

**AIR CAVALRY
SQUADRON**



**HEADQUARTERS, DEPARTMENT OF THE ARMY
1969**

FIELD MANUAL }
No. 17-37 }

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 20 June 1969

AIR CAVALRY SQUADRON

PART	ONE.	GENERAL	Paragraphs	Page
CHAPTER	1.	GENERAL	1-1-1-4	1-1-1-6
	2.	EMPLOYMENT OF AIR CAVALRY UNITS	2-1-2-7	2-1
PART	TWO.	AIR CAVALRY TROOP		
CHAPTER	3.	GENERAL		
Section	I.	Introduction	3-1, 3-2	3-1
	II.	Organization	3-2-3-9	3-1-3-2
	III.	Duties of key personnel	3-10, 3-11	3-8
	IV.	Employment of the air cavalry troop	3-12-3-15	3-11
CHAPTER	4.	RECONNAISSANCE OPERATIONS		
Section	I.	Introduction	4-1-4-4	4-1-4-2
	II.	Employment	4-5-4-7	4-2-4-3
	III.	Types of reconnaissance operations	4-8-4-11	4-4-4-8
CHAPTER	5.	SECURITY OPERATIONS		
Section	I.	Employment	5-1, 5-2	5-1
	II.	Types of security operations	5-3-5-9	5-1-5-13
CHAPTER	6.	ECONOMY OF FORCE OPERATIONS	6-1-6-16	6-1-6-6
PART	THREE.	CAVALRY TROOP		
CHAPTER	7.	GENERAL		
Section	I.	Introduction	7-1-7-2	7-1
	II.	Organization	7-3-7-6	7-1-7-2
	III.	Duties of key personnel	7-7	7-5
	IV.	Employment of the cavalry troop	7-8-7-12	7-7-7-9
CHAPTER	8.	RECONNAISSANCE OPERATIONS		
Section	I.	Introduction	8-1-8-5	8-1-8-2
	II.	Employment	8-6-8-8	8-2-8-4
	III.	Types of reconnaissance operations	8-9-8-14	8-4-8-11
CHAPTER	9.	SECURITY OPERATIONS	9-1-9-12	9-1-9-13
	10.	ECONOMY OF FORCE OPERATIONS		
Section	I.	Introduction	10-1	10-1
	II.	Offensive operations	10-2-10-22	10-1-10-7
	III.	Defensive operations	10-23-10-32	10-7-10-13
	IV.	Retrograde operations	10-33-10-37	10-13-10-19
PART	FOUR.	AIR CAVALRY SQUADRON		
CHAPTER	11.	GENERAL		
Section	I.	Introduction	11-1-11-3	11-1
	II.	Organization	11-4-11-13	11-2-11-6
	III.	Combat support	11-14-11-18	11-9
	IV.	Organization for combat	11-19, 11-20	11-10
	V.	Employment, headquarters and headquarters troop	11-21-11-25	11-10-11-12
CHAPTER	12.	RECONNAISSANCE OPERATIONS		
Section	I.	Introduction	12-1-12-5	12-1-12-3
	II.	Employment	12-6, 12-7	12-3
	III.	Types of reconnaissance operations	12-8-12-10	12-3-12-5

		Paragraphs	Page
CHAPTER	13. SECURITY OPERATIONS		
Section	I. Introduction	13-1, 13-2	13-1
	II. Flank guard operations	13-3, 13-4	13-1—13-3
	III. Rear guard operations	13-5, 13-6	13-4
	IV. Rear area security operations	13-7—13-10	13-4—13-6
	V. Screening force operations	13-11, 13-12	13-8
	VI. General outpost and covering force operations	13-13	13-8
CHAPTER	14. SURVEILLANCE OPERATIONS		
Section	I. Introduction	14-1—14-4	14-1
	II. Employment	14-5, 14-6	14-1
CHAPTER	15. ECONOMY OF FORCE OPERATIONS		
Section	I. Introduction	15-1	15-1
	II. Offensive operations	15-2—15-5	15-1—15-5
	III. Defensive operations	15-6—15-16	15-6—15-9
	IV. Retrograde operations	15-17—15-22	15-9—15-14
PART	FIVE. SPECIAL OPERATIONS		
CHAPTER	16. GENERAL		
Section	I. Introduction	16-1, 16-2	16-1
	II. Stability operations	16-3—16-12	16-1—16-5
	III. Reconnaissance deep in enemy areas	16-13—16-16	16-5—16-7
	IV. Chemical agent detection and radiological monitoring and survey operations	16-17—16-20	16-7—16-8
	V. Area damage control	16-21—16-23	16-8—16-9
	VI. Night operations	16-24—16-28	16-9—16-11
	VII. Riverine operations	16-29, 16-30	16-11
	VIII. Battle drill and formations	16-31, 16-32	16-11
APPENDIX	A. References		A-1
INDEX		Index-1

PART ONE GENERAL

CHAPTER 1 GENERAL (STANAG 2022)

1-1. Purpose

This manual provides doctrine for the employment of the aero scout platoon, aero rifle platoon, aero weapons platoon, air cavalry troop, cavalry troop, and the air cavalry squadron of the airmobile division and separate air cavalry squadrons.

1-2. Scope

a. This manual covers basic doctrine in tactics, techniques of employment, organization, exercise of command, control, and movements appropriate to all elements of the air cavalry squadron.

b. The procedures described herein are intended as a guide only and are not considered inflexible. Each situation in combat must be resolved by an interpretation and application of the doctrine set forth herein. Employment techniques and organization will vary widely based on conflict intensity, capabilities and limitations of current equipment, and environmental conditions affecting flight profiles.

c. This manual is designed to be used in conjunction with FM 17-1. General information contained in FM 1-100 and FM 17-36 may be used as applicable.

d. Unless otherwise specified, the material presented herein is applicable to general war, limited war, and cold war, to include stability operations.

e. Figure 1-1 shows the symbols most frequently used in illustrations throughout this text. For other military symbols, refer to FM 21-30.

f. This manual is in consonance with the following International Standardization Agreements which are identified by type of agreement and number at the beginning of each appropriate chapter:

TITLE	NATO STANAG	CENTO STANAG	SEATO STANAG	ABCA SOLOG
Intelligence Reports	2022		2022	2R2
Rear Area Damage Control	2079	2079	2079	48R
Battlefield Illumination	2088	2088		108
Fire Coordination in the Land Air/Battle	2099	2099	2099	
Offensive Air Support Operations	2134			

g. Users of this manual are encouraged to submit recommended changes or comments to improve the text. Comments should be keyed to the specific page, paragraph, and line of the text in which the change is recommended. Reasons should be provided for each comment to insure understanding and complete evaluation. Comments should be prepared using DA Form 2028 (Recommended Changes to Publications) and forwarded direct to the Commanding Officer, U.S. Army Combat Developments Command Armor Agency, Fort Knox, Kentucky 40121. Originators of proposed changes which constitute a significant modification of approved Army doctrine may send an information copy through command channels to the Commanding General, U.S. Army Combat Developments Command, Fort Belvoir, Virginia 22060, to facilitate review and follow-up.

1-3. Missions and Tasks of Air Cavalry Units

a. Air cavalry units are organized to perform reconnaissance missions; to provide security for the unit to which assigned or attached; and to engage in offensive, defensive, and retrograde operations as an economy of force unit. The employment of the air cavalry units for such operations provides a commander with an increased capability to engage in combat operations over a wide area.

b. The tasks assigned to air cavalry units in-

FM 17-37



1/4 TON TRUCK COMMAND/UTILITY VEHICLE



1/4 TON TRUCK SCOUT VEHICLE WITH LIGHT MACHINE GUN



1/4 TON TRUCK ANTI-TANK VEHICLE WITH 106 MM RECOILLESS RIFLE



3/4 TON TRUCK RIFLE SQUAD TRANSPORTER



3/4 TON TRUCK MORTAR SQUAD TRANSPORTER



CHECK POINT



CONTACT POINT

Note: Illustrations used herein are not intended to depict future design of vehicles or equipment.

HELICOPTER OBSERVATION



Aero scout



Platoon Leader
Aero Scouts

HELICOPTER, UTILITY / ATTACK



CO



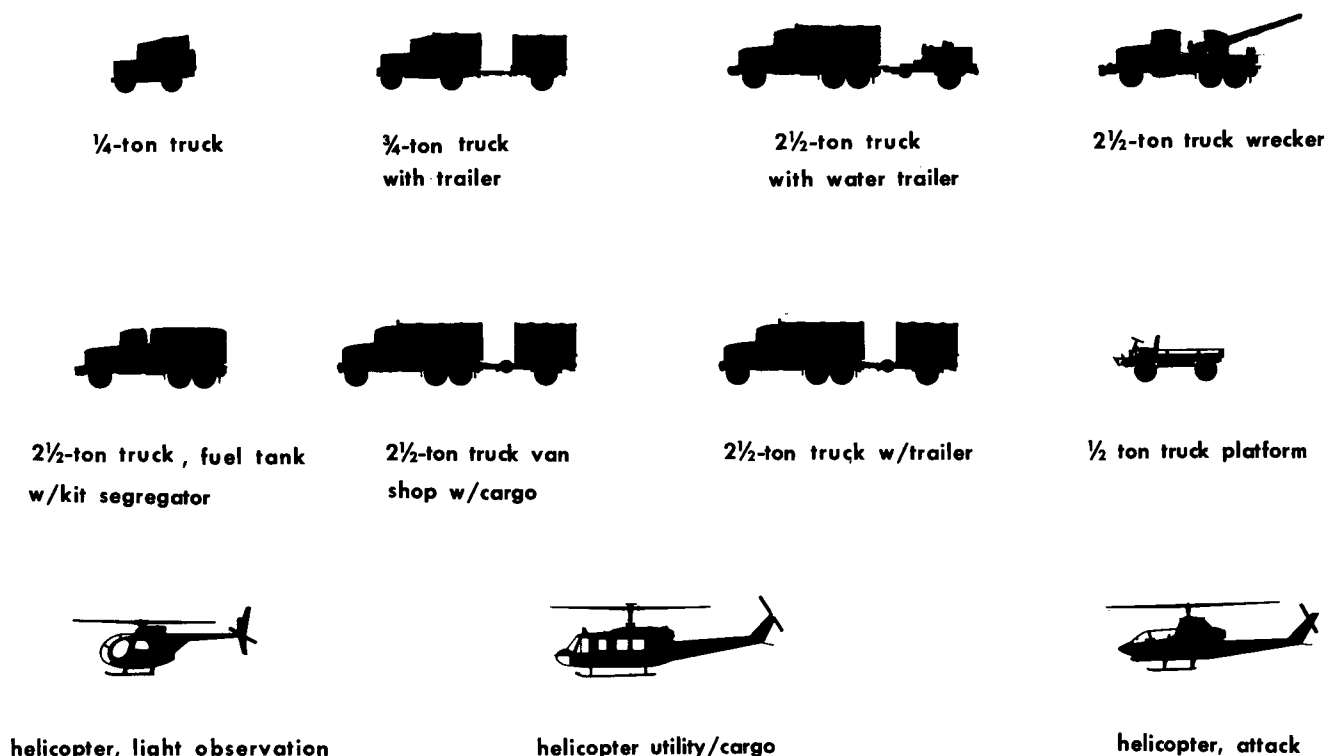
Aero weapons



Aero rifle

Note: Commanders aircraft symbols have unit size symbol added.

