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DEPARTMENT OF THE ARMY FIELD MANUAL

CORPS SIGNAL BATTALION

HEADQUARTERS, DEPARTMENT OF THE ARMY
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CORPS SIGNAL BATTALION

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CHAPTER 1
GENERAL

1. Purpose and Scope

a. This manual provides guidance in training a corps signal battalion.

b. The manual contains information on the organization, administration, and tactical employment of the signal battalion as organized under TOE 11–15( ). In addition, it provides information on the corps communication system, and on the relationship of the corps communication system to communication systems of higher and lower headquarters.

2. Application

The material presented herein is applicable without modification to both nuclear and nonnuclear warfare.

3. References

The publications listed in appendix I provide information for training the corps signal battalion. Their use will assist battalion personnel to become familiar with the principles involved in the administration and operation of the corps signal battalion.

CHAPTER 2
CORPS COMMUNICATION SYSTEM

Section I. GENERAL

4. Signal Communication Requirements

The corps commander requires signal communication to receive orders from higher headquarters and for command control of his subordinate units. In addition, he requires a communication system to request and coordinate logistical support for corps operations.

5. Area Communication System

a. Field army signal troops establish a system of area signal centers so situated throughout the army area that a subordinate headquarters located anywhere within the area is readily accessible to the signal communication facilities of one of the centers. The area signal centers are interconnected by multichannel signal communication facilities in a manner (fig. 1) that permits switching of communications through any of a variety of routes from one signal center to another. The system illustrated makes use of the full capability of signal troops and equipments normally assigned to a field army for the purpose. Usually, the number of area signal centers actually established is smaller than illustrated, giving the systems flexibility and the capability to establish new or additional signal centers, as required.

b. Each area signal center provides local and trunk facilities for the use of units and activities located within its area of responsibility. The trunk facilities employ radio relay, cable, or a combination of both, with terminal and switching equipment at each area signal center. Headquarters of major tactical commands in the field army area make use of the area communication system as required. This is in addition to their own organic command communication facilities.

Section II. EMPLOYMENT

6. Corps Communication System

a. Corps headquarters communicates with the field army headquarters through army radio nets and the army area communication system (fig. 2). Divisions attached to the corps also have

entry into the army system. Divisions use the system for communication direct to field army headquarters on administrative and logistical matters in which corps headquarters is not involved. Trunks connecting corps and division signal centers into the system are established by army signal troops. Figure 2 shows the flexibility of routing available in the army system to insure communication between corps and other headquarters.

b. The corps commander employs the corps communication system for control of corps operations. He may also use the army area communication system for this purpose. The corps communication system provides direct communication from corps headquarters to its divisions, and from corps artillery headquarters to headquarters of each division artillery and each artillery group attached to the corps. This system, when integrated with the army area communication system (fig. 3), provides the degree of flexibility required in signal communication on the nuclear battlefield.

7. Signal Centers

Signal communication is provided for corps headquarters through signal centers established at each echelon of the command post. The principal command signal centers in the corps communication system are at corps main, corps advance, and corps rear (when employed). Facilities terminating trunks from the army area communication system are provided by army signal troops.

a. Corps Main Signal Center. The most comprehensive of the corps signal centers is that provided at corps main. Figure 4 illustrates the variety of signal communication facilities installed in the corps main signal center.

b. Corps Advance Signal Center. Figure 5 illustrates the variety of signal communication facilities installed at the headquarters advance command post.

c. Corps Rear Signal Center. When corps rear echelon is established, a corps signal center provides the necessary signal communication facilities. Type facilities are illustrated in figure 6.

d. Other Corps Communication Facilities. Additional signal communication facilities are required in the corps zone. For example, corps communication facilities are provided at corps artillery headquarters (fig. 7), at the headquarters of each attached artillery group, and at the headquarters of each division artillery with the corps.

8. Trunking Systems

a. Multichannel communication trunks of the corps command communication system extend between echelons of corps head-

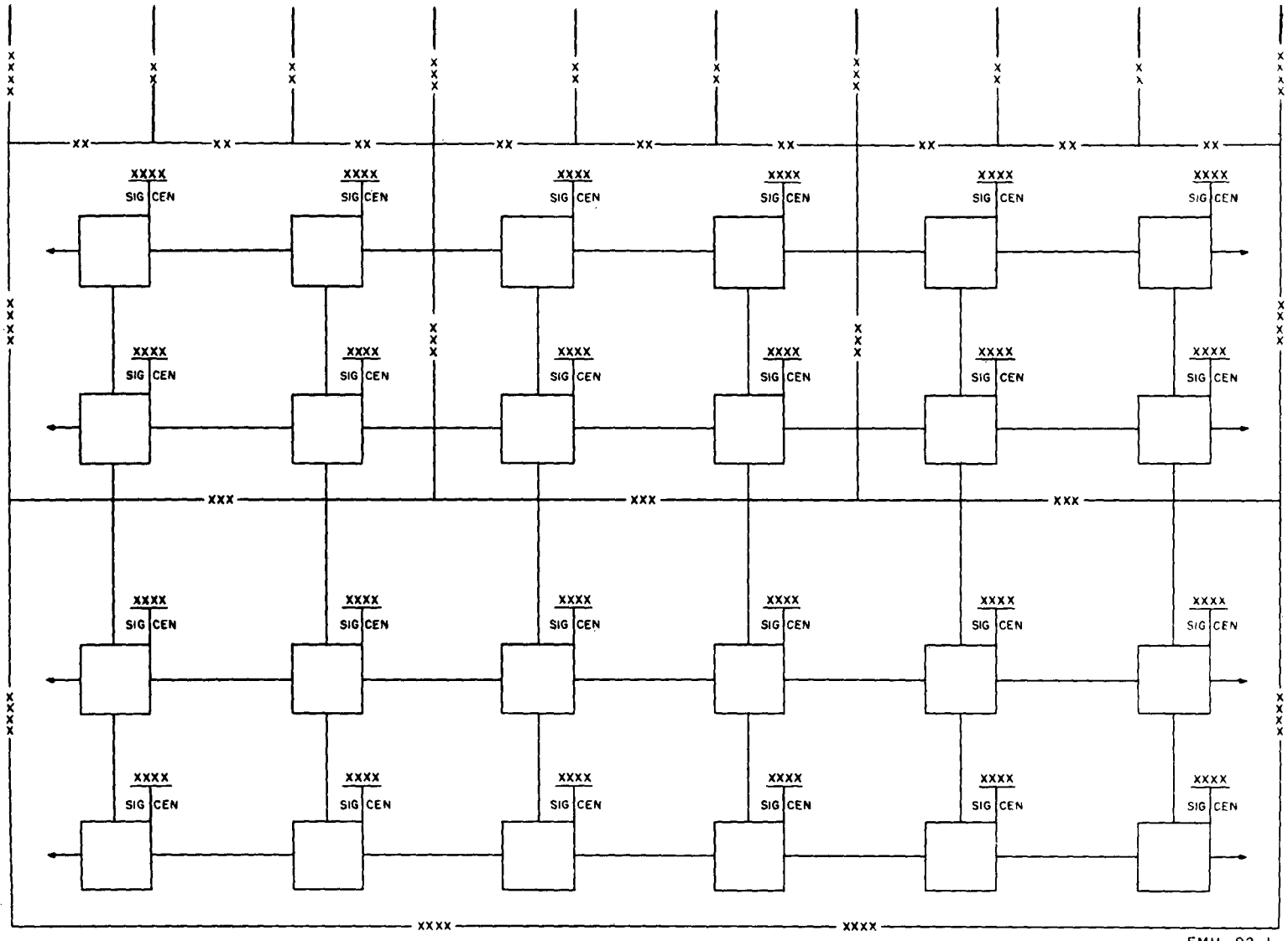

Figure 1. Army area communication system, schematic diagram.

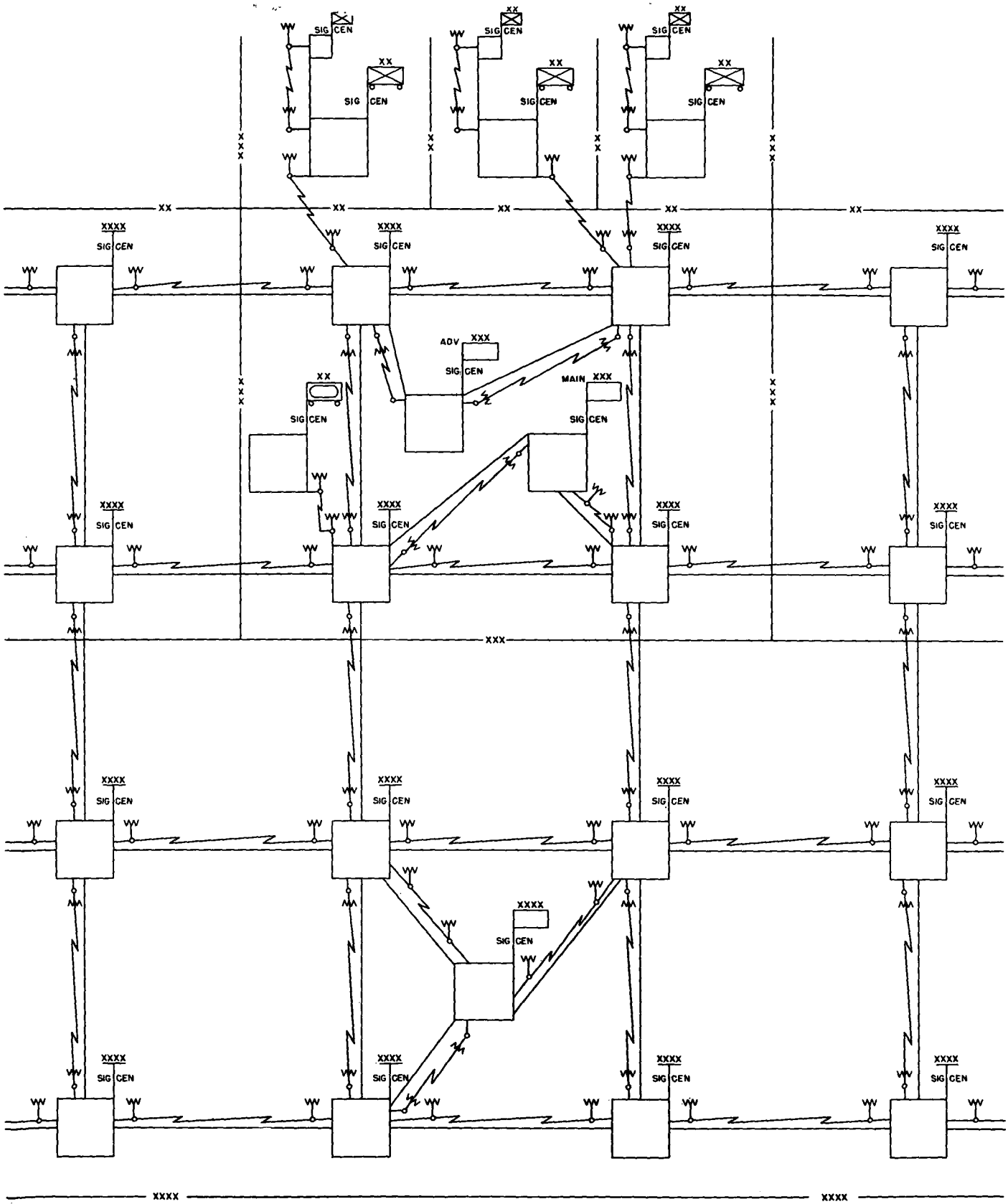

Figure 2. Field army, corps, and division headquarters in the army area communication system, schematic diagram.

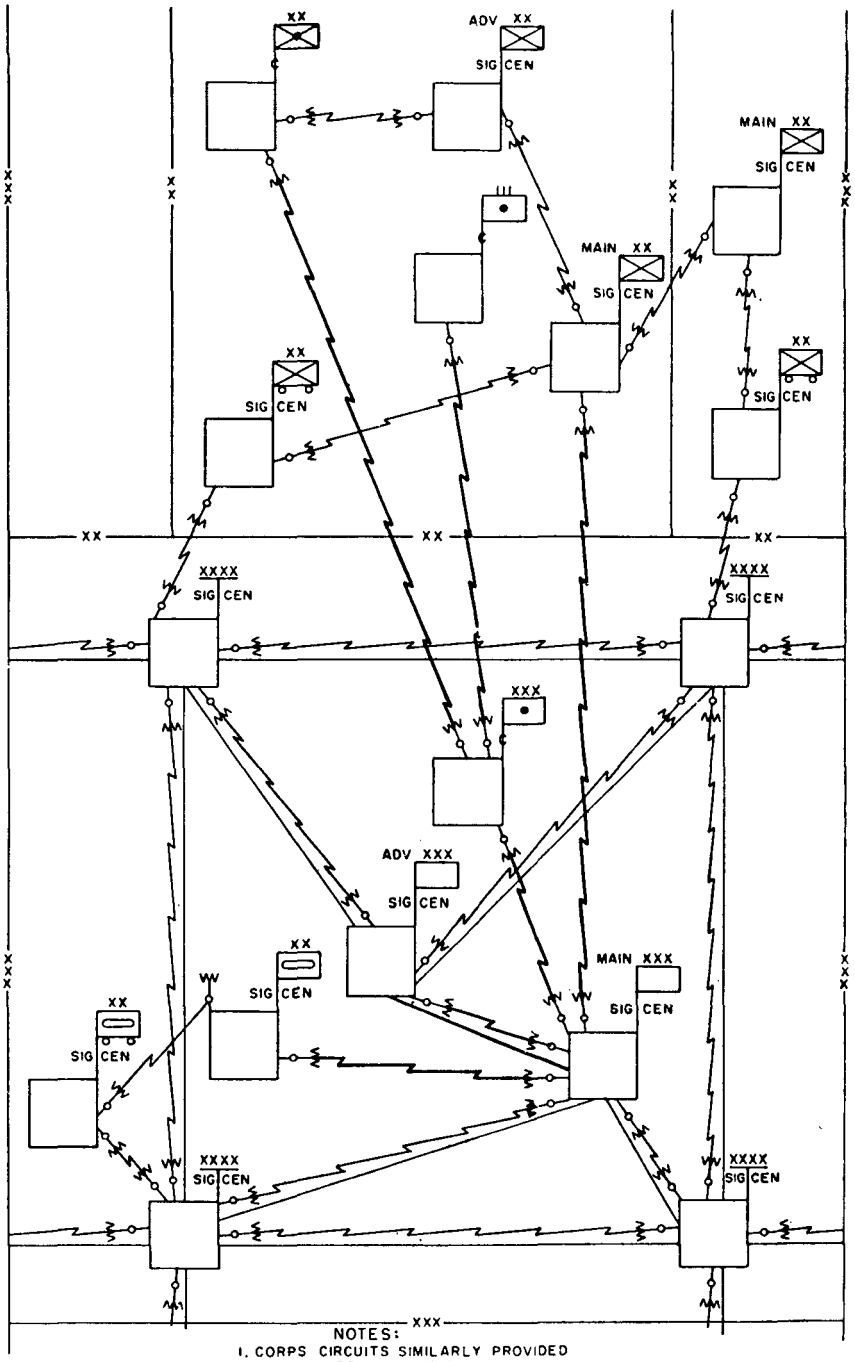

Figure 3. Corps communication system integrated with the army area communication system, schematic diagram.

