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10-29

DEPARTMENT OF THE ARMY FIELD MANUAL



QUARTERMASTER GRAVES REGISTRATION COMPANY

DEPARTMENT OF THE ARMY

MAY 1952

AGO 3617C—May

QUARTERMASTER GRAVES REGISTRATION COMPANY



DEPARTMENT OF THE ARMY



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CONTENTS

	<i>Paragraphs</i>	<i>Page</i>
CHAPTER 1. INTRODUCTION		
<i>Section 1. General</i>	1-2	1
<i>II. The unit</i>	3-7	1
CHAPTER 2. TRAINING		
<i>Section 1. Training of individuals</i>	8-11	5
<i>II. Unit training</i>	12-20	9
CHAPTER 3. ORGANIZATION AND EQUIPMENT		
<i>Section 1. Organization</i>	21-23	14
<i>II. Equipment</i>	24-30	15
<i>III. Maintenance of equipment</i> ..	31-35	24
CHAPTER 4. DUTIES OF PERSONNEL	36-38	27
5. PREPARATION FOR OPERATIONS		
<i>Section 1. Reconnaissance and site selec-</i> <i>tion.</i>	39-41	39
<i>II. Planning for operations</i>	42-44	40
CHAPTER 6. OPERATION OF THE UNIT		
<i>Section 1. Methods of operating</i>	45-50	43
<i>II. Records and reports</i>	51, 52	51, 53
<i>III. Opening-up, taking-over, and</i> <i>closing-out operations.</i>	53-55	53
<i>IV. Operating under unusual con-</i> <i>ditions.</i>	56-59	54
CHAPTER 7. SECURITY, CAMOUFLAGE, AND DEMOLITION.	60-62	60
8. MOVEMENT		
<i>Section 1. Motor</i>	63-65	63
<i>II. Rail</i>	66-69	68
<i>III. Air</i>	70, 71	75, 76

	<i>Paragraph</i>	<i>Page</i>
APPENDIX I. REFERENCES -----		78
II. MINIMUM TRAINING SCHEDULE -----		86
III. UNIT PROFICIENCY STANDARDS -----		100
IV. FIRST AND LAST GRAVES IN CONSECUTIVE PLOTS. -----		104
V. BLOCKING 1-TON, 2-WHEEL CARGO TRAILER FOR RAIL SHIPMENT. -----		105
INDEX -----		108

CHAPTER 1

INTRODUCTION

Section I. GENERAL

1. PURPOSE

The purpose of this manual is to provide information necessary for the efficient functioning of the Quartermaster Graves Registration Company (T/O&E 10-297A).

2. SCOPE

The scope of the manual is the mission, organization, and operations of the graves registration company. The technical operations of handling deceased personnel are given in FM 10-63, Handling of Deceased Personnel in Theaters of Operations.

Section II. THE UNIT

3. MISSION

The mission of the graves registration company is to receive, evacuate to a temporary cemetery, verify and accomplish identification, and accomplish interment of deceased personnel subject to military jurisdiction. The company will also

establish, operate, and maintain the cemetery; prepare and maintain all records of interment; and collect, inventory, record, and dispose of personal effects received with the remains. With the ending of national hostilities or of a battlefield engagement, the company may be given the additional mission of search and recovery of deceased military personnel.

4. ASSIGNMENT

a. *Combat Zone.* In the combat zone the graves registration company may be assigned to an army or to an independent corps. One or more platoons of the company may operate separately in the combat zone to search for, recover, and evacuate the dead and operate an army cemetery (fig. 1).

b. *Communications Zone.* In the communications zone the graves registration company may be assigned to a base, an intermediate, or an advanced section of the zone. Separate platoons may be assigned by the communications zone commander to perform graves registration operations in the communications zone.

5. CONTROL

a. *Combat Zone.* In the combat zone administrative control is usually exercised over the graves registration company or detached platoons by headquarters and headquarters detachment, quartermaster battalion. Operational control over the company is exercised by the army quartermaster or by a headquarters and headquarters

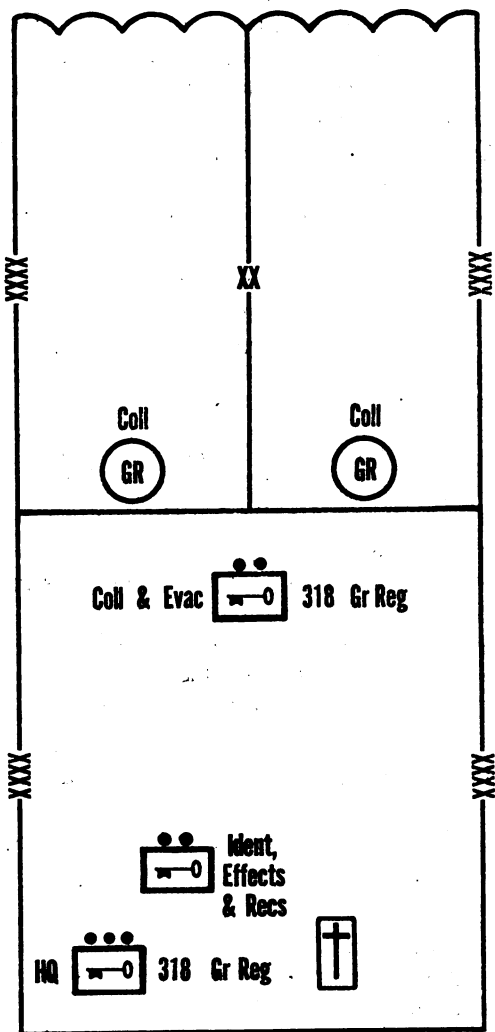


Figure 1. Platoon operation in combat zone.

detachment, quartermaster battalion. However, platoons that operate away from the company may be attached to divisions for administrative and operational control.

b. Communications Zone. In the communications zone the graves registration company (or separate platoons) is normally under the administrative control of a headquarters and headquarters detachment, quartermaster battalion. In certain instances, the battalion may exercise both administrative and operational control.

6. RELATED UNITS

a. Quartermaster Service Company. The Quartermaster Service Company (T/O&E 10-67) will furnish labor details for the graves registration company whenever prisoner of war or civilian labor is insufficient to perform the duties required of labor personnel. Personnel of the service company are used for grave opening, cemetery improvement, and related duties.

b. Quartermaster Service Organization. Quartermaster Service Organization (T/O&E 10-500) provides supplementary graves registration teams of various sizes which may be used to augment the strength of a graves registration company as required.

7. CAPABILITIES

The graves registration company is capable of serving a force of 100,000 men. Each platoon is capable of serving a force of 25,000. When operating separately, added labor details are required.

CHAPTER 2

TRAINING

Section I. TRAINING OF INDIVIDUALS

8. PURPOSE

Individual training prepares each soldier in the graves registration company to perform his duties efficiently. Training accustoms him to share in military teamwork and prepares him for the next higher job in the company (fig. 2) and a career field in the Army (SR 615-25-20).

9. TRAINING PHASES

Every soldier in the company is given basic military training, which is the first phase of training, and advanced individual training, which is the second phase. Normally, such training is accomplished concurrently when possible at training centers in the continental United States. Basic military training emphasizes individual physical conditioning, discipline, adjustment to army life, and the development of soldierly qualities. Advanced individual training develops in the soldier facility in the use of tools, skills, and equipment. It teaches him to work effectively as a member of a military team. Basic military and advanced individual training will conform to the current

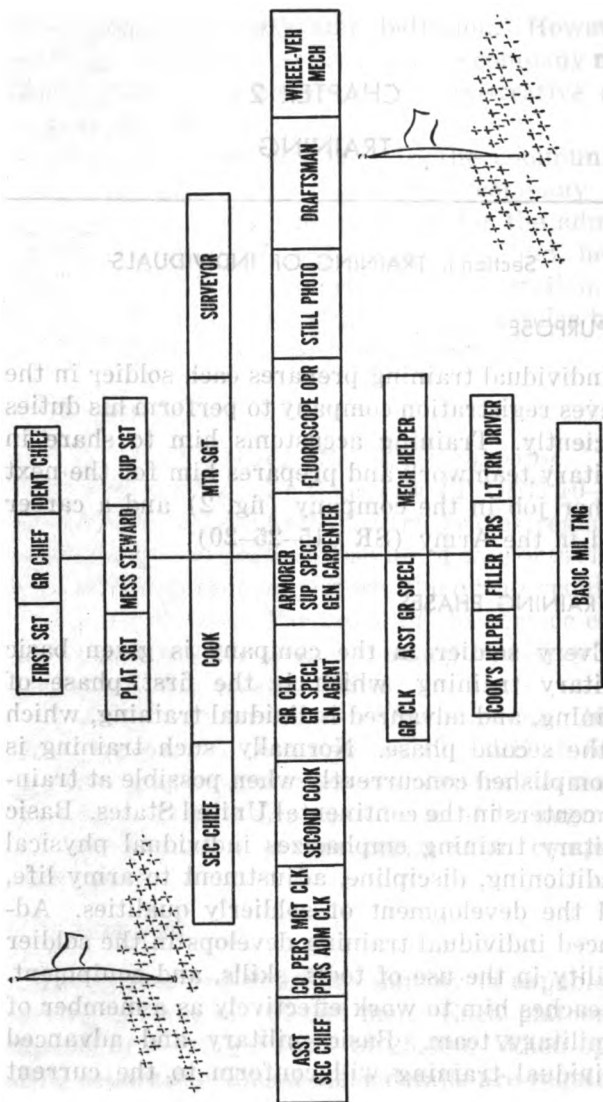


Figure 2. Chart showing positions in graves registration company.

**Army Training Program ((ATP No. 10-214*)
(Mobilization)) for Quartermaster Graves Registration Company.**

10. SCHOOL TRAINING

Army training schools provide basic or advanced training in graves registration procedures and related subjects. Such schools may be service schools conducted by the appropriate technical service or schools organized by the company commander in the company training area.

a. Service School. The company commander may recommend through channels that platoon leaders be permitted to attend appropriate service schools. Noncommissioned officers and enlisted specialists should be encouraged to submit applications for attendance at appropriate service schools. Procedures for obtaining quotas for attendance are outlined in instructions issued by higher headquarters.

b. Company School. The company school provides military education for the individual non-commissioned officer and training for enlisted specialists. Uniformity of instruction should be emphasized. Instructions in new procedures developed for graves registration, as well as preparation for field and operational exercises, are usually conducted in a company school.

11. TRAINING OF PERSONNEL

Officers, section leaders, and key personnel must know the organization and operations of the

* Available from continental army headquarters.

graves registration service from the company level to the highest level in order to perform their own duties intelligently. They must know how their work fits into the whole scheme and realize the results of an error which may seem trifling in the field. They must be familiar with the general provisions for a company as set forth in AR 220-70.

a. Clerical Training. Ordinary clerical training for graves registration personnel is inadequate. Intensive additional training in the proper, detailed preparation of graves registration reports and records is necessary.

b. Map Preparation. Proper training of the draftsman familiarizes him with the preparation of cemetery maps as outlined in FM 10-63.

c. Surveying Procedures. The training of surveyors should emphasize surveying procedures for military cemeteries under varying climatic conditions. Surveyors must be familiar with and able to perform the duties of rodmen, tapemen, axmen, and recorders.

d. Military-Civilian Relations. Personnel should be trained in military-civilian relations and in the supervision of prisoners of war used for labor (par. 49b).

e. Improvisation. Personnel of the graves registration company must be trained to improvise where lack of proper supplies or equipment makes improvisation necessary.

f. Supply Economy. Personnel must be impressed with the importance of high standards for

the maintenance, use, and storage of property and organizational supplies, and must be made conscious of costs of supplies, maintenance, and other services and of pecuniary responsibility for property lost, damaged, or destroyed. Requisitions for supply should be held to a minimum consistent with the needs of the organization and the approved level of supply.

g. Defense Measures. Since personnel of the graves registration company may be required to operate in the combat zone, they must be trained to fight against enemy infiltration tactics or direct assaults. Soldierly qualities will be stressed. The importance of control, discipline, familiarity with weapons, and orderly habits will be emphasized. Graves registration personnel are soldiers first of all and may be used in any way necessary to accomplish the mission of the unit.

Section II. UNIT TRAINING

12. SECTION

The section must be trained to function under its section chief and to work in coordination with the platoon.

13. PLATOON

The platoon must be trained to function with the other platoons when combined operations are planned, and separately when separate platoon operation is necessary. Platoon headquarters

must be able to direct the operations of the sections. Since the platoon may be required to operate separately, emphasis must be placed on the development of initiative and leadership.

14. COMPANY

The company must be trained to operate as a unit with each element capable of operating efficiently. Typical situations should be prepared showing how the unit operates with a full complement of personnel. Operations of the company with one or more platoons operating separately should be stressed.

15. SUBJECT MATERIAL

Unit training will emphasize proper handling of the dead and their effects; proper preparation of records and reports; decontamination; destruction of supplies and equipment; sanitation and personal hygiene; defense against air, mechanized, and ground attack; application of camouflage and cover; and movement of personnel and equipment.

16. UNIT TRAINING SCHEDULES

Unit training schedules are prepared by the commander of the graves registration company or his designated representative. The schedules are based on a unit training program outlined by the battalion S-3 or higher headquarters. Policies and procedures described in Army training memoranda, directives, and training manuals are

followed (app. I). A suggested minimum training schedule given in appendix II will be used as a guide in planning unit training.

17. TRAINING PROGRESS CHART

A chart containing information relative to training courses offered and completed should be prepared for the unit. A detailed record of each man's progress should be kept. An example is shown in figure 3.

18. TACTICAL EXERCISE

Periodic tactical exercises will be given under simulated combat conditions. Difficulties encountered in the field will be stressed. A practical test during a tactical exercise is outlined in appendix III.