Figure 1-1. Symbols used in text.



UNIT SYMBOLS

AIR ELEMENTS



OTHER ELEMENTS

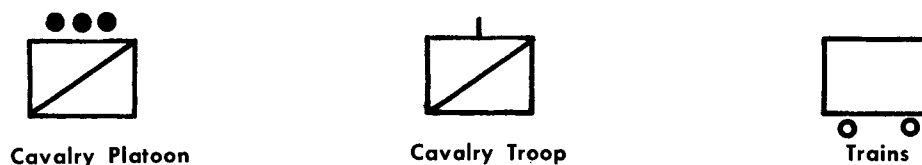


Figure 1-1—Continued.

clude reconnaissance, security, and surveillance. In many instances, troops of the squadron will perform one of the types of reconnaissance or surveillance tasks as a part of the overall squadron security mission. When troops of the squadron are assigned a security mission, they also perform continuous reconnaissance and surveillance. Therefore, a reconnaissance mission provides a degree of security, and, conversely, a security mission produces information of the enemy and area of operation which is inherent in reconnaissance and surveillance.

c. The security force orients its operation on the force for which the mission is being performed; the reconnaissance force orients its operations on intelligence objectives; and when performing surveillance tasks, a unit orients its operation on systematic and continuous coverage of the assigned area.

d. A detailed discussion of reconnaissance, security and surveillance follows.

(1) *Reconnaissance—General, missions, and fundamentals.*

(a) *General.* Reconnaissance is the directed effort in the field to collect information of the enemy and the area of operations by ground and air activities.

(b) *Types of reconnaissance missions.*

1. *Route reconnaissance.* Route reconnaissance is the directed effort to obtain information of the route, obstacles to include chemical and radiological contamination, the enemy, and the adjacent terrain along a specific route which, would affect friendly movement.

2. *Zone reconnaissance.* Zone reconnaissance is the directed effort to obtain detailed information of all routes, obstacles to include chemical and radiological contamination, key terrain, and the enemy forces within a zone defined by boundaries.

3. *Area reconnaissance.* Area reconnaissance is the directed effort to obtain detailed information of all routes, obstacles to include chemical and radiological contamination, terrain, and enemy forces within a specific and clearly defined area.

(c) *Fundamentals of reconnaissance.*

1. Orient on the location or movement of intelligence objectives.

2. Report all information accurately and rapidly.

3. Avoid decisive engagements.

4. Maintain contact with the enemy.

5. Develop the situation.

(2) *Surveillance—General, types, and fundamentals.*

(a) *General.* Surveillance involves the systematic and continuous (all-weather, day and night) observation of the battlefield to include selected areas, routes, or static locations such as crossroads, bridges, aircraft landing areas, or other specific type installations. Factors influencing surveillance are visibility, terrain, natural or manmade concealment, enemy air defense capabilities (aerial surveillance), and types of surveillance equipment. Units performing surveillance, as an inherent part of reconnaissance and security missions, provide commanders with current information by keeping a systematic watch over the assigned surveillance area for the purpose of detecting, locating, identifying, and reporting information of military value.

(b) *Types of surveillance.* Surveillance as part of unit security is conducted in each combat operation by all combat units; surveillance as discussed herein is part of reconnaissance and security tasks to be conducted by cavalry units. Throughout the text, surveillance is included in these type discussions.

1. *Visual.* Visual surveillance is accomplished by all cavalry units. Reports of an immediate nature are relayed by radio through intelligence or command channels, depending on the channel established by the surveillance mission order.

2. *Electronic.* Electronic surveillance consists of ground radar, sound detection base equipment, light intensification devices, infrared devices, radio monitoring equipment, concealed personnel detection (CPD) devices, and airborne radar and infrared sensors. Information secured by use of the ground devices is reported in the same manner as visual surveillance reports. Airborne sensors report immediate intelligence reports over the spot report receiver system or may transmit data from the aircraft to a ground sensor station in near real time via data link equipment for rapid processing and evaluation (FM 30-20).

3. *Photographic.* Photo coverage by armored and air cavalry units performing a surveillance task is usually limited to hand held or special mounted cameras operated from organic aircraft. Aerial photo coverage is provided by Air Force units, and can be supplemented by Army aviation photo coverage.

4. *Audio.* Audio surveillance by individual soldiers is accomplished by all cavalry units. Reports are relayed by most expeditions electronic means through intelligence or command channels.

(c) *Fundamentals of surveillance.*

1. Orient on assigned area.
2. Maintain continuous and systematic observation of the area.
3. Report all information of activity, or lack of activity, within the area accurately and rapidly.
4. Avoid engagement with the enemy except in self-defense.

(3) *Security—General, types, forces, and fundamentals.*

(a) *General.* Security as applied to armored cavalry and air cavalry includes all measures taken by a command to protect itself from observation or surprise.

(b) *Types of security.*

1. *Cover.* To cover is to operate as a force apart from the main force and oriented in the direction of the enemy in order to develop the situation early; to defeat hostile forces if possible; and to deceive, delay and disorganize enemy forces until the main forces can cope with the situation.

2. *Protect.* To protect is to operate to the flank, front, or rear of a large moving or stationary force in a manner that precludes enemy ground observation, direct fire, and surprise attack of the main force. This is done by defeating, destroying, or delaying the enemy within the protecting force's capabilities.

3. *Screen.* To screen is to maintain surveillance to the front, flank, or rear of a moving or stationary force, and to provide early warning to this force by observing, reporting, and maintaining contact with enemy forces encountered. The screening force will, within its capability, impede and harass the enemy by organic and supporting fires, and destroy or repel enemy patrols.

(c) *Security forces.* A security force may be a covering force, guard force, screening force, or a rear area security force according to the degree of security required and its location in relation to the force being secured. It may engage in offensive, defensive, or delaying actions as required to accomplish the mission.

(d) *Types of security forces.*

1. *Guard force.* A guard force is a security force that operates to the front, flank, or rear of a moving or stationary force to protect that

force from enemy ground observation, direct fire, and surprise attack. It defeats, destroys, or delays enemy threats within its capabilities. A guard force is normally composed of units assigned or attached to the force being protected.

(a) *Advance guard.* An advance guard is a security force, primarily offensive in nature, which operates to the front of a moving force to insure its uninterrupted advance and to protect it from surprise attack by defeating or delaying the enemy within its capabilities.

(b) *Flank guard.* A flank guard is a security force that operates to the flank of a moving or stationary force to protect it from enemy ground observation, direct fire, and surprise attack by defeating or delaying the enemy within its capabilities.

(c) *Rear guard.* A rear guard is a security force that operates to the rear of an advancing or withdrawing force to protect its from surprise attack or annoyance by defeating or delaying the enemy within its capabilities.

2. *Screening force.* A screening force, by surveillance over an extended frontage to the front, flank, or rear of a moving or stationary force provides early warning by observing, reporting, and maintaining positive knowledge of the activities and locations of enemy forces encountered.

3. *General outpost or covering force.* A general outpost or a covering force is a mobile, tactically self-sufficient (except for combat service support for sustained periods) security force that operates at a considerable distance to the front, flank, or rear of a moving or stationary force, with the mission of quickly developing the situation, defeating hostile forces if possible, and deceiving, delaying, and disorganizing enemy forces until the main force can adequately act to cope with the situation.

4. *Rear area security force.* A rear area security force protects rear area units, installations, and routes of communication from attack by enemy airborne and airlanded forces, guerrillas, infiltrators, and forces penetrating the forward area.

(e) *Fundamentals of security.*

1. Orient on the location or movement of the force being secured.
2. Perform continuous reconnaissance.
3. Provide timely and accurate warning.
4. Provide space for maneuver.
5. Maintain enemy contact.

e. Economy of force is the skillful and prudent use of combat power to accomplish the mission with minimum expenditure of resources.

(1) Economy of forces implies appropriate allocation, rather than withholding of the available means, to perform supporting tasks to insure sufficient combat power at the point of decision. Air cavalry units are organized and equipped to perform economy of force missions, thus permitting a commander to maneuver the preponderance of his other forces to another area for a decisive blow.

(2) In the economy of force role, air cavalry units can be employed in any offensive, defensive, or retrograde operation in areas and on missions not requiring the combat power of larger forces.

1-4. Characteristics of Air Cavalry Units

a. General. Successful operations by air cavalry units depend on taking maximum advantage of the favorable characteristics of airmobile firepower, air and ground mobile combat elements, shock effect, extensive and multiple means of communications, surprise, and flexibility. The air and ground units of the squadron and troops should be employed so as to complement one another.

b. Firepower. Air cavalry squadrons have

mobile firepower in the form of high volume, short duration, air-to-ground point and area fire weapons, ground mobile antitank weapons, machineguns and mortars, and individual weapons.

c. Mobility. Air cavalry squadrons have air and surface mobility using organic vehicles and aircraft. The vehicles of the cavalry troop can be readily transported throughout the battle area by Army helicopters.

d. Shock Effect. Shock effect in air cavalry units is enhanced by three dimensional mobility and a large volume of aerial firepower.

e. Extensive and Flexible Communications. Air cavalry units have extensive and flexible communications. Although FM radio is the primary means employed between troop and squadron, UHF, AM SSB voice radio, LF (Low Frequency) in selected areas, and telephone are available. This capability enables a great volume of message traffic to be handled over the long ranges normally separating the troops from the squadron operations center.

f. Flexibility. Air and surface mobility, extensive and flexible communications, and responsiveness to command permit air cavalry units to operate over wide areas in accomplishing rapidly changing and varied missions.

CHAPTER 2

EMPLOYMENT OF AIR CAVALRY UNITS

2-1. General

Actions of air cavalry units in combat are governed by the application of the principles of war and certain guiding fundamentals of employment for armor, which are discussed in FM 17-1, and air cavalry, which are discussed in this manual. The success of these units depends largely on the tactical ingenuity of commanders in applying these principles and fundamentals.

