) Type of package (box, crate, etc.).

(e) Number of packages.

(f) Description of contents.

(g) Average unit net weight (excluding fruit and shell eggs).

(h) Total net weight (based on average) in pounds (except fruit and shell eggs which will be package count only).

(i) Packages received in damaged, short or other unsatisfactory condition, are to be shown as a separate item and not included in the quantity received in a proper state. Should the quantity received vary from the quantity advised on way bills or tally-outs, the number short or over is to be reported on an O.S.&D. report.

b. DELIVERY ADVICES. (1) Delivery advices are to be

forwarded by the cold store manager to the commanding officer, U. S. Army depot, on date of delivery of supplies if possible but not later than noon of the following day.

(2) The carrier will receive two copies of the delivery advice, he will give one copy to the USA representative receiving the supplies.

(3) Delivery advices are to state the following particulars:

(a) Date of delivery.

(b) Carriers (service agent or USA vehicle).

(c) Unit to whom delivery is made.

(d) USA delivery order number.

(e) Type of package (box, crate or wrapping).

(f) Number of packages.

(g) Description of contents.

(h) Average unit net weight (except in case of fruit, shell eggs, etc.).

(i) Total net weight (based on averages) in pounds except in case of fruit, shell eggs, etc.).

(j) If packages are not of standard weight all marked weights (gross, net and/or tare) are to be taken and noted on the advice.

c. STOCK STATEMENT. (1) A periodic statement is to be forwarded by the cold store manager to the depot commander giving the information:

(a) Quantity received at the cold store during the inventory period.

(b) Quantity delivered.

(c) Quantity on hand as of the close of business on the 8th, 15th, 23d and last day of each month.

(2) A separate report will be rendered on each component and on each variety thereof.

11. Stock Records

a. The initial entry on the stock record account is established from tallies into the cold store of initial shipments. A proper tally of all subsequent incoming shipments and outgoing deliveries enables depot to maintain an accurate book inventory of stocks on hand at all times. All tallies and tally-outs are made on a "per case" basis and not on a "pound" or "weight" basis.

b. The keeping of accurate stock records obviates the necessity of taking physical inventories of stocks in the cold stores at *stated periods*. (See *c* below.)

c. Should a shortage in a component occur in a cold store, it will be replaced by the Ministry of Food from British stocks.

d. In view of the fact that the Ministry of Food has guaranteed to replace any losses or shortages, the chief concern will be that supplies are properly handled at the cold storage to insure U. S. forces being supplied with food of unquestionable quality.

e. It is deemed advisable, however, to obtain a reconciliation of the stock in cold stores with the stock card records occasionally.

(1) Physical inventories will be taken of stocks on hand, wherever it is possible to do so without an excessive amount of rehandling or undue labor. Where stocks are excessive, taking of inventories will be deferred until stocks are depleted to a point where they can be taken. If the balance of stocks (packages, not pounds) actually on hand is less than balances indicated on the cold store and depot stock cards, a report will be submitted to the OCQM by the depot indicating such shortages in order that steps may be taken to obtain replacements from the Ministry of Food.

(2) Keep old and new stocks segregated in the cold stores as shipments of new supplies arrive, in order that book balances on old stocks may be closed as those stocks become exhausted.

12. Reports

The cold store manager will have no contacts with or render any reports to this office. All reports for the U. S. will be rendered to the depot headquarters, which, in turn, will furnish this office with a periodic stock record report of stocks on hand of each component in the cold store, using Q-Sub Form No. 31d.

13. Short and Damaged Stocks

Short, damaged, and pilfered packages will be reported to depot commanders by depot representatives at cold stores daily. This report should indicate whether the damage or loss occurred en route to the cold store or after arrival at the cold store.

APPENDIX II

WAREHOUSING AND SAFE STORAGE PERIODS

Section I. ITEMS SUITABLE FOR OPEN STORAGE IN THE UNITED KINGDOM AND GEOGRAPHIC AREAS WITH SIM- ILAR CLIMATE

As a result of storage experience in the United Kingdom, the tables below may be used as an open storage index for quartermaster items.

