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FM 10-33

DEPARTMENT OF THE ARMY FIELD MANUAL

AIRBORNE DIVISION
QUARTERMASTER AIR EQUIPMENT
SUPPORT COMPANY

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HEADQUARTERS, DEPARTMENT OF THE ARMY

NOVEMBER 1961

FIELD MANUAL
No. 10–33

HEADQUARTERS,
DEPARTMENT OF THE ARMY
WASHINGTON 25, D.C., *11 December, 1961*

AIRBORNE DIVISION QUARTERMASTER AIR EQUIPMENT SUPPORT COMPANY

* This manual supersedes FM 10–33, 30 March 1959

CHAPTER 1

INTRODUCTION

Section I. GENERAL

1. Purpose and Scope

a. This manual provides information necessary for the employment and operation of the Airborne Division Quartermaster Air Equipment Support Company (TOE 10–337).

b. The manual covers the organization, mission, training, and administration of the company. It describes in detail company operations and delineates duties of key personnel.

2. Modification

Tactical and logistical developments and changes in Army organization, concepts, and methods of operation will require modifications of the doctrine presented herein. Field experience may also suggest modification and improvement. Users of the manual are requested therefore, to forward suggestions and recommendations direct to the Commanding General, Quartermaster Training Command, U.S. Army, Fort Lee, Va.

3. Application

The policies and procedures contained in this manual are intended as a guide and should not be considered inflexible. Conditions under which the company may operate will vary and each situation must

be met by an intelligent interpretation and application of basic operating principles. The material presented herein is applicable to nuclear and nonnuclear warfare environments.

Section II. THE UNIT

4. Mission

The mission of the company is to support the airborne division by providing the following:

a. Requisition, inspection, packing, storage, maintenance, and issue of quartermaster air delivery equipment required for air delivery of personnel, supplies, and equipment.

b. Inspection and technical assistance in packing, rigging, and loading supplies and equipment.

5. Capabilities

The company is capable of—

a. Requisitioning, receiving, storing, and issuing quartermaster air delivery equipment.

b. Inspecting and packing parachutes.

c. Inspecting and providing technical assistance in packing, rigging, and loading supplies and equipment.

d. Providing organizational maintenance for quartermaster air delivery equipment.

e. Supervising and assisting in the recovery and evacuation of quartermaster air delivery equipment after drop.

f. Providing flexibility to support major elements of the airborne division.

g. Fighting as infantry when required, and defending itself and its installations against hostile ground attack.

6. Assignment and Control

The company is organic to the Airborne Division Support Command (TOE 29–51). The basis of allocation is one company per command. For its internal operations, the company is under the command of the company commander. Operational control and technical supervision of company activities in support of division elements, however, rests with the division parachute officer who serves on the special staff of the commanding officer of the airborne division support command.

7. Related Units

The airborne division quartermaster air equipment support company has a direct relationship to the following types of units:

a. Quartermaster Aerial Supply Company. The Quartermaster Aerial Supply Company (TOE 10–407) packages, temporarily stores, and rigs supplies and equipment designated for delivery by parachute drop or free drop. In addition, it assists in the recovery of quartermaster air delivery equipment as required. The quartermaster aerial supply company will normally fulfill air delivery requirements that exceed the organic capabilities of the airborne division quartermaster air equipment support company.

b. Quartermaster Air Equipment Repair and Depot Company. The Quartermaster Air Equipment Repair and Depot Company (TOE 10–417) provides supply,

field maintenance, and reclamation of quartermaster air delivery equipment; and it requisitions, receives, stores, and issues this equipment in a fixed installation. The quartermaster air equipment repair and depot company will normally fulfill quartermaster air equipment supply and maintenance requirements that exceed the organic capabilities of the airborne division quartermaster air equipment support company.

c. Quartermaster Service Organization. The Quartermaster Service Organization (TOE 10—500) provides teams that can be used to form quartermaster units or to augment existing units, and as such is capable of supplying additional personnel for a quartermaster air equipment support company.

d. Quartermaster Field Maintenance and Service Company. A limited responsibility for supply and maintenance of quartermaster air delivery equipment exists within the Quartermaster Field Maintenance and Service Company (TOE 10–448). This company contains a parachute packing and maintenance section that supplies and performs organizational maintenance on parachutes and other quartermaster air items used in Army aircraft. The company evacuates equipment beyond its maintenance capabilities to the next higher echelon capable of performing maintenance on quartermaster air delivery equipment.

CHAPTER 2

ORGANIZATION AND PERSONNEL

Section I. ORGANIZATION

8. Company

The airborne division quartermaster air equipment support company (fig. 1) has a functional platoon organization covering supply and maintenance, packing, and air delivery activities. The company consists of a division parachute office, company headquarters, a supply and maintenance platoon, a packing platoon, and an air delivery platoon. Each platoon is composed of a platoon headquarters and three sections. This vertical functional organization is especially suitable when the unit is employed in a single location. The company may, however, be organized horizontally into operating (composite) platoons on a provisional basis to operate independently in support of separate tactical elements engaged in mounting or marshaling activities in multiple areas or already committed to the assault. Figure 2 illustrates a suggested organization for the company in support of division units located in multiple areas.

Figure 1. Organizational chart, airborne division quartermaster air equipment support company.
(Located in back of manual.)

9. Division Parachute Office

The division parachute officer exercises operational control and technical supervision of the company through the division parachute office. This office pro-

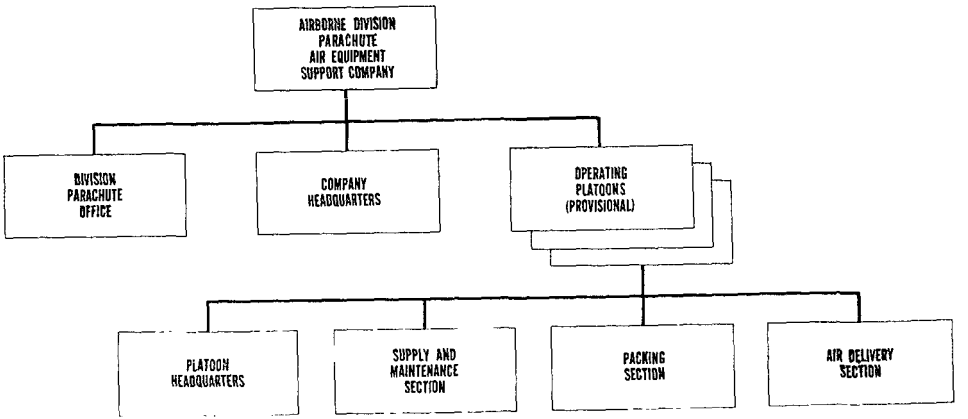


Figure 2. Airborne division quartermaster air equipment support company organized on a provisional-composite basis in support of division units in multiple areas (suggested).

vides the necessary liaison means between the company headquarters and the office of the commander of the airborne division support command for all matters pertaining to supply and maintenance of parachutes and other air delivery equipment items, parachute packing, and air delivery operations in support of division elements.

10. Company and Platoon Headquarters

a. Company Headquarters. Company headquarters provides the administrative support required to implement the plans and policies of the division parachute office. Under the immediate direction of the division parachute office, it supervises and coordinates the activities of the platoons (app. II). Company headquarters also provides the necessary command and supervision relative to company administration, mess, communications, organizational maintenance, security, and training activities.

b. Platoon Headquarters. The headquarters of each platoon is the supervisory and coordinating agency for all activities of the various sections concerned with the company's mission performance.

11. Supply and Maintenance Platoon

The supply and maintenance platoon consists of three supply and maintenance sections which are responsible for—

a. Requisition, receipt, storage, and issue of quartermaster air delivery equipment required by the airborne division.

b. Maintenance of supply records for air delivery equipment.

c. Inspection, fabrication, and assembly of rigging components and related equipment.

d. Supervision of shakeout and drying of parachutes after an airdrop.

e. Organizational maintenance of quartermaster air delivery equipment.

f. Attaching parachute assemblies to cargo that is to be dropped and/or assisting in the packing of personnel parachutes and cargo parachute assemblies, when required.

12. Packing Platoon

The packing platoon consists of three sections which are responsible for—

a. Inspection and packing of personnel and cargo parachutes.

b. Inspecting and, as required, fitting and adjusting parachutes to wearers.

c. Providing technical assistance to division personnel in the recovery and evacuation of quartermaster air delivery equipment.

13. Air Delivery Platoon

The air delivery platoon consists of three air delivery sections which are responsible for—

a. Rigging platform loads and air delivery containers.

b. Providing technical assistance to units of the division in the preparation of supplies and equipment for air delivery.

c. Providing personnel to establish a training program for training division personnel in the techniques

of rigging and loading equipment and other supplies required in an airborne operation, as well as in proper recovery procedures.

d. Assisting in packing cargo parachutes, as required.

Section II. DUTIES OF KEY PERSONNEL

14. General

All personnel of the quartermaster air equipment support company are qualified parachutists. The primary duties of most enlisted personnel are apparent from the job titles and military occupational specialty numbers listed in TOE 10–337 and explained in AR 611–201. The total workload and the nature of the company's operations will make necessary a wide latitude of duty assignments among personnel assigned to the nine sections of the company. A parachute rigger is qualified to pack parachutes, perform maintenance on quartermaster air delivery equipment, and rig air delivery containers and platform loads. As a general rule, the TOE serves as the basis for the assignment of specific duties within the sections as well as secondary duties such as those of light truck drivers and forklift truck operators. Personnel are interchangeable in their duty assignments within the company when it is organized on a composite platoon basis. For example, supply and maintenance platoon personnel are qualified by MOS training to perform duties in the packing platoon or air delivery platoon.

15. Division Parachute Office

a. The *division parachute officer,* assisted by the *parachute operations officer, parachute operations chief, air delivery expediter,* and *teletypewriter operator,* has full responsibility for the company's mission performance in support of the airborne division. He performs the following specific duties:

(1) Plans, directs, coordinates, and supervises the quartermaster parachute supply, maintenance, and air delivery operations performed by the company.

(2) Plans, prepares, and issues operational orders and instructions.

(3) Coordinates with tactical planners to determine quartermaster air delivery equipment required to support airborne operations.

(4) Inspects and provides supported units with technical assistance in packing, rigging, and loading supplies and equipment for air delivery.

b. The *parachute operations officer* assists the division parachute officer in planning, coordinating, and supervising all technical operations necessary for the accomplishment of the company mission. He is second in command of the division parachute office and may represent the division parachute officer on the special staff of the commander of the airborne division support command. His duties include—

(1) Assisting the division parachute officer in the planning, preparation, and issuance of operational orders and instructions.

(2) Making a continuous study of the company's

operational requirements and capabilities to assist the division parachute officer in the preparation of estimates and plans for the successful performance of the company's support mission.

(3) Working in close cooperation with division air liaison groups and airfield control groups on such air delivery functions as rigging, loading, and preparing time deadlines; presenting briefings on weights, cubages, and other technical data pertaining to rigged loads.

(4) Technically directing and coordinating the activities of available company personnel during an air supply operation.

(5) Assisting in the inspection of technical operations.

(6) Making certain that sufficient air delivery equipment is requisitioned, received, stored, issued, and shipped to fulfill the mission of the company.

(7) Assisting the division parachute officer in the coordination of the technical activities of the supply and maintenance, packing, and air delivery platoons.

(8) Reviewing training programs to insure adequate training of personnel.

(9) Coordinating company activities with other units and organizations requiring support by the company.

c. The *parachute operations chief* and *air delivery expediter* are qualified by MOS training to perform all of the duties of a parachute rigger outlined in

AR 611–201. The parachute operations chief is a noncommissioned officer charged with command and liaison duties incident to carrying out the plans, policies, and procedures delineated by the division parachute officer for the company's technical operations. He is assisted by the air delivery expediter who, by virtue of his specialist training in the use and care of the company's organic air delivery equipment, provides technical advice and assistance to the operators. In addition to his MOS duties as a parachute rigger, the air delivery expediter is a technical specialist in—

(1) Nomenclature and construction of personnel and cargo parachutes and all other items of quartermaster air delivery equipment.
(2) Tensile strength, texture, moisture content, and weave of all textiles, ropes, thread, cord, and hardware needed in parachute maintenance.
(3) Inspection of parachutes and other air delivery equipment.
(4) Methods and techniques employed in recovery of parachutes and heavy drop equipment.
(5) Techniques of rigging platform loads and air delivery containers.
(6) Repair of parachutes, including operation, adjustment, and essential maintenance of sewing machines.
(7) Techniques and methods for the care and preservation of textiles.