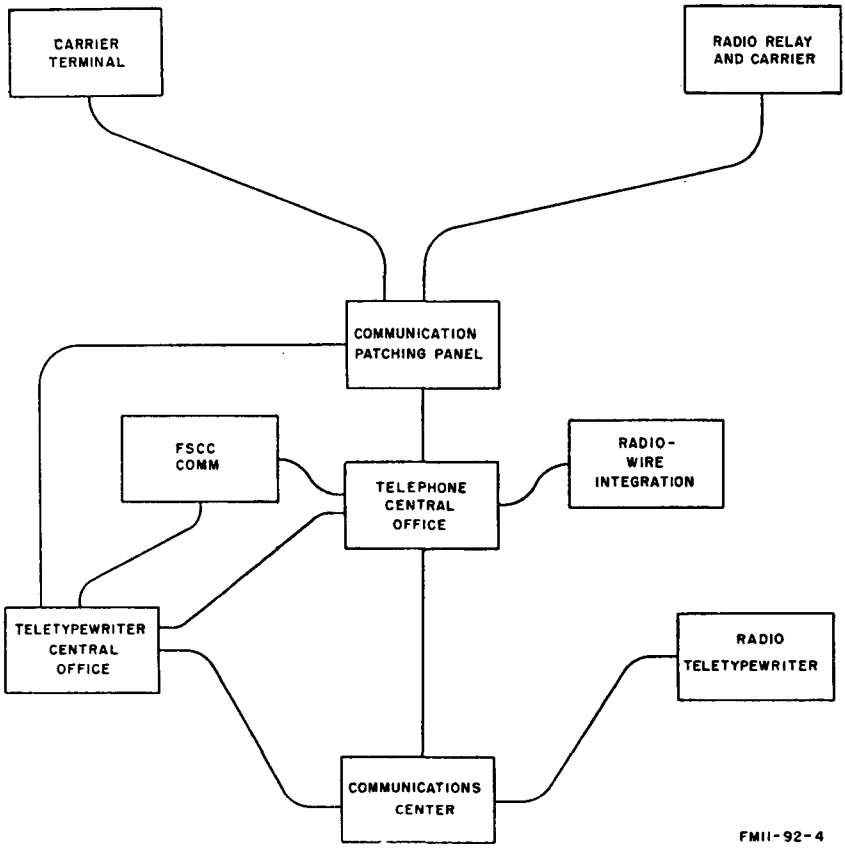

Figure 4. Corps main signal center facilities, block diagram.

quarters, and from corps headquarters direct to major subordinate headquarters, attached divisions and other combat units, and special forces (fig. 8). When corps rear is established, the corps communication trunks are extended to that echelon. This may be accomplished through the army area communication system. Priority is placed upon use of radio relay for corps trunks; however, field cable is installed when practicable.

b. Corps multichannel communication facilities are used to establish trunks between corps artillery headquarters and attached field artillery groups. Trunks also are established between corps artillery headquarters and the headquarters of each division artillery with the corps (fig. 9).

9. Telephone Central Office Facilities

a. Switchboards. A corps telephone central office is installed as part of the signal center at each echelon of corps headquarters (figs. 4–6). Each central provides telephone subscriber switch-

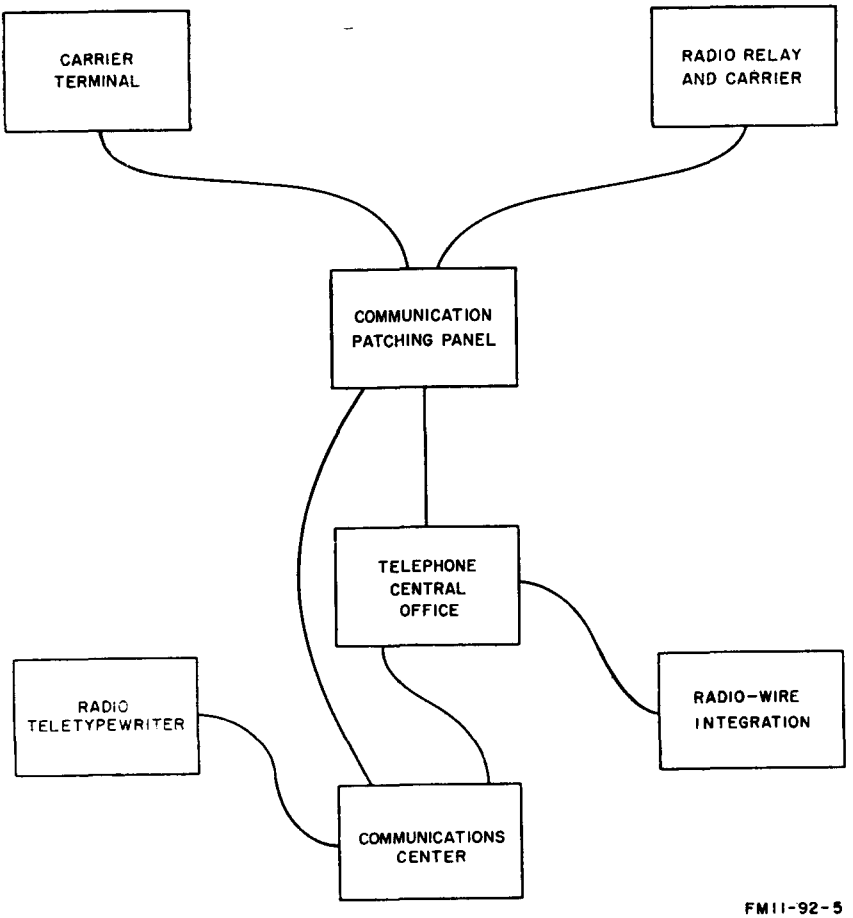

Figure 5. Corps advance signal center facilities, block diagram.

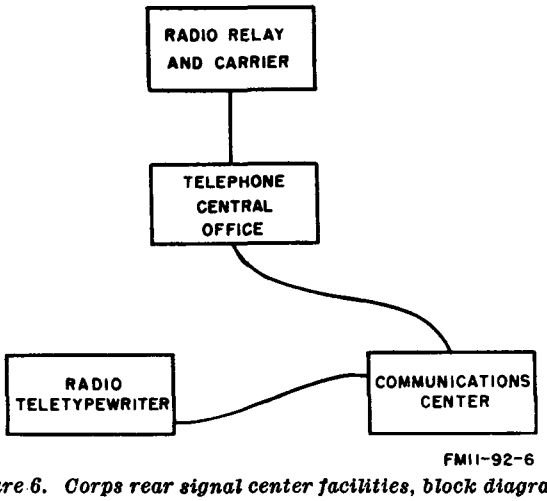

Figure 6. Corps rear signal center facilities, block diagram.

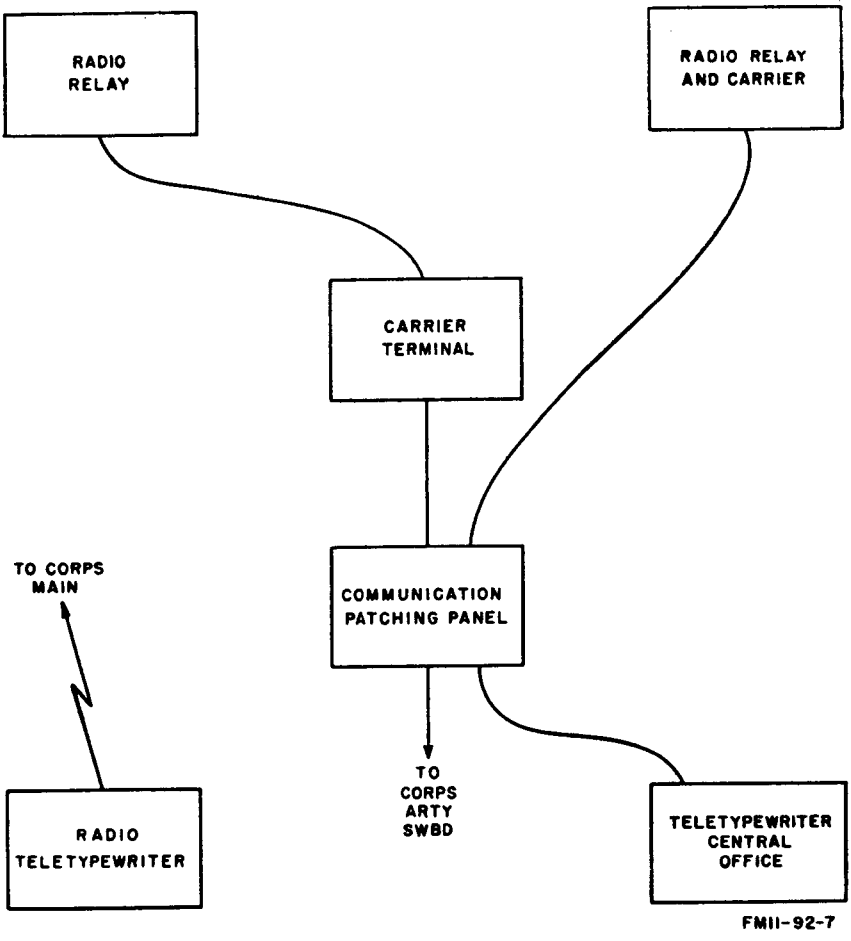

Figure 7. Corps communication facilities at corps artillery headquarters, block diagram.

board service for the headquarters served by the signal center. It also terminates corps and field army trunk circuits, and provides for entry into the trunk circuits by subscribers as required.

b. Telephones. Telephone instruments are authorized to using headquarters by their appropriate table of organization and equipment. Telephones are connected into the corps headquarters signal center switchboard through local wire lines. The construction of these lines is usually the corps responsibility.

10. Teletypewriter Central Office Facilities

Corps teletypewriter circuit switching facilities are installed at corps main and rear signal centers, and at corps artillery headquarters. Limited teletypewriter circuit switching is available in the teletypewriter terminal at corps advance signal center.

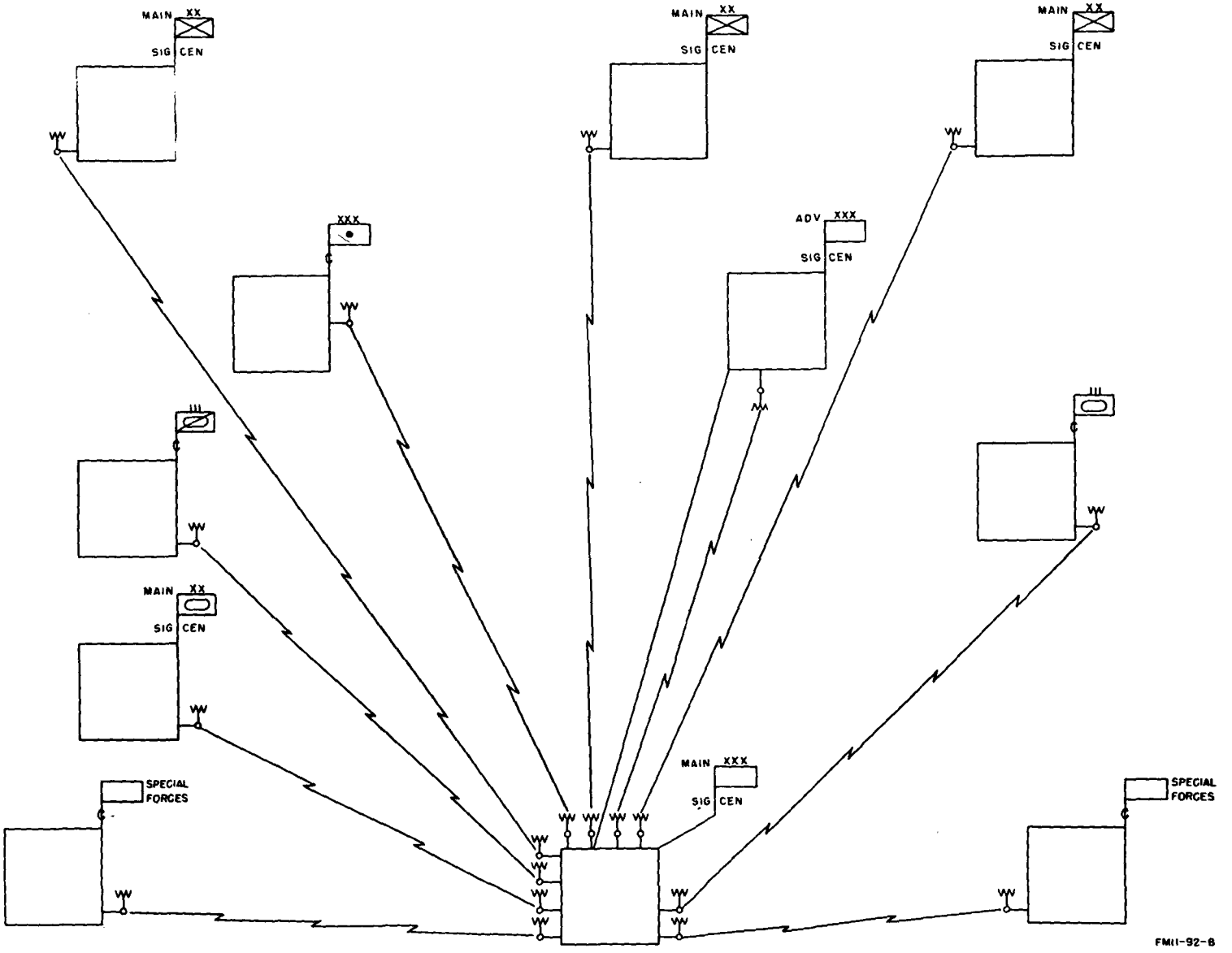

Figure 8. Principal corps communication trunks direct to major combat units, schematic diagram.