1. The following is a list of subsistence items best suited for open storage:

<i>Item</i>	<i>Unit</i>	<i>Item</i>	<i>Unit</i>
Apple butter	can	Luncheon meat	can
Apple nuggets	can	Mackerel	can
Applesauce	can	Marmalade	can
Apricots	can	Oil, vegetable, salad	can
Bacon	can	Onions, dehydrated	can
Beans, lima puree	can	Orange and grapefruit juice	can
Beef, corned	can	Orange juice	can
Beef, roast	can	Ovaltine	can
Beets, dehydrated	can	Peaches	can
Biscuits, type C sq.	can	Peanut butter	can
Bouillon cubes	can	Pears	can
Butter	can	Pickles	can
Cabbage, dehydrated	can	Pineapple juice	can
Candy, hard	can	Pineapple, sliced	can
Carrots, dehydrated	can	Plums	can
Catsup, tomato	can	Potatoes, sweet	can
Cheese, processed	can	Potatoes, sweet, dehydrated	can
Cherries, sweet	can	Potatoes, white	can
Chicken boned	can	Potatoes, white, dehydrated	can
Coffee R & G	can	Prunes, dry	can
Coffee soluble	can	Prunes, in sirup	can
Cranberry sauce	can	Rations Type C	
Cranberry flakes, dehydrated	can	Type K	
Crystals, lemon	can	Type 5-in-1	
Dessert, powdered	can	Type 10-in-1	
Eggs, dehydrated	can	Salmon	can
Figs	can	Sardines	can
Fruit cocktail	can	Sauerkraut	can
Grapefruit	can	Sausage, pork	can
Grapefruit juice	can	Sausage, Vienna	can
Grape juice	can	Sirup	can
Hash, corned beef	can	Soups, assorted	can
Hash, meat and vegetable	can	Soup, hydehydrated	can
Hominy, dehydrated	can	Stew, meat and vegetable	can
Jam and jelly	can	Tea	can
Lard or lard substitute	can		

<i>Item</i>	<i>Unit</i>	<i>Item</i>	<i>Unit</i>
Tomato cocktail	can	Tuna fish	can
Tomato cocktail, dehydrated	can	Turkey, boned	can
Tomato puree	can	Vinegar	kg

2. The following is a list of subsistence items requiring closed storage:

<i>Item</i>	<i>Unit</i>	<i>Item</i>	<i>Unit</i>
Apricots, dry	bx-not canned	Mustard, prepared	bot or jar
Apples, dry	bx-not canned	Noodles, egg	ctn
Beans, dry, all varieties	sk-jute or cloth	Nutmeg	pkg
Beans, kidney, dry	lami- nated paper bg	Oats, rolled	ctn
Biscuits, Type "C"	ctn	Onion, powdered, dry	ctn
Candy and gum ration kits		Orange juice, con- centrated	jar or bot
Candy, hard	fiber drum	Peaches, dry	bx-not canned
Catsup	bot	Pepper, black	can or bx
Cereal, wheat, uncooked	ctn	Pickles, all varieties	jar
Cereal, prepared, assorted	ctn	Powder, baking	can or pkg
Chili powder	can	Prunes, dry	bx-not canned
Cinnamon	can	Raisins, dry	bx-not canned
Cloves	can	Rations, type 12-in-1	
Cocoa	ctn	Rations, type D	
Coffee, R & G	ctn	Rice, dry	laminated paper bg
Corn meal	pkg or bg	Rice, dry	sk-jute or cloth
Cornstarch	pkg	Salt	sk-jute or cloth
Crackers, soda or graham	pkg	Salt	laminated paper bg
Dessert powder	ctn	Salt, celery	pkg
Extracts, lemon and vanilla	bot	Sauce, concentrated	bot
Flour	lami- nated paper bg sk	Seasoning, poultry	can or bx
Flour	can	Soda, baking	pkg
Ginger	can	Spaghetti	ctn
Lard or substitute	ctn	Sugar	sk-jute or cloth
Macaroni, dry	ctn	Sugar, brown	laminated paper bg
Milk, evaporated	can	Sugar, confectioners'	pkg
Mustard, dry	ctn	Sugar, granulated	lami- nated