16. Company Level

a. The *company commander* is responsible for the establishment of the company command post and the

performance of unit administrative and support activities. His chief duties include—

(1) Maintaining close liaison with the division parachute officer to insure adequate and timely planning for training missions and for actual operations.
(2) Assisting the division parachute officer in all matters pertaining to parachute supply and maintenance, air supply operations, and recovery procedures, including recommendations for suitable employment of the company when supporting separate units or organizations of the division.
(3) Establishing requirements and planning for company quarters, mess, and operational facilities.
(4) Supervising the administrative and operational activities of the company.
(5) Directing the training of the company.

b. The *first sergeant* is primarily responsible to the company commander for the routine administrative operations of the company including mess, unit supply, organizational maintenance, security, communications, discipline, and training; however, he must also have general knowledge of platoon operations in parachute supply and maintenance, parachute packing, and air delivery activities in support of the division.

c. Other key personnel assigned to company headquarters are a *mess steward;* a *supply sergeant,* who is also the armorer; a *maintenance sergeant;* three *first cooks* and two *cooks,* one of whom is also a light truck driver; a *cook's helper;* an *armorer;* a *company clerk;* a *general carpenter,* who performs necessary

maintenance of air delivery platforms and platform components stocked and utilized by the company; a *materials-handling equipment repairman* and *helper;* a *sewing machine mechanic;* a *wheel vehicle mechanic;* a *light truck driver;* and a *wireman,* who is also the company's switchboard operator.

17. Platoon Level

Each platoon leader is responsible for the performance of all duties necessary for efficient operation of his platoon. These include supervising and coordinating platoon functions, training his platoon, supervising the preparation of records and reports relative to platoon operations, and advising the division parachute officer on the status of platoon operations, equipment, and personnel. Platoon leaders of the quartermaster air equipment support company have the following specific responsibilities related to the technical activities of their platoons:

a. The *supply and mantenance platoon leader* is responsible for the proper performance of all activities of his platoon to include requisitioning, storage, and issue of quartermaster air delivery equipment required by the airborne division; maintenance of supply records; inspection, fabrication, and assembly of rigging components and related equipment; provision of personnel who supervise the shakeout and drying of parachutes after an airdrop; organizational maintenance of quartermaster air delivery equipment; and attaching parachutes to cargo that is to be dropped, and/or assistance in the packing of personnel and cargo parachutes. He is assisted in the execution of his duties by the *equipment repair technician,* the *platoon sergeant,* and the *reports clerk.*

b. The *packing platoon leader,* assisted by the *platoon sergeant* and the *reports clerk,* is responsible for the activities of his platoon in the inspection and packing of personnel and cargo parachutes; and assistance to parachutists in the fitting and adjusting of parachutes. He is also responsible for the duties performed by personnel of the company who give technical assistance to troops engaged in recovery and evacuation of quartermaster air delivery equipment.

c. The *air delivery platoon leader,* assisted by the *air delivery technician,* the *platoon sergeant,* and the *reports clerk,* is responsible for the activities of the platoon in rigging platform loads and air delivery containers; and providing technical assistance to units of the division in the preparation of supplies and equipment for air delivery. He is responsible for providing personnel to establish a training program for the training of division personnel in the techniques of rigging and loading supplies and equipment required in an airborne operation. He also employs air delivery personnel, as required, to assist in the packing of cargo parachutes. The *crane-shovel operator* is responsible for operating the 7-ton crane-shovel used to position heavy equipment on platforms prior to rigging for air delivery.

18. Section Level

Section supervisors and section leaders are responsible for supervising the activities of their sections. They must assure that their sections accomplish work in accordance with established schedules and standards of proficiency. They stand ready to reorganize their sections to accommodate specific operations.

Section leaders should have a thorough knowledge of quartermaster air delivery equipment items so that they may acquire the flexibility required to supervise various work assignments. Section supervisors in the supply and maintenance platoon, for example, who are specially trained and qualified in all activities performed by their platoons, should also be qualified riggers and have a working knowledge of parachute inspection and packing.

a. Supply and Maintenance Sections.

(1) The *section supervisors* are responsible for the efficient operation of their sections. They regulate and maintain production, check each parachute log record, and inspect all parachutes before and after repairs are made. They requisition, receive, store, and issue all quartermaster air equipment and supplies required to support division elements. They are also responsible for the performance of the company's internal supply functions.

(2) The *senior parachute repairman, parachute repairmen,* and *parachute repair assistants* must be familiar with all aspects of parachute maintenance including detection of damaged or weak spots. Parachute repairmen may be employed to assist parachute packers.

(3) Other key operating personnel are the *air delivery equipment specialists, packing-crating specialists, supply clerks, supply handlers,* and *warehouse equipment operators.*

b. Packing Sections.

(1) The *section chiefs* of the packing sections are responsible for efficient operation of

their sections. They are assisted by the senior noncommissioned officers of their sections including the *parachute packer supervisors* and *senior parachute packers.* Two parachute packer supervisors are assigned to each packing section and serve as squad leaders (subordinate supervisors).

(2) Key operating personnel include the *parachute packers* and *parachute packer assistants* who perform their duties under the immediate guidance of the senior parachute packers. Parachute packers and their assistants may be divided into teams before being assigned duties such as laying out, packing, or adjusting parachutes. Parachute packers are responsible for inspecting and packing all types of parachutes for jump or drop. They must be able to recognize defects in and damage to parachutes while inspecting and packing in order that unserviceable parachutes may be transferred to the supply and maintenance sections for repair. Parachute packers should also be capable of repairing parachutes.

c. Air Delivery Sections.

(1) The *section supervisors* are charged with the efficient operation of their sections. They coordinate with platoon headquarters personnel in expediting the supply of parachutes, platforms, air delivery containers, and related equipment required by the sections to complete their operations. They supervise the loading and rigging of air delivery equipment

and the packing of cargo parachutes, as required. They also conduct training programs for units of the division in the preparation of supplies and equipment for air delivery.

(2) *Senior air delivery specialists, air delivery specialists,* and *air delivery assistants* comprise the key operating personnel assigned to the sections. Under the immediate guidance of the senior air delivery specialists, the air delivery specialists and their assistants rig platform loads and air delivery containers. As they are also qualified packers, air delivery specialists are capable of packing cargo parachutes used in the preparation of rigged loads.

CHAPTER 3

EQUIPMENT

Section I. SPECIALIZED ORGANIZATIONAL EQUIPMENT

19. Parachutes

a. Personnel Parachutes.

(1) *Parachute, personnel, troop, back, 35-foot nominal diameter, type T–10.* This parachute consists of a canopy, deployment bag, pack, and harness. It is used by airborne troops in all types of airborne operations.

(2) *Parachute, reserve, personnel, troop, chest, 24-foot diameter.* This parachute is a reserve parachute consisting of a canopy, pilot chute, and pack. It is used by airborne troops in conjunction with the T–10 personnel parachute.

(3) *Parachute, personnel, back, 28-foot diameter canopy.* The 28-foot back-type parachute consists of a canopy, pilot chute, pack, and harness. This type of parachute or its equivalent is worn by passengers or crew members of aircraft. It is actuated manually. This parachute is also worn by personnel assisting in the ejection of supplies from aircraft in flight.

b. Cargo Parachutes.

(1) *Light cargo parachute.* Examples of the light cargo parachute are the G–13, used for loads

up to 500 pounds, and the G–1A, used for loads up to 300 pounds.

(2) *Medium cargo parachute.* The medium cargo parachute is used alone with the A–22 aerial delivery container for loads up to 2,200 pounds and in clusters for delivery of certain heavy-drop loads. For example, the G–12D parachute is a medium cargo parachute.

(3) *Heavy cargo parachute.* The heavy cargo parachute (100-foot diameter canopy) is used alone for loads up to 3,500 pounds and in clusters for delivery of platform assemblies weighing more than 3,500 pounds. For example, the G–11A parachute is a heavy cargo parachute.

(4) *Pilot, parachute, cargo-type.* The pilot parachute is used to deploy the extraction parachute for platform assemblies and load-bearing platforms.

(5) *Parachute, extraction.* The extraction parachute is used to release and extract platforms from the airplane, to deploy the canopies on extracted loads, and to release A–22 aerial delivery containers from aircraft. Extraction parachutes of 15-foot diameter and 22-foot diameter are authorized.

20. Sewing Machines

a. Medium Heavy Duty. Medium heavy-duty sewing machines are used primarily in sewing parachute canopies. A typical medium heavy-duty machine is the Model 31–15 which sews 7 to 32 stitches per inch. It is used in sewing duck, canvas, and light webbing.

Another medium heavy-duty machine is the Model 111w155 which sews 3½ to 32 stitches per inch.

b. General Industrial. General industrial sewing machines are used in sewing heavy canvas and webbing such as pack trays and containers. An example of such a machine is the Model 7–33 which sews 2 to 8 stitches per inch. It is used in sewing very heavy canvas, webbing, and slings. Another type of general industrial sewing machine used by the company is the Model 97–10 which sews 3 to 12 stitches per inch.

c. Parachute Line Tacking. The parachute line tacking industrial sewing machine, Model 17w15, is provided to perform such special duty operations as line tacking and rope attachment. It is familiarly known for its use in zigzag stitching of parachute suspension lines.

21. Packing-Repair Tables and Related Equipment

a. Parachute Packing Tables. The company is authorized 54 parachute packing tables each of which is a sectional-type table consisting of four 144-inch sections with an overall length of 576 inches. The sections can be assembled in various combinations to provide packing facilities for parachutes of various sizes.

b. Inspection Table. The company is authorized three shadow box inspection tables, each 216 inches long and 36 inches wide with adjustable legs, and six parachute packing table sections, each 144 by 36 by 32 inches. These tables and sections can be assembled in various combinations to facilitate the inspection of various size parachutes.

c. Related Equipment.

(1) *Separator, line, parachute.* The line separator is made of metal or wood and is used to separate suspension lines during a packing operation.

(2) *Weight, parachute packing.* The parachute packing weights are used to hold the parachute canopy in place during a packing operation.

(3) *Kit bag flyers.* The kit bags, which are rectangular in shape and made of canvas or duck, are used to hold parachute assemblies during storage, recovery, and shipment. They are expendable items of issue authorized by TA 10–100.

(4) *Fan, air, 30-inch blade.* The air fans are used to separate canopy gores during the packing of medium and heavy cargo parachutes.

22. Air Delivery Containers

a. Type A–7A. The A–7A aerial delivery cargo sling consists of four 188-inch straps, which may be secured in various combinations around supplies to be dropped. Although it is easily adapted to irregularly shaped loads, the A–7A is usually used for such loads as ammunition, water cans, rations, and fuel drums weighing up to 500 pounds.

b. Type A–21. The A–21 assault-type aerial delivery container consists of an adjustable open-type sling assembly with straps, duck cover, padding, and quick-release assembly. It is adaptable to a variety of loads up to 500 pounds, such as ammunition, rations, medical supplies, and weapons.

c. Type A–22. The A–22 aerial delivery container is an adjustable open-type sling assembly with duck cover, rigid skid, and scuff pad to provide protection for the load. It is adaptable to a variety of loads up to 2,200 pounds, and is designed for air delivery from aircraft using the floor-level, wheeled-conveyor jettison system.

23. Air Delivery Platforms and Platform Assemblies

a. General. As part of its complete stock of quartermaster air delivery equipment in support of the airborne division, the company stocks the air delivery platforms and platform components required to rig and load all types of supplies and equipment accompanying divisional elements in an airborne assault. Included among these components are the air delivery expander assemblies used in preparing honeycomb logs as shock absorbers for platform loads.

b. Equipment. For information on equipment, see TM 10–500-series. These manuals specify and illustrate the air delivery equipment required for the preparation of supplies and equipment for air delivery, furnish general information on the various aircraft used for air delivery operations, and give common procedures used in rigging the supplies and equipment for airdrop.

24. Trucks and Trailers

The quartermaster air equipment support company is authorized trucks and trailers necessary for company administration and operational requirements. The ¼-, ¾-, and 2½-ton trucks are used primarily for transportation within the company or for supply pickups.

The ¾-ton trucks also provide transportation means for liaison between platoons that are operating separately. Transportation requirements in excess of this organic capability must be provided by the division supply and transportation battalion or from other sources. For the handling of supplies in the company's warehouses and for loading trucks, the company is authorized 6,000- and 15,000-pound forklift trucks, 4,000-pound warehouse tractors, and 6,000-pound warehouse trailers. It is authorized ¾- and 1½-ton cargo trailers and ¼-ton amphibious cargo trailers. The company is also authorized a 7-ton, wheel-mounted crane-shovel for use in positioning heavy equipment on platforms prior to rigging for air delivery.

Section II. MAINTENANCE OF EQUIPMENT

25. Responsibility

a. Division Parachute Officer. The division parachute officer is responsible for the dissemination of instructions and procedures for maintenance of air delivery equipment. He must make certain that these instructions and procedures are strictly complied with by all members of his command and that authorized maintenance materials are available at all times.

b. Other Officers. The company commander is responsible for the maintenance of organic equipment required for the internal operations and administration of the company. Each subordinate officer will make certain that the personnel under his command are trained in proper preventive maintenance procedures. It is the duty of each officer at platoon and

section level to regularly inspect the supplies and equipment under his jurisdiction to make certain that prescribed maintenance procedures and regulations are being complied with.

c. Enlisted Personnel. The enlisted personnel are responsible to the company commander for preventive maintenance of the equipment assigned to them.

26. Parachutes and Containers

Parachutes, air delivery containers, weapon cases, equipment bags, and similar equipment will be maintained by the parachute packers and parachute repairmen.