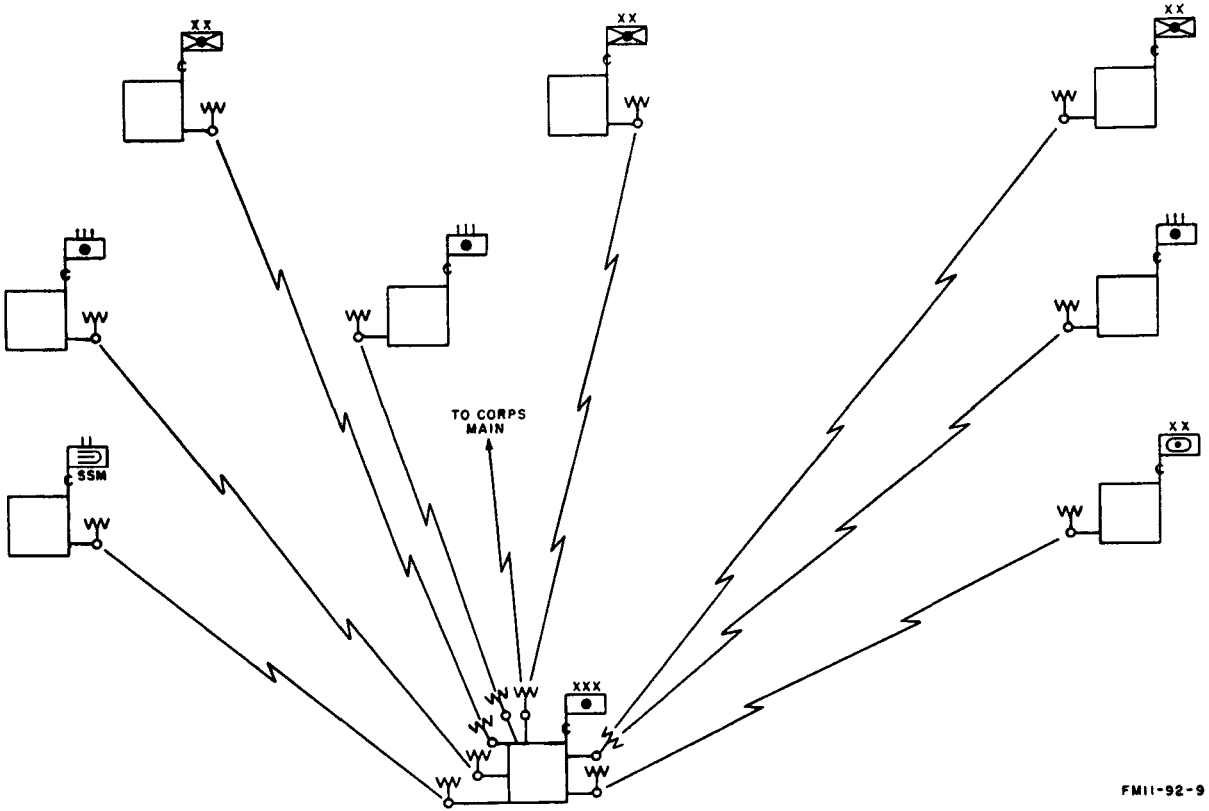

Figure 9. Type corps artillery communication system provided by corps signal battalion, schematic diagram.

11. Wire Carrier Facilities

a. Terminals. Carrier terminal equipment is required at signal centers where spiral-4 field cable is terminated. In addition, it must be used where trunks are brought into telephone or teletypewriter switchboards from radio relay repeater equipments. Figures 4, 5, and 7 indicate that carrier terminals are necessary in corps signal centers located at corps main, corps advance, and corps artillery headquarters.

b. Repeaters. Carrier repeater equipment may be placed in service, when required, in spiral-4 cable installations. The requirements may occur in a cable installation that carries circuits between carrier terminals located at each of two signal centers, or it may exist in spiral-4 cable installed between a radio relay terminal and a carrier terminal, both located at the same signal center.

12. Radio Relay Systems

a. General. Telephone communication from corps headquarters direct to divisions and other major combat elements of the corps will be established initially through trunk circuits completed by means of radio relay (fig. 8). Spiral-4 cable is used to augment the radio relay system if time and terrain permit. However, radio relay may be the sole means of completing the trunk circuits.

b. Radio Relay Terminal Facilities. Every radio relay circuit in the corps command communication system (figs. 8 and 9) is terminated at both ends by corps radio relay equipment. Either radio relay terminal or repeater sets may be used as terminal facilities, but additional carrier terminal equipment must be provided when radio relay repeater sets are employed in that manner (figs. 4 and 7). The answer to the question of when and where to use radio relay repeater sets as terminal facilities depends upon the specific communication requirements of the command and the numbers and type of equipment available for employment. Field army signal troops normally provide radio relay terminal equipment for the purpose of terminating radio relay circuits that enter corps signal centers from the army area communication system.

c. Radio Relay Repeater Facilities. A number of radio relay repeater sets usually are used, in conjunction with required carrier equipment, at terminal facilities in the signal centers at corps main and corps artillery (figs. 4 and 7). Other repeater sets are used as radio relay repeaters, when they are needed to complete circuits between radio relay terminal facilities.

13. Radio Communication Facilities

a. General. Corps radio communication facilities are provided at each echelon of corps headquarters, and at other headquarters

as required. They operate as stations both in field army and corps nets (app. II). In general, corps organizations provide their own radio stations for operation in corps and army nets. Corps provides radioteletypewriter stations for entry by corps artillery and special forces into certain corps nets. The nets discussed in this paragraph are type nets employed by corps. They may vary in composition according to the situation and the mission of the corps.

b. Field Army Nets. Corps radio stations operate in the army command net, the air request net, and the army information net. Corps radio teletypewriter stations for operation in these nets serve the corps main command post. The stations in the air request net and the information net may be located in the vicinity of corps fire support coordination center (FSCC) G2–G3 sections to work directly with the G2 and G3 representatives therein. Each of the two stations has a radio receiver for monitoring warning broadcasts, and a radio set for monitoring communications of air force aircraft operating in support of the corps.

c. Corps Command Net 1 (fig. 10). This net provides corps headquarters with direct radio teletypewriter communication between corps main signal center and the divisions attached to the corps. A station at corps advance signal center may enter the net, and may assume net control on order, when required. A separate radio teletypewriter circuit may be established between corps headquarters and the armored division when the division is engaged in a mission requiring direct communications.

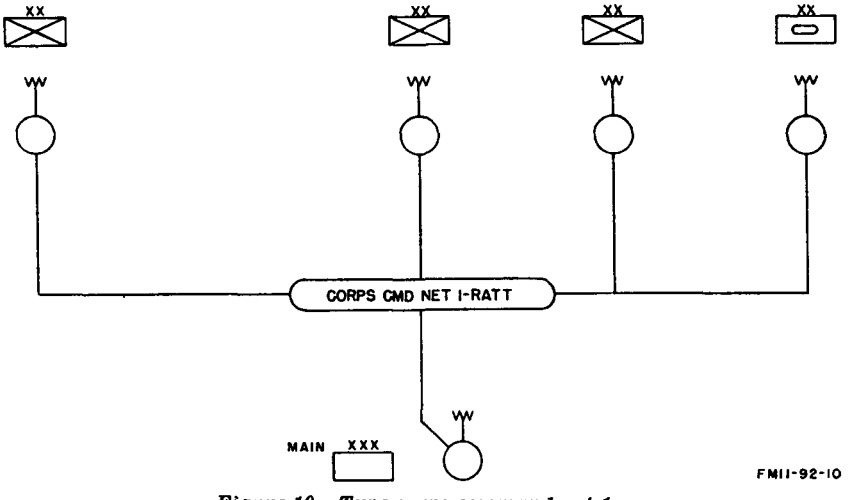

Figure 10. Type corps command net 1.

d. Corps Command Net 2 (fig. 11). This net provides corps headquarters with radio teletypewriter communication between corps main signal center, signal centers at other echelons of corps

headquarters, and to corps artillery headquarters. The station that operates at corps artillery headquarters is provided by the corps signal battalion.

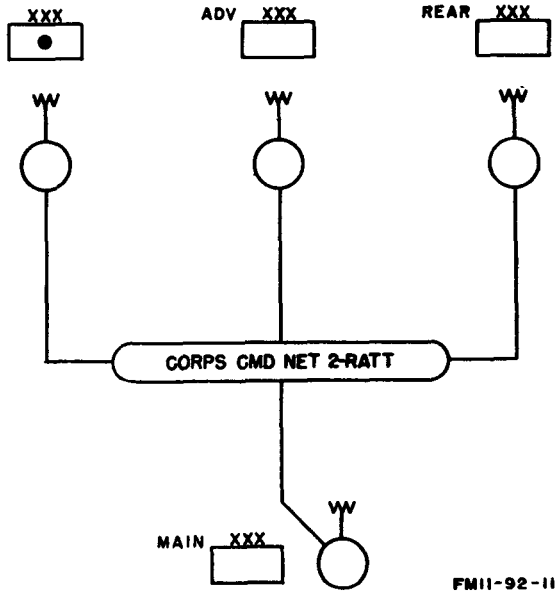

Figure 11. Type corps command net 2.

e. Corps Command Net 3 (fig. 12). This net provides corps headquarters with radio teletypewriter communication between corps main signal center and the armored cavalry regiment, the armor group, and two engineer groups.

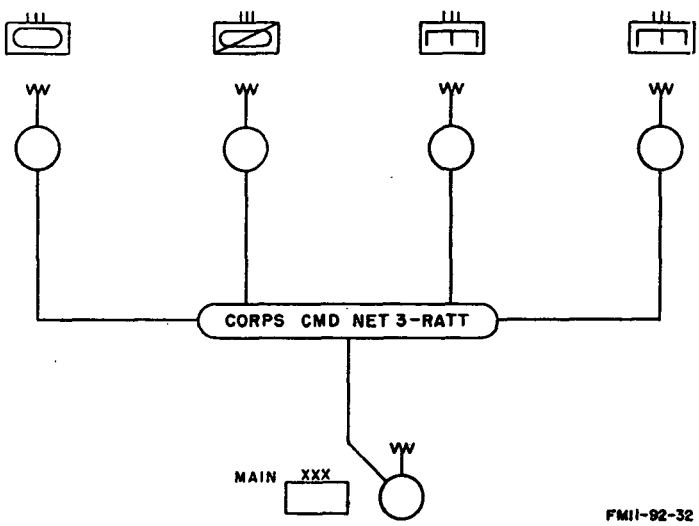

Figure 12. Type corps command net 3.

f. Corps Reconnaissance Net (fig. 13). This net is used primarily for radio teletypewriter communication between corps headquarters and corps collecting agencies. The corps station usually operates at the corps signal center; however, a corps advance station may enter the net, when required, and may assume net control on order.

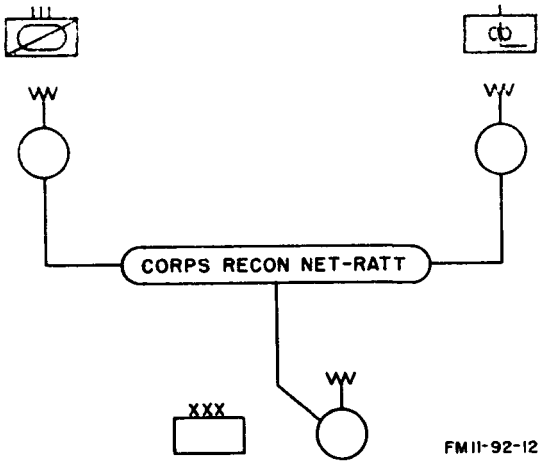

Figure 13. Type corps reconnaissance net.

g. Corps Special Forces Nets. These radio nets are established as required. Corps radio teletypewriter stations in the nets operate at the corps main signal center and at headquarters of the special forces when required.

h. Commander's Mobile Radio Facilities. Two mobile radio stations are provided for use by the commander, his staff, and liaison officers, when they require radio communication while away from the command post. Each station has three radio sets mounted in a ¾-ton truck.

i. Subordinate Organization Nets. Corps organizations use organic equipment to establish internal radio nets as required and authorized by standing operating procedures, standing signal instructions, and signal operation instructions. For example, the corps signal battalion radio command net may be organized as indicated in figure 14.

14. Radio-Wire Integration Facilities

Corps mobile stations provide radio-wire integration facilities at corps main and corps advance signal centers. The wire circuits from each station connect directly with the telephone central office of the signal center at which it is located (figs. 4 and 5).

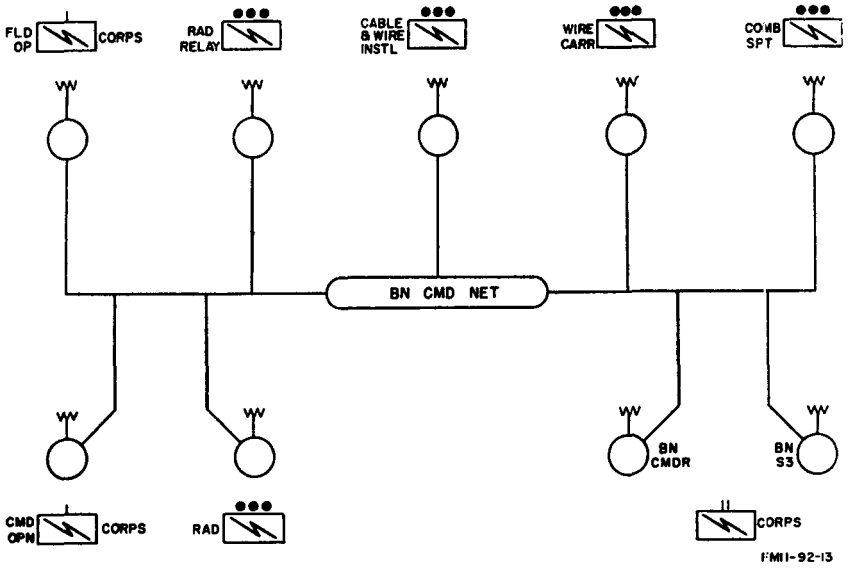

Figure 14. Type corps signal battalion radio command net.

15. Communication Center Facilities

a. Message Centers. Corps message centers are located at corps main, advance, and rear signal centers (figs. 4–6). Headquarters of corps artillery and other corps troops usually provide their own organic message center facilities as required to serve their headquarters.

b. Cryptographic Facilities. The corps signal center at each echelon of corps headquarters has cryptographic facilities. Each of these signal centers also has security teletypewriter equipment.

c. Teletypewriter Terminals. Corps truck-mounted teletypewriter terminal facilities are installed in the signal centers at each echelon of corps headquarters, at the G2–G3 staff area in the corps main command post, and at headquarters of corps artillery. On-line encryption equipments normally are operated on each of the point-to-point circuits to divisions, corps artillery, and field army. At corps main signal center, the teletypewriter terminal is connected by multipair cable to the teletypewriter terminal operating at the radio teletypewriter station site. The connection permits refiling of teletypewriter message traffic electronically, in preference to transferring it physically by messenger.

d. Corps Signal Messenger Service. Corps operates a signal messenger service providing scheduled and special air and motor messenger runs. Scheduled messenger runs are established to provide the most frequent and economical service practicable. Figure 15 illustrates a type of corps signal messenger service that integrates with the signal messenger service provided by army and

divisions. Material to be handled by air couriers is dispatched through corps messenger facilities. Corps signal messenger service also prepares and handles pouched message distribution through the field army signal messenger system.