Item	Unit	Item	Unit
Tea (British)	paper bg bx or ctn not canned	Vinegar	pkg bot
Tobacco kits		Vitamin tablets	bot
Toilet goods ration kits		Yeast	ctn, drum, and canned
Vanilla tablets	can or		

3. The following is a list of subsistence items suitable for outside storage if properly covered and when required for short periods of time:

Apples, dry or dehydrated	can	Corn	can
Apples, water packed	can	Hominy, lye	can
Apricots, dry	can	Milk, malted, powdered	can
Asparagus	can	Milk, skim, powdered	drum
Beans, kidney	can	Milk, whole, powdered	can
Beans, lima	can	Oysters	can
Beans, string	can	Peaches, dried	can
Beans, string puree	can	Peas	can
Beans, w/o pork	can	Peas puree	can
Beets	can	Pumpkin	can
Beets, puree	can	Raisins, dry	can
Berries, water packed	can	Spinach	can
Carrots	can	Squash	can
Carrot puree	can	Sugar, lactose	can
Cherries, sour, water packed	can	Tomatoes	can
Chile con carne w/o beans	can	Tomato juice	can
Clams	can	Vegetables, mixed	can

4. The following is a list of items of clothing and equipment and regular supplies suitable for open storage:

INDIVIDUAL CLOTHING:

Overshoes, arctic

ORGANIZATIONAL CLOTHING:

Device, foot measuring outfits
Gloves, waterproof, rubberized
Headbands, helmet, steel, M1
Helmet, steel, M1 (body)
Liners, helmet, steel, M1
Mittens, asbestos

INDIVIDUAL EQUIPMENT:

Bag, barrack
Bag, canvas field, od
Belts, cartridge, cal. .30 dismounted
Belts, cartridge, cal. .30 mounted
Belts, magazine, BAR
Belts, pistol, revolver, or carbine
Cans, meat
Canteens
Carriers, pack
Covers, canteen, dismounted
Covers, canteen, mounted
Cups
Haversacks

Pockets, magazine double web
Pouches, first aid
Rolls, bedding, waterproof
Straps, carrying, bag, field
Suspenders, belt
Tags, identification
Tent, shelter half

MISCELLANEOUS ORGANIZATIONAL EQUIPMENT:

Axes, intrenching
Bags, canvas, mail
Bags, canvas, water sterilizing
Bandoleer, gas grenade
Bar, sandfly
Basins, canvas, folding
Bolos, Philippine
Buckets, canvas, folding 8 qt.
Carriers, ax, intrenching
Carriers, pickmattock, intrenching
Carriers, shovel, intrenching
Carriers, wire cutter
Case, canvas, dispatch
Cases, magazine, 50 rd. w/shoulder strap
Cases, magazine, 5-pocket—20 rd.
Clubs, MP
Flies, tent, storage (extra)
Flies, tent, wall, large (extra)
Flies, tent, wall, small (extra)
Machetes, 18" blade M1942
Paulins, canvas, large
Paulins, canvas, small
Pickmattock, intrenching
Pins, tent, shelter wood
Pins, tent 16"
Pins, tent 24"
Poles, tent, ridge, 7' screen latrine
Poles, tent, ridge, 9' screen latrine
Poles, tent, ridge, 9' wall, small
Poles, tent, ridge, 11'4" wall, small
Poles, tent, ridge, 14' wall, large
Poles, tent, ridge, 14' jointed with sleeve
Poles, tent, ridge, 15'
Poles, tent, shelter
Poles, tent, ridge, storage complete 208x3½"
Poles, tent, upright, 4'9"
Poles, tent, upright, 5'3", assembly
Poles, tent, upright, 21', assembly
Poles, tent, upright, 12'3", hospital ward
Poles, tent, upright, 12'3", jointed with sleeve
Poles, tent, upright, 7', latrine screen
Poles, tent, upright, 12', pyramidal
Poles, tent, upright, 5'5", storage
Poles, tent, upright, 13', storage
Poles, tent, upright, 13', storage, jointed
Poles, tent, upright, 12', wall, large
Poles, tent, upright, 9', wall, small
Poles, tent, shelter
Ropes, drag w/shoulder strap