19. ON-THE-JOB TRAINING

On-the-job training makes maximum use of demonstrations and field problems. Realistic field problems involving graves registration procedures under all conditions of combat, weather, and terrain must be prepared and executed. Practice in identification procedures should be carried out in the field. During a field exercise the graves registration specialist should be assigned to perform identification processing when the remains arrive at the graves registration collecting point or at the cemetery. One graves registration clerk should be assigned to work with the graves regis-

TRAINING PROGRESS CHART

Date 21 Jul 68		Semi Registration Co.	
100 10-297 A		Date 8 Jan 61	
Date		Date	
10 Strength 6 6		EM 154	
Date Serial Training		1 JUL 61	
Unit Commander		THOMAS A. JENNINGS	
		CAPT. QMC	
V/O		Actual assignment	
Authorization	Grade	Present Name	Made in TOLL
1	MAJ 1	SPRITH, JOHN A.	
2	MAJ 1	SCARLE, LEONARD	
3	MAJ 1	ROBINSON, ROBERT D.	
4	MAJ 1	STEIN, FRANK B.	
5	MAJ 1	JOHNSON, JAMES S.	
6	MAJ 1	JOHNSON, FRED M.	
7	MAJ 1	CRABST, JOHN W.	
8	MAJ 1	AMAR, B. SPAT, CHARLES R.	
9	MAJ 1	ANDERSON, BOB D.	
10	MAJ 1	AMAR, CARLTON	
DRAFTING			
11	MAJ 1	AMAR, JOEL	
12	MAJ 1	AMAR, HARRY	
13	MAJ 1	AMAR, HARRY	
14	MAJ 1	AMAR, HARRY	
15	MAJ 1	AMAR, HARRY	
16	MAJ 1	AMAR, HARRY	
17	MAJ 1	AMAR, HARRY	
18	MAJ 1	AMAR, HARRY	
19	MAJ 1	AMAR, HARRY	
20	MAJ 1	AMAR, HARRY	
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84	MAJ 1	AMAR, HARRY	
85	MAJ 1	AMAR, HARRY	
86	MAJ 1	AMAR, HARRY	
87	MAJ 1	AMAR, HARRY	
88	MAJ 1	AMAR, HARRY	
89	MAJ 1	AMAR, HARRY	
90	MAJ 1	AMAR, HARRY	
91	MAJ 1	AMAR, HARRY	
92</			

BASIC		TECHNICAL		TACTICAL AND LOGISTICAL	
1	ARTICLES OF WAR				
2	MILITARY CUSTOMS AND CUSTOMS				
3	EMPLOYMENT OF THE ARMED FORCES				
4	DISMOUNTED BATTLE AND CEREMONIES				
5	TENT FITTING				
6	CARE OF CLOTHING				
7	BIVOUACS				
8	DATEROLING				
9	SUPPLY ECONOMY				
10	FIRST AID				
11	PERSONAL HYGIENE				
12	ELEMENTARY MAP READING				
13	ELEMENTARY INTELLIGENCE TRAINING				
14	INDIVIDUAL PERSONS QUALIFICATION				
15	ADVANCE MAP READING				
16	MINES AND BOoby TRAPS				
17	ESTABLISHMENT OF CAMERAS				
18	EVALUATION OF THE DEAD				
19	IDENTIFICATION PROCEDURES				
20	BURIAL PROCEDURES				
21	GRAVE MARKING				
22	HANDLING OF PERSONAL EFFECTS				
23	REPORTS AND RECORDS				
24	DISINTERMENT AND REINTERMENT				
25	TECHNICAL SUPPLIES				
26	RECOVERY OF THE DEAD				
27	COLLECTING POINT OPERATIONS				
28	RELIGIOUS RITES				
29	BURIAL OF ENEMY DEAD				
30	SCATTERING				
31	INTERMENTING				
32	DEGRADATION OF TOOTH CHAIRS				
33	CAMOUFLAG				
34	NIGHT OPERATIONS				
35	ERECUTION AND SENTRY				
36	AREA PROTECTION AND DEVELOPMENT				
37	SECURITY AND DEFENSE				
38	FIELD SANITATION				
39	AMMUNITIONS TERMINAL				
40	FIELD EXPEDIENTS				
41	ROUTE PLANNING AND ANALYSIS				
42	LOADING AND UNLOADING OF VEHICLES				
43	MOVING MOVEMENTS				
44	RAIL MOVEMENTS				
45	AIR MOVEMENTS				
46	DEMOLITIONS				

Figure 3. Training progress chart.

tration specialist to prepare records. The assistant graves registration specialist, the other graves registration clerk, and the still photographer should be assigned duties in the morgue tent or processing area of a cemetery to identify unknown cases.

20. CADRE

a. Training. The enlisted cadre is the key group of men designated to establish and train a new unit. Cadre understudies must be trained concurrently for all key positions. The graves registration company will furnish a cadre of 25 trained men when called upon to form a new unit of the same type.

b. Cadre School. A cadre school will be organized as soon as the company is activated and is assigned filler personnel. The company commander will use officers and noncommissioned officers as instructors. During later phases of cadre school training, selected personnel will be given review and refresher courses in their specialties and will be trained as instructors for new men assigned to the company.

CHAPTER 3

ORGANIZATION AND EQUIPMENT

Section I. ORGANIZATION

21. SECTION

The section is the basic element of the graves registration company. There is a collection and evacuation section and an identification, effects, and records section.

22. PLATOON

The platoon, which is the smallest complete unit of the graves registration company, consists of platoon headquarters, a collection and evacuation section, and an identification, effects, and records section. The platoon is the basic work unit of the company.

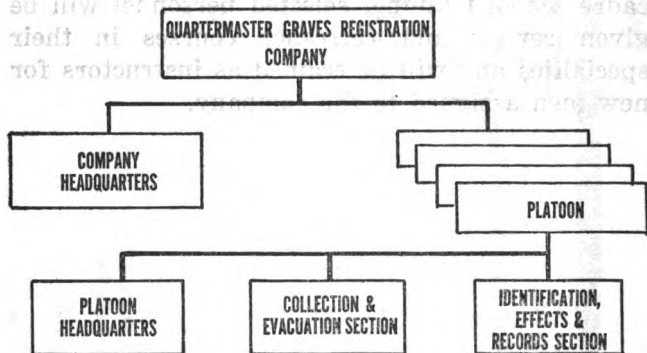


Figure 4. Organizational chart of graves registration company.

23. COMPANY

The graves registration company consists of company headquarters and four platoons (fig. 4).

Section II. EQUIPMENT

24. ENGINEER EQUIPMENT

a. Drafting Equipment Set. The drafting equipment, set No. 2, is for the use of the draftsman assigned to the company. This set consists of a drawing board, instruments, and accessories necessary to draw the cemetery map and prepare plans for cemetery development.

b. Electric Lighting Equipment Set. Four No. 2 sets of electric lighting equipment furnish power for electric lighting. Each set consists of a portable, gasoline, engine-driven, skid-mounted 1½-kilowatt generator, together with flood lamps, tools, and accessories.

c. Generator Set. A 3-kilowatt, 120-volt, 1-phase, 60-cycle, skid-mounted, portable, gasoline-engine-driven generator set is provided for each fluoroscopic assembly used by the company. The generator furnishes the extra power required for the operation of the fluoroscope.

d. Sign Painting Set. The sign painting equipment, set No. 1, consists of a crate and chest with brushes, paints, and accessories. The set is used by personnel for signs, markers, and general maintenance painting.

e. Brass Alidade. The brass alidade is a sur-

veying instrument used by the surveyor in triangulation reconnaissance and cemetery mapping operations. The alidade, which includes a telescopic attachment, rests on a 24- by 31-inch board termed a plane table. The instrument can be used for map making in laying out cemeteries. It is excellent for making preliminary surveys, since it is a more rapid method than by transit and dispenses with field notes. However, it is not practical for use in wet weather.

f. Transit. The transit consists of a telescope, tripod, and accessories. It is used by the surveyor to make accurate land surveys for cemetery sites.

25. MEDICAL EQUIPMENT

a. Balances.

(1) Precise readings from .001 gram to 100 grams can be made on the analytical balance provided the company. Since this balance is a highly sensitive instrument, readings will be difficult to take and considerable time will be required to set up the balance properly. Precautions for installation and use are given in TM 8-227.

(2) The double beam Harvard trip balance meets requirements for precise weighing between 100 grams and 1,000 grams.

b. Bone-Holding Forceps. The 8½-inch Kern, straight, bone-holding forceps are used to force crushed or broken bones into a more normal position and thereby improve the appearance of the remains.

c. Bunsen Burners.

- (1) The high temperature Bunsen burner has a high heating capacity. One of its uses in the identification laboratory is to boil clothes in order to reveal faded laundry marks by removing body fats from the clothing.
- (2) The Tirrill-type Bunsen burner is smaller, has a lower heating capacity, and is more economical to operate than the high temperature burner.
- (3) Cylinders of manufactured illuminating gas will be required to operate the Bunsen burners unless a supply of municipal gas is available.

d. Fluoroscopic Assembly. The fluoroscopic assembly consists of a table unit and accessories. The assembly is used by the fluoroscope operator to locate foreign objects in remains. Hand processing of badly decomposed remains to locate identifying media is difficult. The fluoroscope easily locates identification tags or personal effects that might be used to identify the remains. The fluoroscope is also used to check on the work of the identification team when hand processing has failed to reveal identification data. It is also used to examine the clothing of the deceased and other grave debris for possible identification clues (TM 8-633).

e. Litter. The straight aluminum pole litter is constructed of aluminum alloy poles and a canvas bed. This litter, which folds in the long axis only,

has the advantage of light weight and a high degree of durability. The over-all length is 90 inches and the weight 15 pounds.

f. Microscope and Illuminator. The monocular microscope has 10x, 44x, and 95x achromatic objectives, 5x and 20x Huygenian eyepieces, Abbe condenser, and mechanical stage. It is used by the identification team to make exact recordings of scientific data, such as color reaction tests of ink on documents. The microscope is provided with a 110-volt ac-dc junior microscope illuminator.

g. Nasal Elevator. The Freer double-ended nasal elevator is an instrument used to lift crushed nasal tissue, and thereby improve the appearance of the nose and face. Its use may be necessary before the remains are photographed.

h. Scissors. The 8-inch, heavy, angular scissors are field-type scissors, used for cutting heavy or multiple layers of cloth.

i. Tooth-Extracting Forceps. The tooth-extracting forceps are provided the identification processing team to make laboratory examinations of fillings or tooth formations. The 53R forceps are used for extracting upper first and second molars. The 150A forceps are used for extracting upper anteriors, bicuspid, and roots. The forceps are restricted to laboratory use in instances where technicians are making a thorough search for identification media. Forceps will never be used where there is a possibility that evidence for future investigation is being destroyed or where there is a chance of the remains being mutilated.

26. ORDNANCE EQUIPMENT

a. *Spare Parts Cabinet.* The spare parts cabinet, type-I, M1940, is made of green-enameled steel and wood and weighs 296 pounds. The cabinet has a hinged top for the removal of drawers and locking bars to lock in the drawers. The two cabinets furnished company headquarters are used for the storage of spare parts for the wheeled-vehicle equipment.

b. *Vehicles.* See table I.

27. QUARTERMASTER EQUIPMENT

a. *Fingerprint Kit.* The fingerprint kit consists of a No. 8 duck case with brushes, papers, powders, and other accessories for the taking of fingerprints of deceased military personnel.

b. *Embossing Machines.* Addressograph and graphotype machines are used for the preparation of duplicated material. The addressograph machine is used to imprint identification tag information on reports. The graphotype is used to prepare the embossed plate which is put on each grave marker for identification purposes.

28. QUARTERMASTER AIR ITEM

The human remains, crash victim, pouch assembly is used for evacuation of the dead or parts of remains. The water-resistant pouch is made of coated, olive-drab duck. This pouch, which is approximately 7 feet 11 inches long and 30 inches wide, is provided with a slide fastener and six carrying straps. It can be cleaned with soap and hot water.

29. SIGNAL EQUIPMENT

a. Camera PH-503/PF. Camera PH-503/PF is used by the graves registration company to photograph fingerprints of unidentified remains. The camera is a complete, self-contained unit with a fixed-focus lens, battery-operated lamps to light up the subject, a focusing panel, and a cut film holder (TM 11-2377).

b. Camera PH-629/UF. Camera PH-629/UF is a precision-built 35-millimeter still-picture camera. The camera, including a standard 47-millimeter lens, weighs 25 ounces. The shutter is adjustable for automatic time exposures from 1 second to 1/1000 second. The camera will give satisfactory performance in tropical climates and in temperatures as low as -65° F. Standard 35-millimeter perforated line roll film is used. The minimum focal range is $3\frac{1}{2}$ feet (TM 11-2334). The camera takes photographs to identify remains under a wide variety of climatic and light conditions.

c. Tool Equipment. Tool equipment TK-28/GF, furnished the photographer, is used for first echelon photographic maintenance. It includes pliers, files, a screw driver set, and other items.

30. PROVISION OF EQUIPMENT

Provision of the major items of equipment of the graves registration company is shown in table I. All items of equipment for The Quartermaster Graves Registration Company are listed in T/O&E 10-297A.

Table I. Provision of Equipment for Graves Registration Company

	Section		Platoon head-quarters	Company head-quarters	Total in company
	Collection and evacuation	Identification and effects			
Engineer:					
Alidade, brass			1		4
Drafting equipment, set No. 2			1	1	5
Electric lighting equipment, set No. 2			1		4
Generator set, portable				1	
Pole, ranging			1		4
Rod, level			1		4
Sign painting equipment, set No. 1	1				4
Tape, measuring, steel			1	1	5
Transit, engineer			1		4
Medical:					
Balance, analytical				1	1
Balance, Harvard trip, double-beam				1	1
Burner, Bunsen, high temperature				1	1
Burner, Bunsen, Tirrill type				1	1
Elevator, nasal		1			4

Equipment	Section		Platoon head-quarters	Company head-quarters	Total in company
	Collection and evacuation	Identification and effects			
Fluoroscopic assembly	---	---	---	1	1
Forceps, bone-holding, straight, Kern	---	1	---	---	4
Illuminator, microscope	---	---	---	1	1
Litter, straight, aluminum pole	---	25	---	---	100
Microscope, monocular	---	---	---	1	1
Scissors, angular, heavy, 8-inch	---	2	---	---	8
Weights, analytical balance	---	---	---	1	1
Weights, Harvard trip balance, 100 grams to 1000 grams.	---	---	---	1	1
Ordinance:					
Cabinet, spare parts, type I, M1940	---	---	---	2	2
Trailer, 1-ton, 2W, cargo	3	---	1	2	18
Trailer, 1-ton, 2W, watertank, 250-gallon.	---	---	---	1	1
Truck, ¼-ton, 4 x 4, utility, M38	---	---	1	2	6
Truck, ¾-ton, 4 x 4, cargo, M37	---	---	1	1	5
Truck, ¾-ton, 4 x 4, cargo, M37 W/WN	1	---	---	---	4
Truck, 2½-ton, 6 x 6, cargo	2	---	---	1	9

Truck, 2½-ton, 6 x 6, cargo, with winch
 Quartermaster:
 Kit, fingerprint
 Machine, addressograph, hand-operated,
 (TAG Imprinters, Model 60).
 Machine, embossing (phototype),
 hand-operated.
 Quartermaster Air Item:
 Pouch assembly, crash victim, human
 remains.
 Signal:
 Camera PH-503/PF
 Camera PH-629/UF
 Tool equipment TK-28/GF

					1	1	1
		2					8
			1			1	5
						1	5
6							24
		1					4
		1					4
		1					4

Section III. MAINTENANCE OF EQUIPMENT

31. MAINTENANCE RESPONSIBILITY

Since the company has many items of specialized organizational equipment, a definite maintenance responsibility rests upon each member of the unit. The company commander will insure that instructions and procedures for organizational maintenance operations are strictly complied with by all personnel under his control. He also will make certain that each individual user, wearer, or operator of equipment within his command is trained in the organizational (first echelon) maintenance of his equipment. All officers and noncommissioned officers will insure that instructions and procedures for maintenance operations, which are published in Army regulations, technical manuals, Department of the Army lubrication orders are strictly complied with by all personnel under their immediate supervision (app. I).