27. Machines and Mechanical Equipment

Sewing machines will be maintained by the users and by the sewing machine mechanic assigned to company headquarters. Maintenance of the machines will be performed in accordance with the instructions contained in TM 10–263 and TM 10–591. Other machines and mechanical equipment, such as the generators, will be maintained by the operators in accordance with the publications pertaining to the specific types of equipment. The required preventive maintenance of the crane-shovel will be performed by the operator.

28. Vehicles and Materials-Handling Equipment

The trucks and trailers will be maintained by the operators and company mechanics (materials-handling equipment repairmen and helpers) as prescribed in TM 9–2810 and the vehicle technical manuals. The operators and mechanics will also be responsible for maintaining the company's forklift trucks and

warehouse tractors as prescribed in TM 10–1600 and the individual equipment technical manuals.

29. Records and Reports

Maintenance and inspection operations performed on parachute assemblies will be recorded in DA Form 10–42 (Army Parachute Log Record) as outlined in AR 750–1670–2. The vehicle maintenance records prescribed by AR 700–2300–1 and illustrated in TM 9–2810 will be kept by the unit motor personnel. Special reports may be required by higher authorities depending upon the local situation.

CHAPTER 4

TRAINING

Section I. GENERAL

30. Responsibility

Responsibility for training the quartermaster air equipment support company is vested in the division parachute officer. Assistance and control is provided by the commander of the airborne division support command. Training must be conducted in accordance with Department of the Army policies and techniques.

a. For training purposes, the division parachute officer and the company commander are provided with—

(1) ATP 10–110, which describes individual training for personnel of all quartermaster units.

(2) ATP 10–337, which describes general training responsibilities and scope of instruction for the unit training of the company.

(3) ATT 10–337, which is the army training test for this unit.

b. As indicated in the training program, the division parachute officer is specifically responsible for the preparation of training schedules, records, and reports, and for the planning, organization, and supervision of all phases of technical training of the unit. He is assisted by the parachute operations officer in the performance of these duties. In addition, he may be called upon to aid in establishing training programs

for personnel of other units when such units are required to prepare their equipment for air delivery. The company commander is responsible for the conduct of those phases of unit training concerned with the readiness and capability of the company to perform its internal operations and administrative functions.

31. Objectives

The primary objective of training is to produce a well-trained, integrated company ready for field and combat duty. The airborne division quartermaster air equipment support company, by its mission, must be prepared to support an airborne division in training as well as in combat. The company must be brought to perfection, therefore, by an intensive, thorough, and rapid training program. The company must be trained also in defending itself and its assigned area and in operating under varying field conditions. In addition, the company may be called upon to train other units of the division in the packing and rigging of unit equipment for air delivery. As an aid in attaining the desired objectives, see appendix III.

32. Points for Emphasis

The following subjects should be stressed during both individual and unit training:

a. Packing Responsibility. Each parachute packer and repairman is responsible for insuring the dependability of each cargo and personnel parachute he packs or repairs. When the parachute packer or inspector initials the DA Form 10–42 (par. 65*a*) which accom-

THE RIGGER'S PLEDGE

I will keep constantly in mind that until men grow wings their parachutes must be dependable.

I will pack every parachute as though I were going to jump with it myself and will stand ready to jump with any parachute which I have certified as properly inspected and packed.

I will remember always that the other man's life is as dear to him as mine is to me.

I will never resort to guessing, as I know that chance is a fool's god and that I, as a rigger, cannot depend on it.

I will never pass over any defect, nor neglect any repair, no matter how small, as I know that omissions and mistakes in the rigging of a parachute may cost a life.

I will keep all parachute equipment entrusted to my care in the best possible condition, remembering always that the little things left undone cause major troubles.

I will never sign my name to a parachute inspection or packing certificate unless I have personally performed or directed or supervised every step and am entirely satisfied with all the work.

I will never let the idea that a piece of work is "good enough" make me a potential murderer through a careless mistake or oversight, for I know that there can be no compromise with perfection.

I will keep always a wholehearted respect for my vocation, regarding it as a high profession rather than a day-to-day task, and will keep in mind constantly my grave responsibility.

I will be sure—always.

4A-9-2

Figure 3. Rigger's Pledge.

panies each parachute, he certifies his acceptance of the responsibility for that parachute. The Rigger's Pledge (fig. 3) should impress the rigger with his responsibilities.

b. Supply Economy. Supply economy is a command function. The doctrine of supply economy requires strict adherence to authorized allowances and immediate processing of excesses. It further requires economy in replacement issues; proper care, preservation, and timely repair of all economically repairable items; and extensive rehabilitation and conversion of items for other practical and economical uses when these items can no longer be used for their original purpose.

c. Recovery. Recovery, inseparably linked with supply economy, requires that every effort be made to return parachutes and other quartermaster air delivery equipment to collecting points after the drop. This applies especially during training periods when technical assistance in the recovery of air delivery equipment may be provided by personnel of the quartermaster air equipment support company. Recovery procedures are outlined in AR 750–1670–2.

d. Lines of Responsibility. The company commander should build up definite lines of responsibility within the company in accordance with the plans and policies of the division parachute officer. These lines compose the chain of command and make responsibilities clear.

33. Noncommissioned Officer Training

Noncommissioned officer training may be carried on during duty hours and in off-duty classes. Noncommissioned officers should be able to instruct enlisted men in their technical qualifications and should be given opportunity to exercise command functions to develop leadership, initiative, and a sense of responsibility. Troop schools, such as those set up by the division or other local organizations, are useful in instructing the noncommissioned officers in the duties and responsibilities of their grade and in teaching them correct methods and procedures.

Section II. INDIVIDUAL TRAINING

34. Basic Combat Training

Basic combat training is designed to convert the recruit from a civilian to a soldier by familiarizing him with basic military subjects and the fundamentals of infantry combat. It may be assumed that each individual will have received his basic combat training before assignment to the company.

35. Advanced Individual Training

Advanced individual training consists of branch training and specialist training. During branch training, the individual acquires a general knowledge of the organization, mission, and functions of the Quartermaster Corps, the airborne division, and the quartermaster air equipment support company. During specialist training, the individual learns the specific techniques pertaining to his TOE assignment. Both branch and special training are integrated through-

out the individual training phase. To develop the capabilities required for the accomplishment of the mission of the quartermaster air equipment support company, special emphasis must be placed on the following areas of individual training, in addition to those described in ATP's 10–337 and 10–110.

a. Parachute Packing, Supply and Maintenance, and Air Delivery Training. TOE 10–337, which prescribes the military occupational specialty (MOS) of each individual, indicates that the majority of personnel in the company are parachute packers, repairmen, and/or air delivery specialists. It is desirable that these individuals be school trained. During training, all personnel learn the techniques of packing and repairing all types of parachutes and containers, the fundamentals of packaging supplies and equipment for air delivery, and the mechanics and use of repair equipment, such as sewing machines.

b. Parachute (Jump) Training. The number "7" used as the second suffix (5th digit) to an enlisted military occupational specialty number indicates that the individual is a qualified parachutist. Initial and qualifying jump training is conducted at appropriate schools, but continued jump training is the responsibility of the company commander. During jump training, the individual is taught the techniques of jumping and undergoes a rigorous physical conditioning program.

36. Additional Individual Training

a. Refresher Training. Occasionally, parachute maintenance personnel, upon assignment to the company, will be in need of a refresher course in order to

bring them up to desired levels of proficiency. Such a course may be conducted as on-the-job training under the supervision of qualified parachute riggers. If practicable, similar courses may be set up for jump-qualified personnel who do not have military occupational specialties in the parachute maintenance career field.

b. Secondary Duty Training. Certain individuals of the company will be required to assume secondary duties in addition to their assigned military occupational specialties. TOE 10–337 indicates specific personnel required to assume additional duties as armorers, switchboard operators, warehouse specialists, radiotelephone operators, and light truck drivers. Other additional duties will be assigned to individuals at the discretion of the company commander. Training in these additional duties will usually be given in the form of on-the-job training.

c. On-the-Job Training. On-the-job training consists of continued practice in all phases of the individual's assignment so as to develop a high level of proficiency in his occupational skills. It is also intended to train the individual in related jobs and to insure that every man is capable of assuming the duties of the individual immediately above him. In this way, the operating efficiency of the company will not be affected by the absence of key personnel.

Section III. UNIT TRAINING

37. General

The commander of the quartermaster air equipment support company should prepare at the outset of unit

training a training progress chart, based upon directives from higher headquarters, indicating the progress of training and the training status of the company.

a. Technical Subjects. Unit training in technical subjects is designed to train members of the individual platoons to work as a team and to develop further individual and platoon efficiency. It consists largely of actually putting to use the skills acquired in individual training.

b. Combat Support Skills. Unit training in combat support skills continues the basic combat training of the individual soldier, teaching him the application of basic combat training and military procedures to the defense of the company and its assigned area.

c. Miscellaneous. Unit training in miscellaneous subjects includes tests, drills, and inspections. In unit training, time is allocated to the commander for covering special training considerations. Suggestions for effective utilization of the commander's time are given in ATP 10–337.

38. Combined Training

Combined training may be given in the form of tactical exercises, such as command post, field, or joint exercises or maneuvers. This training, directed by higher authority, is designed to provide practical knowledge of tactical, logistical, and technical doctrine and procedures under simulated combat conditions. Joint training and maneuvers provided for in the airborne division training program will require the employment of the quartermaster air equipment support company.

Section IV. CADRE TRAINING

39. General

The cadre is a key group of officers and enlisted men necessary for the establishment and training of a new unit. Because the company may be called upon to furnish the cadre indicated in TOE 10–337, the training of cadre understudies is a continuous part of the company training program.

40. Cadre Selection

Each individual designated as a member of the cadre should be thoroughly trained before being so designated and should be qualified both to perform his specific duties and to aid in the training of the company. Each company should have the cadre divided into two groups, each containing senior and junior cadre so that the transfer of one group will not deplete the ranking organization or the newly formed unit of experienced personnel.

41. Special Training

Cadre training should be aimed at producing alert, aggressive, and energetic individuals with a well-grounded, overall knowledge of the general and specific fields covered in the training and operation of a quartermaster air equipment support company. ATP 10–110 outlines requirements for cadre training. Special emphasis should be placed on training in methods of instruction in order to select the best qualified instructors for cadre assignment.

CHAPTER 5

PREPARATION FOR OPERATIONS

Section I. RECONNAISSANCE AND SITE SELECTION

42. Reconnaissance

The general area in which the airborne division quartermaster air equipment support company will operate is designated by the commander of the airborne division support command. After the general area is designated, the division parachute officer, with the assistance of the parachute operations officer and the company commander, makes a reconnaissance to select the most desirable site within the general area. Reconnaissance for site location is best accomplished by using a combination of map and ground evaluation. Usually, a study of the map is made first to determine the location of likely areas. Ground reconnaissance is made to determine the nature and condition of the terrain in order to select the best locations for the various operations.

43. Site Selection

The principal factors to be considered in site selection are the following:

a. Location. The company should be located as close as possible to road and rail nets leading to sources of supply and to air delivery preparation areas and marshaling areas on or near the airfield, so far as dispersion factors permit. It should also fit into the pattern of operations established for the staging of

the airborne division. Normally, under combat conditions requiring extensive dispersion, division units, that is, brigades and/or battalions, will marshal in two or more base camps. The elements of the division should be separated from each other, and from departure airfields, by such a distance as to preclude two facilities or elements being affected by a single, nominal-yield nuclear weapon.

b. Space Requirements. With the exception of requirements for barracks, messhall, and motor pool, the company can normally operate effectively in an area of 200,000 square feet—48,000 square feet for inspection and packing operations; 117,000 square feet for supply, maintenance, and storage operations; and 35,000 square feet for air delivery operations. The number of buildings required will depend upon the extent and condition of facilities at the operating site and existing operating conditions. It may be necessary to use some outdoor space if the number or condition of the available buildings is inadequate. Parking and turnaround space for vehicles must be available.

c. Terrain. Level ground adjacent to the company working area is necessary for the quarters, parking space, and temporary storage area. The ground should be reasonably high, with slopes affording good drainage. If possible, gravel should be used, since even well-drained terrain will become muddy with heavy truck traffic during rainy weather.