2-2. Principles of War

The principles of war govern all military operations. They are the major factors that commanders must consider in achieving success on the battlefield. In combat, the plan of each commander, regardless of level, must be based on a specific mission and on the logical application of the principles of war. Principles of war are discussed in detail in FM 17-1.

2-3. Factors Affecting Employment

The successful employment of air cavalry units depends on the commander's careful and continuous consideration of certain influencing factors. These are the mission, enemy, terrain and weather, and troops available (METT).

2-4. Combat and Combat Service Support for Air Cavalry Units

Air cavalry units may be supported by all combat arms and services, tactical air, and naval gunfire. FM 17-1 provides general guidance for combat

and combat service support of armor units. Specific guidance for combat and combat service support of air cavalry units is contained in succeeding chapters.

2-5. Airspace Control

Air cavalry units receive airspace control and coordination policies and procedures from higher headquarters. Normally, operations are conducted in block airspace. When significant portions of this airspace are being used by supporting weapons, air cavalry unit operations within the airspace may be temporarily restricted. For additional details concerning airspace control, see FM 1-60.

2-6. Rules of Engagement

Dependent upon the conflict situation and existing policies, general and/or specific rules of engagement may be in effect. When these contingent conditions are present, they will affect the planning and execution of missions to varying degrees directly related to the degree of restrictiveness of the rules of engagement.

2-7. Use of Non-Air Defense Weapons in the Air Defense Role

Air cavalry unit commanders must be cognizant of the threat to their units by enemy aircraft. The commander must consider employment of non-air defense weapons in the protection of his unit from attack by hostile aircraft. For a detailed discussion, see FM 17-1.

PART TWO

AIR CAVALRY TROOP

CHAPTER 3

GENERAL

Section I. INTRODUCTION

3-1. Purpose and Scope

Part Two covers the organization, tactics, and techniques employed by the air cavalry platoons and troops. Reconnaissance, security, offensive, defensive, and retrograde operations are covered in separate sections for each type unit.

3-2. Missions and Capabilities of the Air Cavalry Troop

The air cavalry troop is designed to perform reconnaissance and security missions; to accomplish surveillance tasks; to engage in offensive, defensive, and delaying action as an economy of force unit; and to provide a limited armor defeating capability to supported units. The air cavalry troop has the following capabilities:

- a. Collection of information of intelligence value, including potential chemical, biological, and nuclear targets, and CB casualty and nuclear damage assessment.
- b. Provide flank security for a larger unit on one flank.
- c. Act as a security force between two larger units.
- d. Act as a part of a divisional general outpost (GOP) or a corps covering force in defensive operations; act as a part of a division covering force in offensive and retrograde operations.

- e. Provide a screen for a larger unit.
- f. Perform rear area security as a part of a larger force.
- g. Conduct offensive, defensive, and retrograde operations in reconnaissance and security missions, surveillance tasks, or as an economy of force unit.
- h. Conduct chemical agent detection and radiological monitoring and survey operations.
- i. Perform damage control operations as part of a larger force.
- j. Conduct reconnaissance and security missions in support of airmobile forces.
- k. Secure and defend lightly defended areas or terrain features.
- l. Provide armed aerial escort for ground convoys and route security for short periods of time.
- m. Perform target acquisition and battle damage assessment for tactical Air Force operations.
- n. Provide limited area medical evacuation in emergency cases.
- o. Conduct reconnaissance with airborne personnel detector.

Section II. ORGANIZATION

3-3. General

The air cavalry troop consists of a troop headquarters, aviation section, aero scout platoon, aero rifle platoon, aero weapons platoon, and maintenance section. Figure 3-1 shows the organization of the air cavalry troop.

3-4. Troop Headquarters, Air Cavalry Troop (fig. 3-2)

The troop headquarters is the administrative center of the troop and performs normal administrative functions, to include supply and communi-

AIR CAVALRY TROOP AIR CAVALRY SQUADRON

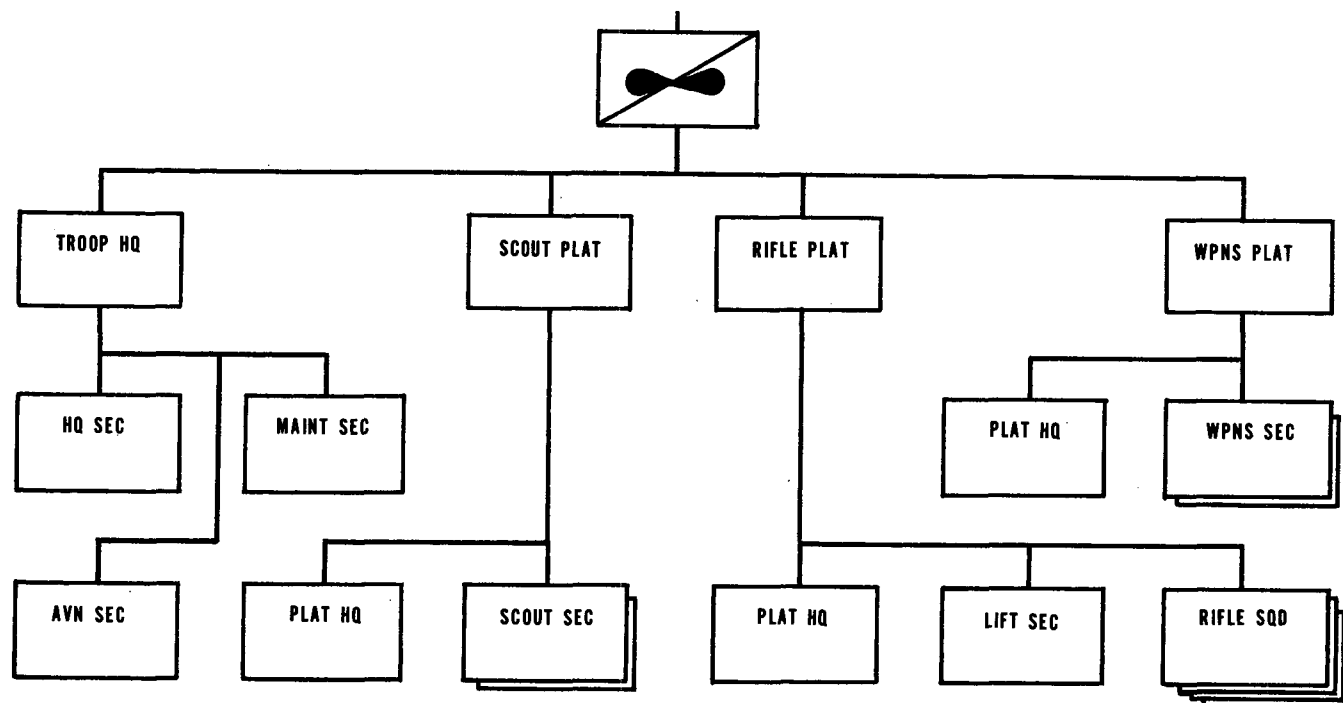


Figure 3-1. Organization chart, air cavalry troop, air cavalry squadron, separate and airmobile division.

cations, usually under the supervision of the executive officer. Flight operations is also in the troop headquarters, normally under the supervision of the troop commander. It is the operations center of the troop and gathers, consolidates, analyzes, and reports operational information; provides centralized external and internal communications; and performs liaison and coordination for tactical requirements and related logistical support.

3-5. Aviation Section

The aviation section provides the necessary personnel and equipment to operate the two aircraft organic to the section. These aircraft are used to further the mission of the troop headquarters by performing command and control, aerial resupply, or other missions as assigned.

3-6. Maintenance Section

(fig 3-3)

The maintenance section provides organizational maintenance on air and ground vehicles, armament, and avionics equipment.

3-7. Aero Scout Platoon

(fig 3-4)

The aero scout platoon includes a platoon headquarters and two scout sections, and is equipped with the light observation helicopter. It provides the primary reconnaissance capability of the troop.

3-8. Aero Rifle Platoon

(fig 3-5)

The aero rifle platoon is organized with a platoon headquarters, a lift section, and four rifle squads. The platoon provides an airmobile, limited strength, ground reconnaissance capability to the troop.

3-9. Aero Weapons Platoon

(fig 3-6)

The aero weapons platoon is organized with a platoon headquarters and two sections, and provides the high volume, high intensity, short duration fire support for the troop.