32. ORGANIZATIONAL MAINTENANCE

The purpose of organizational maintenance is to detect and correct minor defects before they become major defects.

a. First Echelon. First echelon organizational maintenance is that maintenance performed by the user, wearer, or operator of the equipment. This includes the proper care, use, operation, cleaning, preservation, lubrication, and such adjustment, minor repair, testing, and parts replace-

ment as may be prescribed by pertinent technical manuals and tool and parts lists.

b. Second Echelon. Second echelon maintenance is the maintenance performed by specially trained personnel provided for that purpose in the using organization. Appropriate publications authorize the second echelon of maintenance additional tools, and the necessary parts, supplies, test equipment, and skilled personnel to perform maintenance beyond the capabilities and facilities of the first echelon.

33. MAINTENANCE OF MOTOR VEHICLES

The motor vehicles assigned to the graves registration company will be maintained by the drivers and company vehicle mechanics under the supervision of the motor sergeant. Procedures prescribed in AR 700-105 and TM 37-2810 and in appropriate vehicle technical manuals will be followed (app. I).

34. MAINTENANCE RECORDS

The prescribed maintenance records for motor vehicles will be kept by the motor sergeant. AR 700-105 lists approved forms for motor vehicle maintenance.

35. SUPPLY OF SPARE PARTS AND TOOLS

a. Allowances. Authorized initial allowances of spare parts and tools for company equipment are usually supplied with the equipment. Company

supply personnel will maintain the authorized stock level by requisition from or exchange with the designated supplying organization.

b. Requisitions. Requisitions for all spare parts for vehicles and other special equipment should contain the make, model, and serial or series number of the equipment as well as the official stock number and nomenclature of all items required.

CHAPTER 4

DUTIES OF PERSONNEL

36. SECTION

a. Section Chief.

(1) The section chief of the collection and evacuation section supervises graves registration specialists, one of whom serves as assistant section chief, and assistant graves registration specialists in locating and removing the dead (fig. 5). Although normally, combat units are responsible for evacuating dead from active battlefields, the chief of the collection and evacuation section may be required to supervise the collecting of the dead on battlefields recently evacuated by combat units. He must be thoroughly trained in procedures for collection, aseptic handling techniques and interment of the dead. He details search parties and supervises the search for unburied or unsuitably buried dead and for isolated or unmarked graves. He also instructs personnel under his supervision in proper search procedures.

(2) The section chief of the identification, effects, and records section supervises

those operations of the section pertaining to identification, and interment of the dead, marking of graves, disposition of personal effects and property, and the keeping of graves registration records. The section chief has under his supervision graves registration specialists, assistant graves registration specialists, graves registration clerks, and a still photographer.

b. Assistant Section Chief. An assistant section chief is assigned to the collection and evacuation section. He must be able to receive, accord proper sanitary handling, evacuate and identify the dead. He exercises direct supervision of the work details engaged in burial of the dead. He determines from military maps, charts, sketches, and overlays areas to be searched, location of temporary graves, and location of collecting points. He assists the section chief and may substitute for the section chief when required.

c. Graves Registration Specialists. The graves registration specialists assigned to the sections are familiar with the receipt, evacuation, identification, and interment of deceased military personnel, maintenance of military cemeteries, disposal of effects and property, disinfection, fumigation, decontamination, and preparation of graves registration records. In addition to their technical training in graves registration, a number of the graves registration specialists assigned to the collection and evacuation section are light truck drivers.

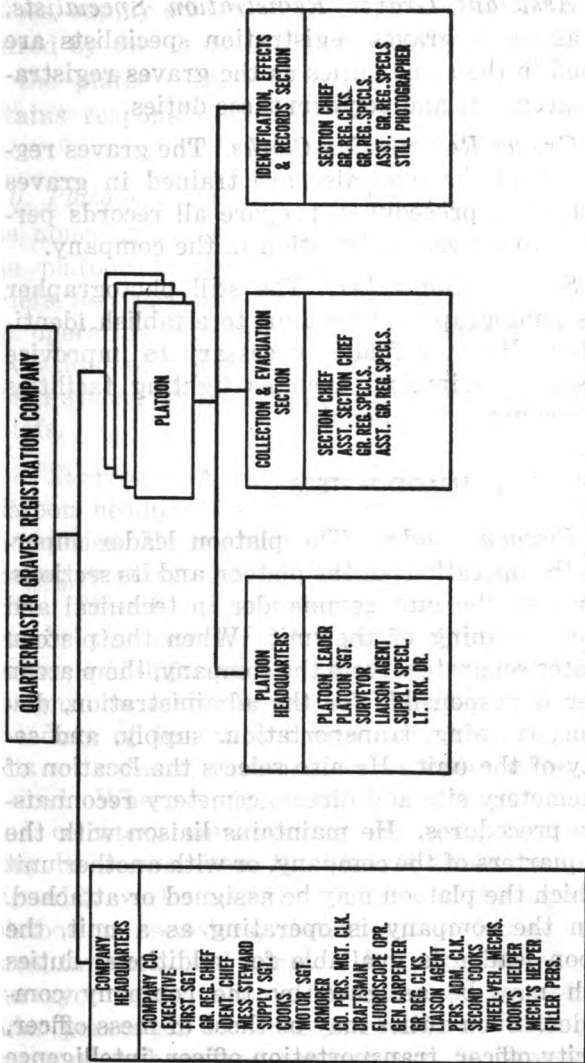


Figure 5. Personnel chart of the company.

d. Assistant Graves Registration Specialists. The assistant graves registration specialists are trained in the same duties as the graves registration specialists and perform these duties.

e. Graves Registration Clerks. The graves registration clerks who also are trained in graves registration procedures, prepare all records pertaining to graves registration in the company.

f. Still Photographer. The still photographer takes photographs of remains to establish identification. He may find it necessary to improvise necessary equipment, such as lighting facilities and background material.

37. PLATOON HEADQUARTERS

a. Platoon Leader. The platoon leader supervises the operations of the platoon and its sections. He assists the unit commander in technical and tactical training of the unit. When the platoon operates separately from the company, the platoon leader is responsible for the administration, discipline, training, transportation, supply, and security of the unit. He also selects the location of the cemetery site and directs cemetery reconnaissance procedures. He maintains liaison with the headquarters of the company, or with another unit to which the platoon may be assigned or attached. When the company is operating as a unit, the platoon leader is available for additional duties which may be assigned by the company commander. Such duties may be those of mess officer, security officer, transportation officer, intelligence

officer, supply officer, or any other assignment required by the situation. In assigning such duties to the platoon leader, the company commander retains responsibility for their proper performance.

b. Platoon Sergeant. The platoon sergeant is the noncommissioned administrative assistant to the platoon leader. Working with the section chiefs, he assists the platoon leader in supervising the operations of the platoon and coordinates the operations of the sections. The platoon sergeant has the same technical qualifications as the section chiefs.

c. Surveyor. A surveyor is assigned to each platoon headquarters to supervise laying out of cemeteries. He establishes the relative position of boundary points for the cemetery from an established "bench mark", and the plots and roads within the cemetery by measuring distances, angles, and differences in elevation. The surveyor assigned to each platoon headquarters performs the duty of instrument operator. The assistant acts as rodman, tapeman, or recorder when required. Where a platoon is operating separately and cemetery surveying is required, surveyors may be drawn from the other platoons and assigned to work under the surveyor of the separate platoon as recorders, instrument operators, rodmen, tapemen, and axmen. However, the platoon surveyor usually should train a team, possibly of filler personnel, to serve as assistants. The surveyor of each platoon headquarters is responsible

for maintaining in proper condition the surveying instruments assigned to him.

d. Liaison Agent. The liaison agent of platoon headquarters represents the platoon leader. He receives and transmits requests for assistance received from units being served. He cooperates with intelligence officers by aiding them in getting desired information from the remains of enemy dead. He transmits verbal orders received from competent authority to the platoon leader. Being familiar with the operations of the sections, he coordinates their activities by transmitting messages between sections when telephone communication is impossible. He maintains contact with the liaison agent of company headquarters by means of telephone, written messages, or personal visits to the headquarters. He is trained to be a light truck driver.

e. Supply Specialists. The supply specialists assist the supply sergeant in requisitioning, receiving, storing, and issuing technical equipment, such as grave markers, pouch assemblies, personal effects bags and pouches, and other items used by the company in its operations.

f. Light Truck Driver. The light truck driver operates the trucks assigned to platoon headquarters. He serves as messenger and performs miscellaneous graves registration duties.

38. COMPANY HEADQUARTERS

a. Officers.

(1) *Company commander.* The commander of the graves registration company is

responsible for the administration, training, operation, discipline, supply, and security of the company. He maintains liaison with higher headquarters in order to keep abreast of changing tactical situations. With the approval of higher headquarters, he plans the assignment of the platoons in relation to combat areas. He should provide his men with all necessary comforts and privileges consistent with good discipline.

- (2) *Executive officer.* The executive officer is the administrative assistant to the company commander. He must be ready at all times to assume control of the company in the absence of the company commander.

b. Administration.

- (1) *First sergeant.* The first sergeant assists the company commander in administrative duties. He supervises the preparation of morning reports, sick reports, duty rosters, charge sheets, guard rosters, and other reports as required.
- (2) *Personnel administrative clerk.* The personnel administrative clerk maintains files and service records; prepares military pay orders, personnel records for transfer, company orders, and correspondence; acts as receptionist for the command; and performs other duties as required.

- (3) *Personnel management clerk.* The personnel management clerk prepares the morning report; maintains the company sick book, duty rosters, individual qualification cards, and other records; files orders and other papers; types correspondence; counsels personnel on planning their Army careers; and performs other duties as required.

c. Food Service Personnel.

- (1) *Cooks.* The cooks under the supervision of the mess steward prepare food for company personnel, conforming to military methods for food preparation. When a platoon operates separately, one of the cooks will serve as mess steward for the platoon.
- (2) *Cook's helper.* The cook's helper assists the cooks in the preparation and serving of food. He cleans utensils, tools and equipment, and the working area in conformity with principles of sanitation. He may act also as a light truck driver and he may assist in drawing rations from the supply point.
- (3) *Mess steward.* The mess steward supervises the food service personnel and plans the use of available facilities to provide for any type of operation undertaken by the company. He must make necessary plans to insure satisfactory messing arrangements for the company when it is

operating on more than one daily shift and for a platoon when it is operating at a distance from the company mess.

d. Motor-Operations Personnel.

- (1) *Motor sergeant.* The motor sergeant under the direction of the company commander supervises the operation and maintenance of all vehicles organic to the company. He supervises the work of the vehicle operators and vehicle mechanics and makes sure that they comply with the rules for organizational maintenance. He supervises the preparation of prescribed records and reports and maintains necessary liaison with the next higher echelon of maintenance.
- (2) *Vehicle mechanics.* The vehicle mechanics under the supervision of the motor sergeant perform the necessary maintenance on company vehicles and assist in training newly assigned mechanics.
- (3) *Mechanic's helper.* The mechanic's helper assists the vehicle mechanics in the performance of their duties. He is a light truck driver capable of performing road tests of vehicles or emergency recovery operations with available transportation.

e. Supply Personnel.

- (1) *Supply sergeant.* The supply sergeant is assistant to the company commander in all matters pertaining to supply within

the unit. He is in immediate charge of the receipt, storage, and issue of individual and organizational clothing and equipment and expendable and operating supplies. He prepares requisitions for supplies, checks supplies received and issued, and reports to the company commander any discrepancies noted in quantity or quality. He draws and issues supplies to separate platoons unless the distance between the company and the separate platoon makes this impractical. If such is the case, the supply specialist of the separate platoon will draw supplies as directed by higher headquarters.

- (2) *Armorer.* The armorer makes minor repairs on carbines and pistols authorized the company. He assists the supply sergeant as required. He also performs miscellaneous organizational tasks including carpentry and painting. He is trained to be a light truck driver.

f. Technical Operations Personnel.

- (1) *Graves registration chief.* The graves registration chief supervises the technical operation of the company. He is responsible to the company commander for the graves registration operations of the four platoons. He must be able to plan personnel assignments and cemetery layout when the company is operating as a unit.

- (2) *Identification chief.* The identification chief assists the graves registration chief in the performance of his duties by supervising the identification teams and relieving the graves registration chief of administrative tasks in connection with identification. He supervises the taking of fingerprints, preparation of tooth charts, examination of anatomical characteristics, and recording of accurate physical descriptions on appropriate forms.
- (3) *Draftsman.* The draftsman draws plans for cemetery layout and construction using engineer manuals, tables, and pertinent references and data as a guide (app. I). He should have a thorough knowledge of geometry for proper computation of cemetery measurements.
- (4) *Graves registration clerks.* The two graves registration clerks in the company headquarters assist the graves registration chief and identification chief in the performance of duties.
- (5) *Fluoroscope operator.* The fluoroscope operator uses the fluoroscopic equipment to locate metallic objects of identification which may have become impacted within the remains. Possessing a knowledge of the skeletal system and an elementary knowledge of human anatomy, the fluoroscope operator is also a chemical laboratory technician and makes use of lab-

oratory equipment. He should be aware of proper shielding required to safeguard his health from the physiological effects of hard X-rays. He should also be examined periodically for a determination of blood count changes.