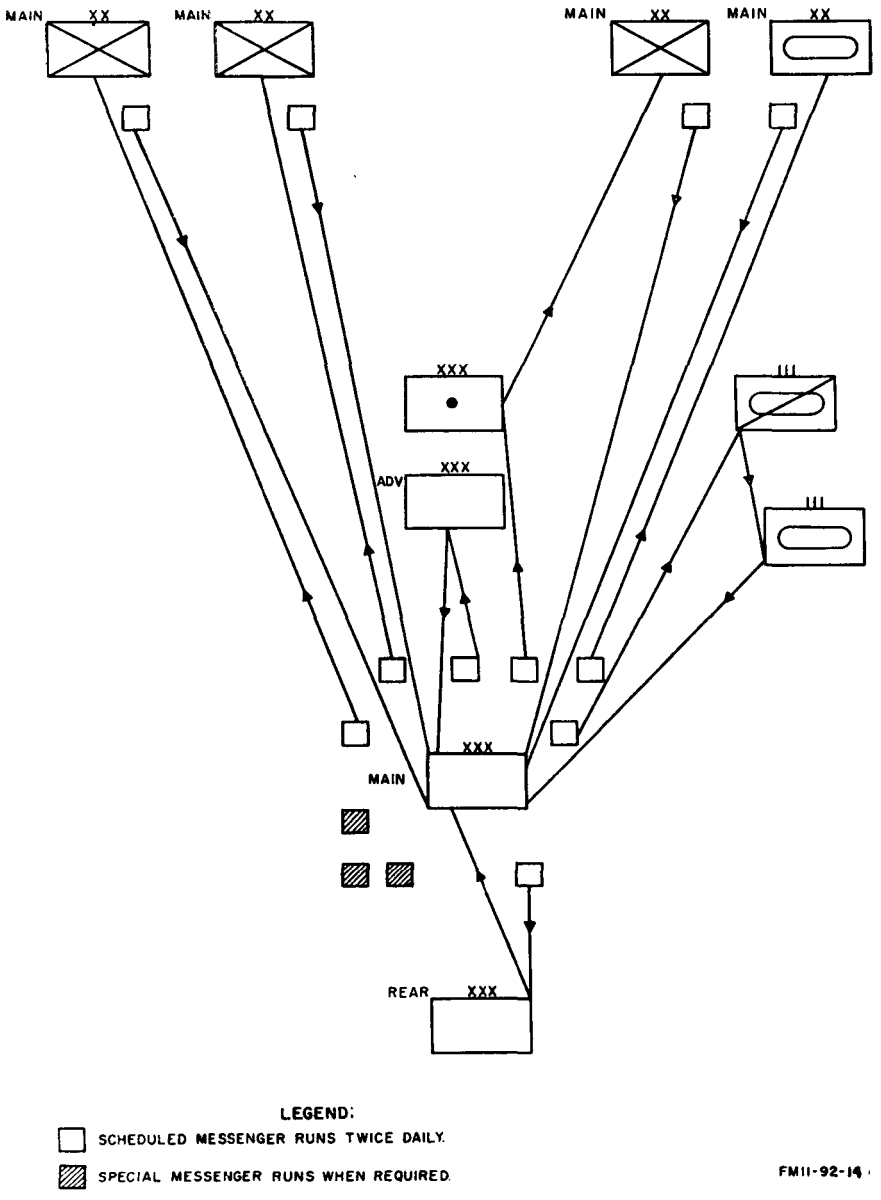

Figure 15. Type corps signal messenger service, block diagram.

16. Signal Communication Control

a. Field Army Communication. Control in the field army system is exercised at field army level. The corps signal officer coordinates with the army signal officer to insure that the service provided by the army area communication system is adequate to satisfy the corps communication needs. When additional service is required, it is usually requested through technical channels. Corps assumes responsibility for control of the system only when so directed by field army.

b. Corps Communication. Central control of the corps system is exercised from a communications control center, through the corps main signal center. Control circuits for direct telephone and teletypewriter communication are established from the control center to signal communication facilities in the corps system. The circuits provide for routing, rerouting, and emergency rearrangement of circuits in the corps communication system. They permit immediate reporting of, or requests for, trunk routing and directory changes from signal centers in the system. In addition, they provide an efficient means of directing, and disseminating information about, changes in the system. Complete and current signal communication records are maintained at the control center to provide accurate directory and routing information. The records provide technical information on the status of all components of the corps communication system.

17. Pictorial Service

a. Photographic service is provided by the corps pictorial facility. The service includes ground still and ground motion picture photography, and the processing of both ground and air still photographs in two mobile laboratory darkrooms. Exposed motion picture film is sent to the nearest photographic facility that has a motion picture processing capability, usually at theater army. Support is given to attached divisions, when necessary and available.

b. U. S. Army tactical, intelligence, and operational record photography comprise the bulk of the corps photography workload. Other types of photography are performed as directed.

18. Signal Supply and Maintenance

Corps depends on field army facilities for signal supply and field maintenance of signal equipment.

19. Physical Security

a. Physical security for signal communication facilities is necessary to insure that the facilities may operate undisturbed by local

enemy action. This security may be provided by the headquarters that is served by the facility, or it may be provided by the signal unit that is responsible for the facility.

b. Perimeter defenses of the headquarters served provide the physical security required by signal facilities that are located inside the perimeter. However, special security measures must be taken to prevent unauthorized entry into restricted areas within defense perimeters; for example, areas in which cryptographic operations are conducted.

c. Signal communication facilities are frequently installed outside the defense perimeters. Physical security for these facilities is usually provided by the signal unit responsible for their installation and operation.

20. Displacement of Signal Communication Facilities

Frequent movement of echelons of corps headquarters causes signal communication displacement operations to be carried on continuously. Proposed future locations of command posts must be selected and surveyed, plans must be made for their occupancy by signal communication facilities, plans must be developed for physical rearrangement and electrical rerouting of communication circuits, and all affected elements must be advised of the actions they must take to effect the displacement. Physical movement of personnel and equipments must then be initiated. This movement must be conducted in phases that will permit establishment of signal communication prior to the time operation of the headquarters begins at the new command post. The phases also must permit communcation to continue at the old command post until operation of the headquarters there is discontinued and until communication is properly established at the new command post. Simultaneously, actions similar to the foregoing must be taken for signal centers or signal facilities at locations other than command posts. As a result, personnel and equipment must be available for displacement operations.

CHAPTER 3
BATTALION ORGANIZATION AND EMPLOYMENT

21. General

The corps signal battalion provides signal facilities which, when supplemented by the army area communication system, satisfy the communication requirements of the corps headquarters to which the battalion is assigned. The corps signal officer provides the guiding influence that gives purpose and direction to the battalion's activities. This chapter describes the battalion's authorized organization, and provides general information about its mission and operations. Chapters 4 through 6 discuss operational organization and employment of the battalion and its subordinate units in greater detail.

22. Authorization

TOE 11–15( ), with changes as published, is the governing strength authorization document for a corps signal battalion. It authorizes the number of personnel and the quantity of equipment required for the battalion to perform its mission in normal and reduced corps signal operations.

23. Mission

a. To provide signal communications for all echelons of a corps headquarters.

b. To install, operate, and maintain multichannel communication facilities from corps headquarters to major subordinate tactical units.

c. To install, operate, and maintain multichannel communication facilities between major headquarters of corps artillery.

d. To operate the corps ground messenger service.

e. To provide photographic service (except aerial photography) for the corps.

24. Assignment and Control

One corps signal battalion normally is assigned to each corps. The corps signal officer normally exercises operational control over the battalion, under authority delegated to him by the corps commander.

25. Capabilities

a. When it is at full TOE strength, the corps signal battalion is approximately 85 percent mobile. It is a category I unit (AR 320–5) and provides the following facilities:

(1) Installs, operates, and maintains tactical signal communications for all echelons of corps headquarters and from corps headquarters to units assigned or attached to the corps, on a 24-hour basis. This includes telephone, radio, radio relay, teletypewriter, message center, and messenger service.

(2) Operates the corps ground messenger service, within the general capabilities of up to 14 motor messenger teams, and a limited air messenger service.

(3) Provides photographic service for the corps. This includes provision of ground still and motion picture coverage for the corps, operation of two mobile photographic laboratories, and processing of ground and aerial still photographs for all corps units.

(4) Depends on the army signal supply and maintenance battalion for signal supply and field maintenance of signal equipment.

(5) Depends on the corps combat aviation company or other units for aircraft and pilots for signal operations.

(6) Depends on the army area communication system for long lines circuits not provided for by organic elements of the battalion.

(7) Depends on army or other higher units for processing motion picture film.

b. The reduced strength column of TOE 11–15( ) adapts the battalion to the lesser requirements for personnel and equipment during prolonged noncombat periods and for a limited period of combat.

c. TOE 11–15( ) is not adaptable to type B organization.

d. The battalion depends on other corps units for medical, dental, and supplemental transportation.

e. Individuals of this unit, except the chaplain, can fight as infantrymen when required. The unit has the capability of defending itself and its installations against hostile ground attack.

26. Organization

A corps signal battalion is organized with the following components (fig. 16).

a. Headquarters and headquarters company (TOE 11–16( )).

b. Command operations company (TOE 11–17( )).

c. Field operations company (TOE 11–18( )).

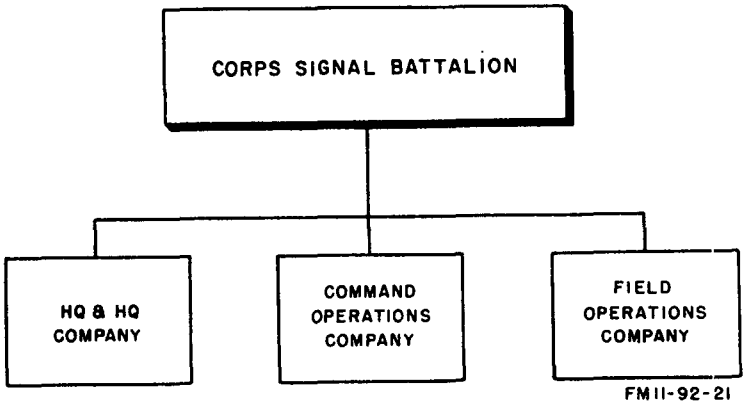

Figure 16. Organization of corps signal battalion.

27. Method of Operation

Battalion elements that perform functions for accomplishment of the organizational mission of the battalion are organized in teams according to their functions, and are located so that they are readily accessible to the corps echelon which they support. To permit them to efficiently carry on their operations, elements of the battalion that provide administrative and logistical support to the battalion are placed in a centrally located echelon of corps headquarters, where they have access both to the battalion elements they support and to higher echelon administrative and logistical facilities. Thus, elements of the signal battalion are found at each echelon of the corps headquarters, and at various major subordinate headquarters.

CHAPTER 4
HEADQUARTERS AND HEADQUARTERS COMPANY

28. General

Headquarters and headquarters company provides normal support for the battalion. In addition, it performs certain functions that are part of the operational mission of the battalion. This chapter describes the authorized organization of headquarters and headquarters company, and cites a typical method of organizing and employing the unit operationally.

29. Authorization

TOE 11–16( ), with changes as published, is the governing strength authorization document for headquarters and headquarters company of a corps signal battalion. It authorizes the number of personnel and the quantity of equipment required for the unit to perform its mission in normal and reduced operations of the battalion.

30. Mission

a. To direct and coordinate operations and training of a corps signal battalion, and to provide command, administration, and logistic support for the battalion.

b. To provide consolidated personnel administration, and supervision of supply, motor, and signal maintenance for the battalion.

c. To provide photographic service for the corps.

31. Assignment and Control

Headquarters and headquarters company is organic to a corps signal battalion. It is controlled through command channels that are normal for a separate battalion.

32. Capabilities

a. When it is at full TOE strength, headquarters and headquarters company is approximately 75 percent mobile. It is a category I unit (AR 320–5) and provides the following facilities:

(1) Plans, commands, controls, and coordinates the operation and training of a corps signal battalion.

(2) Provides administrative and logistic support for a corps signal battalion. This includes consolidated personnel

administration, and organizational maintenance of cryptographic equipment for the battalion. It also includes battalion supply, and electronic, power generator, and motor maintenance.

(3) Provides ground photographic service required for the corps, including still and motion picture coverage and processing of film exposed by unit photographers.

b. The reduced strength column of TOE 11–16( ) adapts this unit to the lesser requirements for personnel and equipment during prolonged noncombat periods and for a limited period of combat.

c. TOE 11–16( ) is not adaptable to type B organization.

d. Individuals of this unit, except the chaplain, can fight as infantrymen when required. The unit has the capability of defending itself and its installations against hostile ground attack.

33. Organization

Headquarters and headquarters company of a corps signal battalion is organized with the following elements (fig. 17):

a. Battalion headquarters.

b. Headquarters company.

(1) Company headquarters.
(2) Administrative and logistic section.
(3) Battalion personnel section.
(4) Operations and intelligence section.
(5) Battalion motor maintenance section.
(6) Frequency utilization section.
(7) Pictorial section.
(8) Battalion electronic maintenance section.

34. Method of Operation

a. Headquarters and headquarters company provides the direction and vital logistic activities necessary for the battalion to function as a coordinated organization in the accomplishment of its mission. It is the means by which the battalion commander exercises command and supervision of the battalion and ministers to the needs of its subordinate units.

b. The company normally is employed in one echelon. It usually operates from a location near the corps main command post. Paragraphs 35 through 42 give details about operations performed by elements of the company that differ from functions considered common to similar companies of separate battalions.