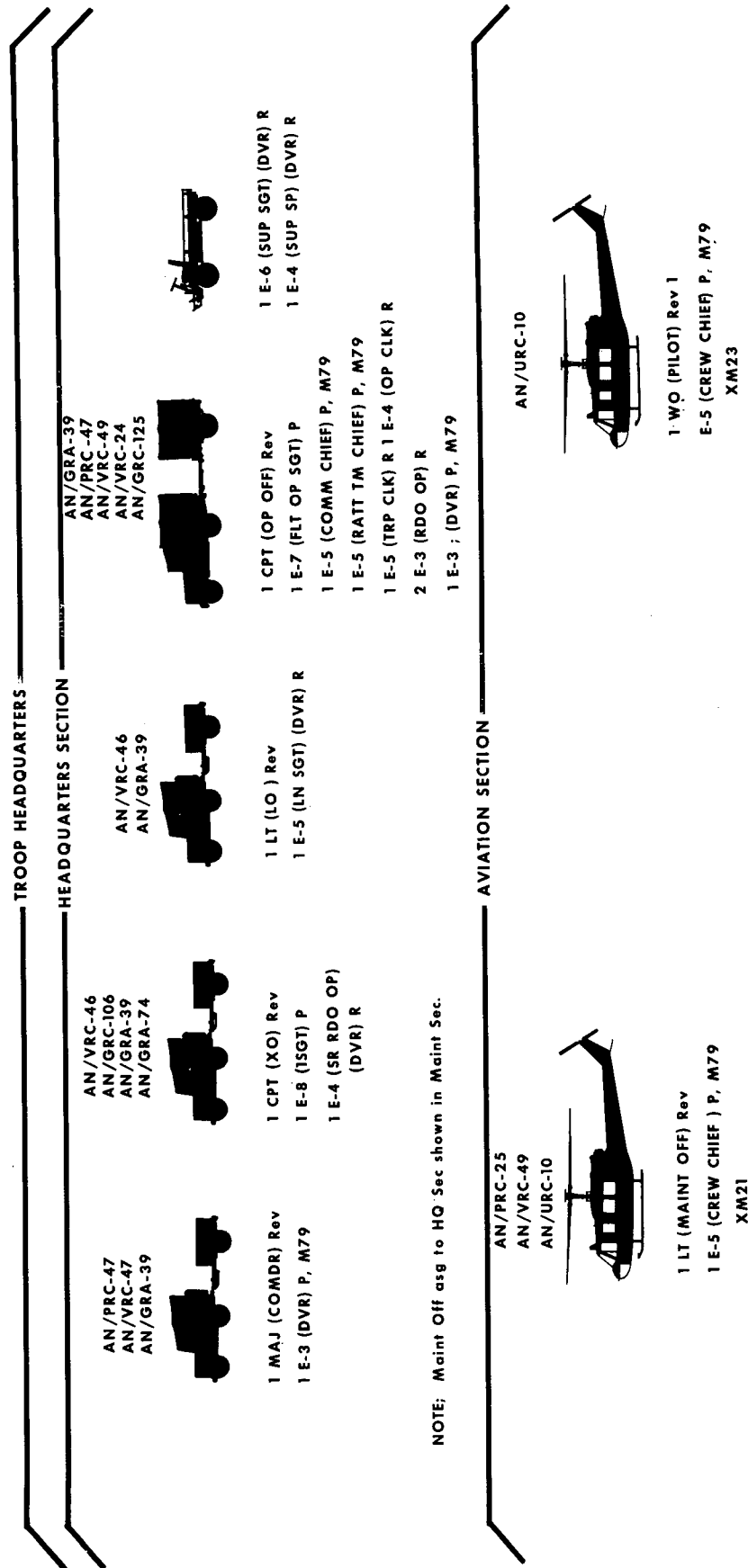
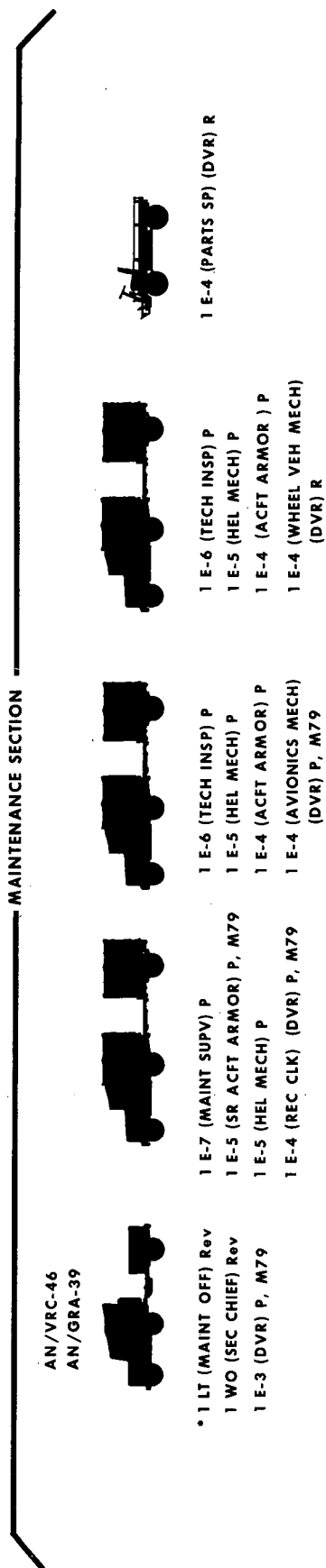


Figure 3-2. Manning chart, troop headquarters and aviation section, air cavalry troop.



• Asg to HQ sec.

Figure 3-3. Manning chart, maintenance section, air cavalry troop.

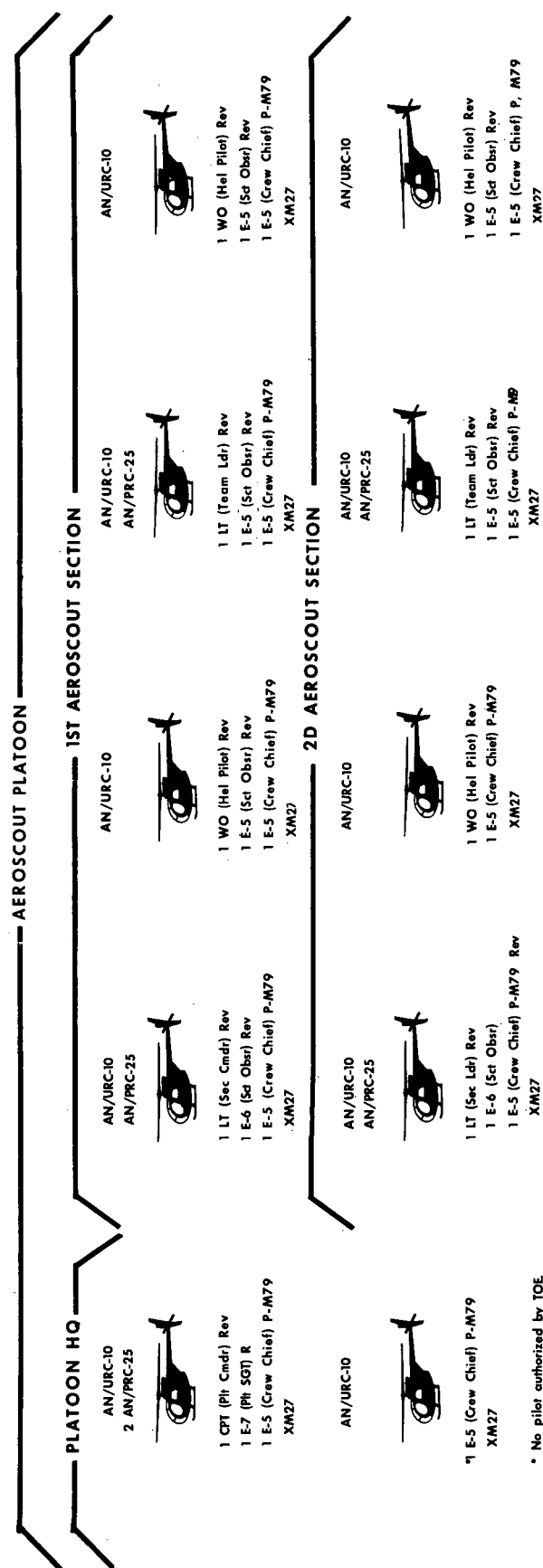


Figure 3-4. Manning chart, aero scout platoon, air cavalry troop.

* No pilot authorized by TOE

FM 17-37

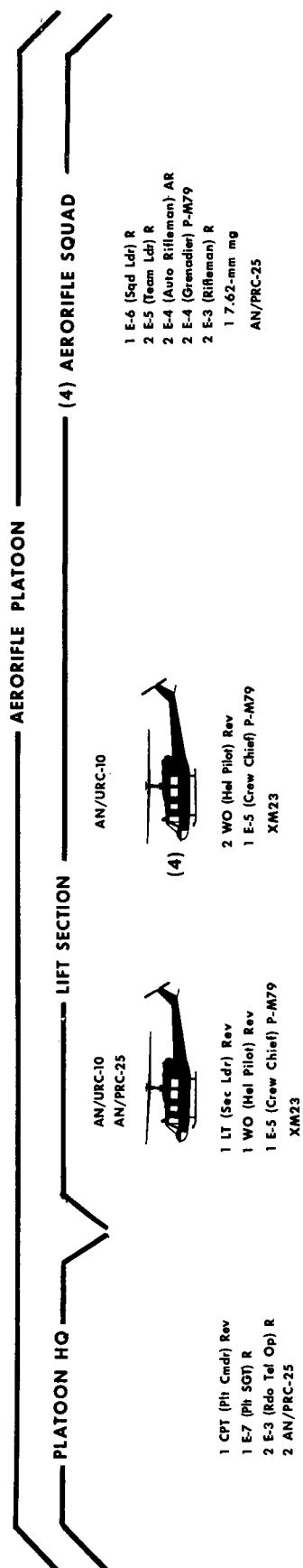


Figure 3-5. Manning chart, aero rifle platoon, air cavalry troop.

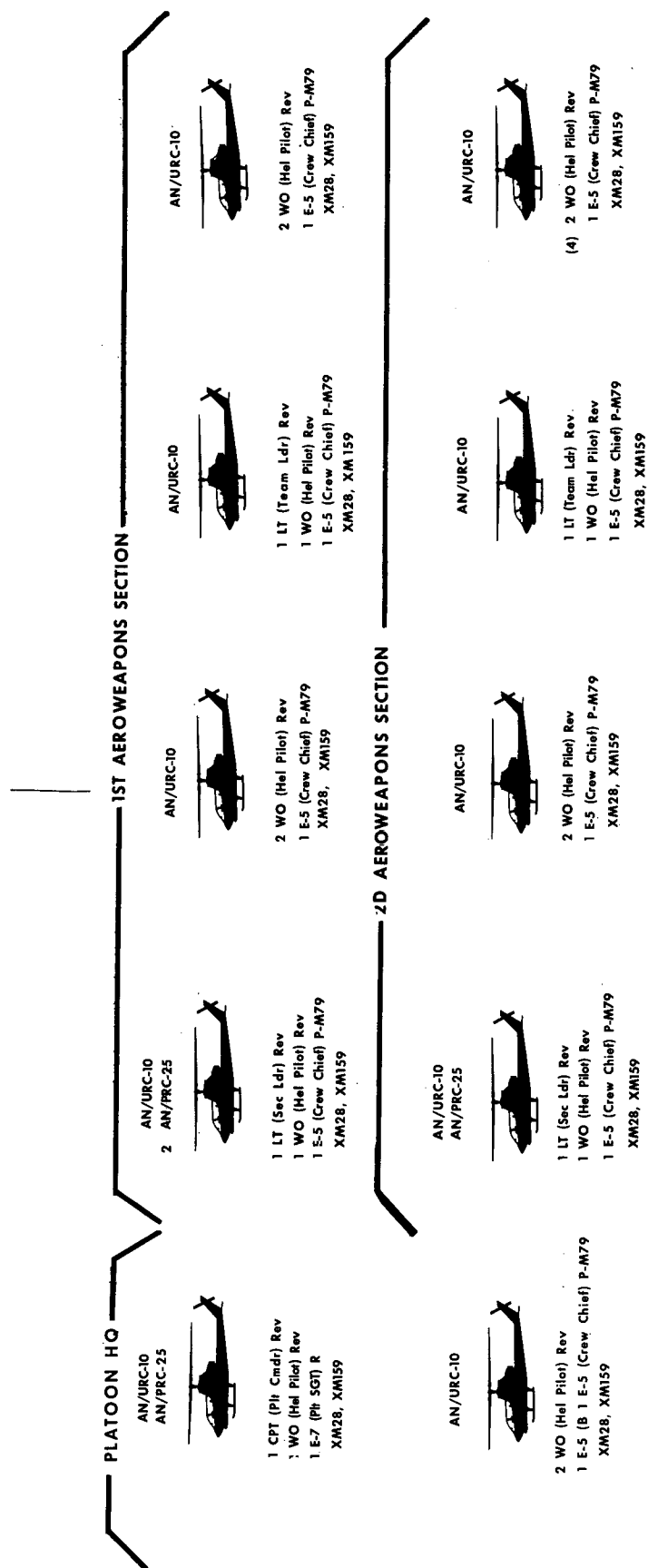


Figure 3-6. Manning chart, aero weapons platoon, air cavalry troop.