- (6) *Liaison agent.* The liaison agent of company headquarters carries out orders for graves registration service issued by the company commander. He keeps the company commander informed of platoon operations and locations of supported troops. He establishes contact with platoon liaison agents and assists them as necessary. He assists intelligence personnel in obtaining information from remains of enemy dead. He keeps well informed on over-all liaison activities within the unit. He maintains contact with personnel keeping records in higher headquarters in order to obtain information relating to air crashes, personnel missing in action, unknowns, and other cases. He is also a light truck driver.
- (7) *Carpenter.* The carpenter constructs gates and fences in the cemetery, builds forms for masonry, constructs signs for cemetery identification, makes markers for grave sites, and performs other tasks as required. Filler personnel may assist the carpenter.

CHAPTER 5

PREPARATION FOR OPERATIONS

Section I. RECONNAISSANCE AND SITE SELECTION

39. RECONNAISSANCE

The commander of the graves registration company is normally assigned the duty of reconnaissance for a cemetery site by the army quartermaster. In many instances, however, the platoon commander will perform this duty. The army quartermaster should be able to provide information as to areas suitable for a cemetery. Where this information is lacking, it may be necessary for the reconnaissance party to make a wide search for a suitable site. Before making final selection of a site, the platoon commander should make a careful study of the terrain by personal inspection and use of maps to find out the extent of necessary mine clearance, construction (including bridges), drainage, condition of the soil and vegetation, and number of available roads and their condition.

40. SITE SELECTION

A temporary cemetery should be located as follows:

- a. In a large open field where the soil is well-drained and easy to dig.
- b. On slightly rolling land.

c. On land where the operations do not interfere with adjoining land.

d. Near road nets, but out of sight of troops and off main supply routes. Alternate routes should be available.

Note. For further details on site selection, see FM 10-63.

41. BIVOUAC SITE

The bivouac site for the company should be located at a place convenient to the cemetery. General requirements for a bivouac site are given in paragraph 65f.

Section II. PLANNING FOR OPERATIONS

42. LAYOUT OF COLLECTING POINT

When planning the layout of the collecting point, the company or separate platoon should select a central location near the battle area and to the rear of units being served. The collecting point should be near but not on a main supply route. Tents or unused buildings available at the site should be used. A sample layout for a collecting point is shown in figure 6.

43. CEMETERY

a. *Graves Layout.* The graves layout plan will conform to instructions outlined in FM 10-63. The plan for numbering first and last graves in consecutive plots is given in appendix IV.

b. *Operations Plan.* A suggested operations plan for use in a cemetery under combat conditions is shown in figure 7. It must be altered, how-

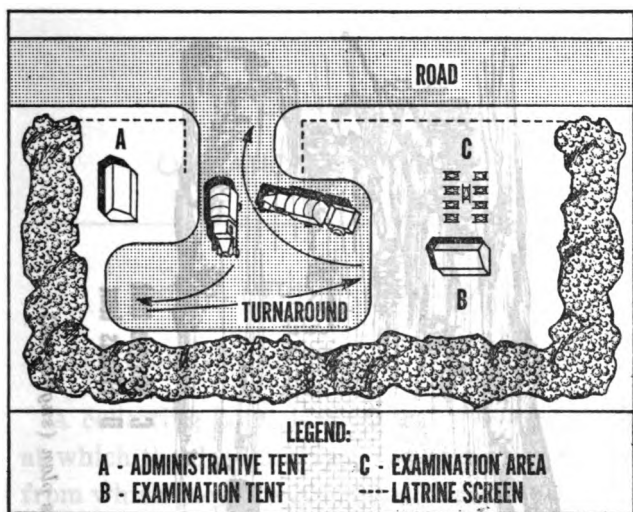


Figure 6. Layout of a collecting point.

ever, to meet ever-changing conditions in the cemetery.

44. TECHNICAL OPERATIONS

The movement of military dead is from battle areas to divisional collecting points, to army collecting points, and to military cemeteries. The graves registration company operating at army collecting points receives the dead from divisional collecting points, identifies and evacuates the dead, verifies identification and buries the dead at army cemeteries, and takes care of personal effects and baggage of deceased military personnel. Burial of the dead is expedited by constant liaison between the graves registration company and higher and lower elements.

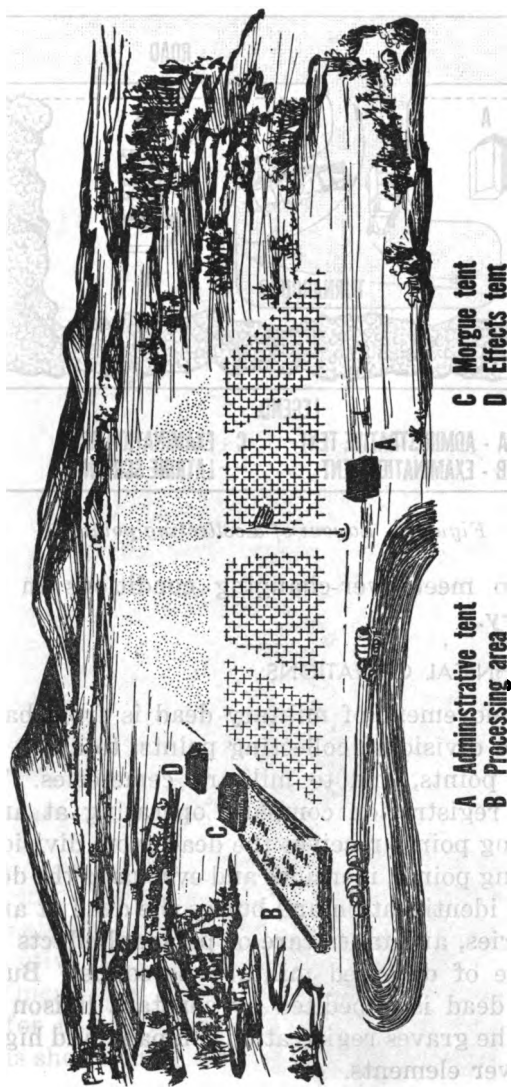


Figure 7. Cemetery operations plan (suggested).

CHAPTER 6

OPERATION OF THE UNIT

Section I. METHODS OF OPERATING

45. COLLECTING POINT

A collecting point is a centrally located station at which the dead are received and identified and from which they are evacuated to cemeteries. The location of a collecting point is given in administrative orders issued by the appropriate headquarters so that the information is available to all elements of the command. When a platoon of a graves registration company is operating from one to three collecting points, personnel of a section may be assigned as in table II.

Table II. Assignment of Personnel to Collecting Points

Personnel	One collecting point	Two collecting points		Three collecting points ^f		
		No. 1	No. 2	No. 1	No. 2	No. 3
Section chief	1 ^a	1 ^a		1 ^a		
Assistant section chief	1 ^d		1 ^d		1 ^a	
Graves registration specialists	6 ^c	3 ^c	3 ^c	2 ^c	2 ^c	2 ^{b e}
Assistant graves registration specialists.	6	3	3	2	2	2

^a Supervisor.

^b One to serve as supervisor.

^c Three of these men serve as truck drivers.

^d Serves as supervisor of second shift, when required.

^e At least one man qualified as light truck driver.

^f Personnel must be augmented under T/O&E 10-500 to operate a second shift.

46. COLLECTION AND EVACUATION SECTION

The collection and evacuation section of the graves registration company operates the army collecting points. Personnel of the section may be detached to assist in operations at divisional or regimental collecting points, if the need arises.

a. Procedure.

- (1) Graves registration specialists receive the remains from units evacuating them from battle areas. They examine the remains and effects for identification purposes, make a record of receipt of the remains on a collecting point register, and prepare any forms required (FM 10-63). They make every effort to identify remains before the remains are moved to the cemetery. One of the graves registration specialists, accompanied by an assistant graves registration specialist, transports the remains to the cemetery.
- (2) Section personnel erect signs showing the route to and location of the collecting point. They remove the signs when the collecting point is moved.

b. Organization. Normally, the section will be organized to receive and evacuate the dead as indicated in table II. However, the men assigned to the section can be organized into teams. Where a team operation is required to recover the dead after hostilities have ended, the section may be assigned as follows:

- (1) *Search team.* Assigned to this team may be a section chief (supervisor), three graves registration specialists, and three assistant graves registration specialists. This team may gather preliminary data for a search where a large area is to be covered. Whenever a grave site in a battle area is found, the team will record the location of the grave by map coordinates for future exhumation. If the site is difficult to locate, the members of the team will erect a temporary marker.
- (2) *Recovery team.* An assistant section chief (supervisor), two graves registration specialists, and two assistant graves registration specialists may be assigned to the recovery team, together with any attached personnel required. This team will recover or exhume the remains from the burial site in accordance with procedures outlined in FM 10-63.
- (3) *Evacuation team.* A graves registration specialist (supervisor) and one assistant graves registration specialist may be assigned to the evacuation team to evacuate the remains to the cemetery.

47. IDENTIFICATION, EFFECTS, AND RECORDS SECTION

The identification, effects, and records section operates the cemetery to which it is assigned.

a. Procedure. This section is organized to handle identification, interment, and graves registra-

tion; disposal of personal effects; and preparation of records and reports. The section chief exercises over-all supervision. Normally, enough men to identify the dead and process effects will be provided by organic personnel. However, laborers will be required for grave opening and cemetery maintenance.

b. Organization. The section may be divided into groups as follows:

- (1) *Identification.* A graves registration specialist (supervisor), one assistant graves registration specialist, two graves registration clerks, and one still photographer may be assigned for identification. Supervised by the graves registration specialist, the assistant graves registration specialist makes preliminary examination of all remains for positive identification media. Usually such media can be readily found, but verification must be painstakingly performed. Data may be recorded by graves registration clerk No. 1, and effects placed in the personal effects bag by graves registration clerk No. 2. Unknown cases are segregated, and current approved graves registration methods are used by the supervisor and his assistants to find identification media (FM 10-63). The photographer can provide photographs of remains showing views of the torso, indicating scars, tattoos, etc., and views of the face and head. Also photographs of fingers

can often be made to show identification data when actual fingerprints cannot be produced.

(2) *Burial and registration.*

- (a)** The graves registration specialist (burial supervisor) assigned to this phase of the operations, organizes the grave-opening operations and prepares markers for graves. He must be familiar with requirements for supervising prisoners of war or civilians, if available.
- (b)** The burial supervisor finds out from cemetery headquarters the number of burials to be made and the locations of the grave sites. Cemetery headquarters plans locations of the processing area and tents in anticipation of the burial plan.
- (c)** The burial supervisor makes certain that graves are properly dug or that emergency excavating follows established procedures. After the remains have been moved from the processing area to the grave site and lowered into the graves, the graves are filled.
- (d)** The burial supervisor makes certain that markers are correctly prepared and placed.
- (e)** The burial supervisor notifies cemetery headquarters daily of burials performed.

- (3) *Effects.* Supervised by a graves registration specialist, the assistant graves registration specialist and graves registration clerk account for all personal effects passing through the effects tent. The graves registration clerk makes a carefully prepared inventory of effects (par. 51b) and disposes of the inventory as indicated in SR 600-560-6, Disposition of Personal Property (Effects) In Theaters of Operations. He should be sure that records are consistent. For instance, items shown on the report of interment should agree with items shown on the inventory of effects.
- (4) *Records.* Supervised by a graves registration specialist, the assistant graves registration specialist and graves registration clerk prepare final reports of interment from work copies and prepare any other records required.

48. SHIFTS

The table of organization for the graves registration company provides operating personnel for two shifts a day, whether the company is operating as a unit or with separate platoons. However, additional personnel may be required to operate a second shift at a collecting point (table II). Additional personnel for shifts may be provided from T/O&E 10-500.

49. LABOR

Most of the labor used by the graves registration company will be employed in grave opening.

a. Civilian Labor. Civilian labor can be used for cemetery maintenance, grave opening, or clerical work where they are qualified. They should be trained to perform the duties to which they are assigned.

- (1) All civilian labor, enemy or other, must be paid regularly. Records kept by the company should contain the names, addresses, classifications, dates and hours worked, wages, rates, and any other required information.
- (2) Effects of the dead must be safeguarded against pilferage, and military information must be adequately safeguarded.

b. Prisoner of War Labor. Prisoners of war can be used for grave opening and cemetery maintenance. They are employed in accordance with the provisions of the Geneva Convention. Prisoners of war may be used in informal groupings or may be organized into units.

c. Military Labor. If no other labor is available, either civilian or prisoner of war, military labor may be employed. Upon request to higher headquarters by the company commander or platoon leader, nondivisional troops, usually from quartermaster service companies, are provided for grave opening and other duties. Since labor troops are trained in working units, their work will be most

efficient when the units are kept intact. Men of each squad work best under their own leader.

50. REQUISITIONING TECHNICAL SUPPLIES

a. *Combat Zone.*

(1) *Regulated items.* Regulated items are items that are scarce, costly, or of a highly technical nature. They are obtained by requisitioning through appropriate channels to the immediate higher supply echelon. Requisitions are usually for a 30-day period and are submitted at least 5 to 7 days before the supplies will be required. Emergency requisitions may be submitted when the need justifies, however, they should be kept to a minimum.

(2) *Supply items.* Supplies other than regulated items will be requisitioned in accordance with the locally prescribed procedure. Basis of issue and authority will be shown on requisitions.

b. *Communications Zone.* Supplies will be requisitioned in accordance with the locally prescribed procedure. Basis of issue and authority will be shown on requisitions.

Section II. RECORDS AND REPORTS

51. RECORDS

Records used by the graves registration company are prescribed in FM 10-63. Such records consist of:

a. Report of Interment. The report of interment (DD Form 551) is the most important form used by the company. It is a permanent record of disposition of remains and effects.

b. Inventory of Effects. WD AGO Form 54, adapted as required.

c. Collecting Point Register. The collecting point register is not a standard form but should include the following information: Name, grade, service number, evacuation number, date and place of death (the latter indicated by coordinates), names of persons delivering the body to the collecting point, time and date the body was received at the collecting point, and the time and date the body was evacuated to the cemetery.

d. Certificate of Identity. A certificate of identity, DD Form 565, may be prepared at either the collecting point or cemetery after individuals making the identification of the remains are interviewed. A certificate signed by the individual recognizing the remains will list basis of identification of the body.

e. Report of Recovery of Unknown. The report of recovery of unknown is prepared at the collecting point for unknown cases on DD Form 567. The report includes location of recovery, date of death, identification of other remains found in the vicinity, and names of persons making the recovery.

f. Grave Plot Chart. The grave plot chart DD Form 568, is prepared for each plot in the cemetery. Grave numbers are shown on the plot and names of deceased in the graves occupied.

g. Historical File. The historical file consists of a register of interments, record of isolated burials in the general area, and supporting maps and sketches of the cemetery and area.

h. Alphabetical Index. An alphabetical index of all remains will be maintained at the cemetery.