35. Battalion Headquarters

The corps signal officer exercises operational control over the battalion through this headquarters. A battalion commander and

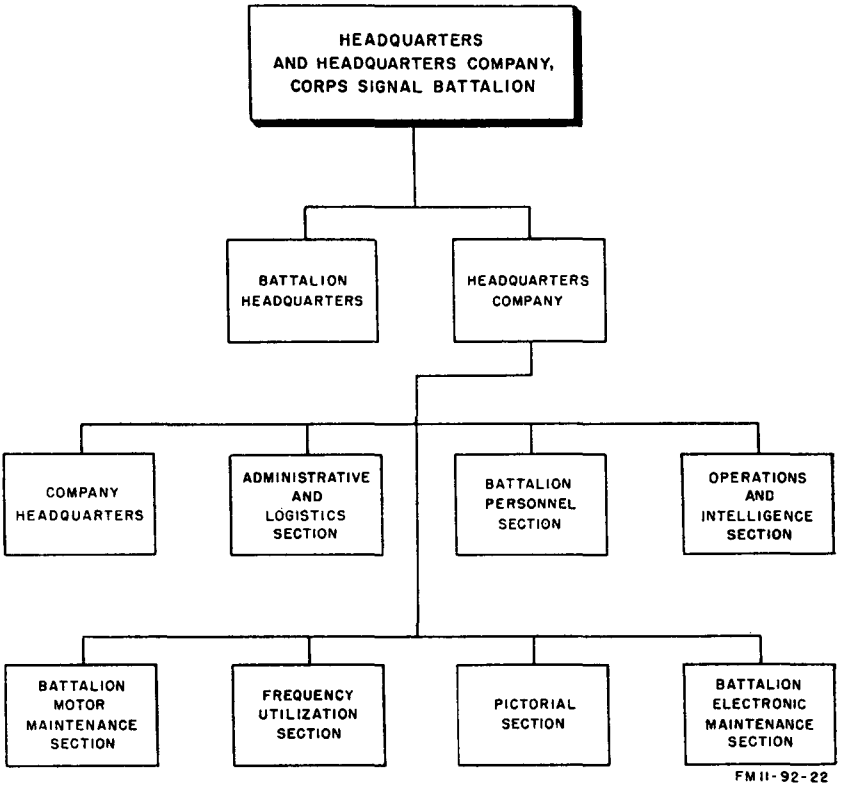

Figure 17. Organization of headquarters and headquarters company, corps signal battalion.

members of his staff are assigned to the headquarters. Operation of the headquarters is normal for a separate battalion, except that local modification may be necessary because elements of the battalion are widely separated when performing their missions.

36. Headquarters Company

The functional organization of headquarters company is the same as the authorized organization shown in figure 17. The company provides the staff of battalion headquarters with staff section personnel and equipment, and gives normal separate battalion organizational support to battalion headquarters and to other companies of the battalion. In addition, the company performs the specialized functions discussed in paragraphs 37 through 42.

37. Administrative and Logistic Section

The administrative and logistic section provides the personnel and equipment to support the battalion executive, adjutant, and S4 in carrying out the administrative and supply functions of the

battalion. The section normally performs signal supply functions solely for battalion operations. It does not have the capability to operate corps signal supply facilities.

38. Operations and Intelligence Section

The operations and intelligence section provides the personnel and equipment to assist the battalion S3 in planning, coordinating, and supervising the training and operation of the battalion. This includes the supervision of the frequency utilization section. The section supervises the corps system control facility that provides central control of the corps communication system.

39. Battalion Motor Maintenance Section

The battalion motor maintenance section operates under the staff supervision of the battalion S4. It supervises organizational maintenance of gasoline-driven power generator equipment used by the battalion. It performs organizational maintenance on this type of equipment for headquarters company, and supplements the organizational maintenance capability of the other companies. When it is feasible, generators requiring repair are brought to the section to take advantage of organizational maintenance shop facilities. However, it often is more desirable for the repairman to perform the maintenance at the site where the equipment is operated.

40. Frequency Utilization Section

The frequency utilization section functions under the control of the battalion operations and intelligence officer. It employs radio direction finding and receiving equipment to collect data pertaining to radio frequency congestion and interferences in the corps zone. The section may be organized in teams that are located at various sites in the corps zone to obtain the radio reception required for the individual missions of the teams. Collected data is submitted through the operations and intelligence section, in accordance with the battalion and corps standing operating procedures and special instructions from the corps signal officer.

41. Pictorial Section

a. The pictorial section accomplishes part of the operational mission of the battalion. It provides still and motion picture photographers and equipment for photography missions as required by the corps standing operating procedure, corps operation orders, and fragmentary orders received from the corps signal officer.

b. The section also operates two photographic laboratory darkrooms to process photographs for corps photographers. Although the mission of the section excludes aerial photography, aerial

photographs made by photographers of other corps units may be processed in the laboratory darkrooms of this section.

c. The functional organization of the section is flexible. Photographers may operate as individuals or as members of provisional teams, depending on the nature of each assignment. Their duties may take them anywhere in the corps zone. The photographic laboratories usually are located at the headquarters company area in the vicinity of corps main. The criterion for their location is their accessibility to the source of their workload and to the sources of photographic supplies used at the laboratories in processing photographs. The laboratory darkrooms are mobile and may be placed in any location where they can best serve photographic requirements.

42. Battalion Electronics Maintenance Section

The battalion's electronics maintenance section, under the staff supervision of the battalion S4, supervises organizational maintenance of the electronic equipment used by the battalion. It performs organizational maintenance on electronic equipment used by headquarters and headquarters company, and augments the maintenance capability of other companies of the battalion. The section operates two mobile organizational electronics maintenance shops. The shops are based at the same location as headquarters and headquarters company. When advisable, they may be moved to the location of the equipment that requires repair. When it is not advisable to move the equipment to be repaired, and the amount of shop equipment required does not warrant movement of a mobile repair shop to the site of the equipment, a repairman or repair team may be dispatched to the site with the necessary tools and test equipment.

CHAPTER 5
COMMAND OPERATIONS COMPANY

Section I. THE COMPANY

43. General

This chapter describes the authorized organization of a command operations company. It also presents a method of organizing and employing elements of the company operationally.

44. Authorization

TOE 11–17( ), with changes as published, is the governing strength authorization document for the command operations company of a corps signal battalion. It authorizes the number of personnel and the quantity of equipment required for the company to perform its mission in normal and reduced corps signal operations.

45. Mission

To provide signal communication facilities at corps main, corps advance, and corps rear headquarters.

46. Assignment and Control

The command operations company is organic to a corps signal battalion. Its control is exercised through command channels that are normal for a separate battalion.

47. Capabilities

a. When it is at full TOE strength, the command operations company is approximately 90 percent mobile. It is a category I unit (AR 320–5) and provides the following facilities:

(1) Installs, operates, and maintains terminal-type signal communication facilities at corps main, corps advance, and corps rear, including message center, messenger, cryptographic, teletypewriter, and telephone service.

(2) Provides high frequency radio teletypewriter communication between echelons of a corps headquarters, from corps headquarters to corps artillery, to subordinate divisions, to an armor group, and to an armored cavalry regiment.

(3) Provides high frequency radio teletypewriter stations to operate for corps headquarters in the army command net, air request net, and information net.
(4) Operates a corps signal messenger service between echelons of corps headquarters, and from corps headquarters to major subordinate units.
(5) Provides signal service for units in the vicinity of corps main and corps advance headquarters.
(6) Depends on the field operations company, corps signal battalion, for providing communication trunk facilities and installations of long-lines cable and wire circuits to subordinate headquarters.
(7) Depends on the army area signal group for connections into the army area communication system.
(8) Provides command, mess facilities, and motor maintenance for the company.
(9) Depends on the headquarters and headquarters company for personnel administration.

b. The reduced strength column of TOE 11–17( ) adapts this unit to the lesser requirements for personnel and equipment during prolonged noncombat periods and for a limited period of combat.

c. TOE 11–17( ) is not adaptable to type B organization.

d. Individuals of this unit can fight as infantrymen when required. The unit has the capability of defending itself and its installations against hostile ground attack.

48. Organization

The command operations company is organized with the following elements (fig. 18) :

a. Company headquarters.
b. Wire operations platoon.
c. Radio platoon.
d. Communications center platoon.

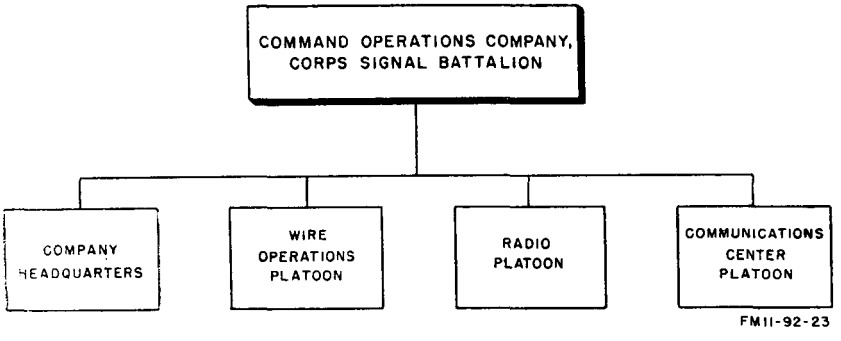

Figure 18. Organization of command operations company, corps signal battalion.

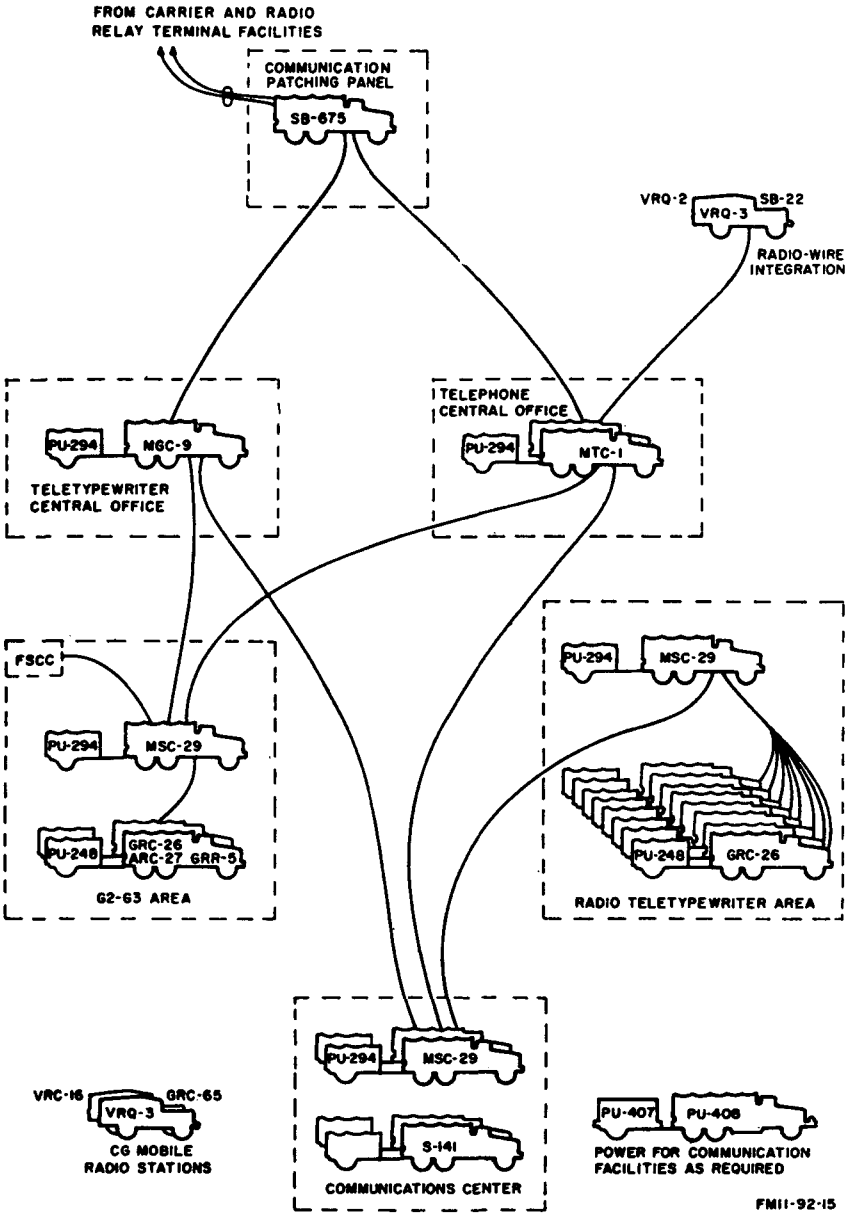

Figure 19. Facilities provided at corps main signal center by command operations company.

49. Method of Operation

a. Elements of the company install, operate, and maintain a variety of signal communication facilities at each echelon of corps headquarters (figs. 19–21). To do this, sections in the platoons of the company provide teams of personnel and equipment that are organized into provisional operational detachments. Numbers and types of personnel and equipment in each detachment depend on the signal communication facilities required for the particular echelon of corps headquarters at which the detachment operates.

b. Basic signal communication requirements are given in the corps and signal battalion standing operating procedures and operation orders. More detailed instructions are placed in the corps signal operation instructions, and in company, platoon, and section standing operating procedures.

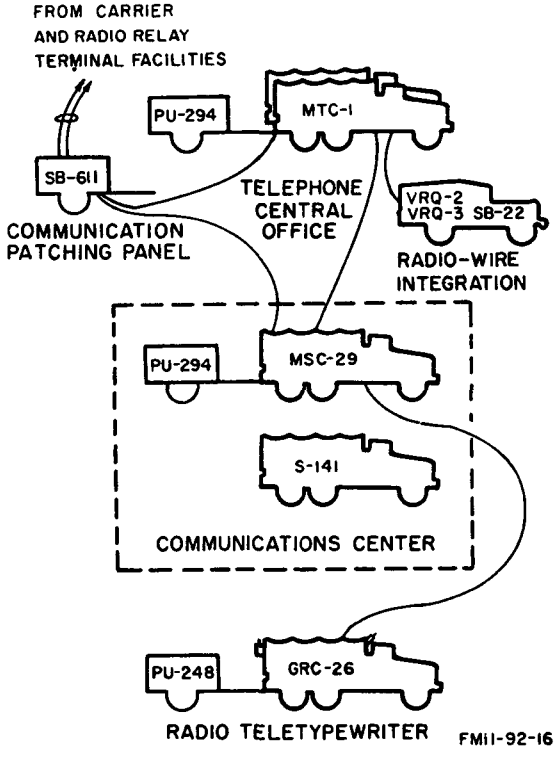

Figure 20. Facilities provided at corps advance signal center by command operations company.

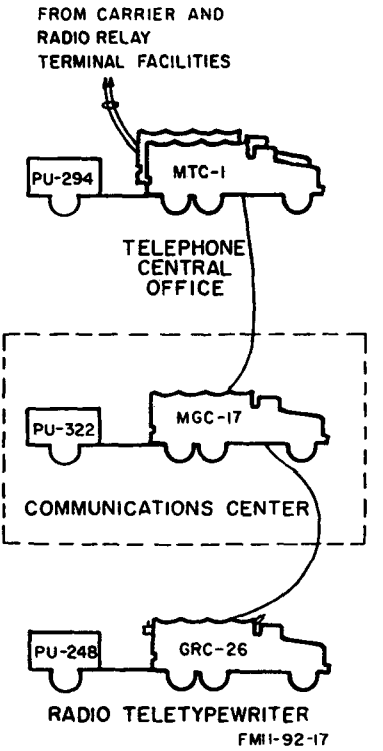

Figure 21. Facilities provided at corps rear signal center by command operations company.

Section II. COMPANY HEADQUARTERS

50. General

The headquarters provides command and administrative control that is normal in an organic company of a battalion. In addition, it has responsibilities for widely separated signal communication activities. Company headquarters is located where it can best control the activities. This normally is adjacent to battalion headquarters and headquarters company, in the vicinity of the corps main command post signal center.