Section III. DUTIES OF KEY PERSONNEL

3-10. Duties of Key Personnel, Troop Headquarters

a. Troop Commander. The troop commander is responsible for the training, tactical employment, health and welfare, discipline, and administration of the troop. To discharge these responsibilities efficiently, he must train and use his subordinates to the fullest and continually supervise the actions of the troop.

b. Executive Officer. The executive officer is second in command of the troop and keeps abreast of the tactical situation so as to be prepared to assume command at any time. As the principal assistant to the troop commander, the executive officer supervises the administrative activities of the troop. He is responsible for the movement, location, operation, and security of the combined command post/operations center. He supervises and coordinates the activities of the operations officer, service platoon leader, first sergeant, communications chief, and the supply section chief. He can relieve the troop commander on station and direct tactical operations of the troop, or he can command a composite platoon under a troop reorganization.

c. Operations Officer. The operations officer is responsible for the troop operations center, for maintaining a current tactical situation map, and for maintenance of external and internal communications. He assists the troop commander in planning and coordinating the training and tactical employment of the troop and supervises liaison activities. The operations officer maintains maps, aviation publications, and prepares operational and flight records and reports. He frequently accompanies the combat elements on tactical operations. The operations officer is responsible for briefings, weather information, landing area selection and traffic control, and prisoner interrogation and evacuation when required. He can relieve the troop commander on station and direct the tactical operations of the troop.

d. First Sergeant. The first sergeant is the troop commander's administrative assistant and per-

forms normal duties and those delegated by the troop commander.

e. Communications Chief. The communications chief assists the operations officer on communication matters; trains communications personnel; and supervises the installation, operation, and maintenance of the troop communications system (fig 3-7).

3-11. Duties of Key Personnel, Aero Scout, Rifle, and Weapons Platoons

a. General. The platoon leader and section or team leaders must be capable of employing the aerial combat vehicles and personnel of their units in any situation. They must have a knowledge of the technical capabilities of their aircraft and be thoroughly indoctrinated in combined arms tactics to be able to employ their elements alone or as part of a larger force.

b. Platoon Leader. The platoon leader is responsible to the troop commander for the discipline, training, combat readiness, and control of his platoon, and the maintenance of and accountability for its equipment. The platoon leader must know the capabilities and limitations of the men and the equipment in the platoon, and he must be thoroughly familiar with all aspects of command and leadership.

c. Section Leaders. Section leaders are responsible to the platoon leader for the training, discipline, tactical employment, and control of their sections. They closely supervise the maintenance and operation of all aircraft and equipment that are organic to their elements. Each section and squad leader must know the capabilities and limitations of the men and equipment in his section, and must be thoroughly familiar with all aspects of command and leadership.

d. Platoon Sergeant. The platoon sergeant or senior crew chief assists the platoon leader in maintaining discipline and control of the enlisted personnel of the platoon, and in training the troops. He assists in matters pertaining to maintenance of equipment, supply, and other platoon administrative functions.

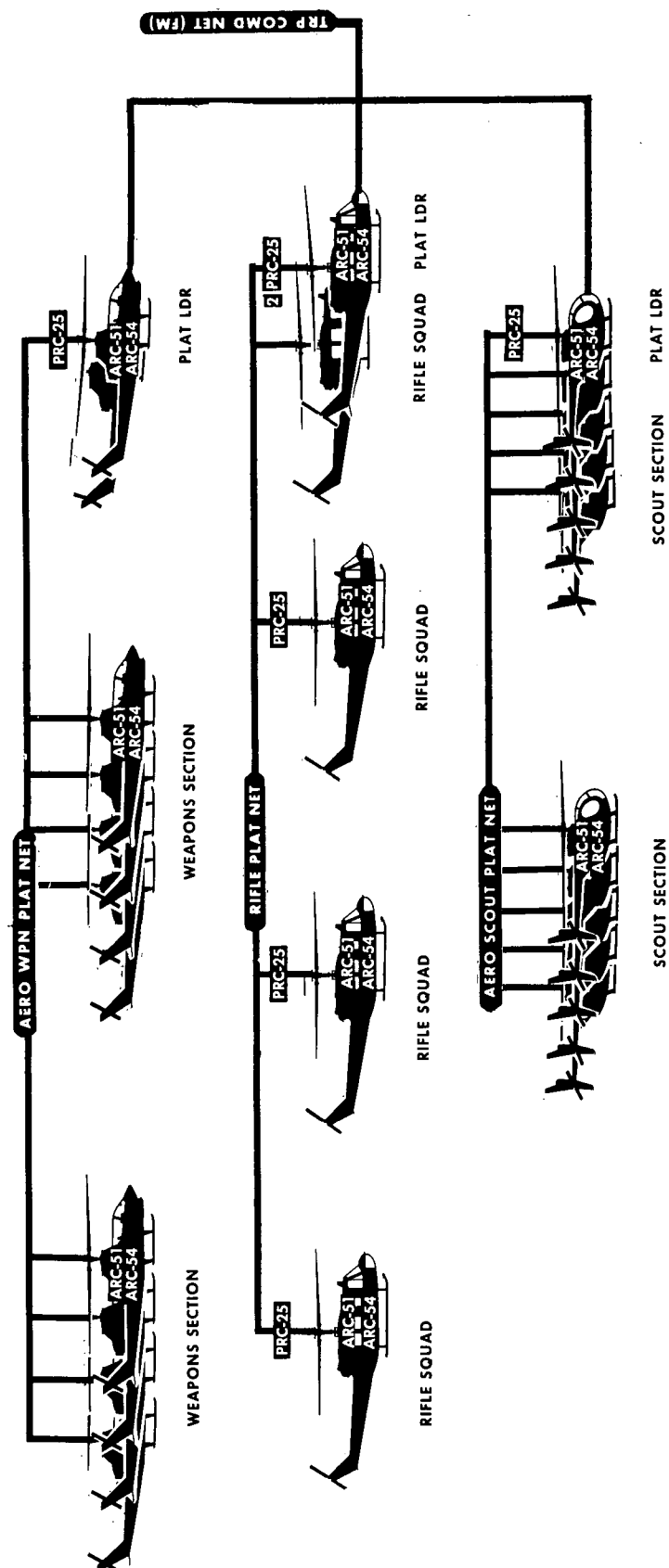


Figure 3-7. Communications schematic, air cavalry troop.

FM 17-37

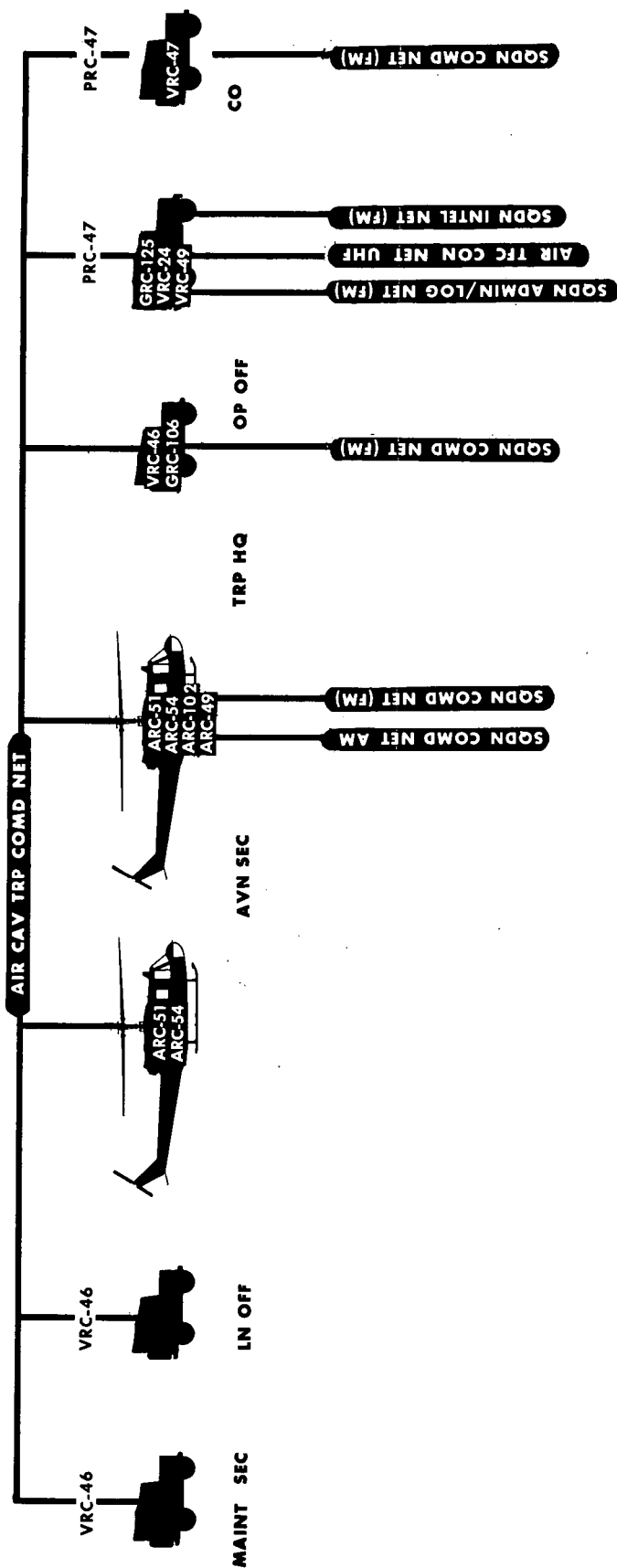


Figure 3-7—Continued.