52. REPORTS

A weekly report of burials (DD Form 566) will be prepared by the company and submitted through channels, to higher headquarters.

Section III. OPENING-UP, TAKING-OVER, AND CLOSING-OUT OPERATIONS

53. OPENING-UP OPERATIONS

The company commander or platoon leader on opening up operations will—

a. Select a site for bivouac or location for quartering of personnel.

b. Work out the standing operating procedure for the new mission.

c. Establish sanitary and security measures for the cemetery and bivouac or quarters area.

d. Arrange for communication facilities with higher headquarters.

e. Obtain general information about the area to be served.

f. Obtain information on the location of adjacent units and units to be served.

g. Establish contact, where possible, with headquarters of units being served.

h. Determine requirements for operating supplies and have requisitions forwarded to cover same.

54. TAKING-OVER OPERATIONS

The company commander or platoon leader on taking over the operations of a cemetery will—

a. Acquaint himself with the standing operating procedure for the cemetery.

b. Check the security and sanitary measures established for the cemetery and bivouac or quarters area.

c. Establish contacts with higher headquarters and commanders of the units being served.

55. CLOSING-OUT OPERATIONS

The company commander or platoon leader on closing out the operations will—

a. Insure that all phases of orders from higher headquarters have been complied with.

b. Prepare a plan for movement by rail or truck and instruct company or platoon personnel in its provisions.

c. Insure that all equipment is loaded properly.

d. Insure that latrines are closed and that the cemetery area is thoroughly policed.

e. Turn over cemetery records to the authority designated by higher headquarters.

Section IV. OPERATING UNDER UNUSUAL CONDITIONS

56. OPERATIONS

Graves registration operation under unusual

conditions will approximate as closely as possible, operations under most normal conditions, to the extent that climate and terrain will permit, and to the extent that the ingenuity of the troops will make it possible. There will be times when the usual operations will be more difficult or impossible to perform. Some difficult situations are described; others will occur under other conditions. It is not possible to cover completely all the unusual conditions under which graves registration operations may be required.

57. ARCTIC

a. Responsibility. The graves registration company may be called upon to operate collecting points in arctic areas. There may be times when it would not be possible to establish cemeteries. Tentage or prefabricated buildings should be set up near trails or communications lines to protect the remains and provide a place to work until the remains are transported to a temporary body storage area. When the ground thaws sufficiently, the cemetery may be prepared and the bodies removed from the temporary storage for interment.

b. Methods of Evacuation. Graves registration personnel evacuate the remains from collecting points by litter, litter-ski adapter, toboggan sled, akja (snow boat), or by air when the means are available. Use of litters, skis, or sleds is limited to open, smooth, and hard, snow-covered surfaces. The toboggan sled, which may be towed by over-snow vehicles, may be used on hard, smooth surfaces to evacuate three or four remains a trip. The

akja (snow boat) is useful in deep snow because the sides assist in supporting the load. If available, the pouch assembly will be used during evacuation to protect the remains and prevent loss of personal effects.

c. Body Storage Area. The body storage area is used as a processing area and as a storage place for remains. It corresponds to the processing area of a cemetery. It should be located as close as possible to areas where the heaviest fighting and casualties are expected, since evacuation of remains must usually be made by man- or animal-drawn methods. In locating a storage area, such terrain conditions as slopes, roads, and means of access from roads will be considered. Road signs showing the location of the storage area will be erected. The body storage will consist of a receiving area, an administrative tent, a morgue tent, an effects tent, and one or more storage structures.

d. Identification.

- (1) Graves registration personnel will identify remains before they are stored. Fingerprinting and care of effects will be more easily done if the remains are thawed out in a heated inclosed space. Shelter is required for the graves registration personnel gathering, classifying, and reporting identification media and caring for effects.
- (2) Identification tags will not be removed from remains, since no burials or grave marking will be made.

e. Storing Remains. Remains are stored in temporary structures, such as tentage or prefabricated buildings. In the portable arctic tent-type shelter, a platform can be built to store 30 or more remains (fig. 8). All aboveground storage should be insulated against the summer thawing period. The storage structure should be encased with icecrete (water mixed with sand or gravel) or snow blocks. Snow walls or windbreaks should be constructed as required.

f. Caring for Personal Effects. Personal effects will be taken care of at the storage area and in rear areas as outlined in SR 600-560-6, Disposition of Personal Property (Effects) In Theaters of Operations.

g. Reports. Reports will conform to procedures in temperate zones, so far as possible.

h. Isolated Burials. Graves registration personnel will locate and evacuate isolated remains as soon as possible. They will make a record on the report of interment of the location of the remains as related to landmarks.

58. TROPICS

a. Recovery. The graves registration company may be responsible for recovery of the dead in the tropics. Recovery of remains in jungle warfare requires promptness and ingenuity in making evacuation. In many cases motor transport cannot be used and the remains must be transported on litters or human backs, sometimes for great distances. The helicopter will be used for evacua-

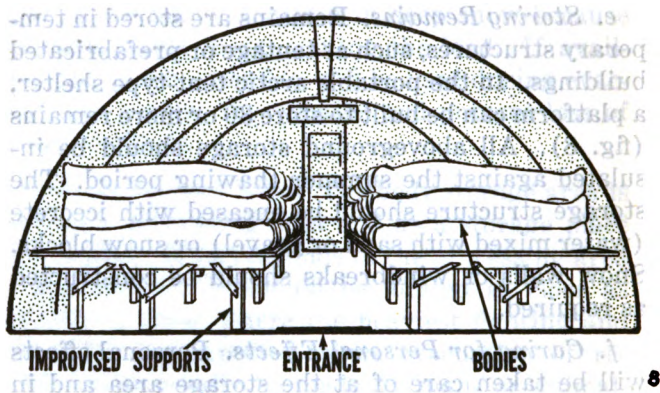


Figure 8. Portable shelter for the storage of remains (suggested).

tion from mountain areas when practicable.

b. Burial. Burial of the dead must be made on the day of death, if possible, because of rapid decomposition of remains.

c. Cemeteries. Bulldozers must usually be used to clear cemetery sites, since human labor will usually not be adequate for the task. Because of extreme weather conditions, including wind storms and torrential rains, cemeteries must be planned for the minimum maintenance under such conditions. To prevent rapid jungle growth within cemeteries, gravel or coral may be spread over grave sites. Adequate drainage is important and must take care of peak storm loads.

59. MOUNTAINS

Hasty and isolated burials are rarely made in mountains because of terrain conditions. How-

ever, unburied dead will be searched for, recovered, and evacuated as promptly as possible when the mission of the company calls for these duties. Recovered remains are transported by trained search and recovery parties to the graves registration collecting point. This point will be established near a designated truckhead serving the combat troops and will be moved forward with the change of location of the truckhead.

CHAPTER 7

SECURITY, CAMOUFLAGE, AND DEMOLITION

60. SECURITY

The commander of the graves registration company must prepare an adequate security and defense plan for the company. Platoon leaders should arrange security measures to meet the particular situation where the platoons are operating at a distance from company headquarters. Every man in the company should understand the principles of passive and active defense, the use of weapons, the demolition of supplies and equipment, and the use of camouflage and cover. The company depends primarily upon passive defense for security. The elements of passive defense are concealment, dispersion, and deception. These terms are included in camouflage.

a. Mines and Booby Traps. The graves registration company may use land mines and booby traps to strengthen defensive positions (FM 5-32).

b. Weapons. For active defense measures, the company is armed with .30 caliber carbines and .45 caliber automatic pistols.

61. CAMOUFLAGE

Camouflage is a principal defense method for the company. References giving details for proper

camouflage procedures are given in appendix I, paragraph 2.

62. DEMOLITION

Normally, demolition will be carried out when ordered by higher command. However, in instances of extreme urgency demolition may be carried out when ordered by the company commander or platoon leader. Procedures for demolition should be simple and swift and must be planned in advance to be effective. The tactical situation, available tools, and available time will largely determine the degree of destruction. Any supplies and equipment which could be used by the enemy should be destroyed. Adequate safety precautions must be taken to protect the personnel involved.

a. Engineer Equipment. Drafting equipment, transit, alidade, and other surveying equipment can be destroyed by smashing or burning. The generator set and electric lighting equipment set are destroyed by ax or sledge hammer blows.

b. Medical Equipment. Medical equipment should be destroyed by smashing and burning.

c. Ordnance Equipment. The tanks of motor vehicles should be punctured, the motors and transmissions smashed, and tires burned with gasoline. The spare parts cabinets should be smashed.

d. Quartermaster Equipment. Typewriters should be smashed. An explosive charge should be put in the oven of the fuel range or the door

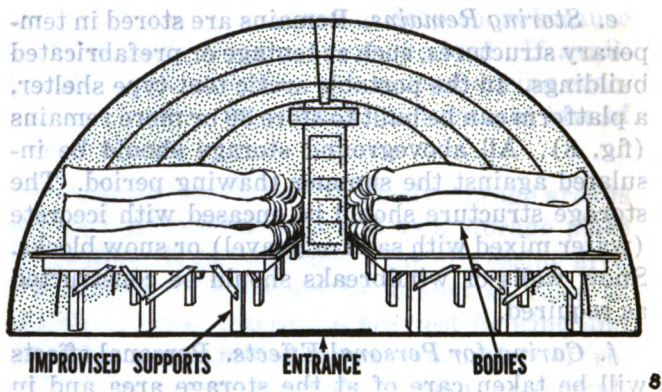


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a. Engineer Equipment. Drafting equipment, transit, alidade, and other surveying equipment can be destroyed by smashing or burning. The generator set and electric lighting equipment set are destroyed by ax or sledge hammer blows.

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c. Ordnance Equipment. The tanks of motor vehicles should be punctured, the motors and transmissions smashed, and tires burned with gasoline. The spare parts cabinets should be smashed.

d. Quartermaster Equipment. Typewriters should be smashed. An explosive charge should be put in the oven of the fuel range or the door

should be smashed. Miscellaneous quartermaster equipment should be burned or blasted.

e. Other Equipment, Records, and Property. Other equipment including vehicle records and spare parts should be burned, smashed, or blasted. Efforts will be made to save cemetery records. Even if their capture is certain they will not be destroyed. The cemetery property, including grave markers, will not be destroyed.

CHAPTER 8

MOVEMENT

Section I. MOTOR

63. REQUIREMENTS

The graves registration company and platoons are provided with sufficient organic transportation to move all their personnel and equipment by motor simultaneously.

64. LOADING PLAN

For speed and efficiency of movement the loading plan should be uniform through the company. Table III gives a suggested loading plan for the company and table IV for a platoon operating separately.

Table III. Loading Plan for Company

Truck			Truckload
Num- ber	Type	Position in convoy	
1	¼-ton	1	Company commander. Kitchen truck towing 1-ton cargo trailer. Tool sets, tentage, tent stoves and burners, tent poles, tent pins, latrine screens, folding tables, field desks, folding chairs, field safe, electric lamps. Truck towing water tank trailer.
1	2½-ton	2	
1	2½-ton	3	

Truck			Truckload
Num- ber	Type	Position in convoy	
1	2½-ton	4	Litters and miscellaneous items. Truck towing 1-ton cargo trailer carrying sign painting set, general purpose buckets, water cans, fingerprint kits, addressograph, and graphotype machines.
1	2½-ton	5	Fluoroscopic assembly, spare parts cabinets, engineer transits, level rods, ranging poles. Truck towing 1-ton trailer with picks and mattocks.
1	2½-ton	6	Generator set, rakes, crosscut saws, post hole diggers, sledges, rotary barrel pump. Truck towing 1-ton trailer with shovels and axes.
1	2½-ton	7	Electric lighting equipment sets and miscellaneous items. Truck towing 1-ton trailer carrying lanterns, typewriters, pouch assemblies, chemical items, miscellaneous items.

Truck			Truckload
Number	Type	Position in convoy	
1	2½-ton	8	Miscellaneous equipment. Truck towing 1-ton trailer with miscellaneous items.
1	¾-ton	9	Miscellaneous equipment, including 5-gallon gasoline drums and corrugated cans. Truck towing 1-ton trailer with miscellaneous equipment.
3	2½-ton	10, 11, 12	Personnel. Trucks towing 1-ton trailers with individual equipment.
8	¾-ton	13, 14, 15, 16, 17, 18, 19, 20	Personnel. Trucks towing 1-ton trailers.
5	¾-ton	21, 22, 23, 24, 25	Personnel.*

* Mechanics will ride in rear vehicle of column to repair any vehicles that break down.

Table IV. Loading Plan for Platoon Operating Separately.

Truck			Truckload
Number	Type	Position in convoy	
1	¾-ton	1	Platoon leader.
1	2½-ton	2	Kitchen truck, including nine of personnel. Truck towing 1-ton trailer with miscellaneous items.

Truck			Truckload
Number	Type	Position in convoy	
1	2½-ton	3	Engineer equipment, 25 litters, axes, mattocks, picks, shovels, buckets, water cans, lanterns, folding table, tent, typewriters, pouch assemblies, 5-gallon gasoline drums. Truck towing 1-ton trailer with miscellaneous items.
1	¾-ton	4	Personnel. Truck towing 1-ton trailer with individual equipment.
1	¾-ton	5	Personnel. Truck towing 1-ton trailer.