51. Administration and Personnel

The battalion administrative and logistics section and the battalion's personnel section function in support of the headquarters company as well as in support of the battalion. However, the impact of wide physical separation of company elements from company headquarters necessitates special consideration in planning and carrying out many administrative actions within the company. Examples of problem areas in this field are payment of troops, dis-

tribution of personal mail, issue and replacement of individual clothing and equipment, and issue and maintenance of company supplies and equipment. Personnel matters that require the company commander to make personal contact with a large number of his soldiers during combat signal operations also fall into this category.

52. Command

The company commander receives his orders through normal battalion command channels. Distances between activities of the company pose problems in maintenance of internal control. The company commander must extend his control through the commissioned and noncommissioned officers of the company. He makes extensive use of detailed standing operating procedures for all signal communication activities of the company, and spends much of his time in personal observation of the signal operations of the company.

53. Coordination

The diverse nature of signal communication operations, control by the corps signal officer as well as command and staff supervision at battalion headquarters level, and interdependance of the companies of the battalion for complementary signal communication facilities, all combine to present the requirement for close coordination to keep all concerned aware of the signal communication situation.

a. The company commander constantly coordinates with the commander of the field operations company. Most of the signal communication facilities that are provided at the echelons of corps headquarters are interconnected with those at subordinate headquarters through trunk facilities provided by the field operations company.

b. Close coordination with the battalion staff is important. The company follows operational orders and procedures prepared by the battalion staff. Written reports keep the battalion commander and staff periodically informed, but only frequent oral interchange of information, followed by periodic reports, permits true efficiency in the conduct of signal operations.

c. During fast-moving situations, fragmentary orders sometimes are passed directly from the corps signal officer's section to personnel at one of the corps signal communication facilities of the company. The company commander must implement specific procedures to insure that, in such instances, company personnel report the orders and resultant actions to him as soon as possible. He, in turn, coordinates the information with the battalion commander

and staff. This procedure allows urgent operational actions to be initiated and implemented without delay, and permits restoration of the unity of command, with its resultant coordinated battalion effort.

Section III. WIRE OPERATIONS PLATOON

54. General

a. Mission. The wire operations platoon installs, operates, and maintains the telephone and teletypewriter central office facilities and the communication patching panels at all signal centers of the corps headquarters. It also installs and maintains the command post telephone distribution circuits and telephones at all echelons of the corps headquarters.

b. Organization. This platoon is organized with the following elements (fig. 22):

(1) Platoon headquarters.
(2) Telephone operations section.
(3) Telephone installation section.
(4) Teletypewriter switching and carrier section.

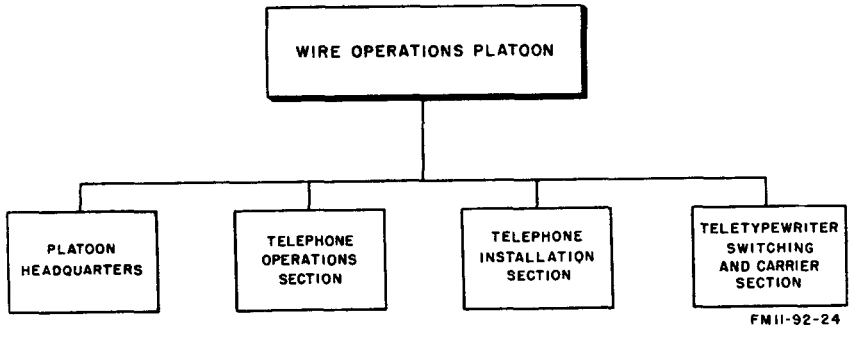

Figure 22. Organization of wire operations platoon, command operations company.

c. Method of Operation. The platoon carries on operations at three signal centers simultaneously. These are the corps main, corps advance, and corps rear signal centers. The platoon is organized into functional teams whose capabilities satisfy the requirements for signal wire operations facilities at each echelon of the corps headquarters.

55. Wire Operations Platoon Headquarters

The wire operations platoon headquarters provides command supervision of the platoon activities. The platoon leader is stationed at corps main signal center. He supervises installation,

operation, and maintenance of the wire facilities of the platoon. The assistant platoon leader performs the same function at corps rear signal center, and may be designated officer-in-charge of the provisional signal detachment at the corps rear command post. The telephone installation section leader supervises wire operation platoon activities at the corps advance command post.

56. Telephone Operations Section

The telephone operations section is organized into teams that install, operate, and maintain telephone central offices and communication patching panels at corps main and advance signal centers (figs. 19 and 20). This section also installs, operates, and maintains the central office equipment at corps rear signal center (fig. 21). The teams are capable of operating on a 24-hour-per-day basis.

57. Telephone Installation Section

The telephone installation section is organized into teams that install and maintain telephones and telephone distribution circuits. The teams are composed of installer-repairmen and are based at corps main, advance, and rear signal centers.

58. Teletypewriter Switching and Carrier Section

The teletypewriter switching and carrier section is organized into teams to operate on a 24-hour-per-day basis. The teams install, operate, and maintain teletypewriter central office facilities at the corps main signal center (fig. 19). Teletypewriter switching facilities at corps advance and rear signal centers are provided by the comunications center platoon (pars. 64–69).

Section IV. RADIO PLATOON

59. General

a. Mission. The radio platoon installs and operates the corps high frequency radio teletypewriter equipment, provides and operates radio-wire integration facilities, and provides a mobile command radio station to accompany the corps commander as required.

b. Organization. The platoon is organized with the following elements (fig. 23):

(1) Platoon headquarters.
(2) Radio teletypewriter section.
(3) Air support radio teletypewriter section.
(4) Mobile radio section.

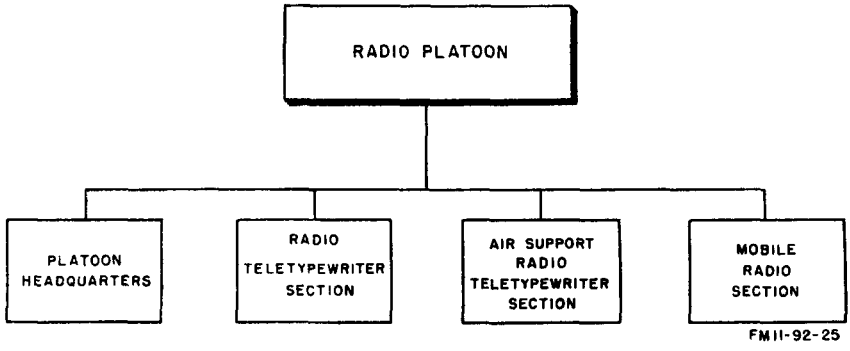

Figure 23. Organization of radio platoon, command operations company.

c. Method of Operation. The platoon conducts its operations at three signal centers simultaneuosly. They are corps main, advance, and rear signal centers. Sections of the platoon are organized into functional teams, each of which operates one radio station that contains one or more radio sets. The number of radio stations assigned to each signal center depends on the radio communication requirements of each echelon of corps headquarters. Radio teams often are assigned special missions that take them away from corps signal centers to sites anywhere in, and sometimes out of, the corps zone.

60. Radio Platoon Headquarters

The radio platoon headquarters provides supervision of the platoon activities. Maintenance on power generator and teletypewriter components of the radio teletypewriter equipment of the platoon is performed by maintenance personnel of this headquarters.

61. Radio Teletypewriter Section

a. The radio teletypewriter section provides radio teletypewriter teams and equipment for operation in the army command net and corps nets at the corps main, advance, and rear signal centers (figs. 19–21) ; and for special missions, such as operation at headquarters of special forces that require radio teletypewriter communication with corps headquarters. It also provides a radio teletypewriter station at corps artillery command post for entry of artillery headquarters into corps command net number 2 (fig. 11).

b. At the corps main signal center, radio teletypewriter stations usually are sited outside the command post; then, the message traffic is relayed to the message center through a telegraph terminal (fig. 19) provided by the communications center platoon (sec. V).

62. Air Support Radio Teletypewriter Section

a. The air support radio teletypewriter section is divided into two radio teletypewriter teams for operation in the field army air request and information nets. In addition to its radio teletypewriter set, each team has as a radio receiver for monitoring warning broadcasts and a radio set for monitoring radio communication with high performance aircraft performing air support missions for the corps.

b. The teams operate at the corps main command post. They usually are located in the G2–G3 area and handle traffic for the G2 and G3 representatives in the FSCC.

63. Mobile Radio Section

The mobile radio section is organized into four radio teams. Two of the teams have mobile radio stations that are located at the corps main command post for use by the commanding general, and authorized members of his staff, when traveling away from the command post and radio communication is required (fig. 19). The other two teams operate radio-wire integration stations; one of the stations is at the corps main signal center (fig. 19), and the other is at the corps advance signal center (fig. 20). Each team has more than one radio set in its station. The radio-wire integration stations also have a small telephone switchboard for switching calls to the telephone central office of the signal center.

Section V. COMMUNICATIONS CENTER PLATOON

64. General

a. Mission. The communications center platoon provides the message center, terminal teletypewriter, and cryptographic facilities at each echelon of the corps headquarters. It also operates the corps signal messenger service.

b. Organization. The platoon is organized with the following elements (fig. 24):

(1) Platoon headquarters.
(2) Message center section.
(3) Messenger section.
(4) Cryptographic section.
(5) Teletypewriter terminal section.

c. Method of Operation. The platoon conducts its operations at three signal centers simultaneously. They are corps main, advance, and rear signal centers. The platoon is organized into functional teams, whose capabilities satisfy the requirements for message center, messenger, cryptographic, and teletypewriter facilities at each echelon of corps headquarters.

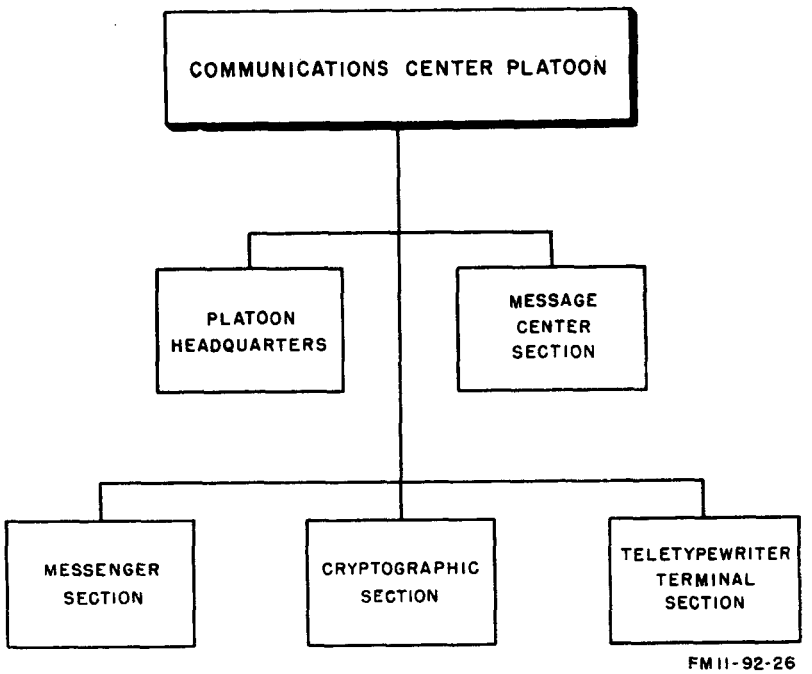

Figure 24. Organization of communications center platoon, command operations company.

65. Communications Center Platoon Headquarters

The platoon headquarters provides command supervision of the platoon operations. The platoon leader also is the battalion communications center and cryptographic officer.

66. Message Center Section

The mesasge center section is organized into message center teams capable of operating three message centers simultaneously, one at the signal center of each of the corps headquarters command posts (figs. 19–21). The teams process outgoing, incoming, and refiled message traffic on a 24-hour-per-day basis at their respective message centers.

67. Messenger Section

The messenger section is organized into two-man motor messenger teams. It operates scheduled and special motor and air messenger service to corps units and attached divisions (fig. 15). The section processes material for dispatch through air courier service. In addition, it prepares and handles pouched message distribution through the field army signal messenger service.

68. Cryptographic Section

The cryptographic section is organized into teams that provide cryptographic service, and a team that can perform cryptographic equipment maintenance. The cryptographic teams are located at corps main, advance, and rear signal centers, according to the loads of message traffic that require encryption or decryption. The repairmen of the cryptographic equipment maintenance team are based at the corps main signal center. They are dispatched as individuals, when and where required, to perform organizational maintenance on the cryptographic equipment of the battalion.

69. Teletypewriter Terminal Section

The teletypewriter terminal section is organized into teams that provide telegraph terminal facilities at corps main and advance command posts, and a teletypewriter central office at corps rear (figs. 19–21). Security teletypewriter equipment is provided at each echelon. At the corps main command post, a telegraph terminal is provided for the fire support coordination center. Another telegraph terminal is provided at the radio teletypewriter area to permit relay of telegraph message traffic between wire and radio teletypewriter systems. Except in the two instances indicated, the teams at each signal center operate their equipment in the communications center areas. On-line encryption equipments are normally operated on each of the point-to-point circuits to divisions, corps artillery, and field army main signal center.

CHAPTER 6
FIELD OPERATIONS COMPANY

Section I. THE COMPANY

70. General

This chapter describes the authorized organization of a field operations company, and gives a typical method of organizing and employing the company operationally.

71. Authorization

TOE 11–18( ), with changes as published, is the governing strength authorization document for the field operations company of a corps signal battalion. It authorizes the number of personnel and quantity of equipment required for the company to perform its mission in normal and reduced corps signal operations.

72. Mission

a. To provide field-type communication trunk facilities between all echelons of corps headquarters, and from corps headquarters to major subordinate headquarters.

b. To provide multichannel communication facilities for corps artillery, and from corps artillery to its major subordinate headquarters.

73. Assignment and Control

Field operations company is organic to a corps signal battalion. Its control is exercised through command channels that are normal for a separate battalion.

74. Capabilities

a. When it is at full TOE strength, the field operations company is approximately 90 percent mobile. It is a category I unit (AR 320–5) and provides the following facilities:

(1) Provides command, mess facilities, and motor maintenance for the company.

(2) Installs, operates, and maintains communication facilities by radio relay from corps main to four divisions, to corps artillery, to an armor group, and to an armored cavalry regiment, and from corps artillery to major subordinate artillery headquarters.

(3) Installs, operates, and maintains communication facilities by radio relay and wire carrier between corps main and corps advance.
(4) Installs and maintains field wire and multiconductor field cables from the patching panels at echelons of the corps headquarters, and from corps artillery to terminals of the corps radio relay and wire carrier systems.
(5) Depends on battalion headquarters and headquarters company for personnel administration and for augmentation of organic motor maintenance and signal supply and maintenance.

b. The reduced strength column of TOE 11–18( ) adapts this unit to the lesser requirements for personnel and equipment during prolonged noncombat periods and for a limited period of combat.

c. TOE 11–18( ) is not adaptable to type B organization.

d. Individuals of this unit can fight as infantrymen when required. The unit has the capability of defending itself and its installations against hostile ground attack.