Section IV. EMPLOYMENT OF THE AIR CAVALRY TROOP

3-12. General

a. The air cavalry troop is organized, trained, and equipped to perform reconnaissance and security operations, to provide surveillance for its parent squadron or a supported unit, and to engage in offensive, defensive, and retrograde operations as an economy of force unit. The air cavalry troop normally operates under the control of its parent squadron, however, it may be placed under the operational control of a brigade or similar headquarters for specific operations.

b. The air cavalry troop is a combat force in which the combat elements are mounted in organic helicopters. The unit combines the characteristics of tactical air mobility and destructive firepower. The troop has an antipersonnel and antimateriel capability.

c. The aero scout, rifle, and weapons platoons are tactical elements of the air cavalry troop, and can operate as teams/sections or platoons, independently or with other elements of the air cavalry troop. The platoons are rarely detached for independent missions.

3-13. Organization for Combat

a. The air cavalry troop commander is responsible for the organization for combat and employment of the platoons, operation of the troop command post, and control of the troop trains. The troop commander normally employs the aero scout, aero rifle, and aero weapons platoons as organized and in a manner that permits their capabilities to be mutually complementary. In some situations, he may cross-attach elements of the platoons to form provisional platoons. Elements of the troop are employed in teams of two or more aircraft to provide mutual support and to insure mission accomplishment.

b. Unless total troop effort is required to accomplish the mission, only those elements essential to mission accomplishment are committed. This permits continuous operation and enables uncommitted elements to relieve committed elements on station.

c. The combat elements of the troop normally operate from the troop laager area (assembly area). The troop commander selects laager areas well forward in the area of operations. Considerations in selecting laager areas are:

(1) Approach and departure routes for troop aircraft which do not reveal the location of the laager area.

(2) A limited number of or no ground avenues of attack.

(3) Near or within the perimeter of friendly elements.

(4) Ease of evacuation during day or night.

(5) Have adequate area for logistical elements.

3-14. Combat Support

a. The air cavalry troop normally operates without attachments; however, for a particular mission, one or more platoons from the cavalry troop or an infantry company may be attached to provide the additional combat power necessary for mission accomplishment.

b. Engineers may be attached to assist in the technical reconnaissance of roads, bridges, fords, and obstacles.

c. Artillery support is facilitated by providing an artillery liaison officer to the squadron headquarters. Aviators and aerial observers in the air cavalry troop are trained to request and adjust indirect fire; they obtain this fire by coordination with the artillery liaison officer at squadron headquarters.

d. Tactical air support may be available to the troop for its combat operations. When desired, tactical air support is requested by the squadron. Details on the employment of tactical air support are included in FM 61-100.

3-15. Employment of Troop Headquarters

a. During combat operations, the troop headquarters is normally organized into the troop command post and troop trains. The troop command post contains the personnel and equipment required for command and control of the troop. The trains include the organic attached or supporting personnel and equipment necessary for logistical support of the troop.

b. When the troop is committed, the troop commander normally exercises control of the troop from his command helicopter or from the troop command post. The command post is organized around the operations center under the supervision of the operations officer. Other elements

FM 17-37

usually located with the command post are the operations and communications elements of the troop, a maintenance team, and an aidman. The command post accompanies the combat elements of the troop to forward assembly areas from which operations are controlled.

c. The troop trains consist of the headquarters and maintenance section, less the personnel and equipment required to operate the command post.

The trains are located to provide maximum troop support, in consonance with available combat service support and security requirements. The service platoon leader is responsible for supervision of the troop trains. Resupply points are established by the squadron trains commander in the forward areas to provide support for the committed troops.

CHAPTER 4

RECONNAISSANCE OPERATIONS (STANAG 2022)

Section I. INTRODUCTION

4-1. General

a. Reconnaissance is one of the primary missions of the air cavalry troop and is conducted independently or as part of the squadron. Reconnaissance is performed to obtain information about the enemy and the area of operations and its resources. Enemy information includes location, identity, disposition, strength, and activity. Information about the area of operations covers the tactically significant aspects of the weather, terrain, trafficability, and obstacles; and the availability of repair materials, food, water, fuel, and related items.

b. One of the outstanding characteristics of the air cavalry troop is its mobility. This mobility is not limited by factors such as terrain, trafficability, and other obstacles that limit ground reconnaissance elements. Weather, such as extremely high winds, icing conditions, and poor visibility may restrict the movement of the troop for short periods of time; however, completely prohibitive weather conditions are rare. Such adverse weather conditions are critical during night reconnaissance missions.

4-2. Reconnaissance Frontages

There is no established frontage which the air cavalry troop may reconnoiter. The visibility, terrain, road net, anticipated enemy contact, the nature of information sought, and the time available are factors which influence the width of the frontage to be assigned to a troop. The most significant characteristic of the air cavalry troop is its ability to perform reconnaissance over areas inaccessible to ground reconnaissance elements. The frontage to be covered by the air cavalry troop is designated by the squadron or higher headquarters. When a detailed reconnaissance is not required, the air cavalry troop can reconnoiter large areas very quickly.

4-3. Reconnaissance Instructions

a. Reconnaissance instructions should be complete and should include:

- (1) Pertinent information of the enemy and friendly troops.
- (2) Plan of the higher commander.
- (3) Specific information desired.

SPOT REPORT (Note)

ALPHA—Who is observer or source?

BRAVO—What enemy was observed?
How many? How equipped?

CHARLIE—Where and when? (Where and when did report event occur)

DELTA—Doing what? (If moving; direction, speed, and altitude)

ECHO—What are you doing?

EXAMPLE

ALPHA—Timber Rattlesnake 16.

BRAVO—5 medium tanks.

CHARLIE—Coordinates 596715. 0930 hours.

DELTA—Moving south on Highway 17.

ECHO—Keeping them under observation.

Note: See FM 17-1 for detailed explanation
of SPOT REPORT content.

Figure 4-1. Spot report format.

FM 17-37

- (4) Zone, area, or route to be reconnoitered.
- (5) When, where, and how information is to be reported.
- (6) Time of departure.
- (7) Control measures.
- (8) Rules of engagement.
- (9) Action to be taken when the mission is completed.

b. When a reconnaissance mission is assigned to the troop, the commander makes a reconnaissance, develops his plan, and issues necessary orders to the platoon leaders. The platoon leaders then prepare and issue orders to elements of their platoons. After the mission has started, additional instructions are normally disseminated by radio.

4-4. Transmitting Information

a. Rapid transmission of information is essential to the success of any reconnaissance mission.

All members of the air cavalry troop must be indoctrinated with the need for rapid and accurate reporting of all positive or negative information gathered. Use of a standard report format facilitates reporting of information. The troop has accomplished its mission when it has reported the results of its reconnaissance to higher headquarters. This is done with spot reports submitted during the mission and a detailed mission report submitted after mission debriefing (fig 4-1).

b. Information from the aero scout teams/sections is reported without delay to higher headquarters. The aero scout teams will report directly to the troop or the supported unit. Collected information, regardless of its apparent value, is forwarded to higher headquarters. This information may be of extreme importance to the higher headquarters when considered in conjunction with information received from other sources. Negative information is often as important as positive information.

Section II. EMPLOYMENT

4-5. Employment Concepts for Reconnaissance Operations

a. The air cavalry troop must make maximum use of its communications, firepower, and mobility when conducting reconnaissance operations. In the conduct of reconnaissance missions, collection of information is the primary task and must not be jeopardized by unnecessary combat actions. In many situations, the troop may be required to fight to obtain the desired information. Whenever possible, the troop should avoid combat, bypass enemy resistance and continue with the reconnaissance mission. When an enemy force is bypassed, the troop commander must report this fact and the complete enemy situation to the commander directing the reconnaissance operation. When the troop is directed to maintain contact with the bypassed force, an aero scout element is usually given this mission.

b. The troop commander employs only those elements—normally the aero scouts, with zero weapons for escort as necessary—required for coverage of assigned routes, areas, or zones. The remaining elements remain in the troop laager area to provide for relief of committed elements, to provide a reaction capability, or for employment if greater reconnaissance is required.

c. Aero scout elements reconnoiter most effectively in open or sparsely covered areas. They perform the bulk of reconnaissance and will frequently make a detailed aerial reconnaissance of small areas or specific points. They use speed, infiltration, observation, and reconnaissance by fire to obtain information. The aero scout platoon performs a reconnaissance mission by sections or teams mutually supporting one another. When enemy contact is imminent or has been made, the aero scout platoon may be complemented by the aero weapons platoon to form mixed sections or teams, to provide additional firepower, and to develop the situation. Upon receipt of a reconnaissance mission, the aero scout platoon leader may initially exert a maximum effort to gain a clear picture of the situation and then on subsequent flights use only one half of his elements in order to sustain continuous operations.

d. The aero rifle elements are used to reconnoiter specific locations that cannot be effectively reconnoitered from the air. Normally, they air assault supported by aero weapons elements on or near the area to be reconnoitered and perform detailed ground reconnaissance of the area. Only required elements are used to accomplish the mission. The method of air assaulting the platoon into a landing zone varies and depends on the factors

of METT. Aircraft may land singly, in pairs, or all simultaneously. On occasions, dismounted elements may be required to rappel into the area to be reconnoitered. Security for the platoon during landing or extraction is provided by other elements of the air cavalry troop. In areas where enemy contact is imminent, extreme care should be taken to avoid landing where the aero rifle elements are exposed to direct fire of the enemy. The most desirable method of air assaulting is for the lift aircraft to land in a formation affording a favorable posture for squad movement after dismounting. Due to the airmobile capability of the platoon, the platoon leader can normally choose the direction from which he desires to approach an objective. After dismounting, the aero rifle platoon or squads move aggressively by bounds to reach the reconnaissance objective. The platoon leader positions himself where he can best control the movement of the platoon, usually with the lead elements. Formations used are dictated by the situation, and basic infantry platoon tactics are employed. The aero rifle platoon attacks, when necessary, in performing the reconnaissance mission. Before committing his platoon to an attack, the leader must be relatively certain of success. Care must be taken to avoid a level of engagement that might prevent extraction of the platoon.

e. The aero weapons elements normally accompany and are prepared to support the aero scout and/or aero rifle elements in the accomplishment of the troop reconnaissance mission. When the area is too large to be covered by the aero scout platoon in the available time, or when enemy contact is imminent, teams of the aero weapons platoon may be used in an aero scout role within the capabilities of their aircraft. They may be employed as pure weapons teams or they may be cross reinforced with scout teams to form mixed teams. When the aero rifle elements are committed, the aero weapons elements normally accompany them to the objective area to provide direct support during the air assault into the landing zone, during the ground reconnaissance action, and during extraction from the pickup zone. Only those weapons elements necessary for providing adequate support are committed.