65. PLAN FOR MOVEMENT

a. Administrative Arrangements. When orders are received to move the personnel of the graves registration company or a platoon to a new location, the company commander will make the necessary administrative arrangements within the company. He will organize the personnel into groups to fit the transportation provided. All equipment to be transported will be packed, marked, and properly loaded on the trucks. The company commander will assemble the personnel of the convoy, outline and discuss the route to be followed, establish march security, and assign

specific march duties to personnel. The plan for motor movement will include provision for mess, medical care, and rest enroute. When the convoy has reached its destination, the company commander (or platoon leader in a separate platoon movement) will make plans for the unloading of equipment and reuniting of troops and equipment.

b. Drivers. Drivers will drive the vehicles to which they are normally assigned.

c. Reconnaissance Party. A reconnaissance party should be designated to select halting and quartering areas in advance.

d. Clean-up Party. A clean-up party will be designated to inspect quartering areas and halt sites after they are evacuated by the convoy.

e. Rate of March. When tactical considerations do not interfere, the following information may be used as a guide in planning an average day's motor march:

- (1) Preparation for march (including time for breakfast, inspection of vehicles, and breaking of camp): 1 hour.
- (2) Running time (including all halts except noon halt): 7 to 8 hours.
- (3) Halt for midday meal and refueling: 1 hour.
- (4) Inspection and servicing of vehicles after arrival at camp: 1 hour.
- (5) Average convoy speed: 25 miles per hour. The individual vehicle should not exceed 35 miles per hour.

f. Quarters. If the trip is over 200 miles, the maximum distance for a day's travel by truck, shelter must be provided. The shelter may be in bivouac, in a friendly camp or cantonment, or in billet. The requirements for quarters are accessibility, protection against the weather, an adequate supply of water, good natural drainage, firm dry soil, and freedom from sources of disease.

g. References. References for specific instructions on motor transportation and convoys are contained in appendix I, paragraph 9.

Section II. RAIL

66. REQUIREMENTS

a. General. When the graves registration company is to be moved by rail, cars will be furnished by the Transportation Corps. As soon as the company commander receives orders to move his company or a platoon of the company, he will submit to the local transportation officer a letter containing the following information:

- (1) Orders or instructions authorizing the movement.
- (2) Name and number of the organization.
- (3) Number of officers, enlisted men, and vehicles.
- (4) Quantity of company or platoon property and the authorized and checkable baggage.
- (5) Date, place of entraining, and destination.

(6) Approximate car requirements.

(a) *Company*. Approximate requirements for movement of the company are 23 flatcars, 1 boxcar, and 5 pullman cars or troop sleepers. For short movements 3 day coaches may be substituted for the pullman cars or troop sleepers.

(b) *Platoon*. Approximate requirements for the movement of one platoon are 5 flatcars, $\frac{1}{2}$ boxcar, and 1 pullman car or troop sleeper. For short movements, 1 day coach may be substituted for the pullman cars or troop sleepers.

b. *References*. See appendix I.

67. PLAN FOR MOVEMENT

The commander of the graves registration company will be informed by the transportation officer where the freight and transportation equipment will be placed and when the equipment will be ready for loading. The commander will assure himself that all necessary assignments of personnel are made for the movement of the unit.

a. *Entraining Officer*. When the graves registration company is to move either as a unit or a platoon, the company commander will detail a platoon leader to serve as entraining officer, whose duties are to—

- (1) Examine the approaches of the entraining point so that entraining may proceed

without confusion, delay, or interruption.

- (2) Supervise the loading of personnel and property.
- (3) Take the necessary measures to insure speedy and satisfactory loading.
- (4) Collect and transmit checkers' lists to the appropriate transportation officer.
- (5) Make necessary assignments of men to cars. Normally, the entraining officer will allow only one entrance to be used in each car and will instruct the men entering the cars to proceed directly to their assigned space.

b. Train Transportation Officer. The company commander will detail a platoon leader to be train transportation officer, whose duties are to—

- (1) Make a record of written orders for transportation.
- (2) Account for all personnel on the train.
- (3) Prepare a bill of lading for organizational equipment in accordance with the instructions in AR 55-145. This bill of lading will usually be turned over to the transportation officer at the destination.
- (4) Designate one noncommissioned officer as checker for each car. The checker will list the property loaded and record the data required for the preparation of the bill of lading.

c. Baggage Detail. The company commander will see that a baggage detail is formed to load and unload the baggage.

d. Guard Detail. The company commander will see that a guard detail is formed. At least two men should ride in an unsealed boxcar to guard the company or platoon property.

e. Time of Departure. Immediately before departure, the company commander will report by telegram to the traffic control division, giving the exact time of departure. Upon arrival at the new destination he will report departure and arrival time to the traffic control division of the transportation section of the new station. However, in a theater of operations, because of disruptions in rail transportation, the above will be complied with only so far as practical.

f. Mess Officer. The company commander will appoint a mess officer, who will supervise the preparation and serving of meals or make arrangements for meals.

g. Orders. The company commander will issue orders to his company (or the platoon leader if the platoon is traveling separately) in conformity with SR 55-705-25.

h. Delays. The company commander (or platoon leader, if he is in charge of the movement) will maintain a complete record of delays en route. The record should include any occurrences that compel the use of railway equipment after the scheduled hour of arrival at destination. Such a record will answer questions that may arise as to the improper use of railway facilities.

i. Inspection. The company commander (or platoon leader) will make an inspection of railway

equipment that has been vacated in order to determine whether any railway property has been damaged or unlawfully removed. He will report the results of this inspection to the commanding officer of the new home station.

j. Certificates. The company commander will obtain the required railroad transportation and accommodations certificates.

k. Detraining. The commander is responsible that troops detrain promptly. However, troops may be told the arrival time so they will be ready to detrain promptly. The officers and guard detail will detrain first. The baggage detail will be left behind to unload the baggage and reload it for transport to the quartering area. When the quartering area is distant from the detraining point, property should be unloaded by the entire company or platoon to save time. If practicable, non-commissioned officers who acted as checkers when loading will serve in the same capacity when unloading.

l. Report Required for Separate Freight Shipment. When the freight shipment and the personnel move separately, the report to the commander of the new station will contain the following information:

(1) Routing by rail.

(2) Car numbers (boxcar or flatcar) and general description of contents.

68. PACKAGING

The commander of the graves registration company must be certain that all company equipment

for rail shipment is packaged and packed to withstand unusual transportation, handling, and climatic conditions. He will see that each shipment conforms to all the requirements necessary to insure its arrival at its destination in sound condition. Field ranges, fuel containers, and other items in which gasoline or other flammables are used must be drained and flushed before being boxed and crated. A certificate that this action has been taken will be attached to crates containing the items and to the packing list.

a. Shipping Containers.

- (1) *Weight.* Containers should be as light as possible consistent with the nature of the item, conditions of handling and distribution, and manner of use in order to permit handling by the smallest number of individuals.
- (2) *Cubage.* Shipping containers should have a minimum cubage in order to conserve shipping and storage space. Cubage can be reduced by disassembling projecting parts, arranging them compactly, wrapping and packaging them, and placing them securely within the shipping container. No part should be removed unless it can be readily reassembled.

b. Packaging Procedures.

- (1) *Wrapping.* Commercial wrapping paper will be used when possible to wrap items.
- (2) *Tying.* Twine should be used in tying packages, interior containers, and arti-

cles that are to be packed in shipping containers. If the packages are large and bulky, the twine should have a breaking strength of not less than 105 pounds.

- (3) *Bolting.* Items that do not completely fill shipping containers should be bolted to prevent movement inside the containers. Items having projecting parts that might be broken or might puncture the container should be rigidly supported or suspended. The clearance between projecting parts and the inside face of the container should be at least an inch.

69. BLOCKING AND BRACING

a. Blocks. One block nailed to the floor outside each vehicle is ordinarily enough to prevent lateral movement. As an additional precaution, an inside block should be used and a rope or length of wire should be passed over the wheel, one turn being made around each block. The lumber used for blocks should be 2 x 4's.

b. Chocks. Security against longitudinal movement requires two chocks to each wheel. Chocks must be at least 3 inches high.

c. Nails. Fortypenny nails should be used to secure blocks and chocks to the floor of the car.

d. Wire. Heavy wire (No. 8 or 9 black annealed steel wire or its equivalent) should be used for securing loads, unless other wire is specified.

e. Reference. Detailed drawings of blocking and bracing the 1-ton, 2-wheel cargo trailer are given in appendix V.

70. REQUIREMENTS

a. *Orders.* Orders for movement of the graves registration company by air will be issued by higher authority to the company commander and to the air task force supplying transportation. The orders normally will comprise—

- (1) Composition of the unit.
- (2) Designation of departure airport.
- (3) Date and hour transport begins.
- (4) Destination. If this information is secret, the headquarters issuing the orders will classify it as such.
- (5) Method of movement from present site and quartering arrangements at or near the airport.
- (6) Restrictions on amount or type of equipment and supplies to be carried.
- (7) Probable length of time during which the unit must be self-sufficient.
- (8) Provision of subsequent supplies.

b. *Company Commander's Report.* The company commander will prepare a report for the air force commander. The report will contain the following information:

- (1) Strength and composition of the unit.
- (2) Total weight of supplies and equipment.
- (3) Nomenclature, cubage, weight, and number of bulky items.
- (4) Amount of baggage.

71. PLAN FOR MOVEMENT

a. Information.

- (1) *Initial.* In compliance with orders from higher authority, the company commander will compile information on the following:
 - (a) Method of loading desired.
 - (b) Initial operations at destination, such as ground transportation or tactical dispersion.
- (2) *Destination.* If orders do not include specific items of supply and equipment that must be excluded from air shipment, the company commander will determine—
 - (a) tentage available at destination.
 - (b) Operating equipment available at destination.
 - (c) Vehicles available at destination which may be utilized in place of authorized vehicles.
 - (d) Operating supplies available at destination.

b. Procedure. The following operations must be considered by the company commander :

- (1) Movement of the unit or sections of the unit from its present location to the vicinity of the departure airport, for which marching and loading tables will be necessary.
- (2) Movement to loading points at departure airport.

- (3) Loading of trucks to correspond to the loading of planes.
- (4) Movement to loading points, with consideration given to time, route, traffic control, loading arrangements, and guides.
- (5) Loading of planes.

c. Packaging and Packing. Procedures for packaging and packing are similar to those discussed in paragraph 68.

d. Personnel and Baggage. Preparations for movement of personnel and baggage will be determined by the type of planes used. Baggage may be carried in the same plane as personnel or in a separate plane.

APPENDIX I.

REFERENCES

1. ADMINISTRATION

- AR 220-70 Companies—General Provisions.
- AR 345-5 Personnel Management—Personnel Records.
- AR 380-5 Safeguarding Military Information.
- SR 320-5-1 Dictionary of United States Army Terms.
- SR 320-50-1 Authorized Abbreviations.
- SR 615-25-15 Military Occupational Specialties.
- SR 615-25-20 Career Fields.
- FM 27-10 Rules of Land Warfare.
- TM 12-250 Administration.
- TM 12-255 Administrative Procedures.

2. CAMOUFLAGE

- FM 5-20 Camouflage, Basic Principles.
- FM 5-20A Camouflage of Individuals and Infantry Weapons.
- FM 5-20B Camouflage of Vehicles.
- FM 5-20C Camouflage of Bivouacs, Command Posts, Supply Points, and Medical Installations.

FM 5-20G	Camouflage of Rear Areas and Fixed Fortifications.
FM 5-20H	Camouflage Materials and Manufacturing Techniques.
TM 5-267	Camouflage.

3. CEMETERY LAYOUT

FM 5-34	Engineer Field Data.
FM 5-35	Reference Data.
TM 5-225	Rigging and Engineer Hand Tools.
TM 5-230	Topographic Drafting.
TM 5-235	Surveying.
TM 5-236	Surveying Tables.
TM 5-615	Concrete and Masonry.
FS 10-101	Registration of graves—Part I; Location and Laying Out of a Temporary Cemetery.
FS 10-102	Registration of graves—Part II; Identification and Interment.

4. CEMETERY MAINTENANCE

TM 5-618	Painting, Repairs and Utilities.
TM 5-630	Ground Maintenance, Dust and Erosion Control, Repairs and Utilities.
TB QM 49	Grass Seed Mixture for Oversea Cemeteries.

5. DEMOLITION

FM 5-25
TB QM 27

Explosives and Demolitions.
Demolition of Quartermaster
Supplies and Equipment.

6. FOOD SERVICE

TM 10-401
TM 10-402
TM 10-405

Food Service Supervision.
Mess Management.
The Army Cook.

7. INDEXES

SR 110-1-1 **Index of Army Motion Pic-**
 tures, Kinescope Record-
 ings and Film Strips.

SR 310-20-3 **Index of Training Publica-**
 tions.

SR 310-20-4 **Index of Technical Manuals,**
 Technical Regulations,
 Technical Bulletins, Supply
 Bulletins, Lubrication Ord-
 ers, Modification Work
 Orders, Tables of Organiza-
 tion and Equipment, Re-
 duction Tables, Tables of
 Allowances, Tables of
 Organization, and Tables of
 Equipment.

SR 310-20-5 **Index of Administrative Pub-**
 lications.

SR 310-20-6 **Index of Blank Forms and**
 Army Personnel Classifica-
 tion Tests.

FM 21-8 **Military Training Aids.**

8. MAINTENANCE

AR 750-5	Maintenance Responsibilities and Shop Operation.
TM 9-840	$\frac{3}{4}$ -Ton 4 x 4 Cargo Truck, M37, Utility Truck M42, Ambulance Truck M43, and Telephone Installation, Light Maintenance and Cable Splicing Truck V-41()GT, Dodge.
TM 9-883	1-Ton, 2-Wheel Cargo and Water Trailers.
TM 37-2810	Motor Vehicle Inspection and Preventive Maintenance Services.
LO 9-883-1	Trailer, 1-Ton Payload, 2-Wheel, Water Tank, 250-Gal.
ORD 7 SNL G-508	Truck, $2\frac{1}{2}$ -Ton, 6 x 6 and 6 x 4 (GMC)—Truck Bomb Service, M27 and M27B1 (DA Supply Catalog).
ORD 7-8 SNL G-527	Trailer, 1-Ton, 2-Wheel, Water Tank, 250-Gallon (DA Supply Catalog).
ORD 7 SNL G-740	Truck, $\frac{1}{4}$ -Ton, 4 x 4, Utility, M38 (DA Supply Catalog).
ORD 7 SNL G-741	Truck, $\frac{3}{4}$ -Ton, 4 x 4, Cargo, M37 (DA Supply Catalog).