Section II. PLANNING FOR OPERATIONS

44. Layout

The division parachute officer, in coordination with

the parachute operations officer and the company commander, should develop a plan for the layout of the company (fig. 4). When available, permanent buildings should be used by the platoons in performing their operations. However, a layout plan should be made for either buildings or tents for the division parachute office and company headquarters. Among the factors to be considered in planning the layout are the following:

a. Division Parachute Office and Company Headquarters. Company headquarters, which is normally located in close proximity to the division parachute office, and the tents or buildings comprising the company area should be located as close as possible to platoon operating areas. The company area should contain the company supply room, orderly room, messhall, recreation room, living quarters, and vehicle parking area.

b. Supply and Maintenance Sections. The supply and maintenance sections can operate effectively with approximately 117,000 square feet of floor space, which includes warehouse space required for the storage of quartermaster air delivery equipment when the company is operating as a unit. In this case, *ideal* warehouse facilities for parachute supply, maintenance, and storage operations should afford approximately 25,000 square feet of floor space, have a cement floor and concrete loading platforms, be located next to a railroad siding, and be surrounded by a hard-top surface such as cement or asphalt. The warehouses and storage facilities are normally separate from, but readily accessible to, the operating and company areas. The sections will require a storage shed in the main operat-

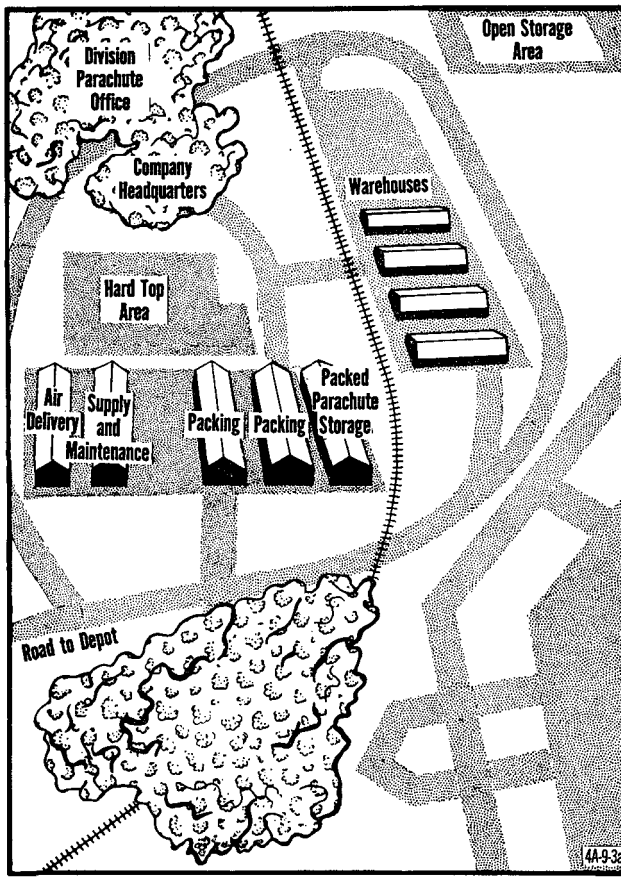


Figure 4. Layout of airborne division quartermaster air equipment support company (suggested).

ing area for the troop-type parachutes and related equipment that the company receives, stores, issues, packs, and maintains. All air delivery equipment items do not, however, require closed storage. Air delivery platforms, for example, can be stored under paulins in the open. If possible, a shakeout room and a drying tower should be built into one of the buildings used for parachute storage. If the shakeout areas and drying towers are outdoors (fig. 5), they should be located so that they are readily accessible to supply and maintenance and packing personnel.

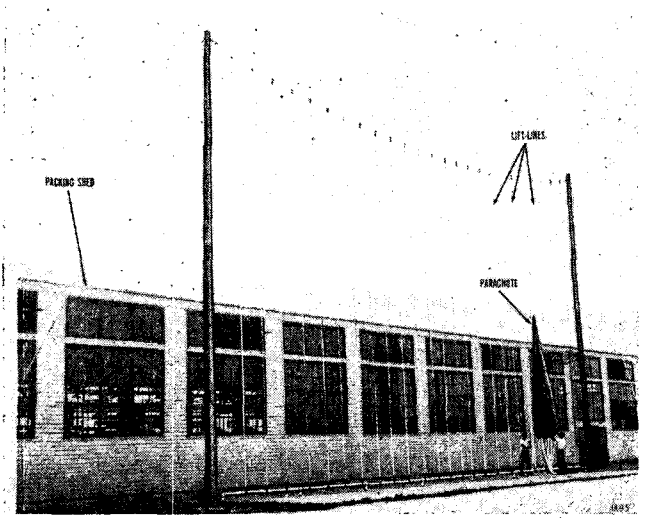


Figure 5. Outdoor drying and shakeout tower.

c. Packing Sections. Normally, the packing sections will require buildings with a total floor space of approximately 48,000 square feet when the company

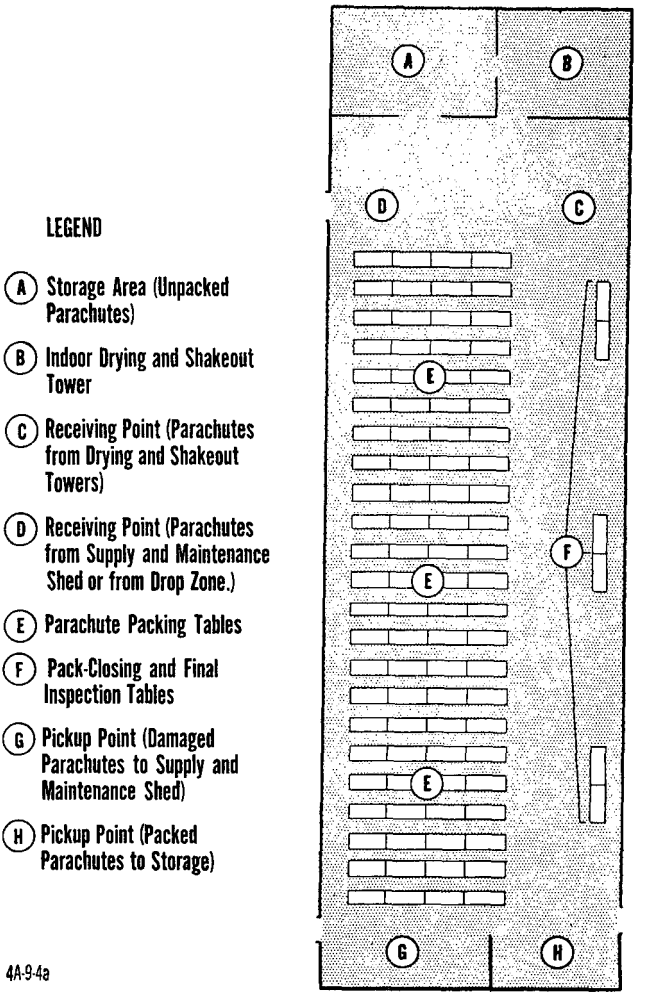


Figure 6. Layout of packing shed (suggested).

is operating as a unit. Most of the floor space will be occupied by the packing tables. A suggested layout for a packing shed is shown in figure 6.

d. Air Delivery Sections. The air delivery sections will require approximately 35,000 square feet of smooth floor space. Most of the floor space will be left clear to accommodate the servicing of medium and heavy cargo parachutes. Facilities should be available to anchor the apex and riser ends when packing the G–11A and G–12D cargo parachutes. In addition, the open floor space may be used for training in air delivery packing and rigging techniques.

45. Work Flow

Simultaneously with planning the company layout, the company commander must plan the company work flow, considering the following factors:

a. Facilities Available. Work flow is largely dependent on the type and location of the facilities the company uses in performing its operations. When buildings are used, it will be necessary to plan the work flow to conform to the building locations. Buildings located close together make it an easy matter to draw up a workable, efficient work flow plan. When buildings are widely separated, considerable planning, foresight, and improvisation are required in order to produce the best possible work flow plan. Suggested work flow of parachutes through supply and maintenance, packing, and storage sheds is illustrated in figure 7.

b. Within Platoons. The layout of equipment and facilities within each platoon's operating area should be planned to establish, so far as possible, a straight-line work flow.

46. Opening Up

Prior to opening-up operations, the company commander should—

a. Issue a standing operating procedure.

b. Establish sanitary and security measures for the area and coordinate these measures with adjacent units.

c. Arrange for communications facilities with higher headquarters.

d. Obtain additional information about the operating area and the surrounding area.

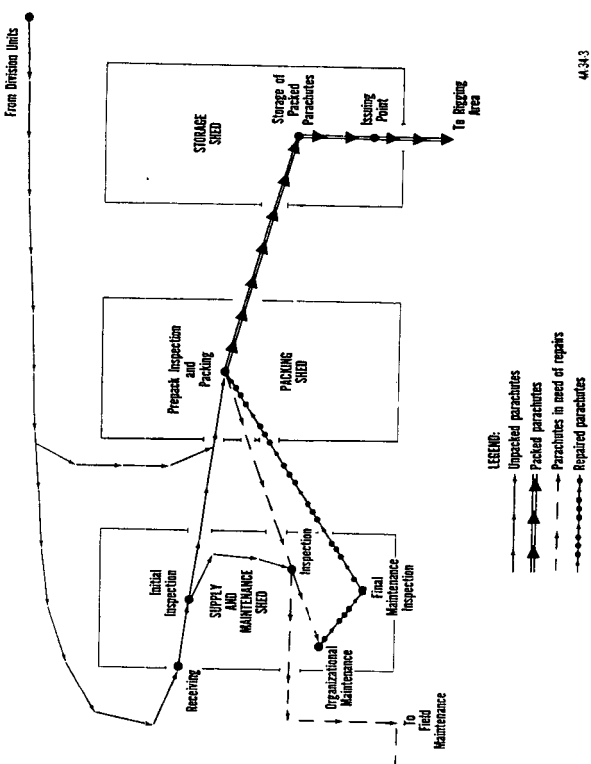


Figure 7. Flow of parachutes through sheds (suggested).

CHAPTER 6

OPERATIONS

Section I. GENERAL

47. Concept of Operations

The airborne division quartermaster air equipment support company is fixed and will normally be located with the airborne division in the communications zone as a part of theater army reserves, or it may be located in the zone of the interior as a strategic reserve. It will normally operate in support of the division in mounting and marshaling areas in the communications zone. It also supports the division in the zone of the interior when division units are in a training status or on standby for commitment to a theater of operations. The company receives and stockpiles sufficient quartermaster air delivery equipment to support the division, or any element thereof, in packing, rigging, and loading activities in preparation for an airborne assault. After the division is committed to an assault, continuing daily air supply requirements must be provided by nondivisional theater army support units such as the quartermaster aerial supply company.

a. Mounting Area Operations. In the mounting area, the company will provide technical assistance to divisional units preparing for an airborne operation. Supply and maintenance platoon personnel will issue personnel parachutes to all division troops. Personnel of the air delivery platoon will assist and/or supervise combat elements in the rigging and loading of

supplies and equipment. Maximum preparation for the airborne assault is made in the mounting area, including the designation of teams to accompany the divisional elements committed to the assault.

b. Marshaling Area Operation. In the marshaling area (fig. 8), the divisional elements committed to an assault will complete final preparations for airborne attack. The team of parachute packers, repairmen, and air delivery specialists assigned to each tactical element will, before takeoff, assist wearers with the fitting and adjusting of their parachutes as required. They will also assist with the attaching of cargo parachutes to cargo load.

48. Method of Operation

a. The quartermaster air equipment support company stores and maintains sufficient quartermaster air delivery equipment to support the airborne division in garrison or during field or combat operations. It issues this equipment to division units engaged in packing, rigging, and loading supplies prior to the assault, including the first 3 days' supplies to be delivered with the assault echelon. After the division has been committed, however, continuing daily air delivery support must be provided by nondivisional theater army support units such as the quartermaster aerial supply company.

b. In a tactical operation, selected personnel of the company, organized as teams, may accompany the assault echelon to provide divisional units technical assistance and supervision in the recovery and evacuation of quartermaster air delivery equipment.

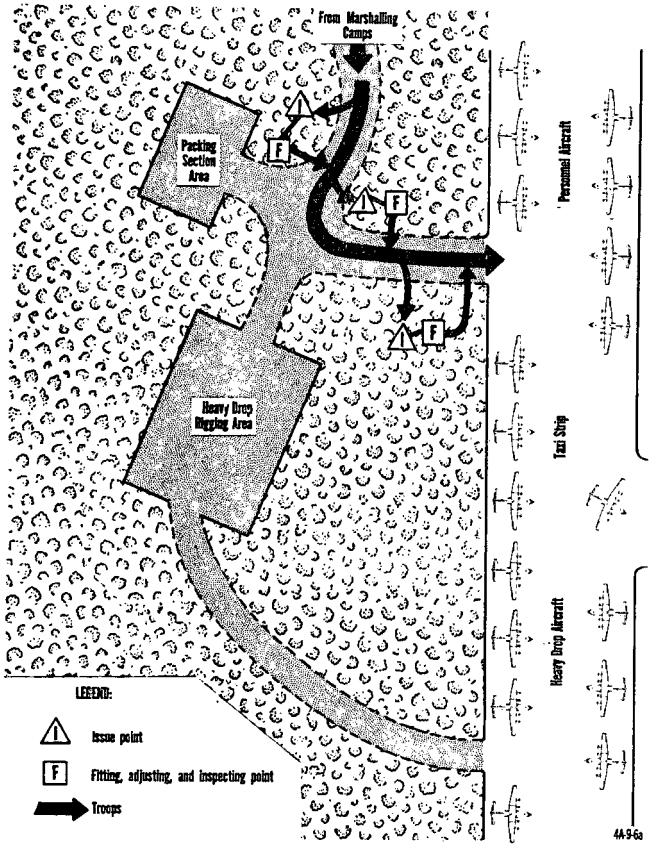


Figure 8. Company activities in marshaling area.

c. Requirements for quartermaster air delivery equipment, including supply and maintenance materials, that exceed the organic capabilities of the com-

pany must be provided by the quartermaster air equipment repair and depot company. This unit is normally located in the communications zone.