Scabbards, bolo
 Scabbards, rifle
 Scabbards, submachine gun
 Screens, latrine complete w/pin and poles
 Sheath, machete
 Shovel, intrenching
 Sling, bugle or trumpet
 Sling, carrying machine gun and ammunition
 Sling, color web
 Tent, assembly complete
 Tent, command post
 Tent, hospital ward
 Tent, hospital ward, 11'x50'x16' w/cover complete
 Tent, pyramidal w/bag
 Tent, pyramidal M1934, 11'x16' w/bag complete w/pins and poles
 Tent, storage, w/bag
 Tent, storage, w/bag complete w/fly pins and poles
 Tent, wall, large
 Tent, wall, large, complete w/fly pins and poles
 Tent, wall, small
 Tent, wall, small complete w/fly pins and poles

BARRACK EQUIPMENT:

Bedstead, single, aluminum finish
 Cots, canvas, folding

REGULAR SUPPLIES:

Arrester, spark
 Ax, camp or hunter, handled
 Ax, hand chop, single bit, standard grade, 4-lb.
 Bars, crow, pinch point
 Bars, crow, wedge point
 Bars, wrecking, type D gooseneck $\frac{3}{4}$ " by 24"
 Basins, wash
 Brooms, corn
 Brooms, rattan push w/o handle
 Brushes, dust, counter
 Brushes, kitchen, wire
 Brushes, marking
 Brushes, sanitary or toilet, type II, 17" handle
 Brushes, scrubbing, floor
 Brushes, sweeping, floor w/o handle, 18"
 Buckets, general purpose, galvanized, w/o lip, 14-qt.
 Bulb, electric, hand, lantern
 Candles, type 2
 Cans, galvanized, w/cover, 10-gal.
 Cans, galvanized, w/cover, 16-gal.
 Cans, galvanized, w/cover, 24-gal.
 Cans, galvanized, w/cover, 32-gal.
 Carbon, tetrachloride
 Cement, liquid, tent-patching
 Cleavers, butcher, 8" blade
 Container, water, 5-gal.
 Compound, rust, protective
 Cups, coffee
 Diggers, post hole
 Dippers, tea, 2-qt.
 Disinfectant, pine tar, 5-gal.
 Dubbin, 2-oz. can

Forges, blacksmith, portable, type 2
 Funnel, tin, 1-qt.
 Glassware, tumbler, water
 Gloves, lantern, gas
 Grater, nutmeg, tin, 5"
 Grater, vegetable
 Grates, wood-burning
 Griddle, cast-iron, 20"x30"
 Grinders, brake horsepower, diameter of wheel, 6"
 Grindstone, nonglaze
 Hammers, carpenters, claw lb.
 Handle, ax, single bit 36"
 Handles, broom, rattan, push, 51
 Handle, hammer, blacksmith 16"
 Handle, hammer, carpenter claw 14"
 Handle, hatchet claw 14"
 Handles, mop, spring lever type
 Handles, pick 36"
 Handles, rake, garden, length 66"
 Handles, shovel, D grip 30"
 Handle, sledge, 36"
 Hatchets, broad or bench $5\frac{1}{2}$ "
 Hatchets, claw 4" cut edge
 Hooks, box 10" length
 Hooks, brush, handled $11\frac{1}{2}$ "
 Hooks, grass, curved blade
 Hooks, hay
 Irons, clinching
 Knife, saddlers', round, 5"
 Ladder, step, 8-ft.
 Ladles, diameter of bowl, $3\frac{3}{4}$ "
 Ladles, diameter of bowl, 6"
 Lanterns, kerosene
 Locks, pads, brass, $1\frac{1}{2}$ "x2"
 Mallet, carpenter, round $3\frac{1}{2}$ "x $5\frac{1}{2}$ "
 Mashers, potato pounder, $3\frac{3}{8}$ "x18"
 Mattock, handled, cutter type 2
 Mattock, handled, pick type 2
 Measure, tin-lipped, 4-qt.
 Measure, tin-lipped, 2-qt.
 Measure, tin-lipped, 1-qt.
 Measure, tin-lipped, $\frac{1}{2}$ -qt.
 Mops, cotton, w/o handle
 Mover, car
 Oil, neat's-foot
 Pans, baking and roasting, 3"x12"x24" (12 rations)
 Pans, baking and roasting, aluminum w/cover
 Pans, dust, hood pattern, 12"
 Pans, fry, diameter 11"
 Pan, tin, bake
 Picks, handled, R.R., 6 to 7 lbs.
 Pipe, stove, 4"x24"
 Pitcher, water, $5\frac{1}{2}$ -qt.
 Plate, cook-pot, splash for 15-gal.
 Plate, dinner, $9\frac{3}{8}$ " diameter
 Plate, soup, 9" diameter
 Platter, meat
 Pliers, combination, slip-joint, wire-cutting type, 6"
 Pliers, side-cut, length 8"