9. MOVEMENTS

AR 55-130	Transportation of Troops and Other Groups—General.
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AR 55-135 **Transportation of Troops—
Railway Equipment.**

AR 55-145 **Transportation of Troops;
Entraining, Duties En
Route, and Detraining.**

AR 55-155 **Transportation of Public
Property (Except Animals)
and Remains.**

SR 55-705-25 **Troop Movement Command-
er's Guide.**

SR 55-720-1 **Preparation for Oversea
Movement of Units (POM).**

TM 9-2800 **Military Vehicles.**

10. SPECIAL OPERATIONS

FM 31-25 **Desert Operations.**

FM 31-70 **Basic Arctic Manual.**

FM 70-10 **Mountain Operations.**

FM 72-20 **Jungle Warfare.**

11. SPECIALIZED EQUIPMENT

TM 8-227 **Methods for Laboratory Tech-
nicians.**

TM 8-633 **X-Ray Field Unit, Fluoro-
scopic, Foreign Body Local-
ization, Complete Item
9621500.**

TM 10-632 **Kits, Fingerprint.**

TM 11-2334 **Camera PH-629/UF.**

TM 11-2377 **Camera PH-503/PF.**

12. SUPPLY

- AR 35-6520 Property Accountability and Responsibility.
- AR 35-6560 Receipt, Shipment, and Issue of Property.
- AR 735-150 Accounting for Lost, Damaged, and Destroyed Property.
- AR 850-5 Marking of Clothing, Equipment, Vehicles, and Property.
- SR 32-20-1 Clothing Allowance System.
- SR 32-420-5 Supply and Accounting Procedure for Organizational Clothing and Individual and Organizational Equipment for enlisted personnel.
- SR 711-45-2 Supply Status Reporting System, Unit Equipment Status Report (Reports Control Symbol CSGLD-212).
- SR 735-150-1 Accounting for Lost, Damaged, or Destroyed Property.
- TM 38-403 Station Supply Procedure.
- FM 10-13 Quartermaster Reference Data.
- GTA 10-1 Supply Classes.

13. TRAINING

- ATP 10-214 (Mobilization)*, Army Training Program for Quarter-

* Available from continental army headquarters.

**master Graves Registration
Company.**

FM 5-15	Field Fortification.
FM 5-32	Land Mine Warfare.
FM 10-10	Quartermaster Service in Theater of Operations.
FM 10-63	Graves Registration.
FM 16-5	The Chaplain.
FM 20-15	Tents and Tent Pitching.
FM 21-5	Military Training.
FM 21-10	Military Sanitation.
FM 21-11	First Aid for Soldiers.
FM 21-15	Individual Clothing and Equipment.
FM 21-18	Foot Marches.
FM 21-20	Physical Training.
FM 21-25	Elementary Map and Aerial Photograph Reading.
FM 21-26	Advanced Map and Aerial Photograph Reading.
FM 21-30	Military Symbols.
FM 21-75	Combat Training of the Indi- vidual Soldier and Patrol- ling.
FM 21-80	Recognition Training.
FM 22-5	Drills and Ceremonies.
FM 23-5	U. S. Rifle, Caliber .30, M1.
FM 23-7	U. S. Carbine, Caliber .30, M1 and M1A1, M2 and M3.
FM 23-30	Hand and Rifle Grenades.
FM 23-55	Browning Machine Guns, Caliber .30, M1917A1, M1919A4, and M1919A6.

FM 23-65	Browning Machine Gun, Caliber .50, HB, M2.
FM 30-5	Military Intelligence—Combat Intelligence.
FM 30-30	Aircraft Recognition Manual.
FM 30-40	Recognition Pictorial Manual, Armored Vehicles.
TM 5-220	Passage of Obstacles Other Than Mine Fields.
TM 5-240	Aerial Photography.
TM 5-246	Interpretation of Aerial Photographs.
TM 5-248	Foreign Maps.
TM 8-220	Medical Department Soldier's Handbook.
TM 9-1275	U. S. Rifles Cal. .30, M1, M1C (Snipers), and MID (Snipers).
TM 9-1940	Land Mines.
DA PAM 20-21	The Army School Catalog.
TF 16-2037	For God and Country.
TF 21-2073	Basic Map Reading—Part III: Direction, Orientation, and Location with Compass.
TF 21-2074	Basic Map Reading—Part IV: Direction, Orientation, and Location with Compass.
TF 21-2075	Basic Map Reading—Part V: Photos and Photomaps.

APPENDIX II

MINIMUM TRAINING SCHEDULE

1. GENERAL

The following minimum technical training schedule is planned to give systematic and progressive training for personnel of the graves registration company. Only essential matter required to train the soldier for his place in the graves registration team in the shortest possible time consistent with efficiency is given in the schedule. The subjects are for a guide only and must be varied to meet the immediate training requirements. The subjects are given first with the minimum number of hours; then each subject is listed and is broken down into lesson periods.

2. MINIMUM TECHNICAL TRAINING SCHEDULE

Hours	Subject	Scope of instruction	References
12	The Grave Registration Service	The history of Graves Registration; Organization of the Office of the QM General; Organization of the theater of operations; Communications zone, and Combat zone. GRS at division and regimental level. Purpose, function, and procedures.	FM 10-63 FM 10-10
29	Identification of the Dead	Taking of fingerprints; preparation of tooth charts; identification by dentures, photography, physical characteristics; clothing sizes and marks; places and circumstances of death; use of equipment.	FM 10-63
12	Personal Effects	Responsibility for the collection, inventory, disposition and protection of personal effects; disposal of money; cleaning of effects; selling of personal effects; shipping of personal effects; equipment and forms.	SR 600-560-10

Hours	Subject	Scope of instruction	References
35	Battlefield Collection and Evacuation.	Searching of battlefield for unburied or improperly buried dead; isolated and unmarked graves; evacuation of the dead; sanitation and hygiene problems; unusual climatic conditions; layout of collecting points; forms used; transportation of the dead; use of GRS equipment. Defense of QM installation infiltration tactics and guerrilla warfare. To provide the student with working knowledge of all phases of battlefield collection and evacuation; defense, infiltration tactics and guerrilla warfare.	FM 10-63
41	Cemeteries Operation-----	Selection of cemetery sites; layout of cemeteries; cemetery maps; numbering within plots; size of graves; grave digging; plans for burial; grave markers and grave marking; location of enemy and allied dead; care and maintenance; vacating a temporary cemetery; permanent cemetery; forms used.	FM 10-63

11	Religious Service and Military Funeral Procedures.	A knowledge of religious ceremonies at burials; duties of Chaplains; military honors; classes of military funerals; characteristics of each class.	Pam 21-39 FM 10-63
29	<i>a. Identification of the Dead</i>	BREAKDOWN OF SUBJECTS TO BE TAUGHT UNDER GENERAL TITLE	
5	Skeletal Structure of the Human Body.	Names and recognition of bones of human body. Difference between sex and race in bone structure. Determining age of person by bone formation; use of Broca's Scale and Rallet's Table.	FS 10-102 FM 10-63 FM 10-63
5	Method and Types of Identification.	Identifying media, types of classification and means of identification.	FM 10-63
2	Processing of Unknown		FM 10-63
2	Identifying Group Casualties	Procedures used in identifying groups with one or more known casualties and groups with all unknown casualties.	FM 10-63
6	Fingerprinting	Practical use and maintenance of the finger-printing kit.	TM 10-632 FM 10-63

Hours	Subject	Scope of Instruction	References
2	Dental Structure	Method of professionally identifying teeth and the recognition of individual teeth.	FM 10-63
1	Dental Chart	Practical exercise in making dental charts.	FM 10-63
2	Photographing the Remains	Technique of photographing and fluoroscopic examination of the remains.	FM 10-63 FM 11-40
4	Practical Exercise in Identification.	Practical exercise in identification using methods taught in previous hours.	FM 10-63
12	<i>b. Personal Effects</i>		SR 600-560-10
1	Responsibility for Effects and Property.	Importance of effects and property; responsibility for the care of the effects and property.	SR 600-560-10
4	Processing of Effects and Property.	Safeguarding; inventory of effects and property; classifying effects and property and recording of data on forms; methods of disposal of money and ration books; sale of effects; payment of debts.	SR 600-560-10
2	Inventory of Effects	Preparation and disposition of inventory of effects.	SR 600-560-10
1	Processing of Miscellaneous Effects.	Personal effects and property found in places other than on the remains.	SR 600-560-10

2 Procedure for Handling Effects

Procedures in handling effects at place of recovery, collecting point; at cemeteries; in rear areas; on beachheads and aboard ship. Handling of effects for allied dead and enemy dead.

1 Personal Effects Bags and Pouch.

Types of personal effects bags and pouch; identification card for personal effects bag.

1 Theater Effects and Property Depot.

Purpose, organization and operation of a theater effects and property depot. Central effects and property installation.

35 c. Battlefield Collecting and Evacuation.

Planning and conducting a battlefield search; purpose of search and recovery.

2 Searching of Battlefields

Definition of hygiene; importance of hygiene to Graves Registration Service personnel; inspection of Graves Registration Service personnel.

1 Individual Hygiene and Inspection.

Definition of sanitation; importance of sanitation; care and cleaning of graves registration equipment.

1 Sanitation for Graves Registration Service Equipment.

Definition of sanitation; importance of sanitation; care and cleaning of graves registration equipment.

SR 600-560-10

SR 600-560-10

FM 10-63

FS 10-101

FS 10-102

FM 10-63

FM 21-10

FM 10-63

FM 10-63

FM 21-10

Hours	Subject	Scope of Instruction	References
1	Offensive Odors, Disposal of Refuse and Disease Cases.	Ways of counteracting offensive odors; disposal of refuse; handling of diseased cases.	FM 10-63
1	Handling and Care of Remains	Methods of caring for the remains at the time of recovery and while transporting to the collecting point.	FM 10-63
1	Human Remains Pouch and Equipment.	Use of the human remains pouch; use and care of equipment.	FM 10-63
2	Protection of Personnel	Methods used to protect graves registration service personnel from booby traps, antipersonnel mines, etc.	TM 5-220 TM 9-1940 FM 5-15 FM 5-31 FM 5-32 TF 5-954 TF 5-1212 TF 5-1481
2	Hastily Buried Dead	Purpose of hasty burial; methods used in burying the remains. Demonstration showing the correct method of burying the remains hastily.	FM 10-63

2 Search and Recovery of Isolated Graves.

1 Report of Recovery of Unknowns.

4 Defense of QM Units and Installations.

Search for the remains; recovery and classification. Demonstration showing how isolated graves are located.

Procedure for preparing "Report of recovery of unknown."

Defensive factors to be considered in locating and establishing QM installations and positions; defense against infiltration tactics, guerrilla warfare and airborne troops; perimeter defense; communications, contact with other units; warning notes; internal security; camouflage; barbed wire entanglements and mine fields; fields of fire; proper use of cover and concealment; scouting and patrolling.

2 Infiltration Tactics and Warfare.

Indoctrination in infiltration tactics and guerrilla warfare methods and objectives; guerrilla organization; offensive and defensive measures to combat infiltration and guerrilla warfare; area and perimeter defense; local internal and communications security.

FM 10-63

FM 10-63

FM 5-31

FM 23-30

Pam 21-23

FM 21-75

Hours	Subject	Scope of instruction	References
2	Night Vision and Sound Detection.	Problems involved in night operations; necessity for training individuals and units to operate in darkness; use of eyes at night; infrared equipment; various means of illumination, sound detection and recognition.	FM 5-15 FM 5-20 TF 21-1433 FM 51-12
4	Collecting Points-----	Location and layout of collecting points; to include road guide signs and identification of markers of collecting points.	FM 10-63
3	Evacuation-----	Definition of evacuation; method and responsibilities of the evacuation of remains; caring for parts of bodies and shrouding.	FM 10-63
1	Transportation-----	Types of vehicles used; source of vehicles; methods used in loading and unloading; number of bodies to be loaded in different types of vehicles; concealing the remains.	FM 10-63 FM 53-80 FM 2-81 FM 5-1481
1	Tropical, Desert, Arctic, and Mountain Burials.	Search, recovery, burial and cemetery preparation under tropical conditions; evacuation in arid conditions. General	FM 10-63 FM 10-63 FM 10-63

4	Field Exercise	procedures in the recovery, collection, evacuation and storage in arctic areas; general procedures and problems in the search and recovery of the deceased in mountain area.	FM
41	<i>d. Cemeteries Operations</i>	Search, recovery and evacuation to collecting point; processing of remains for evacuation to temporary cemetery.	FM
1	Introduction: Temporary Cemeteries.	Purpose of temporary cemeteries; supervision, number and size of cemeteries.	FM 10-63 FS 10-101
6	Cemetery Site, Reconnaissance and Mapping.	Selection of site; reconnaissance and mapping for temporary cemeteries.	FM 10-63 FS 10-101
6	Cemetery Layout	Layout of cemeteries into sections to include plots, rows and graves.	FM 10-63
1	Types of Graves Registration Service Supplies.	Classes of graves registration service supplies; items commonly used in graves registration service operations; security of supplies and personal effects. General procedure for obtaining Graves Registration Service supplies in the theater of operation; control of Graves Registration Service supplies.	FM 10-63 T/A 10-100-20

Hours	Subject	Scope of instruction	References
1	Labor, Tools, Equipment and Transportation.	Service and proper use of labor; prisoners of war and civilians. Tools and equipment provided civilian workers; source of supply; transportation for civilian workers.	FM 10-63
4	Grave Digging	Methods of digging graves by rows; filling in graves; flooded graves; collapsing graves; frozen graves; planning grave openings; blasting trench graves.	FM 10-63
1	Emergency Medical Tag	Responsibility for preparation of emergency medical tag; action to be taken in its absence; disposition of emergency medical tag.	FM 10-63
4	Report of Interment	Nature, necessity, preparation, and disposition of Report of Interment. Emergency Reports of Interment; Report of Interments for allied and enemy.	FM 10-63
1	Casualty Reports	Purpose and use of casualty reports by graves registration service; theater level, communication zone, and combat zone.	FM 10-63

2	Weekly Report of Burials-----	Preparation and submission of weekly report of burials.	FM 10-63
2	Cross Referenced Cemetery Records-----	Records to be permanently kept in bound volumes and card files; properly cross referenced to be kept in each cemetery to assure ready location of any individual grave.	FM 10-63
1	Processing of Records-----	Processing and preparation of complete records for each case.	FM 10-63
2	Care and Maintenance-----	Responsibility and procedures for the care and maintenance of cemeteries; visitors log.	FM 10-63
4	Operations of Mortuary at Temporary Cemeteries.	Removal of effects from body; final check of identity and preparation of body for burial.	FM 10-63
2	Theater Mortuary Operations-----	Operation of theater mortuary. Organization and mission.	FM 10-63
1	Vacating a Cemetery-----	Methods used in vacating a temporary cemetery to include rehabilitation of the area and final report.	FM 10-63
1	Permanent Cemeteries-----	Care, maintenance and beautification of permanent cemeteries; handling of visitors.	FM 10-63