4-6. Reconnaissance by Fire

a. Reconnaissance by fire is a technique which may be employed in all types of operations. It is accomplished by firing on likely or suspected

enemy positions in an attempt to cause the enemy to disclose his positions by movement or return fire. During reconnaissance by fire, elements must continually observe the positions being reconnoitered so that any enemy movement or return fire will be definitely located.

b. Reconnaissance by fire may be used when time is critical. It is used at the risk of losing surprise, but it tends to lessen the probability of inadvertently bypassing a well concealed enemy position. Caution should be exercised in analyzing the results of reconnaissance by fire because it may fail to draw the fire of seasoned enemy troops. If the reconnaissance fails to draw enemy fire, ground reconnaissance by the aero rifle elements may be necessary to confirm that the enemy is not present.

4-7. Actions on Contact

a. When contact with the enemy is made, the action taken falls into four distinct steps.

(1) The air cavalry element deploys to positions from which it can fire at and observe the enemy, and the leader reports enemy contact to the troop commander.

(2) The air cavalry element develops the situation to determine the exact location, disposition, composition, and strength of the enemy encountered. The aero scout/weapons elements use reconnaissance by fire, observation, aggressive flight maneuvers and tactical air and/or artillery to develop the situation. The aero rifle platoon develops the situation through reconnaissance by fire, fire and movement, patrols, and utilization of supporting fires.

(3) After developing the situation, the air cavalry elements must maintain continuous visual contact with the enemy. They must be able to detect any change in the enemy situation, which includes changes in strength, composition, disposition, probable courses of action and routes of march, and direction and position of a moving enemy force. This requires accurate observation of the likely avenues of approach and departure from the enemy battle positions.

(4) The air cavalry element leader subsequently makes reports as required to the troop commander or supported unit. He reports the enemy situation as it has been developed and provides a recommended course of action.

b. Actions on contact must be established in the unit SOP and must be well rehearsed.

Section III. TYPES OF RECONNAISSANCE OPERATIONS

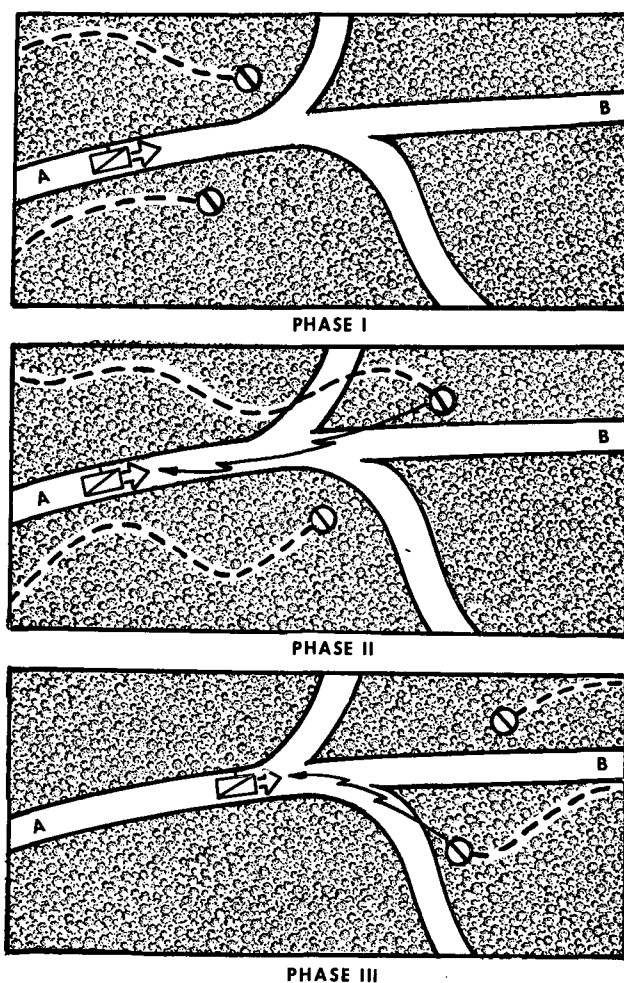
4-8. Route Reconnaissance

a. The air cavalry troop is less suited to perform detailed route reconnaissance than other reconnaissance missions. Although the troop is capable of conducting route reconnaissance independently, it can best perform this mission when reinforced by elements of the cavalry troop.

b. In situations where little enemy action is anticipated, the air cavalry troop may be assigned multiple routes to reconnoiter. In these circumstances, the air cavalry troop normally retains platoon integrity.

c. When enemy contact is probable, the troop is normally assigned no more than one major route to reconnoiter, e.g., a major highway and all parallel and lateral minor routes and adjacent terrain from which the enemy could effect movement of friendly elements on the major route. In these circumstances; the troop commander would normally employ aero scout teams supported by aero weapons teams in the reconnaissance effort, and retain the aero rifle platoon and uncommitted aero weapons teams at troop level to react to situations developed by the aero scout teams.

d. The aero scout platoon may be directed to conduct route reconnaissance. If so, the platoon is normally assigned and can best reconnoiter one major or three minor routes. The platoon is less suited for detailed route reconnaissance than for other reconnaissance missions. Although it is capable of conducting a route reconnaissance independently, it can best perform this mission in conjunction with mounted or dismounted ground reconnaissance elements. When the aero scout and aero rifle platoons conduct route reconnaissance forward of friendly lines, enemy information will usually be of primary concern. Aero scout teams reconnoiter the assigned route or routes and all terrain adjacent to the route, which, if occupied by the enemy, could influence ground movement along that route. The aero scout platoon normally operates in teams of two mutually supporting aircraft using the flight technique best suited to the terrain and enemy situation. The aero rifle platoon complements the aero scout's efforts by performing dismounted reconnaissance of terrain adjacent to the route that cannot be adequately reconnoitered from the air. The platoon may be air-lifted into a landing zone near the area of interest or rappel into areas where landing is not possible.



Legend:

General Aerial Axis - - - -

Team Leader's Air to Ground Communication ⚡

Figure 4-2. Aero scout team reconnoitering a route through a wooded area.

When dismounted, the platoon moves by stealth. The squads or fire teams normally move by bounds. The platoon aircraft orbit or laager nearby and are prepared to extract the platoon when the mission is accomplished. The platoon may also be landed along the route to determine its trafficability and to reconnoiter bridges and obstacles.

d. Route reconnaissance behind friendly lines is usually performed to determine the advisability of using the routes for the movement of a force.

e. All members of the aero scout and aero rifle platoons must have a working knowledge of the road and bridge requirements, overhead clearance

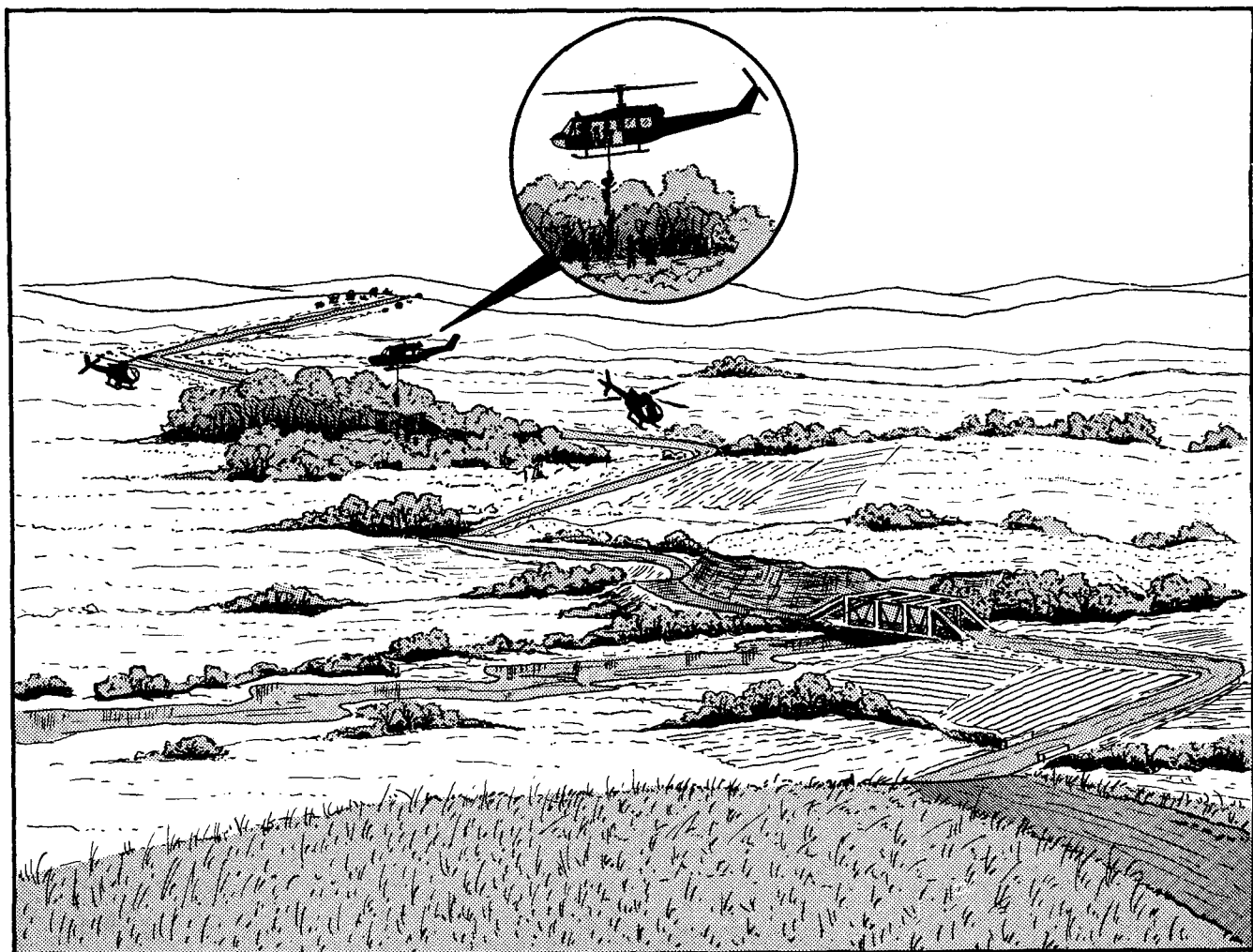


Figure 4-3. Aero scout team performing a route reconnaissance with an aero rifle squad rappelling to reconnoiter key terrain.

requirements, and inland waterway crossing capabilities of supported units. The platoon should report route and bridge conditions and classification, location and condition of bypasses, fords, and obstacles, and information of the enemy or terrain that are likely to affect the movement of friendly elements.