Pokers, stove, 20"
 Polishes, metal, liquid
 Pot, cook, 15-gal., aluminum
 Pot, marking, tin
 Pot, mustard, unhandled
 Pots, stock, w/cover, 10-gal.
 Pots, stock, w/cover, 15-gal.
 Puller, nail, size 18"
 Rake, fire
 Rakes, garden, steel, 14 teeth
 Rolls, commissary
 Safe, field, key lock
 Safe, office, key lock, large, medium or small
 Saucer, coffee, 7" diameter
 Scale, platform, 2,000 lbs.
 Scoop, flour or sugar
 Scrapers, dough, 6"
 Screw driver
 Scythes, bush
 Scythes, grass
 Scythes, weed
 Shaker, pepper
 Shaker, salt
 Shears, tinner, straight cut, type A
 Shovels, D handled, square point, #2
 Shovels, D handled, round point #2
 Shovels, L handled, round point, #2
 Skimmers, 5"x15"
 Sledges, blacksmith, double-faced, 6 to 8 lbs.
 Spades, garden, square point, D handled
 Stoves, tent, M-1941
 Stoves, tent, Sibley
 Table, camp, folding
 Table, mess
 Table, office, wood
 Tray, mess, 6 compartments
 Truck, barrel, warehouse, 2-wheel
 Truck, barrel, warehouse, 4-wheel
 Truck, platform, warehouse, 1-ton
 Tub, foot, rubber
 Vises, pipe, capacity 1/8" to 2 1/2"
 Washers, iron or steel block plate, round, 3/8"x
 1 3/4"x1 1/4"
 Wedges, steel, woodchopper
 Wheelbarrow, wood frame and steel tray, 4 cu. ft.
 Wrenches, pipe

Section II. SAFE STORAGE PERIODS FOR SUBSISTENCE SUPPLIES IN THE UNITED KINGDOM

5. The following is a table giving safe storage periods for nonperishable subsistence supplies in the United Kingdom:

BAKING SUPPLIES:

Item	Safe storage period
Flour, natural, wheat	6 mo.
Flour, white	6 to 9 mo.
Lard or lard substitute, canned	9 mo.

Item	Safe storage period
Lard, or lard substitute, war type	9 mo.
Milk, powdered, skimmed	1 yr.
Salt, table	Indefinitely
Sugar, in bags	1 yr.
Yeast, compressed	1 mo.
Yeast, dry, active	6 mo.

BEVERAGES AND JUICES:

Cocoa	2 yr.
Coffee, green	5 yr.
Coffee, R. & G., canned	3 to 4 mo.
Coffee, R. & G., bulk	2 mo.
Crystals, lemon, canned	1 yr.
Fruit juices, canned	1 to 2 yr.
Tea in chest	1 yr.

CONDIMENTS:

Catsup	1 yr.
Extracts, lemon and vanilla	2 yr.
Mustard, prepared	1 yr.
Sauce, concentrated	2 yr.
Sauce, kitchen	2 yr.
Spices	2 to 3 yr.
Vinegar	1 to 5 yr.

CEREALS:

Cereal, prepared, package	
Oats, rolled, tin	1 to 2 yr.
Wheat, whole and uncooked, pkg.	3 to 6 mo.

DAIRY PRODUCTS:

Butter, canned	1 to 1 1/2 yr.
Cheese, canned	1 to 1 1/2 yr.
Milk, evaporated, canned	9 mo.
Milk, whole, powdered, tin	12 mo.