49. Types of Operations

The company engages in the following overall operations:

a. Supply and Maintenance Operations. Supply and maintenance operations are concerned with—

(1) Procurement of the supplies and equipment required by the company to accomplish its organizational maintenance mission.

(2) Receipt, storage, and issue of quartermaster air delivery equipment to divisional airborne units.

(3) Recovery of parachutes and related quartermaster air delivery equipment.

(4) Methods and procedures used to maintain the division's quartermaster air delivery equipment in top operating condition.

b. Air Delivery Operations. Air delivery operations are concerned with the methods and procedures used to pack and rig cargo loads for air delivery.

c. Packing Operations. Packing operations are concerned with the inspection and packing of the parachutes utilized by the division.

50. Coordination

Coordination among the division parachute officer, the commander of the airborne division support command, the division G3, division air liaison personnel, and the S3 officers of the organizations with which the

company is associated is of the greatest importance in planning for and executing air delivery operations. In the execution of these operations, the company is normally called upon to provide technical assistance in rigging, dispatching, manifesting, and loading procedures. Although weight and balance information will be compiled by the S3 of the unit being moved, the parachute operations officer of the quartermaster air equipment support company may assist in the compilation of these data.

51. Manifesting and Dispatching Cargo Loads

Each unit involved in an air movement will normally prepare its own manifests and will furnish Air Force personnel with a copy of the manifest. In a division air movement involving the quartermaster air equipment support company, personnel of the company will manifest and dispatch the company's equipment included in the operation.

a. Manifesting Procedure. Manifesting procedures will be performed as outlined in table VII of TM 57–210.

b. Dispatching Procedure. Dispatching consists of assembling the various air delivery containers and rigged loads at the marshaling areas and arranging them by airplane loads as determined by the manifests. For this purpose, control points at loading sites and inspection points at loading zones should be established. Transportation is then assigned to the various loads to insure their delivery to the airplane as expeditiously as possible. The air delivery equipment should be placed on trucks or trailers equipped with heavy-duty conveyors.

52. Recovery

All parachutes and other quartermaster air delivery equipment used in training or combat jumps should be recovered in accordance with the provisions of AR 750–1670–2 and directives of division and higher headquarters. In a training jump, each individual will usually be responsible for his own parachute from the time of issue to the time of turn-in to supply and maintenance personnel. In tactical training operations or combat operations, personnel from the quartermaster air equipment support company may be called upon to perform technical assistance for recovery operations. Recovery teams are usually drawn from the packing and air delivery platoons. The parachute operations officer, under the direction of the division parachute officer, is responsible for the division plan of recovery. This plan is contained in the division administrative order and should include recovery points, evacuation routes, and methods of evacuation through supply and maintenance channels. Suggested recovery plans, which may be adapted to different military situations, are as follows:

a. Individual Recovery Plan. In the individual recovery plan, each parachutist recovers his own parachute, figure-eight rolls it, stows it in his kit bag, and carries it to a collecting point operated by members of the supply and maintenance sections. This plan applies only to operations conducted for jump training.

b. Ground Team Recovery Plan. In the ground team recovery plan, collecting teams, supervised by personnel from the quartermaster air equipment support company, clear the drop zone of parachutes and other quartermaster air delivery equipment and carry

these items to collecting points, where the items are turned in to supply and maintenance section personnel. This plan is designed solely for training operations involving the completion of unit tactical problems after the parachutists have landed on the drop zone.

c. Jump Team Recovery Plan. The jump team recovery plan which is prepared and disseminated by the division parachute officer, is best suited to combat operations or training operations requiring the tactical participation of the quartermaster air equipment support company. Because the company may be responsible for recovery in conjunction with combat operations of the airborne division, the company commander should take advantage of every opportunity that will permit him to implement the jump team recovery plan in conjunction with training operation. Recovery team personnel should accompany or follow closely the assault echelon by parachuting with it into the drop zone.

(1) *Recovery.* Parachutes recovered from the drop zone are figure-eight-rolled and protected by suitable cover from dirt, grease, sunlight, and moisture.

(2) *Storage.* The platform assemblies, containers, and related equipment used in the drop should be stored under suitable shelter, when available, pending evacuation.

(3) *Evacuation.* The evacuation of parachutes and other air delivery equipment from the drop zone has a high priority following the evacuation of casualties. Recovered equipment that cannot be repaired at the organizational maintenance level will be evacuated

through maintenance channels direct to the air equipment repair and depot company. The recovery personnel will assist in the loading of equipment on the trucks and, whenever practicable, will accompany the parachutes and equipment to guard them from theft or sabotage.

(4) *Report of recovery mission.* DA Form 10–227 (Report of Recovery Mission) is prepared by the recovery team commander. The form should be prepared in advance so that it may include the quantity of each item used on the mission. The completed report should then include the quantity and type of all items recovered. A copy of this report is forwarded to the supply and maintenance platoon headquarters, which enters the appropriate information on the supply records. A second copy is forwarded to the division parachute office where it becomes a part of the permanent company files.

53. Records, Reports, and Forms

The special records, reports, and forms that are used in the operations of the quartermaster air equipment support company should not be confused with the regular records, reports, and forms used for normal company administration. Copies of special records and reports should be filed in the office maintained by the parachute operations officer in the company work area. Normally, reports to higher headquarters will

consist of summaries of production records. The forms and charts listed in this chapter are designed to aid personnel responsible for maintaining the company's special records and reports.

a. Command Report. The quartermaster air equipment support company will, when in a combat zone, prepare a monthly command report. The report will cover information on and evaluation of combat operations, recommendations based on experiences, details of joint and combined operations and support activities, and other material pertinent to doctrine, organization, equipment, training, administration, techniques, and tactics. The purpose of the command report is to insure timely and appropriate influence on the stated subjects through rapid and effective collection, evaluation, and application of specific lessons learned in combat operations. Instructions relative to the scope, preparation, and disposition of the command report may be found in AR 525–24.

b. Unit History. The quartermaster air equipment support company may prepare a unit history, either of an official or unofficial nature, covering the company's activities in peace or war. This history may comprise the entire life of the unit or be confined to a specific period. Official unit histories are financed from appropriated or nonappropriated funds; unofficial unit histories are produced without cost to the Government. The Department of the Army encourages the publication of unit histories, and instructions concerning their scope, preparation, and distribution may be found in AR 220–345.

Section II. SUPPLY AND MAINTENANCE SECTIONS

54. Responsibility

When the company is operating as a unit, activities of the supply and maintenance platoon are the direct responsibility of the platoon leader. The supply and maintenance sections, under the immediate supervision of the section supervisors, are responsible for—

a. Requisition, storage, and issue of the supplies and equipment included in the categories described in paragraphs 49*a* (1) and (2).

b. Periodic inspections and organizational maintenance of parachutes and related air delivery equipment held in storage.

c. Effective coordination with other company elements for technical assistance in processing and repair of damaged equipment.

d. Inspection, fabrication, and assembly of rigging components and related equipment.

e. Maintenance of supply records for air delivery equipment.

f. Establishment and operation of an effective shop system to insure that each piece of equipment received for inspection and/or repair is subjected to a comprehensive series of checks to render it in top operating condition. (Maintenance methods and systems used will be determined by the nature and volume of the company's total workload.)

55. Storage

Personnel of the supply and maintenance sections charged with storage duties must be familiar with

standard Department of the Army storage practices (FM 10–13 and TM 743–200). Storage practices will be guided also by division standing operating procedures and directives from higher headquarters. Because of the diversity of supplies stored by the quartermaster air equipment support company, time- and space-saving methods must be employed. Inspections must be made at frequent intervals to make certain that supply deterioration, faulty warehousing, fire hazards, and other deficiencies are kept to a minimum. Frequent inventories should be taken to enable the company commander to see at a glance what equipment is on hand for a particular mission and what equipment is required.

56. Issue

The issue of supplies and equipment must follow standard Department of the Army policies and principles and must be based on the directives of the commander of the airborne division support command and higher headquarters. Personnel of the supply and maintenance sections charged with issuing supplies must make certain that a receipt is executed for each issuance.

a. Service Mission Supplies. Supplies required for the accomplishment of the company's service mission are issued to the using elements of the company in conformance with current standing operating procedures.

(1) *Expendable items.* Expendable items, such as cord, wax, webbing, and tape, may be issued from a stockroom located in the supply and maintenance shed or in the parachute issue shed. One of several methods may be

used. A daily issue may be made in response to requests submitted by the company operating elements. Another method is to make issues to individuals as needed. If the issue is made to individuals, a request for supplies must be signed by the individuals' section leader or other designated person.

(2) *Nonexpendable items.* Nonexpendable items, such as sewing machines and packing tables are issued on DA Form 10–233 (Hand Receipt for Expendable or Non-Expendable Items) to the section leaders involved. The supply and maintenance officer should make informal checks from time to time to make certain that issued nonexpendable items are serviceable.

b. Division Support Supplies. Items of quartermaster air delivery equipment, such as air delivery containers, platforms, and platform assemblies, and free-type personnel parachutes, are issued to divisional units on DA Form 10–233 upon approval of requisitions submitted to the division parachute officer by the units. Troop-type parachutes may be issued to individuals or units on the basis of flight manifests prepared and submitted in advance by unit personnel officers. The issue of parachutes is effected most expeditiously by the establishment of "at plane" supply points, when possible, so that jumpers may move directly from issue point to the inspection point. In issuing troop-type personnel parachutes to divisional units the following factors must be considered:

(1) *Training jumps.* In training jumps, when the situation permits, parachutes are issued to

troops lined up at the issue point (fig. 7) according to stick and planeload. Each man calls out his name as he approaches the issue point to receive a parachute.

(2) *Combat jumps.* For combat jumps, if the time element permits, parachutes may be issued in the same manner as prescribed for training jumps ((1) above). If the time element will not permit issue of parachutes as described in (1) above, parachutes may be issued from trucks parked at designated issue points on the departure airfield.

(3) *Supply economy.* After the departure of the parachutists' aircraft, the officer or noncommissioned officer in charge of the issue detail makes certain that all extra parachutes, equipment, and supplies are recovered from the issue points and returned to the company. He assigns certain men to remain at the airfield to recover static lines and other equipment that return with the aircraft.

57. Shakeout

The shakeout operation frees a parachute of all foreign matter that may have been picked up when the canopy and suspension lines were on the ground after a previous jump or drop. Personnel parachutes, extraction parachutes, and light cargo parachutes may be shaken out in a shakeout room indoors or on a shakeout tower outdoors (fig. 5). To raise the parachute above the ground for the shakeout operation, a rope of suitable thickness is fitted with a metal snap fastener and run through an overhead pulley. A two-man

team is generally used for the shakeout procedure. Shakeout procedure is described in TB 10–500-series.

58. Drying

All parachutes and containers must be thoroughly dried before being packed or stored. Air delivery containers may be spread out on a clean, flat surface until dry. When personnel parachutes, extraction parachutes, cargo parachutes, or *light* cargo parachutes are found to be in a damp condition, they will be thoroughly dried in a warm, well-ventilated room. This room should be of sufficient height to permit the complete parachute to be suspended clear of the floor. A parachute should be dried as follows:

a. The parachute should be suspended at its apex so that no part of the parachute will touch the floor (fig. 9).

b. When a room of sufficient height is not available, the parachute may be dried in one of three ways:

(1) Suspending the parachute canopy at the apex, with the suspension lines and other lower parts resting on a packing table (fig. 9).

(2) Suspending the parachute assembly at both top and bottom forming a **U**-shaped suspension of the whole assembly.

(3) Suspending the parachute canopy at the apex and chain-looping the suspension lines.

c. Great care must be taken that, when suspended, the canopy is clear of surrounding walls and projections that might damage the fabric.

d. Canopies should be suspended at least 2 feet apart to prevent them from touching each other.

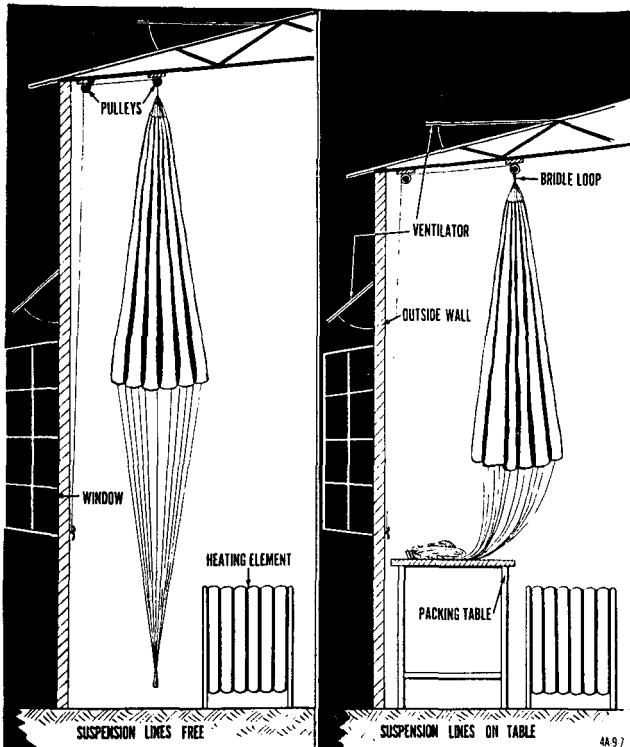


Figure 9. Parachute drying methods.

e. Fans may be used to increase the flow of air through the drying room.