Revised

Hours	Subject	Scope of instruction	References
1	Marking of Graves-----	Grave markers, types and sizes	FM 10-63
11	<i>e. Military Funeral Procedure</i>		Pam 21-39
1	Military Funerals-----	History of funerals; classes of military funerals.	FM 10-63
1	Funerals with Chapel Service-----	Operation of a funeral with chapel service.	Pam 21-39
1	Funerals without Chapel Service	Operation of a funeral without chapel service; classes of military funerals.	Pam 21-39
1	Cremation Prior to Shipment; Cremated Remains.	Funeral procedures for cremated remains; ceremony prior to shipment of remains.	Pam 21-39
1	Cannon Salute, Participation of Aviation, Fraternal or Patriotic Organization.	Procedure and uses of cannon salutes; participation of aviation to include timing. Uses of fraternal and other patriotic organizations.	Pam 21-39
1	Chaplain Duties; Preliminary Arrangements, Floral Tributes.	Duties and status of the chaplain; preliminary arrangements by the officer in charge of a military funeral; arrangement of floral tributes.	FM 10-63 TM 16-205 TF 16-2037

1	Loading and Ceremonial Firing	General rules governing ceremonial firing; commands and position to lead and fire a volley and to unload.	Pam 21-39
2	Religious Service	A familiarization with various religious ceremonies at burials; duties of chaplains; military honors.	Pam 21-39
2	Demonstration of a Military Funeral.	Demonstration of a military funeral including loading and unloading of the remains; moving the remains to the grave by using pallbearers, participation of clergy, firing party, bugler, etc.	Pam 21-39

APPENDIX III

UNIT PROFICIENCY STANDARDS

1. BASIC

- a.* Do the men have knowledge of first aid?
- b.* Are the men trained in map reading?
- c.* Are the men trained in proper conduct if captured?
- d.* Are the men trained in the use of gas masks?
- e.* Are the men oriented in the mission of the unit?
- f.* Are the men trained in the proper use of their weapons?
- g.* Has each man completed his basic military training?
- h.* Are the men supply economy minded and cost conscious?

2. TECHNICAL

Are the personnel able to perform their primary mission? (Determine by spot check of the special tasks set up for each.)

- a.* First sergeant.
- b.* Graves registration chief.
- c.* Identification chief.
- d.* Mess steward.
- e.* Cooks and cooks' helpers.

- f.* Motor sergeant.
- g.* Armorer.
- h.* Company personnel management clerk.
- i.* Draftsman.
- j.* Fluoroscope operator.
- k.* Carpenter.
- l.* Graves registration specialists.
- m.* Assistant graves registration specialists.
- n.* Graves registration clerks.
- o.* Liaison agents.
- p.* Personnel administrative clerk.
- q.* Wheel-vehicle mechanic.
- r.* Surveyors.
- s.* Mechanic's helper.
- t.* Platoon sergeants.
- u.* Supply specialists.
- v.* Supply sergeant.
- w.* Light truck drivers.
- x.* Section chiefs.
- y.* Still photographer.

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 problems involving conduct of the unit in the following operations:

a. Setting up a Cemetery for Operation.

- (1) Does the site afford the best location for properly serving the units using the cemetery?
- (2) Are roads used to the best advantage?
- (3) Are administrative, morgue, and effects tents properly laid out?

b. Defense of Bivouac.

- (1) Is the plan of defense tactically sound?
- (2) Are all personnel armed with their permanently assigned weapons?
- (3) Does the plan for issue of arms and ammunition adequately meet the requirements of speed and safety and of the proper safeguarding of weapons?
- (4) Is the plan adequate for defense against ground troops, paratroops, and air attacks.

c. 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?

d. Showdown Inspection.

- (1) Is organizational equipment complete and serviceable?
- (2) Is individual equipment complete and serviceable?

e. Unit Performance. With due consideration to the above problems, determine the following:

- (1) Can the unit perform its primary mission?
- (2) Can the unit service a force of 100,000?
- (3) Can the platoon perform its primary mission when it is operating as a separate unit?

f. Ground Action. Set up a problem involving the unit in offensive ground action as a combat rifle unit (covering tactical training of infantry soldier). Can the unit perform this mission in a satisfactory way?

g. Operation and Maintenance. Check operation and maintenance of the organizational equipment of the unit.

- (1) Are the vehicles properly operated?
- (2) Is the equipment properly maintained?
- (3) Is organizational maintenance practiced properly?
- (4) Are technical maintenance and operation instructions provided for each vehicle?

APPENDIX IV

FIRST AND LAST GRAVES IN CONSECUTIVE PLOTS

Plot	First grave	Last grave
A	1	144
B	145	288
C	289	432
D	433	576
E	577	720
F	721	864
G	865	1008
H	1009	1152
J	1153	1296
K	1297	1440
L	1441	1584
M	1585	1728
N	1729	1872
O	1873	2016
P	2017	2160
Q	2161	2304
R	2305	2448
S	2449	2592
T	2593	2736
U	2737	2880
V	2881	3024
W	3025	3168
X	3169	3312
Y	3313	3456
Z	3457	3600

APPENDIX V

BLOCKING 1-TON, 2-WHEEL CARGO TRAILER FOR RAIL SHIPMENT

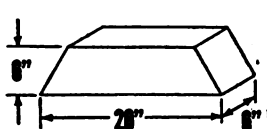
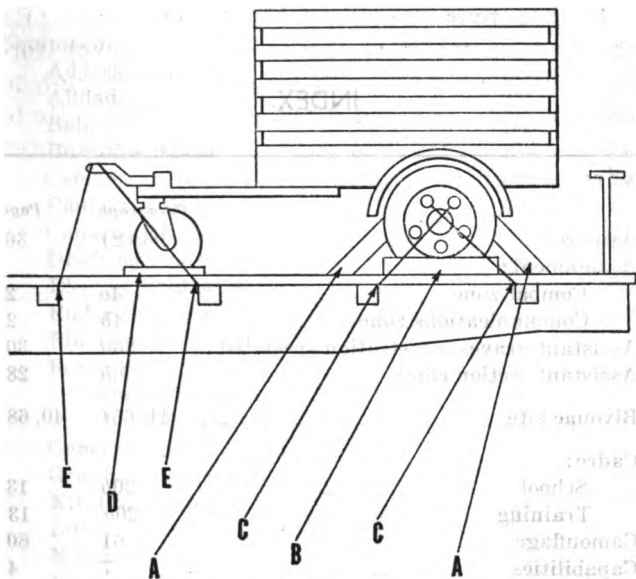
1. Place blocks (A), one to the front and one to the rear of each 7:50 x 20 wheel (fig. 9). Blocks measure 6 by 6 by 20 inches. Green saplings 10 inches in diameter may be substituted. Bevel the blocks or saplings to fit the floor and wheels. Nail blocks or saplings to the floor with forty penny nails.

2. Place one block (B) against the outside face of each wheel. Blocks measure 6 by 6 by 18 inches. Nail the blocks to the floor with forty penny nails.

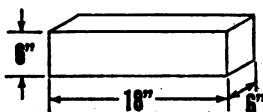
3. Twist together four strands of wire of length desired to form a cable. Insert one end of the cable (C) through a ventilating hole in upper part of wheel and out through an adjoining hole. Extend the wire to a stake pocket rearward of the wheel. Tighten cable enough to remove the slack. Insert another cable through ventilating hole in upper part of wheel and out through an adjoining hole. Extend the wire to a stake pocket forward of the wheel. Tighten cable enough to remove slack.

4. Secure parking wheel with two blocks (D). Blocks measure 2 by 4 by 20 inches. Nail the blocks to the floor with forty penny nails.

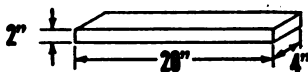
5. Pass four strands of No. 11 gage wire (E) through lunette of trailer to a stake pocket, forward of the lunette, and tighten wire enough to remove slack. Extend a cable from the lunette to a stake pocket rearward of the lunette and tighten wire enough to remove slack.



BLOCK A



BLOCK B



BLOCK D

Figure 9. Blocking 1-ton, 2-wheel cargo trailer for rail shipment.

INDEX

	<i>Paragraph</i>	<i>Page</i>
Armorer.....	38c (2)	36
Assignment:		
Combat zone.....	4a	2
Communications zone.....	4b	2
Assistant graves registration specialist.....	36d	30
Assistant section chief.....	36b	28
Bivouac site.....	41, 65f	40, 68
Cadre:		
School.....	20b	13
Training.....	20a	13
Camouflage.....	61	60
Capabilities.....	7	4
Carpenter.....	38f (7)	38
Cemeteries.....	43	40
Chart, training progress. (See Training.)		
Collecting point.....	45	43
Collection and evacuation section:		
Organization.....	46b	45
Procedure.....	46a	45
Company commander.....	38a (1)	32
Company organization.....	23	15
Control		
Combat zone.....	5a	2
Communications zone.....	5b	4
Cooks.....	38c (1)	34
Cook's helper.....	38c (2)	34
Defense measures. (See Training.)		
Demolition.....	62	61
Draftsman.....	38f (3)	37
Driver, light truck.....	37f	32

	<i>Paragraph</i>	<i>Page</i>
Equipment:		
Addressograph.....	27b	19
Alidade.....	24e	15
Balances.....	25a	16
Bunsen burners.....	25c	17
Cabinet, spare parts.....	26a	19
Camera, PH-503/PF.....	29a	20
Camera, PH-629/UF.....	29b	20
Drafting equipment.....	24a	15
Electric lighting set.....	24b	15
Embossing machines.....	27b	19
Fluoroscopic assembly.....	25d	17
Forceps:		
Bone-holding.....	25b	16
Tooth-extracting.....	25i	18
Generator set.....	24c	15
Graphotype machine.....	27b	19
Kit, fingerprint.....	27a	19
Litter.....	25e	17
Maintenance.....	31-35	24
Microscope.....	25f	18
Nasal elevator.....	25g	18
Pouch assembly.....	28	19
Provision.....	30	20
Scissors.....	25h	18
Sign painting set.....	24d	15
Tool equipment, camera.....	29c	20
Transit.....	24f	16
Vehicles.....	26b	19
Evacuation team.....	46b (3)	46
Executive officer.....	38a (2)	33
First sergeant.....	38b (1)	33
Fluoroscope operator.....	38f (5)	37
Fluoroscopic equipment. (See Equipment.)		
Graves:		
Layout.....	43a	40
Numbering.....	App. IV	104
Graves registration clerks.....	36e, 38f (4)	30, 37

	<i>Paragraph</i>	<i>Page</i>
Graves registration specialists-----	36c	28
Identification chief-----	38f(2)	37
Identification, effects, and records section	47	46
Improvisation-----	11e	8
Labor:		
Civilian-----	49a	50
Military-----	49c	50
Prisoner of war-----	49b	50
Liaison agent-----	37d, 38f(7)	32, 38
Maintenance:		
First echelon-----	32a	24
Motor vehicles-----	33	25
Organizational-----	32	24
Records-----	24	25
Responsibility-----	31	24
Second echelon-----	32b	25
Spare parts and tools-----	35	25
Map preparation-----	11b	8
Mechanics, vehicle-----	32d(2)	35
Mess steward-----	38c(3)	34
Military-civilian relations. (<i>See Training.</i>)		
Mines and booby traps-----	60a	60
Mission-----	3	1
Motor sergeant-----	32d(1)	35
Movements:		
Air:		
Plan-----	71	76
Requirements-----	70	75
Motor:		
Administrative arrangements-----	65a	66
Loading plan-----	64	63
Requirements-----	63	63
Rail:		
Blocking and bracing-----	69; app. V	74, 105
Packaging-----	68	72
Plan-----	67	69
Requirements-----	66	68

	Paragraph	Page
On-the-job training. (See Training.)		
Operations:		
Arctic.....	57	55
Closing-out.....	55	54
Mountain.....	59	58
Opening-up.....	53	53
Taking-over.....	54	54
Technical.....	44	41
Tropic.....	58	57
Personnel administrative clerk.....	38b(2)	33
Personnel, duties.....	36-38	27
Personnel management clerk.....	38b(3)	24
Personnel training.....	11	7
Photographer.....	36f	30
Platoon headquarters.....	37	30
Platoon leader.....	37a	30
Platoon organization.....	22	14
Platoon sergeant.....	37b	31
Provision of equipment.....	30	20
Purpose.....	1	1
Reconnaissance.....	39	39
Records.....	51	51
Recovery team.....	46b(2)	46
References.....	App. I	78
Related units:		
Quartermaster service company.....	6a	4
Quartermaster service organization.....	6b	4
Reports.....	52	53
Requisitioning:		
Spare parts and tools.....	35b	26
Technical supplies.....	50	51
Schedule, training.....	16; app. II	10, 86
School training:		
Company.....	10b	7
Service.....	10a	7
Scope.....	2	1
Section chief.....	36a	27

	<i>Paragraph</i>	<i>Page</i>
Section organization.....	21	14
Security.....	60	60
Shifts.....	48	49
Site selection.....	40	39
Supply.....	50	51
Supply economy. (<i>See Training.</i>)		
Supply personnel.....	38 <i>e</i>	35
Supply sergeant.....	38 <i>e</i> (1)	35
Supply specialists.....	37 <i>e</i>	32
Surveyor.....	37 <i>c</i>	31
Technical operations. (<i>See Operations.</i>)		
Test, tactical exercise.....	App. III	100
Training:		
Clerical.....	11 <i>a</i>	8
Company.....	14	10
Defense measures.....	11 <i>g</i>	9
Improvisation.....	11 <i>e</i>	8
Military-civilian relations.....	11 <i>d</i>	8
On-the-job.....	19	11
Phases.....	9	5
Platoon.....	13	9
Progress chart.....	17	11
Purpose.....	8	5
Schedules, unit.....	16	10
School.....	10	7
Section.....	12	9
Supply economy.....	11 <i>f</i>	8
Surveying procedures.....	11 <i>c</i>	8
Truck drivers.....	37 <i>f</i>	32
Unit proficiency standards.....	App. III	100
Unit training.....	12-20	9
Unit training schedules.....	16	10
Vehicle mechanics.....	38 <i>d</i> (2)	35

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3 1951 D03 425 637 R

FM 10-29

QUARTERMASTER GRAVES REGISTRATION COMPANY—1952