FRUITS, DRY AND CANNED:

Fruits, canned in sirup or water	2 yr.
Fruits, dehydrated	6 to 12 mo.
Fruits, dry, canned	2 yr.
Fruits, dry, bulk	6 to 12 mo.

MEAT AND FISH, CANNED:

Bacon	2 to 3 yr.
Beans w/pork	2 yr.
Beef, corned	2 yr.
Chicken	12 to 18 mo.
Chile con carne	2 yr.
Corned beef hash	2 yr.
Luncheon meat	18 to 24 mo.
Mackerel	2 yr.
Meat and vegetable hash	2 yr.
Meat and vegetable stew	2 yr.
Oysters and clams	1 yr.
Salmon	2 yr.
Sardines	2 yr.
Sausage, pork	1 1/2 yr.
Sausage, Vienna	2 yr.
Shrimp	1 yr.
Tuna fish	2 yr.

<i>Item</i>	<i>Safe storage period</i>
MISCELLANEOUS:	
Baking powder, tin	2 yr.
Bouillon cubes, tin	2 yr.
Candy, hard, tin	1 yr.
Cornstarch	3 yr.
Crackers, type "C", sq. package	1 to 2 yr.
Desserts, tin:	
Butterscotch	1 to 2 yr.
Chocolate	1 to 2 yr.
Oil, salad, tin	2 yr.
Pickles, tin:	
Sweet or mixed dill or sour, chow-chow or relish	1 yr.
Rice, dry, bags, and package	2 yr.
Spaghetti, macaroni, bulk	1 yr.
Spaghetti, macaroni, tin	2 yr.

SPREADS, CANNED:	
Marmalade	} 2 yr. (U. S. pack) 1 yr. (British)
Jams	
Jellies	
Preserves	
Peanut butter	1 yr.
Sirup, British	2 yr.
Sirup, United States	1 yr.

VEGETABLES, CANNED, DRY, DEHYDRATED:

Vegetables, canned	2 yr.
Asparagus	
Beans, kidney	
Beans, lima	
Beans, string	
Carrots	
Corn	
Hominy, lye	
Peas	
Vegetables, canned	1 to 1½ yr.
Beets	
Okra	
Potatoes, Irish	
Potatoes, sweet	
Pumpkin	
Sauerkraut	
Spinach	
Squash	
Tomatoes	
Vegetables, dehydrated, tin	1 to 2 yr.
Vegetables, dry, bags	1 yr.

EMERGENCY RATIONS:

C Ration	18 mo.
D Ration	18 mo.
K Ration	24 mo.
5-in-1 Ration	18 mo.

6. The following is a table giving safe storage periods for perishable subsistence supplies in the United Kingdom:

Bacon, war (salt packed)	6 to 9 mo. in chill storage, 4 mo. in ordinary storage.
Beef, frozen	12 to 18 mo. at 14° to 16° F.

<i>Item</i>	<i>Safe storage period</i>
Butter, 92 score	6 to 8 mo. at 14° to 16° F.
Cheese	6 to 9 mo. at 35° to 40° F. 1 mo. in ordinary storage.
Ham, oversea (salt packed)	6 to 9 mo. in chill storage, 3 mo. in ordinary storage.
Lard other than substitute	8 to 10 mo. at 14° to 16° F.
Pork loins, frozen	12 to 18 mo. at 14° to 16° F.
Poultry, New York dressed	6 mo. at 14° to 16° F.

The above tables of safe storage periods for nonperishable and perishable subsistence supplies are taken from Depot Operations Manual, HQ, SOS ETOUSA OCQM, 1 Dec. 1943.

Section III. SAFE STORAGE PERIODS IN THE TROPICS

7. As a result of storage experience in the Southwest Pacific area, the following table may serve as an indication of what are considered safe storage periods in the Tropics:

<i>Item</i>	<i>Safe storage period</i>
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BAKING SUPPLIES:

Corn meal	9 mo.
Flour, in bags	2 mo.
Flour, in tins	18 mo.
Sugar, brown	3 mo.
Sugar, granulated	2 yr.

BEVERAGES:

Coffee, green	2 yr.
Coffee, roasted	2 mo.
Coffee, roasted in tins	3 mo.
Tea, black	2 yr.
Tea, green	1 yr.