59. Inspections

a. In-Storage Inspection. An in-storage inspection normally consists of making a visual check of all categories of air delivery equipment, including parachutes, to make certain that no damage has been sustained

during storage. The parachute operations officer may coordinate with the platoon leaders for technical assistance in performing in-storage inspections.

b. Routine Parachute Inspection. A routine parachute inspection consists of making a visual check of all the components of a parachute that is ready for issue, without opening the pack. The interval and scope of routine parachute inspections are outlined in AR 750–1670–2. The parachute operations officer should coordinate with platoon leaders for technical assistance in performing routine parachute inspections.

c. Maintenance Classification Inspection. A maintenance classification inspection is performed on damaged parachutes and related air delivery equipment received at the maintenance shop. Designated inspectors from the supply and maintenance sections thoroughly check all damaged items and determine whether they can be repaired locally or should be sent to a field maintenance installation or a depot for further processing and disposition.

d. Final Maintenance Inspection. A final maintenance inspection is performed on all repaired parachutes. In performing this inspection, the inspector checks to make certain that the indicated repairs have been made and that the item is serviceable and ready to be tagged and returned to stock.

e. Drop Test. A drop test will be performed on a parachute when any doubt as to its serviceability exists. The interval and scope of a drop test are outlined in AR 750–1670–2. For drop testing parachutes, an air delivery container loaded with suitable weight may be used.

60. Repair

The quartermaster air equipment support company is charged with the organizational maintenance of its parachutes and other quartermaster air delivery equipment, as defined in AR 750–1670–2. Repair priorities are determined by the current situation, although as a general rule, troop-type personnel parachutes have first priority.

61. Records, Reports, and Forms

a. Bin Card. The bin card (fig. 10) may be a small piece of blackboard or acetate tacked to each storage bin containing parachutes on which packing dates may be entered with a piece of chalk or crayon. The card may also contain the date of routine inspection of those parachutes requiring periodic inspection.

b. Consolidated Inventory Report (Air Equipment). DA Form 10–228 (Consolidated Inventory Report (Air Equipment)) provides ready reference for determining the necessity for requisitioning additional parachutes and other air equipment to meet operational commitments or to process unauthorized overages in accordance with supply economy measures. The inventory report, tabulated whenever equipment status or stock levels change, includes equipment on hand, in repair, on the line (dispatching area), expended, or received. One copy of the report is retained in the files of the operating platoon, and a second copy is forwarded to the parachute operations officer.

c. Jump Schedule Board. The jump schedule board (fig. 11) is used for those supply operations where the quartermaster air equipment support company must issue parachutes and other equipment to jump person-

nel. The board serves as a handy reference for the responsible supply and maintenance personnel. The board may be a blackboard or a large sheet of acetate on which the responsible personnel make appropriate entries with chalk or crayon.

d. Army Parachute Log Record. See paragraph 65*a*.

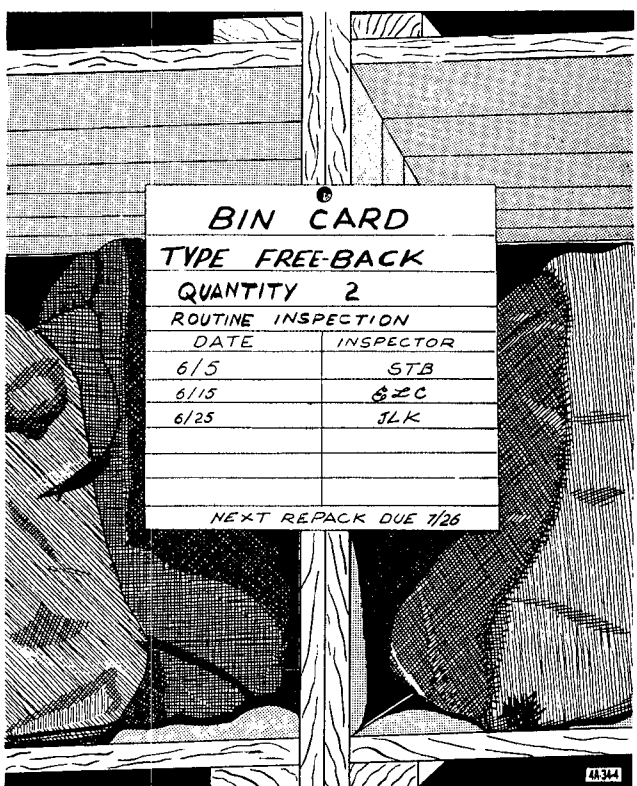
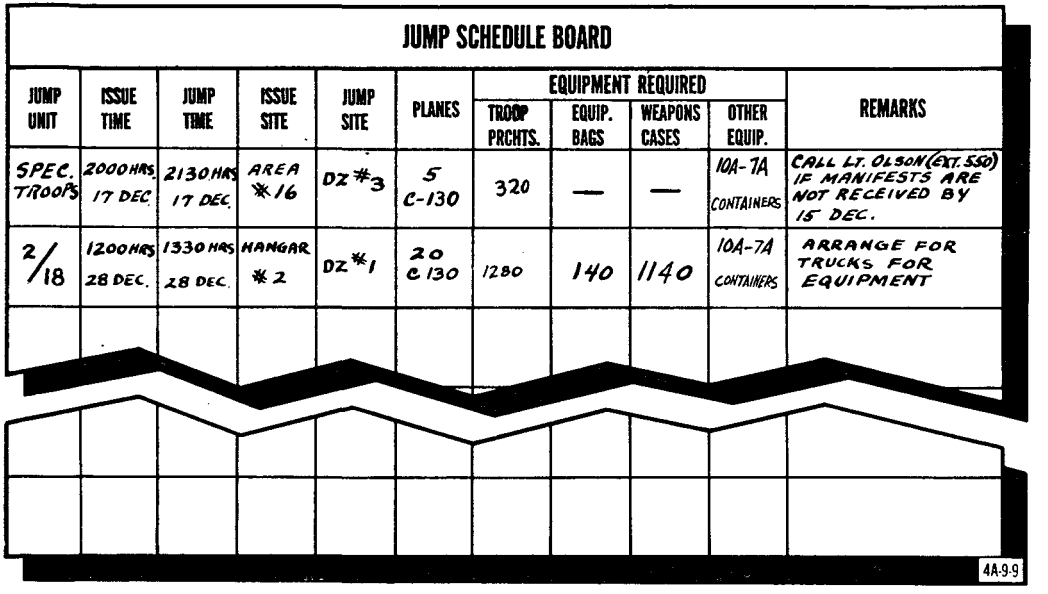


Figure 10. Bin card.



JUMP SCHEDULE BOARD

JUMP UNIT	ISSUE TIME	JUMP TIME	ISSUE SITE	JUMP SITE	PLANES	EQUIPMENT REQUIRED				REMARKS
						TROOP PRCHTS.	EQUIP. BAGS	WEAPONS CASES	OTHER EQUIP.	
SPEC. TROOPS	2000 HRS 17 DEC	2130 HRS 17 DEC	AREA #16	DZ #3	5 C-130	320	—	—	10A-7A CONTAINERS	CALL LT. OLSON (EXT. 550) IF MANIFESTS ARE NOT RECEIVED BY 15 DEC.
2/18	1200 HRS 28 DEC.	1330 HRS 28 DEC.	HANGAR #2	DZ #1	20 C 130	1280	140	1140	10A-7A CONTAINERS	ARRANGE FOR TRUCKS FOR EQUIPMENT

4A-9-9

Figure 11. Jump schedule board.

e. Individual Repair Report (Air Equipment). DA Form 10–231 (Individual Repair Report (Air Equipment)) is prepared daily by each repairman, signed by his immediate supervisor, and turned in to the supply and maintenance section supervisor at the end of each working day. The individual reports are used to prepare a Consolidated Repair Report (*f* below). DA Form 10–231 includes the type of equipment being repaired, the nature of the repairs, and where applicable, the serial number of the parachute.

f. Consolidated Repair Report (Air Equipment). DA Form 10–232 (Consolidated Repair Report (Air Equipment)) is prepared in triplicate each day by the supply and maintenance section supervisor and forwarded to the platoon headquarters. It is a consolidation of DA Form 10–231 (*e* above) prepared by each repairman and turned in to platoon headquarters. The supply and maintenance platoon headquarters forwards the report to the division parachute office where the repair reports of all operating platoons are consolidated and used as a basis for requisitioning air delivery supplies and equipment.

g. Parachute Tags. See paragraph 65*e*.

Section III. PACKING SECTIONS

62. Responsibility

Personnel of the packing sections inspect and pack personnel and cargo parachutes assigned to their sections for servicing. A rigger-assistance team, normally consisting of packing or other rigger-qualified personnel, is responsible for assisting in the fitting, adjusting,

and inspection of parachutes of wearers prior to their enplaning. Recovery teams which may accompany airborne division tactical elements in the assault are responsible for rendering supervisory and technical assistance in the recovery and evacuation of quartermaster air delivery equipment from the objective area.

63. Inspection

a. Repack Inspection. A repack inspection, which consists of a complete physical check of all components of a parachute, is performed by the packer prior to packing the parachute. The interval and scope of repack inspections are outlined in AR 750–1670–2. Damaged parachutes, found at the time of the repack inspection, are tagged and routed to the supply and maintenance platoon.

b. In-Process Packing Inspection. An in-process packing inspection is performed by authorized packing supervisors at critical phases during the packing of a parachute. These inspections ascertain that the packer has followed authorized packing procedures.

c. Final Packing Inspection. A final packing inspection is performed by an authorized packing supervisor who ascertains that all in-process packing inspections have been performed and then checks the exterior of the parachute and prepares it for storage. The final inspector examines DA Form 10-42 to make certain that the correct entry has been made.

d. Rigger-Assistance Inspection. A rigger-assistance inspection (rigger check) is a routine parachute inspection performed on the parachutes of jump personnel immediately prior to enplaning. In addition to visually checking parachute components, the riggers

will aid the jumpers in the fitting and adjusting of their parachutes.

64. Packing

Parachute packing may be organized in accordance with local conditions. Parachutes must be checked for thorough dryness before they are packed. Parachutes that are not completely dry may be dried by spreading them out on a clean, flat surface and allowing sufficient time for the moisture to evaporate. Care should be taken to avoid direct sunlight. The packing procedures for each type of parachute are discussed in appropriate publications (app. I). Parachute packing operations should be performed on a painted cement floor or on smooth ground or other suitable surface covered with a paulin.

65. Records, Reports, and Forms

a. Army Parachute Log Record. DA Form 10–42 may be called a parachute's diary. Appropriate entries are made each time the parachute is jumped or dropped, packed, inspected, repaired, modified, or drop tested. The form is tied into the pocket on the parachute and must remain with the parachute at all times. The log record is signed by the packer, thus certifying that he has inspected and packed the parachute and has found no defects. The packer is then responsible for the performance of the parachute and may be called upon to jump with it at any time.

b. Parachute Packing Report. DA Form 10–229 (Parachute Packing Report) is prepared by the section leader as the basic report of the packing teams he supervises. The form lists cargo parachutes by type

and quantity and personnel parachutes individually by type and serial number. The section reports, or team or individual reports if the forms are so used, are compiled daily into a consolidated Parachute Packing Report (*c* below) for the section.

c. Consolidated Parachute Packing Report. DA Form 10–230 (Consolidated Parachute Packing Report) is prepared daily from the DA Forms 10–229 (*b* above) submitted by each section leader at the end of the previous day. A copy of the consolidated report is forwarded to the packing platoon headquarters, which enters the appropriate information on the supply records if the platoon is operating independently, or, if operating as a unit, forwards the consolidated report to the division parachute office.

d. Unsatisfactory Equipment Report (DA Form 468). DA Form 468 (Unsatisfactory Equipment Report)—(UER) will be used to report malfunctions of personnel parachute canopies which have caused a squid or streamer. The parachute involved will be held pending disposition instructions contained in AR 385–40 and AR 750–1670–2.

e. Parachute Tags. All personnel and cargo parachutes, when evacuated to another parachute maintenance activity or when inspection determines the parachutes to be unserviceable or to require modification, will have attached thereto a completely executed identification tag indicating the serviceability status of the parachute. When a parachute is transferred within a unit, as from a packing section to a supply and maintenance section, the tag need not be fully executed but will be attached to the assembly. The officer charged with responsibility for parachute maintenance will

designate in writing the individuals by name, grade, and service number, whom he certifies as qualified to execute and authenticate the inspector's block on each tag. Instructions pertaining to the completion, utilization, and disposition of parachute tags are prescribed by current army regulations (AR 750–1670–2).

Section IV. AIR DELIVERY SECTIONS

66. Responsibility

The air delivery sections will rig air delivery containers and platform loads in preparation for airdrop. They will provide technical assistance to division units engaged in preparing supplies and equipment for air delivery. The sections are responsible, as well, for inspection and, as required, for assistance in the packing of the company's medium- and heavy-cargo parachutes. They also provide personnel to establish and conduct training programs for division personnel in the techniques of rigging and loading equipment and supplies needed in support of an airborne operation.