75. Organization

The field operations company of a corps signal battalion is organized with the following elements (fig. 25) :

a. Company headquarters.

b. Radio relay platoon.

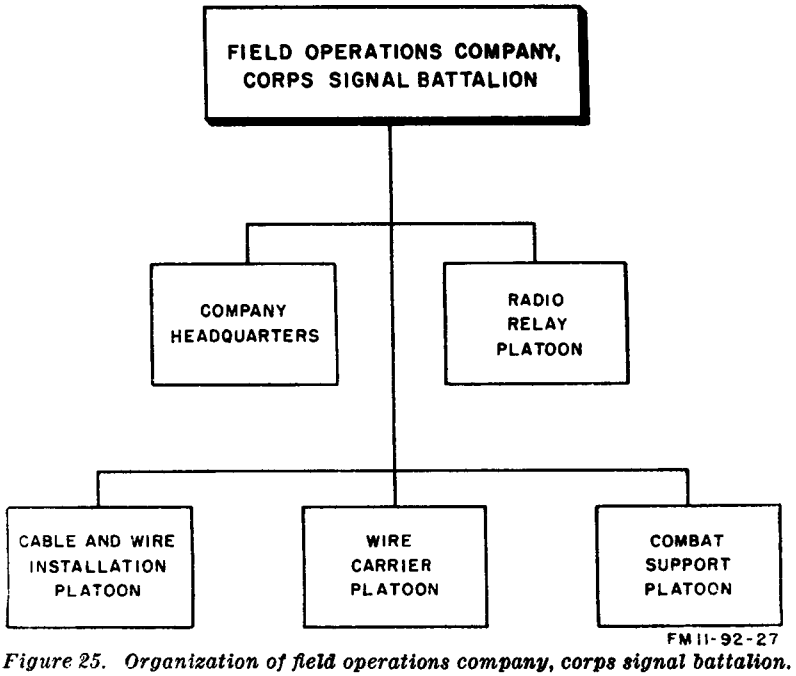

Figure 25. Organization of field operations company, corps signal battalion.

c. Cable and wire installation platoon.

***d.* Wire carrier platoon.**

e. Combat support platoon.

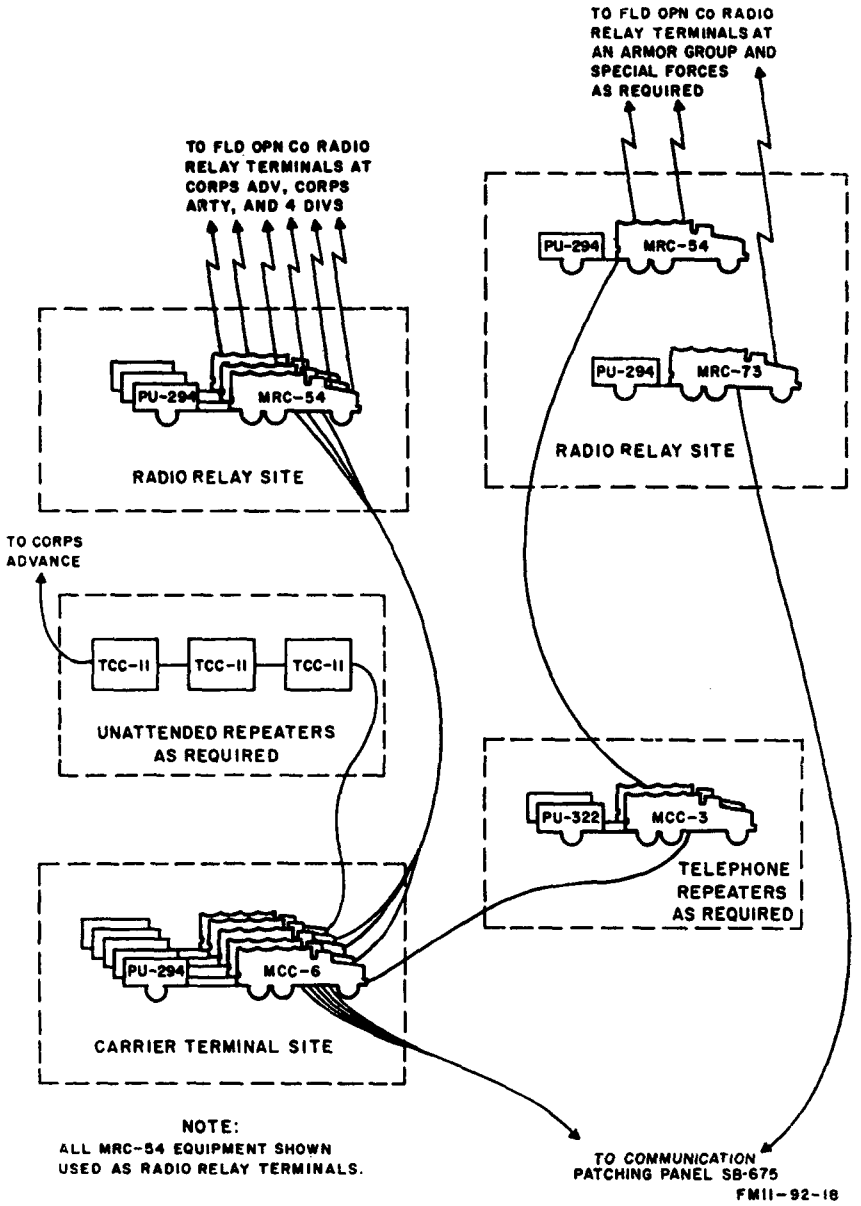

Figure 26. Facilities provided at corps main signal center by field operations company.

76. Method of Operation

a. Elements of the company install, operate, and maintain a variety of signal communication trunk facilities at and between echelons of corps headquarters and major subordinate commands of the corps (figs. 26–28). Operational teams organized with personnel and equipment from sections of the company platoons are employed throughout the corps zone. Numbers and types of personnel and equipment are allotted to each team according to the signal communication requirements to be fulfilled by the team.

b. Basic signal communication requirements are given in the corps and battalion signal standing operating procedures and operation orders. More detailed instructions are placed in the corps signal operation instructions and in company, platoon, and section standing operating procedures.

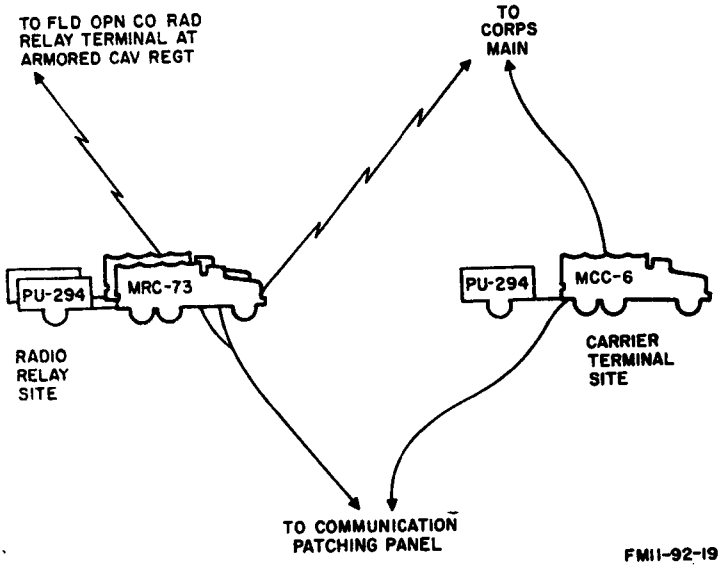

Figure 27. Facilities provided at corps advance signal center by field operations company.

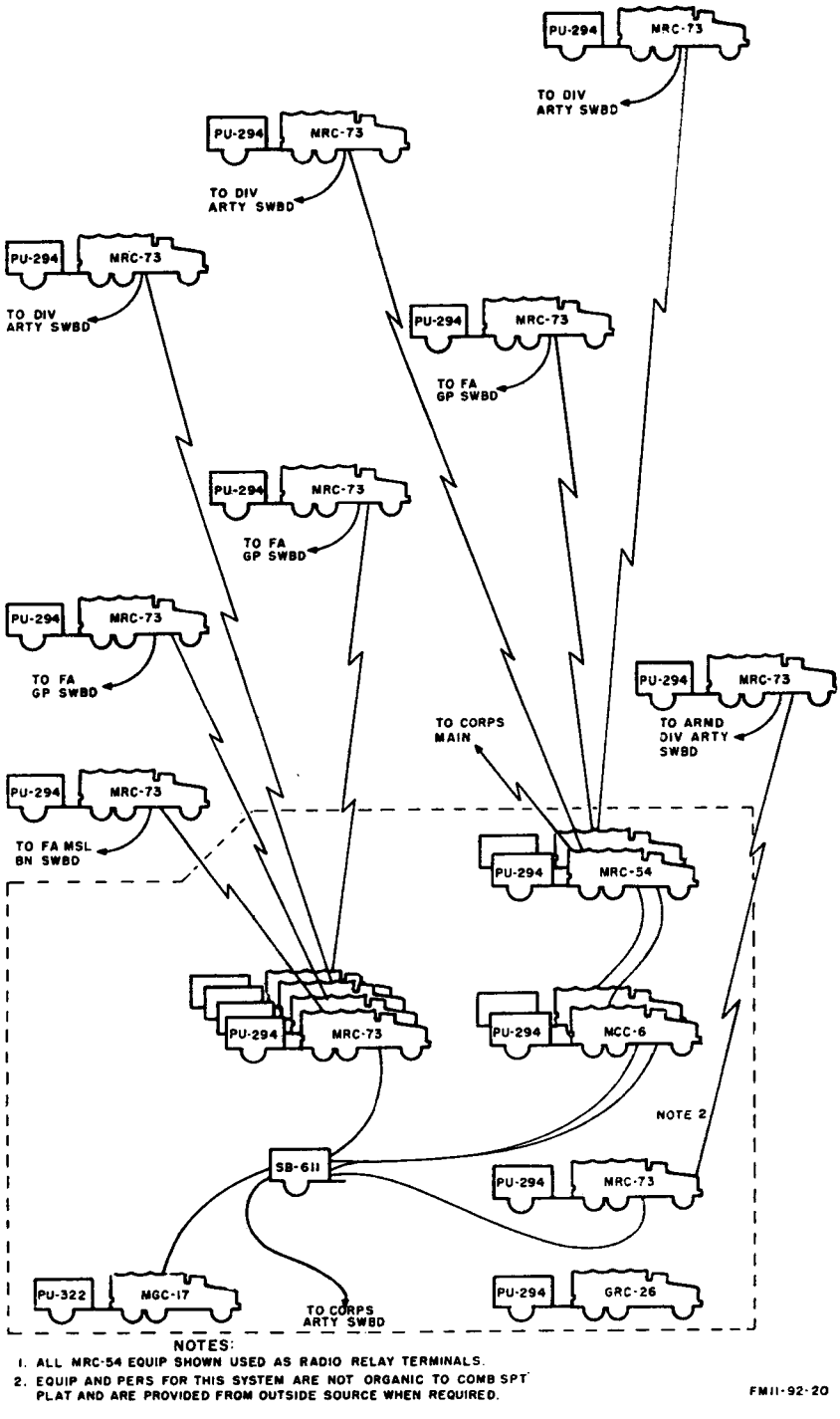

Figure 28. Facilities provided at corps artillery by field operations company.

Section II. COMPANY HEADQUARTERS

77. General

The headquarters provides normal command and administrative control of the company. In addition, it has the responsibility for widely separated signal communication activities. Company headquarters is located where it can best control the activities. This normally is in the vicinity of the corps advance command post.

78. Administration

The battalion administrative and logistic section functions in support of the company as well as in support of the battalion. However, the impact of the wide separation of company elements from company headquarters necessitates special consideration in planning and carrying out many administrative actions within the company. Problems in this field are similar to those existing in the command operations company because of the dispersal of operational teams.

79. Command

The company commander receives his orders through normal battalion command channels. Distances between many company activities and the company headquarters pose problems in maintenance of control. The commander must extend his control through the company commissioned and noncommissioned officers, who also keep him informed of local situations during intervals between his personal visits. He makes extensive use of detailed standing operating procedures to control signal activities of the company

80. Coordination

The requirements for coordination by the commanding officer of this company are similar to those for the command operations company commander. A greater range and frequency of movement by certain functional teams of this company present additional requirements for close coordination within the company.

Section III. RADIO RELAY PLATOON

81. General

a. Mission. The radio relay platoon installs, operates, and maintains radio relay systems and their associated repeaters and component carrier facilities.

b. Organization. The platoon is organized with the following elements (fig. 29) :

(1) Platoon headquarters.
(2) Radio repeater section.
(3) Radio terminal carrier section.

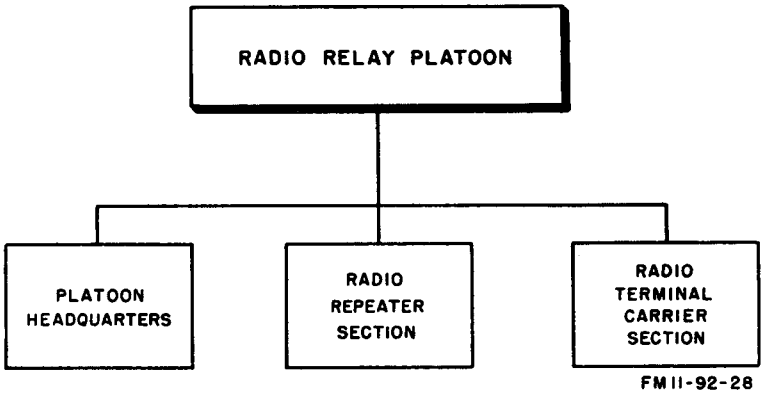

Figure 29. Organization of radio relay platoon, field operations company.

c. Method of Operation. This platoon engages in signal operations simultaneously at many locations in the corps zone. These are at corps main and advance signal centers, corps artillery, attached divisions, and other attached or supporting organizations. The platoon is organized into functional teams, whose capabilities satisfy the radio relay facility requirements at and between the headquarters and other sites where elements of the platoon are deployed.

82. Radio Relay Platoon Headquarters

The radio relay platoon headquarters provides supervision of the platoon activities. It has a team of power generator specialists to perform motor maintenance on the power equipment of the platoon. Scheduling of maintenance requires considerable coordination, because of the number of locations at which the equipment is employed, the distances involved, and the small size and limited capability of the maintenance team.