CONDIMENTS:

Spices	2 yr. av.
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CEREALS:

Corn flakes	1 mo.
Oatmeal	1 mo.
Shredded wheat	1 mo.

FRUITS, CANNED:

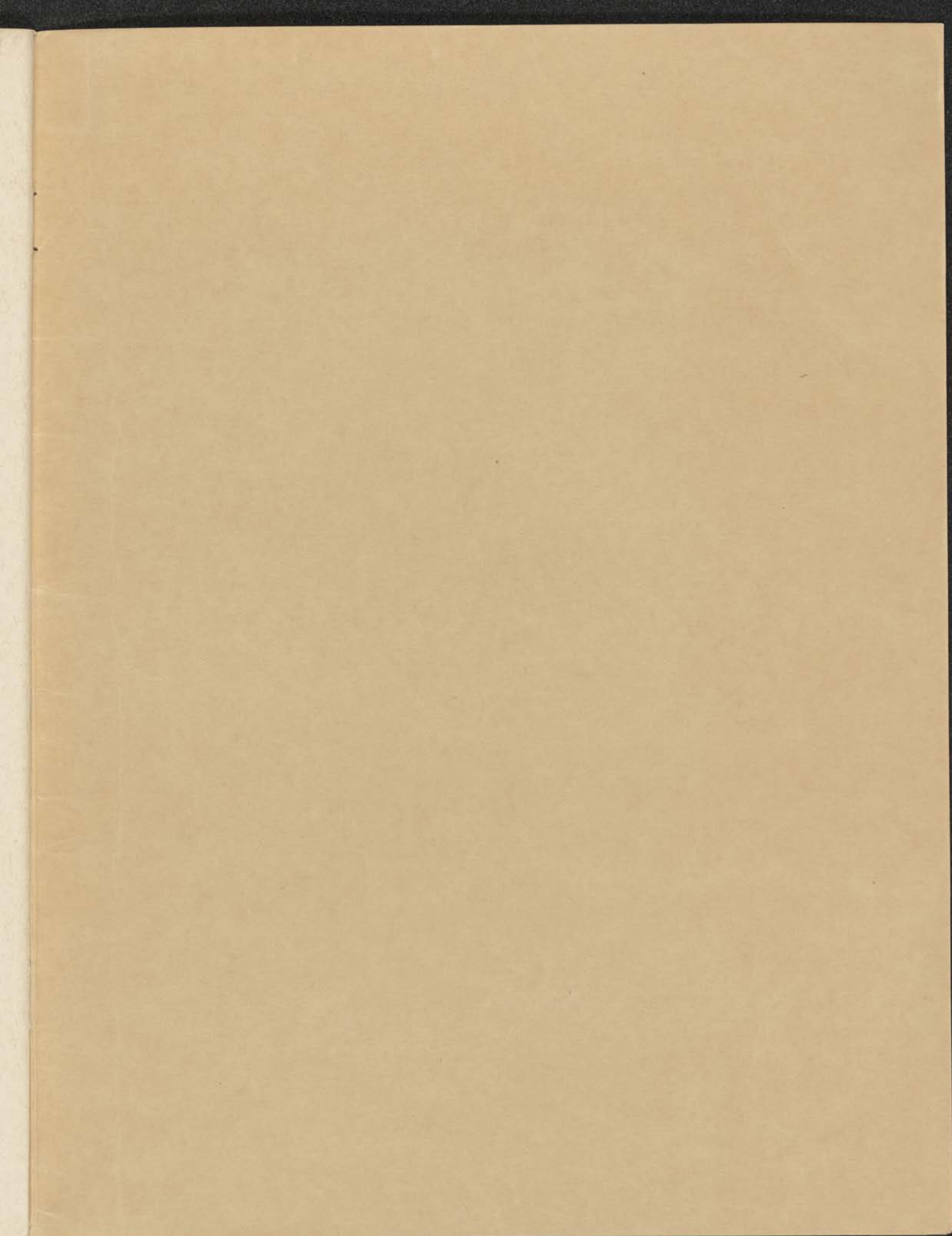
Apples	1 yr.
Apricots	1½ yr.
Blackberries	9 mo.
Blueberries	1 yr.
Cherries, black	9 mo.
Cherries, sour	9 mo.
Cherries, sweet	15 mo.
Cranberry sauce	1 yr.
Fruit salad	9 mo.
Grapes	9 mo.
Grapefruit	9 mo.
Peaches	1½ yr.
Pears	2 yr.
Pineapple	1 yr.
Plums	9 mo.
Rhubarb	9 mo.