67. Packing Air Delivery Containers

Division units pack their own air delivery containers. The personnel of the air delivery sections, together with personnel of other sections as required, will provide technical assistance during the packing of air delivery containers.

a. Types of Containers. The types of air delivery containers normally used by the quartermaster air equipment support company are discussed in paragraph 22. Complete instructions for packing all types of containers are contained in the TM 10–500-series.

b. Packing Methods. The methods employed in packing a large number of air delivery containers will vary with the number and types of containers required for the mission. Normally, the containers will be packed by two-man teams. In packing A–22 containers, the teams may work independently, each team assembling, loading, and rigging a complete container; or they may work on a production-line basis. The production-line method requires the use of wheeled conveyors laid out on the ground or floor. One team lays out containers on the conveyor. A second team, utilizing materials-handling equipment, places the supplies or equipment in position on the open containers. A third team completes the assembly of the container around the load. Qualified riggers then attach the parachutes. A fourth team, utilizing materials-handling equipment, receives the packed containers at the end of the conveyors, chalks the weight and contents (such as 105 ammo, 2,065 lbs.) on the outside of the container, and loads the containers onto trucks for delivery to the airplane or to the marshaling area.

68. Rigging Platform Assemblies

Division units rig their own heavy equipment, such as trucks, trailers, and the large weapons, with technical assistance from qualified personnel of the air delivery sections, together with personnel of other sections as required.

a. Types. The types of platforms and platform assemblies normally used by the company are discussed in paragraph 23. Complete instructions for rigging various assemblies are contained in appropriate manuals and technical bulletins (app. I).

b. Rigging Methods. The methods employed in rigging a large number of platform assemblies will vary with the number and types of assemblies required for the mission. Normally, the assemblies will be rigged by five-man teams. In rigging a large number of assemblies, the production-line method may be used, requiring a reorganization of rigging teams. In the production-line method, a four-man team places the platforms on the roller conveyor assembly line and attaches the extraction bar. A second team, utilizing materials-handling equipment, places the vehicle or equipment on the platform and places the required shock pads and crash frame under the load. Then, as the assembly continues, two-man teams attach the suspension group, lash the equipment to the platform, and install the parachute stowage platform if required. Qualified riggers position the cargo parachutes on the stowage platforms and safety them to the load. At the end of the assembly line, the rigged loads are placed aboard trucks for transportation to the marshaling area or to the airplane.

69. Servicing Parachutes

As required, personnel of the air delivery sections may assist in the servicing of cargo parachutes to include packing, drying, and inspection. Repacking, in-process packing, and final packing inspection will be performed as outlined in paragraph 63.

CHAPTER 7

DEFENSE AND MOVEMENT

Section I. DEFENSE

70. Responsibility

The commander of the airborne division quartermaster air equipment support company, under the direction of the division parachute officer, is responsible for supervising and coordinating the defense plans for the company, including security, camouflage, and demolition. For the most part, the commander will be guided by defense plans established by the commander of the airborne division support command.

71. Security

In implementing established plans for the security of the company area, the company commander must coordinate with neighboring units for defense against infiltration and against air and ground attack. In addition, he must make sure that a proper interior guard has been established to prevent theft or sabotage of company supplies and equipment and that all personnel are trained in both passive and active defense measures against nuclear, air, airborne, ground, biological, and chemical attacks.

72. Camouflage

As the company has a limited number of weapons for active defense, it must depend to a large extent on camouflage. The values of camouflage discipline

must be stressed by company officers and noncommissioned officers, as the carelessness of one man may disclose the position of the unit and endanger the entire group. The principles and techniques of camouflage may be found in FM's 5–20, –21, –22, and –23.

73. Demolition

Demolition is employed only as a last resort. On orders from higher headquarters, the company may be called upon to destroy all buildings, machinery, equipment, supplies, parachutes, and records that cannot be evacuated. Thus, the company commander should establish a plan for the methodical destruction of company property by fire and explosives when so directed. Instructions for the demolition of various types of supplies and equipment are contained in FM 5–25.

Section II. MOVEMENT

74. Orders

Movement orders originate from division headquarters and are disseminated through the airborne division support command to the division parachute office. They are usually preceded by warning orders. When the warning order is received, the division parachute officer notifies the company commander and his subordinate officers so that they may adapt their overall plans to movement requirements. The company has relatively few organic vehicles and must be provided with the additional transport required for movement. Therefore, the company commander forwards his requirement to the division parachute officer. The division parachute officer transmits the movement

plans and requirements to the commander of the airborne division support command who consolidates movement requirements and arranges for transportation for all elements of the division.

75. Responsibilities

Responsibility for estimating and submitting plans and requirements for successful movement of company elements rests with the company commander in coordination with the division parachute officer. He delegates authority to the officers within the company, holding them responsible for the performance of certain duties incident to the movement.

a. Company Commander. It is the function of the company commander to have all company headquarters equipment and supplies in complete readiness on the day of movement, and to have all company personnel provided with authorized individual equipment.

b. Supply and Maintenance Platoon Officers. The supply and maintenance platoon officers (platoon leader and supply and maintenance officer) supervise the packing and shipping of equipment. They will arrange for personnel of the supply and maintenance sections to pack all supplies normally stored by the sections and to assist other sections in the packing and handling of other equipment. In movement by rail, they will see that supply and maintenance personnel block and brace vehicles and warehouse equipment to be transported on flatcars.

c. Platoon Leaders. Platoon leaders are responsible for preparation for movement of their platoons. They will see that the personnel, equipment, and supplies are in complete readiness on the day of movement.

76. Requirements for Motor Movement

Because of the heavy equipment used and stored by the quartermaster air equipment support company, movement by motor requires transportation facilities in addition to those organic to the company. The company's organic transportation facilities are provided for day-to-day operating requirements only. When the unit makes an administrative move, its organic transportation facilities must be augmented from nondivisional transportation sources. To obtain the vehicles required in excess of those organic to the company, the company commander must submit a transportation request to higher headquarters.

77. Requirements for Rail Movement

In most instances, the company and its equipment will move by rail. The number of cars required to move the company will vary with the amount of equipment to be taken with the company and the capacity of available rail facilities.

78. Requirements for Air Movement

Movement of the company and its equipment by air is not usually feasible. The company is, however, 100 percent air transportable by C–119, C–123, and C–130 aircraft. Movement of personnel by air may take place at the direction of higher authority when other means of transportation are not available, or in conjunction with another type of movement. The large volume of equipment and supplies organic to the company is the most important factor in estimating aircraft requirements.

79. Requirements for Water Movement

Normally, transfer to an oversea command will require the quartermaster air equipment support company to move by water. The amount of shipboard space required to accommodate the company en route will vary with the facilities and capacity of the movement transport. The requirements of the company will be determined by the port commander from reports of company strength and tonnage of equipment.

APPENDIX I

REFERENCES

AR 30–41	Field Rations
AR 40–207	Individual Sick Slip
AR 59–106	Operation of Air Force Terminals
AR 65–75	Unit Mail Service
AR 140–138	Qualification Record, Officer, Warrant Officer, Enlisted Personnel
AR 220–45	Duty Rosters
AR 220–70	Companies; General Provisions
AR 220–345	Unit Histories
AR 310–3	Preparation and Processing
AR 320–5	Dictionary of United States Army Terms
AR 320–50	Authorized Abbreviations and Brevity Codes
AR 335–60	Morning Reports
AR 350–1	Army Training Policies
AR 385–40	Accident Reporting and Records
AR 525–24	Command Report
AR 611–103	Officer Qualification and Classification
AR 611–201	Manual of Enlisted Military Occupational Specialties
AR 614–240	Reassignment of Enlisted Personnel
AR 623–105	Personnel Efficiency Rating Officer Efficiency Report
AR 623–201	Enlisted Conduct and Efficiency Ratings
AR 624–200	Appointment and Reduction of Enlisted Personnel

AR 640–203	Enlisted Qualification Record
AR 672–5–1	Awards
AR 700–2300–1	Motor Vehicles
AR 711–16	Installation Stock Control and Supply Procedures
AR 725–5	Preparation, Processing, and Documentation for Requisitioning, Shipping, and Receiving
AR 735–10	Accounting for Lost, Damaged, and Destroyed Property
AR 735–11	Accounting for Lost, Damaged, and Destroyed Property
AR 735–35	Supply Procedures for TOE Units, Organizations, and Non-TOE Activities
AR 746–80	Marking of Supplies for Shipment
AR 746–2300–1	Color and Marking of Vehicles and Equipment
AR 750–1	Concept of Maintenance
AR 750–5	Organization, Policies, and Responsibilities for Maintenance Operation
AR 750–8	Command Maintenance Inspections
AR 750–1670–2	Maintenance of Quartermaster Supplies and Equipment
DA Pam 108–1	Index of Army Motion Pictures, Film Strips, Slides, and Phono-Recordings
DA Pam 310–1	Index of Administrative Publications
DA Pam 310–2	Index of Blank Forms
DA Pam 310–3	Index of Training Publications
DA Pam 310–4	Index of Technical Manuals, Technical Bulletins, Supply Bulletins,

	Lubrication Orders, and Modification Work Orders
DA Pam 310–7	Index of Tables of Organization and Equipment, Type Tables of Distribution, and Tables of Allowances
DA Pam 310–30	Index of Supply Manuals, Quartermaster Corps
FM 5–20	Camouflage, Basic Principles and Field Camouflage
FM 5–21	Camouflage of Fixed Installations
FM 5–22	Camouflage Materials
FM 5–23	Field Decoy Installations
FM 5–25	Explosives and Demolitions
FM 10–13	Quartermaster Reference Data
FM 10–40	Quartermaster Aerial Supply Company
FM 10–53	Headquarters and Headquarters Detachment, Quartermaster Battalion
FM 19–30	Physical Security
FM 20–15	Tents and Tent Pitching
FM 21–5	Military Training
FM 21–6	Techniques of Military Instruction
FM 21–13	The Soldier's Guide
FM 21–20	Physical Training
FM 21–26	Map Reading
FM 21–30	Military Symbols
FM 21–40	Small Unit Procedures in Nuclear, Biological, and Chemical Warfare
FM 21–41	Soldier's Handbook for Nuclear, Biological, and Chemical Warfare
FM 21–48	Chemical, Biological, and Nuclear

	Training Exercises and Integrated Training
FM 25–10	Motor Transportation, Operations
FM 31–25	Desert Operations
FM 31–30	Jungle Operations
FM 31–70	Basic Cold Weather Manual
FM 31–71	Northern Operations
FM 31–72	Mountain Operations
FM 55–4	Transportation Movements in Theaters of Operations
FM 57–30	Airborne Operations
FM 57–100	The Airborne Division
FM 100–5	Field Service Regulations: Operations
FM 100–10	Field Service Regulations: Administration
FM 101–5	Staff Officer's Field Manual: Staff Organization and Procedure
FM 101–10	Staff Officer's Field Manual: Organization, Technical, and Logistical Data
ATP 10–110	Advanced Individual Training of Quartermaster Personnel
ATP 10–337	Airborne Division Quartermaster Parachute Supply Company
ATT 10–337	Airborne Division Quartermaster Parachute Supply and Maintenance Company
TA 10–100	Allowances of Quartermaster Expendable Supplies
TA 20–2	Equipment for Training Purposes
TA 21	Clothing and Equipment
TM 10–263	Clothing and Textile Repair Sewing Machines

TM 10–269	Repair of Canvas and Webbing
TM 10–405	Army Mess Operations
TM 10–500-series	Air Delivery of Supplies and Equipment
TM 10–591	Sewing Machines for the Repair of Parachutes and Allied Equipment
TM 10–1600	Organizational Preventive Maintenance Services and Technical Inspections of Materials Handling Equipment
TM 10–3930–212-series	Truck, Lift, Fork, Gasoline, Rough Terrain, 4 Steerable-Drive Wheels, Pneumatic Rubber Tires, Extensible-Lever-Arm-Type Lift, 6,000-Pound Capacity (Baker)
TM 21–305	Manual for the Wheeled Vehicle Driver
TM 38–230	Preservation, Packaging, and Packing of Military Supplies and Equipment
TM 38–660–2	Maintenance Instructions and Procedures for Administrative Vehicles
TM 57–210	Air Movement of Troops and Equipment
TM 57–220	Technical Training of Parachutists
TM 743–200	Storage and Materials Handling
TM 743–200–1	Storage and Materials Handling
TB 10–500-series	Packing, Rigging, and Maintenance of Parachutes and Other Air-Type Equipment

APPENDIX II

COMPANY ADMINISTRATION

1. Objectives

Company administration comprises the management, guidance, training, supply, physical conditioning, leadership, and discipline of men composing the airborne division quartermaster air equipment support company. It has for its objectives the development of professional competency and a high state of morale. The first objective is accomplished through the efficient utilization of aptitudes, interests, skills, and physical characteristics. The second is accomplished through competent leadership. See AR 220–70.