83. Radio Repeater Section

The radio repeater section is organized into four radio relay repeater teams, each with one radio repeater set. The teams install, operate, and maintain their equipment between radio relay terminal stations, as required, on a 24-hour-per-day basis. The teams usually operate at isolated sites. Therefore, an additional team, without a repeater set, is authorized to the section for relief or augmentation of other repeater teams when necessary.

84. Radio Terminal Carrier Section

The radio terminal carrier section is organized into 25 radio relay terminal teams, each capable of 24-hour-per-day operation. Each team has a radio relay terminal set, or a radio repeater set to be used as a terminal. One group of teams operates at the corps main signal center, and another group has radio relay terminals at the corps advance signal center. In addition, there is a team at each division, armor group, armored cavalry regiment, and special forces as required (figs. 26 and 27). Teams that are equipped with radio repeaters have no carrier terminal components in their sets. Therefore, their circuits are terminated by carrier terminals that are provided by the wire carrier platoon (sec. V).

Section IV. CABLE AND WIRE INSTALLATION PLATOON

85. General

a. Mission. The cable and wire installation platoon installs and maintains all field cable and wire lines between the communication patching panels (switchboards, where there are no patching panels) of corps signal centers and subordinate headquarters. It also installs and maintains long locals as required.

b. Organization. The platoon is organized with the following elements (fig. 30):

(1) Platoon headquarters.
(2) Cable installation section.
(3) Wire installation and maintenance section.

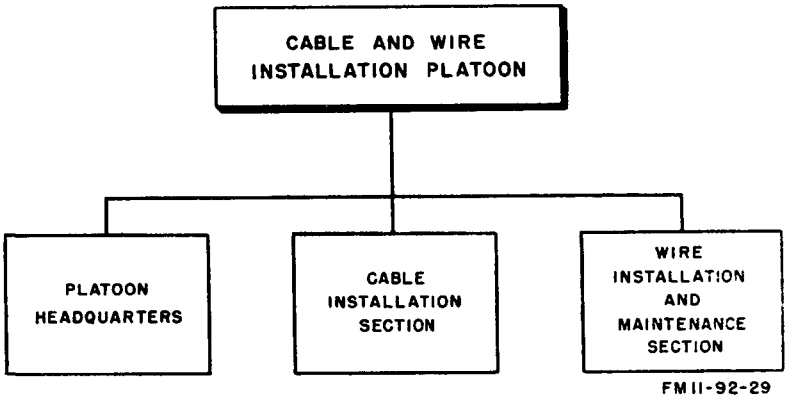

Figure 30. Organization of cable and wire installation platoon, field operations company.

c. Method of Operation. This platoon engages in field cable and wire construction operations at many locations in the corps zone simultaneously. These are located at or between echelons of corps

headquarters, attached divisions, and other attached or supporting organizations of the corps, except corps artillery and attached artillery groups. The platoon is organized into functional teams that are assembled in groups whose capabilities are varied by varying the distribution of teams among the groups. The organization of each group is tailored to give it the capabilities necessary for the performance of its functions.

86. Cable and Wire Installation Platoon Headquarters

The cable and wire installation platoon headquarters provides supervision of the platoon activities. In addition, it provides a limited repair and maintenance capability for field cable that is installed by the platoon. Platoon headquarters also has a vehicular earth auger and a cable plow, for use by teams that require them in the performance of the cable construction activities. Wide distribution of the wiremen and equipment of the platoon throughout the corps zone requires that the platoon leader and his assistants expend much of their supervisory effort in coordination and inspection activities.

87. Cable Installation Section

The cable installation section is organized with 12 cable installation teams. The teams may be employed as follows (figs. 26 and 27):

a. One team operates at each division. Each team installs and maintains a 26-pair cable from a radio relay terminal, provided at division by the radio relay platoon (sec. III), to the division signal battalion's communication patching panel.

b. Two teams install and maintain the spiral-4 cable between the carrier terminals at corps main and advance signal centers. The teams have unattended repeaters for use, as required, in their cables.

c. One team installs a 26-pair cable at corps advance signal center from the radio relay terminal to the communication patching panel. The team also installs two 26-pair cables from the carrier terminal to the communication patching panel.

d. Three teams operate at corps main. They install two spiral-4 cables from each radio relay repeater set (used as a terminal) to a carrier terminal. The teams also install one (two, when required) 26-pair cable from each carrier terminal and the radio relay terminal set to the communication patching panel.

e. Two teams at corps main are used for displacement. When they are not required for displacement, they are used to augment the other teams, or to install cable for special requirements.

88. Wire Installation and Maintenance Section

The wire installation and maintenance section is organized with seven teams of wiremen. One team is located at corps rear, three at corps main, and two at corps advance. Another team is used for displacement. It may also be used to augment other teams or assigned special field wire construction missions, when it is not required to engage in displacement operations. The teams construct field wire circuits outside the communication patching panels at corps main and advance signal centers. At all three echelons of corps headquarters, the teams construct long locals from the corps signal centers to corps units that are in the vicinity and require central office distribution service. The teams can be used to augment the cable installation teams when it is necessary and when they can be relieved of their primary duties.

Section V. WIRE CARRIER PLATOON

89. General

a. Mission. The wire carrier platoon installs, operates, and maintains carrier terminal and repeater facilities, as required, in support of the company's mission.

b. Organization. The platoon is organized with the following elements (fig. 31):

(1) Platoon headquarters.
(2) Carrier terminal section.
(3) Carrier repeater section.

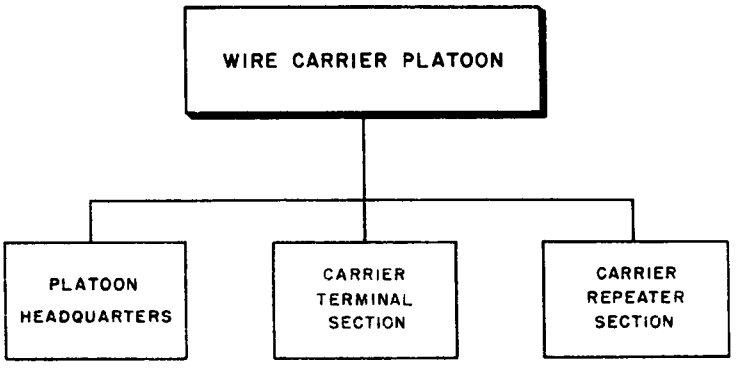

Figure 31. Organization of wire carrier platoon, field operations company.

c. Method of Operation. This platoon provides carrier terminal and repeater facilities at corps main and advance signal centers (figs. 26 and 27). It is organized into two types of functional teams that are grouped at the two signal centers according to the requirements for carrier facilities at each.

90. Wire Carrier Platoon Headquarters

The wire carrier platoon headquarters provides supervision of the platoon activities. Limited power generator maintenance is provided by the power generator specialist authorized to the headquarters.

91. Carrier Terminal Section

The carrier terminal section is organized with 11 carrier terminal teams, each of which is authorized a telegraph-telephone terminal. The teams operate their equipment, on a 24-hour-per-day basis, at corps main and advance signal centers.

a. Five of the teams are at corps main signal center (fig. 26). Four of the five teams use their equipment as terminals for the carrier circuit from radio relay repeater sets that, even though they have no carrier terminal components, are employed as radio relay terminals. The other team terminates the spiral-4 cable from corps advance signal center.

b. One team is located at corps advance signal center. It provides the carrier equipment that terminates the wire carrier circuits from corps main signal center (fig. 27).

c. Five teams are used for displacement. They may be employed in special assignments or to augment the capabilities of the other teams, when they are not required in their displacement roles.

92. Carrier Repeater Section

The carrier repeater section is organized with two functional teams, each of which has a mobile attended repeater. Both teams usually are located at the corps main signal center (fig. 26). They are used when a radio relay repeater set (used as a terminal) is at a great enough physical distance from the carrier terminal to require carrier repeater facilities. The teams operate on a 24-hour-per-day basis.

Section VI. COMBAT SUPPORT PLATOON

93. General

a. Mission. The combat support platoon provides multichannel communication facilities at headquarters of corps artillery and its major subordinate units, and at infantry division artillery headquarters. In addition, the platoon operates a radio teletypewriter station, in a corps command net, and teletypewriter terminal, with switching facilities, at corps artillery headquarters.

b. Organization. The platoon is organized with the following elements (fig. 32) :

(1) Platoon headquarters.
(2) Cable installation section.
(3) Radio terminal carrier section.
(4) Teletypewriter section.

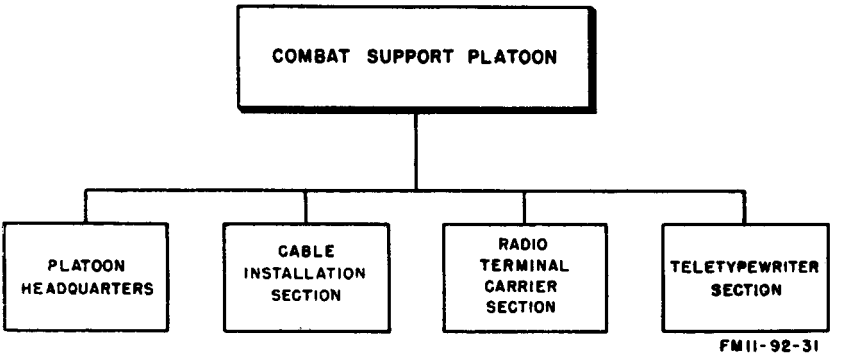

Figure 32. Organization of combat support platoon, field operations company.

c. Method of Operation. This platoon is organized with varied types of functional teams. They provide signal communication facilities on a 24-hour-per-day basis at corps artillery headquarters, and at headquarters of attached artillery groups (fig. 28).

94. Combat Support Platoon Headquarters

The combat support platoon headquarters provides supervision of the platoon activities. Limited power generator maintenance is performed for the platoon by the power generator specialist authorized to the headquarters.

95. Cable Installation Section

The cable installation section is organized with a circuit control team and four cable installation teams. One cable installation team is located at each of the three field artillery groups, and one at corps artillery headquarters. The circuit control team operates at corps artillery headquarters.

a. At an artillery group, the team installs and maintains a 26-pair cable from the radio relay terminal to the group switchboard.

b. At corps artillery headquarters, one cable installation team installs and maintains four spiral-4 cables between the radio relay repeater sets (used as terminals) and the carrier terminals. It also provides 26-pair cables from the carrier terminals and the radio relay terminal sets to the communication patching panel. The circuit control team operates the communication patching panel at corps artillery headquarters.

c. The cable installation section is also responsible for installing and maintaining the 26-pair cable from the platoon's radio relay

terminals at division artillery and the missile organization, to switchboards located at their respective command posts.

96. Radio Terminal Carrier Section

The radio terminal carrier section is organized functionally with 13 radio relay terminal teams, 11 of which are authorized a radio relay terminal set each, and two of which have radio relay repeater sets to be used as terminals. The functional organization of this section also includes two carrier terminal teams, each of which operates a telegraph-telephone terminal set at corps artillery headquarters. The radio relay terminal teams operate on a 24-hour-per-day basis at corps artillery headquarters, headquarters of each artillery group, and at each infantry division artillery (fig. 28). The number and types of teams employed at each location depend on the requirements for radio relay facilities.

a. At corps artillery headquarters, four radio relay teams operate the radio relay terminal sets, and two operate the radio relay repeater sets. The two carrier terminal teams provide carrier terminals for the radio relay repeater sets.

b. At each of the three field artillery groups, one radio relay terminal team provides a terminal for the radio relay system from corps artillery headquarters.

c. One radio relay terminal team is located at each of the three infantry division artillery headquarters. They provide the terminals for the radio relay systems from corps artillery headquarters to division artillery headquarters.

d. One team operates a radio relay terminal at the field artillery missile battalion headquarters.

97. Teletypewriter Section

The teletypewriter section is organized with one radio teletypewriter team and one teletypewriter central office team. Both teams are employed at corps artillery headquarters (fig. 28). The radio teletypewriter team provides a station for corps artillery in the corps radio teletypewriter command net. The teletypewriter team provides teletypewriter terminal and switching facilities for corps artillery headquarters.

APPENDIX I
REFERENCES

AR 220–60	Battalions, Battle Groups, Squadrons; General Provisions.
AR 220–70	Companies; General Provisions.
AR 320–5	Dictionary of United States Army Terms.
AR 320–50	Authorized Abbreviations and Brevity Codes.
AR 380–5	Safeguarding Defense Information.
AR 380–40	Safeguarding Cryptomatter; Distributing, and Accounting for Cryptomaterial.
DA Pam 310–1	Index of Administrative Publications.
DA Pam 310–2	Index of Blank Forms.
DA Pam 310–3	Index of Training Publications.
DA Pam 310–4	Index of Technical Manuals, Technical Bulletins, Supply Bulletins, Lubrication Orders, and Modification Work Orders.
DA Pam 310–5	Index of Graphic Training Aids and Devices.
DA Pam 310–7	Index of Tables of Organization and Equipment, Tables of Organization, Type Tables of Distribution, and Tables of Allowances.
FM 21–5	Military Training.
FM 21–6	Techniques of Military Instruction.
FM 21–30	Military Symbols.
FM 32–5	Communications Security.
TOE 11–15( )	Corps Signal Battalion or Signal Battalion, Airborne Corps.
TOE 11–16( )	Headquarters and Headquarters Company, Corps Signal Battalion or Signal Battalion, Airborne Corps.
TOE 11–17( )	Command Operations Company, Corps Signal Battalion or Signal Battalion, Airborne Corps.
TOE 11–18( )	Field Operations Company, Corps Signal Battalion or Signal Battalion, Airborne Corps.

APPENDIX II

CORPS TYPE RADIO TELETYPEWRITER NETS (NOTE 1)

NET / UNIT	ARMY CMD	ARMY AIR REQ	ARMY INFO	CORPS CMD 1	CORPS CMD 2	CORPS CMD 3	CORPS RECON
ARMY	NOTE 2	NOTE 2	NOTE 2				
CORPS	NOTE 3		NOTE 3	NOTE 2	NOTE 2	NOTE 2	NOTE 2
				NOTE 3	NOTE 3	NOTE 3	NOTE 3
INF DIV		X		X			
INF DIV		X		X			
INF DIV		X		X			
ARMD DIV		X		X			
CORPS ARTY					NOTE 3		
CORPS FSCC		NOTE 3					
		NOTE 4					
CORPS ADV					NOTE 3		
CORPS REAR					NOTE 3		
ARMD CAV REGT						X	X
ARMOR GP						X	
AVN CO							NOTE 3
ENGR GP						GRC-46	
ENGR GP						GRC-46	

1. All stations use AN/GRC-26 except as indicated.
2. Net control station.
3. Personnel and equipment furnished by corps signal battalion.
4. Corps monitors for on-call requests for air support.

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[AG 353 (11 Sep 59)]

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NG: State AG (3); units—same as Active Army except allowance is one copy to each unit.

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

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