<i>Item</i>	<i>Safe storage period</i>	<i>Item</i>	<i>Safe storage period</i>
FRUITS, DRY:		Beans	2 yr.
Apples	1 mo.	Beans, pork	2 yr.
Apricots	1 mo.	Beets	15 mo.
Peaches	1 mo.	Cabbage	1½ yr.
Prunes	2 mo.	Carrots	2 yr.
Raisins, seeded	1 mo.	Cauliflower	1½ yr.
Raisins, "whole"	2 mo.	Corn	3 yr.
Other dried fruits	1 mo.	Hominy	3 yr.
MEAT AND FISH, CANNED:		Olives, ripe	1½ yr.
Beef, corned	2 yr.	Peas	3 yr.
Clams	1 yr.	Pickles	6 mo.
Corned beef hash, Vienna style	1 yr.	Potatoes, sweet	1½ yr.
Crab	1 yr.	Pumpkin	1 yr.
Oysters	1 yr.	Sauerkraut	9 mo.
Salmon	2 yr.	Spinach	1½ yr.
Sardines	6 mo.	Squash	9 mo.
Sausage	1 yr.	Tomatoes	15 mo.
Shrimps	6 mo.	Vegetables, assorted	1 yr.
Tongue	1 yr.	MISCELLANEOUS:	
Tuna	2 yr.	Beans, dry	9 mo.
Veal loaf	2 yr.	Macaroni	3 mo.
VEGETABLES, CANNED:		Noodles	1 mo.
Asparagus	2 yr.	Rice, polished	6 mo.
		Starch	3 yr.

APPENDIX III

BRITISH MINISTRY OF FOODS SALVAGE OFFICES

<i>Food Division</i>	<i>Address of Salvage Office</i>	<i>Food Division</i>	<i>Address of Salvage Office</i>
Northern	2 Eslington Terrace, Newcastle-on-Tyne, 2	Eastern	City Hall, Norwich
N. Eastern	Bridge Chambers, 2d Floor Alfred Gelder Street, Hull	Eastern II	Cathedral School, Victoria Road, Chelmsford, Essex
Do.	7 New Street, York	London	P.L.A. Building Trinity Square, (A) Dock Area London, E.C. 3
Do.	Carver Street Schoolrooms, Rockingham Lane, Sheffield, 1	(B) Remainder	60 Princes Gates, London, S.W. 7
Do.	City of Leeds School, Woodhouse Lane, Leeds, 2	S. Eastern	Bishops Croft, Camden Park, Turnbridge Wells, Kent
N. Midland	Burton House, Newcastle Circus, Nottingham	S. Western	3 Barton Crescent, Mannamead, Plymouth
N. Western	45 Renshaw Street, (Liverpool) Liverpool, 1	Do.	34 Tyndalls Park Road, Bristol, 8
N. Western	Dominion House, Whitworth Street, (Manchester) Manchester, 1	Southern	Parkhurst, Bath Road, Reading, Berks
Midland	Lombard House, Gt. Charles Street, Birmingham, 3	Do.	60 Cambridge Road, Southampton
N. Wales	"Barrance," North Road, Caernarvon	Scotland W	1 Princes Square, Buchanan Street, Glasgow, C. 1
S. Wales	Food Control Office, St. Margarets, Eaton Crescent, Swansea, Glam.	Scotland SE	Lothian House, Lothian Road, Edinburgh, 3
Do.	66 Cathedral Road, Cardiff	Scotland N	Craigiebarn, Craigiebarn Road, Dundee
Eastern	Corpus Christi College, Cambridge	Scotland NE	28 Albyn Place, Aberdeen
		Scotland E	Craigiebarn, Craigiebarn Road, Dundee
		N. Ireland	85 Malone Road, Belfast



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