2. Records and Reports

The records and reports normally in greatest use are—

a. *Routine.*
   (1) Morning reports (Co. prepares feeder, files organizational from Admin Co.).
   (2) Council book.
   (3) Daily sick report.
   (4) Service records (maintained by Admin Co.).
   (5) Duty rosters.
   (6) Qualification cards.
   (7) Training progress chart.
   (8) Correspondence file.

b. *Miscellaneous.*
   (1) *Policy file.* The policy file furnishes a current summary of the policies of the unit in con-

sonance with those issued by the division parachute officer and higher authorities. It is prepared for use by company personnel. The file should be based on existing orders, experience, and past decisions pertaining to all aspects of company operation.

(2) *Progress reports.* Progress reports and statistical compilations should be prepared periodically by company headquarters on subjects that pertain to the activities of the company. Compilations may be converted into graph form for display or instructional purposes. The progress report contains information that is often required for the preparation of reports to higher headquarters.

3. Troop Information Program

a. General. The troop information program embraces the conduct of troop information discussion periods, the operation of troop information centers, the use of daily news summaries, and the use of Army newspapers, radio, and motion picture facilities.

b. Mission. The mission of the troop information program is to keep the soldier informed on military and civilian matters so that he may understand his responsibilities as a soldier and as a citizen of a free nation.

c. Accomplishment. Normally, one undivided hour a week is allotted for training under the troop information program. The information and education officer supplies discussion leaders with an outline or guide. Discussions are held in platoon-size groups.

4. Troop Education Program

a. General. The troop education program consists of educational and vocational guidance activities, educational services including correspondence courses provided by the United States Armed Forces Institute (USAFI), the establishment of Army education centers, and accreditation procedures for the benefit of those completing the program.

b. Mission. The mission of the troop education program is to assist military personnel in obtaining the education necessary to develop their military careers, provide them with continuing opportunity for nonmilitary education, and aid in maintaining discipline and morale.

5. Athletics and Recreation

a. General. Organized athletics and recreational opportunities are essential for the physical and mental welfare and morale of company personnel. In planning physical welfare and morale-building activities, the company commander should designate a well-qualified officer to take over the general supervision of the program.

b. Athletics. Intramural competitions usually are successful when they are a part of an organized athletic program. Such intramural competition can include volleyball, basketball, baseball, or softball competition with teams from adjacent division and Air Force units. Boxing tournaments can also be arranged between a company team and the team of a nearby unit.

APPENDIX III

UNIT PROFICIENCY STANDARDS

1. Basis

a. Do the men have knowledge of first aid?

b. Are the men trained in map reading?

c. Are the men trained in the proper use of individual and organizational weapons?

d. Have the men had proper combat training?

e. Are the men trained in proper conduct if captured?

f. Are the men oriented in the mission of the unit?

g. Do the men know the proper use of the protective mask?

h. Has each man completed his basic military training?

i. Are division level schools conducted in air delivery methods?

2. Technical

Are the personnel able to perform their primary missions and is each man familiar with the duties of the individual immediately above him? (Determine by spot check of the special duties of each.)

a. First sergeant.

b. Supply and maintenance officer.

c. Supply and maintenance platoon sergeant.

d. Parachute packing supervisor.

e. Air delivery platoon sergeant.

f. Mess steward.

g. Section leaders and section supervisors.

h. Air delivery specialists.

i. Cooks.

j. Parachute packers.
k. Parachute repairman.
l. Parachute operations chief.
m. Clerical personnel.
n. Materials-handling equipment repairman and helper.
o. Truck drivers.
p. Supply clerks and handlers.
q. Crane-shovel operator.
r. Warehouse equipment operators.
s. General carpenter.

3. Housekeeping and Supply

a. Is the unit supply section trained to function properly?
b. Is the unit mess section trained to function properly?
c. Is the unit administrative section trained to function properly?

4. Practical Test

Set up practical problems involving conduct of the company under the following conditions:

a. Unit Performance.
(1) Can the unit perform its primary mission?
(2) Is coordination with Air Force properly executed?
(3) Are the men trained in the proper methods in order to fulfill their missions?

b. Supply and Maintenance Section Performance.
(1) Is the section properly organized?
(2) Are stock levels properly recorded?

(3) Is proper liaison with supply agencies maintained?
(4) Is air equipment in storage properly inspected?
(5) Are parachutes and related air delivery equipment properly stored?
(6) Are containers and platform assemblies properly stored?
(7) Is outdoor storage properly protected?
(8) Is materials-handling equipment properly operated and maintained?
(9) Is maintenance equipment in proper condition?
(10) Are the regulations covering parachute maintenance complied with?
(*a*) Maintenance classification inspection.
(*b*) Application of patches to canopy.
(*c*) Replacement of accessories.
(*d*) Repair of webbing.
(*e*) Maintenance and modification entries in log record.
(*f*) Repair of canvas and webbing type containers.
(*g*) Final maintenance inspection of repaired item.
(*h*) Drop testing.

c. Packing Section Performance.

(1) Is the section properly organized?
(2) Is packing equipment in proper condition?
(3) Are the regulations covering parachute packing complied with?
(*a*) Inspection.
(*b*) Packing of personnel parachutes.

(*c*) Packing of cargo parachutes.
(*d*) Packing of pilot and extraction parachutes.
(*e*) Execution of parachute log record by packer.
(*f*) In-process and final inspections of completed parachute.
(*g*) Inspection of parachutes in storage.

d. Air Delivery Section Performance.
(1) Is the section properly organized?
(2) Is equipment in proper condition?
(3) Are assembly-line methods of rigging perfected, and are all personnel concerned trained in these methods?
(4) Are the men familiar with packaging of all types of containers?
(5) Are the men familiar with rigging of all types of platform loads?
(6) Are parachutes properly attached to loads?
(7) Are loads safely transported to marshaling area?
(8) Are personnel of the section prepared to conduct training programs for divisional units in rigging and loading techniques?
(9) Are the men trained and ready to assist in the packing of cargo parachutes?

e. Rigger-Assistance Team Performance.
(1) Is the team properly organized?
(2) Are team members properly briefed?
(3) Are the regulations covering a rigger-check complied with?
(*a*) The rigger inspects the parachutists from the front to insure that—
1. Helmet is fitted and fastened properly.

2. Shoulder adjusters are snug and even.
3. Chest straps are even and without twists.
4. Quick-release assembly is in the locked position, with the safety clip inserted and all lugs firmly secured.
5. Waistband is through the two waistband retainer loops on the rear of the reserve parachute; the free end of the waistband is formed into a quick-release fold.
6. Reserve parachute has—
   (a) Snap fasteners buckled to the reserve D-ring on the harness.
   (b) Ripcord handle on the parachutist's right. Handle turned away from reserve pack when arctic mittens are worn.
   (c) Ripcord pins straight and in cones.
   (d) Rigger's seal intact.
   (e) Pack opening bands free of the ripcord handle.
   (f) Unfrayed and unbroken pack opening bands.
   (g) Canopy not showing.
7. Leg straps snug and even, through the leg strap loops, and locked in the quick-release assembly.
8. Entire harness is properly adjusted and free of frays and twists.
9. All loose equipment and straps are tied down before the parachutists enplane.

(*b*) The rigger inspects the parachutists from the rear to insure that—

1. Risers are without twists.

2. Static line snap is in serviceable condition.
3. Static line is correctly stowed.
4. Pack closing tie is through the pack opening loop.
5. Saddle is not twisted.

f. Recovery Team Performance.
(1) Is the team properly organized?
(2) Are team members properly briefed?
(3) Do recovery personnel wear proper parachutes and other flying equipment?
(4) Is the personnel jump well executed?
(5) Is assembly after jump properly executed?
(6) Are the proper precautions taken during the field storage of parachutes and related air delivery equipment?
(7) Is the air delivery equipment properly loaded for evacuation?
(8) Are proper guards stationed to accompany evacuation of parachutes?

g. Defense in Bivouac.
(1) Is the defense plan tactically sound?
(2) Is the defense plan adequate against enemy ground troops and guerrillas, airborne troops, and air and CBR attacks?
(3) Are all personnel armed with their permanently assigned weapons?
(4) Are foxholes properly dug and other defensive emplacements arranged?
(5) Are men and vehicles properly dispersed?
(6) Are communications and control lines properly established?
(7) Are strict rules of health and sanitation being observed?

h. Camouflage.

(1) Has the equipment and installation been camouflaged?

(2) Have dispersion, deception, and other basic principles outlined in FM 5–20 been used in the camouflaging?

(3) Is the camouflage adequate to prevent observation from the air or ground?

i. Demolition.

(1) Is the demolition plan both tactically and technically sound?

(2) Are all personnel acquainted with the demolition plan and capable of performing their mission?

(3) Are demolition materials in stock and available?

j. Ordnance and Engineer Equipment Maintenance.

(1) Are the vehicles properly maintained?

(2) Are technical maintenance and operating instructions provided for each vehicle?

(3) Are organizational weapons in satisfactory operating condition?

(4) Is preventive maintenance practiced?

(5) Are sufficient maintenance materials on hand?

k. Showdown Inspection.

(1) Is organizational equipment complete and serviceable?

(2) Is individual equipment complete and serviceable?

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By Order of the Secretary of the Army:

G. H. DECKER,
General, United States Army,
Chief of Staff.

Official:

J. C. LAMBERT,
Major General, United States Army,
The Adjutant General.

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USAR: Same as Active Army except allowance is one copy to each unit.

For explanation of abbreviations used, see AR 320–50.

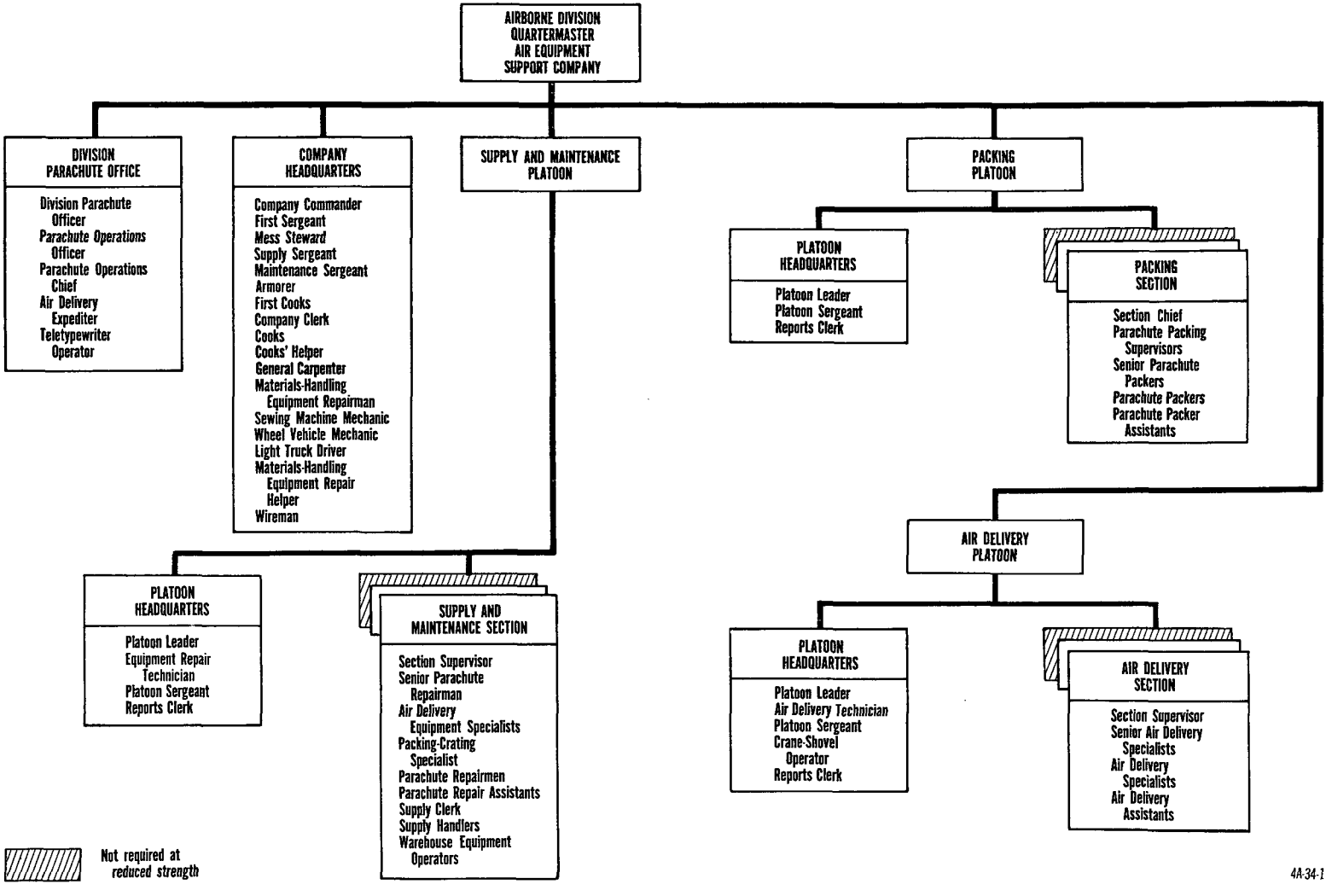

Figure 1. Organizational chart, airborne division quartermaster air equipment support company.