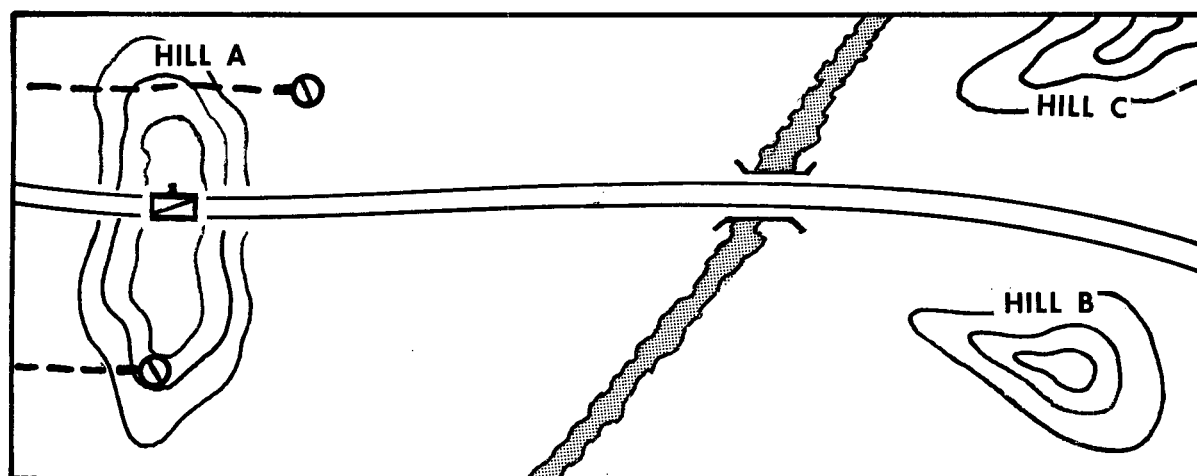
f. Engineers should accompany the aero rifle platoon when they can facilitate the advance and assist in collecting technical information. Engineers may assist by clearing mines, removing roadblocks, or selecting bypasses.

4-9. Air Route Reconnaissance

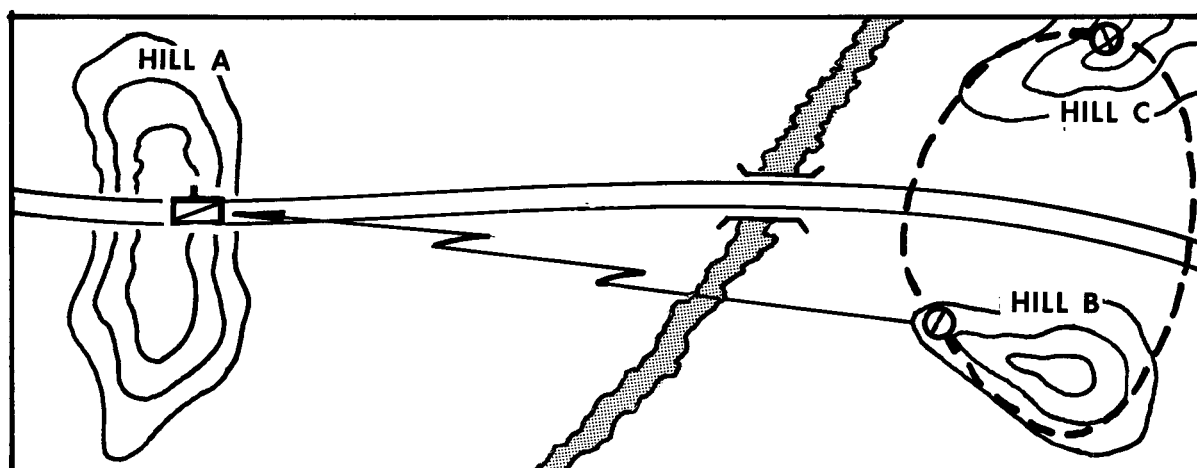
a. The air cavalry troop may conduct an air route reconnaissance for airmobile operations. The reconnaissance may be conducted forward of or behind friendly lines.

(1) When the troop is assigned this mission forward of friendly lines, enemy information will usually be of primary importance. The troop reconnoiters to determine the best route or routes for the airmobile force to use to avoid enemy anti-aircraft fire which might influence the success of the airmobile operation. To lessen the possibility of revealing the intent of the friendly force, the air cavalry troop uses only those elements which are essential for route reconnaissance. Aero scout teams will normally conduct the reconnaissance supported by aero weapons teams, while the remainder of the troop remains in the assembly area prepared to support the reconnaissance effort.

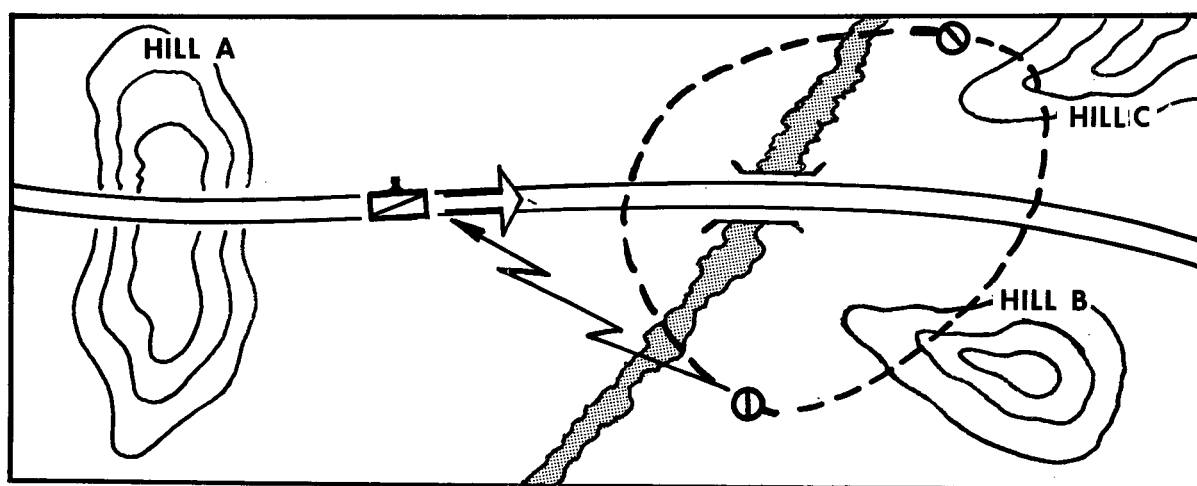
(2) Air route reconnaissance behind friendly lines usually is performed to determine the suitability of routes and landing zones for movement of a large airmobile force.



PHASE I



PHASE II



PHASE III

Legend:

Aerial routes----

Team Leader's Air to Ground Communications



Figure 4-4. Aero scout team reconnoitering a bridge.

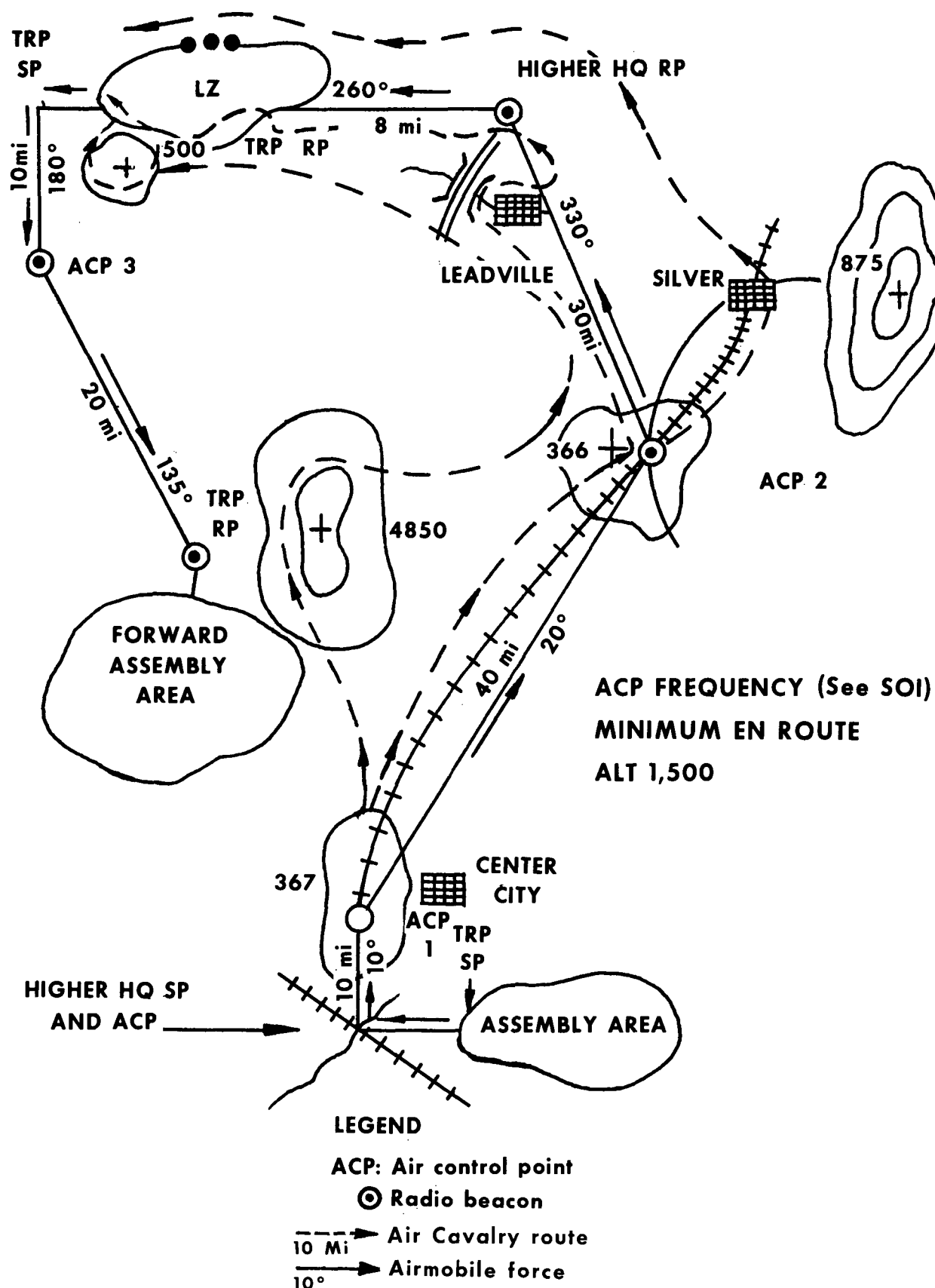


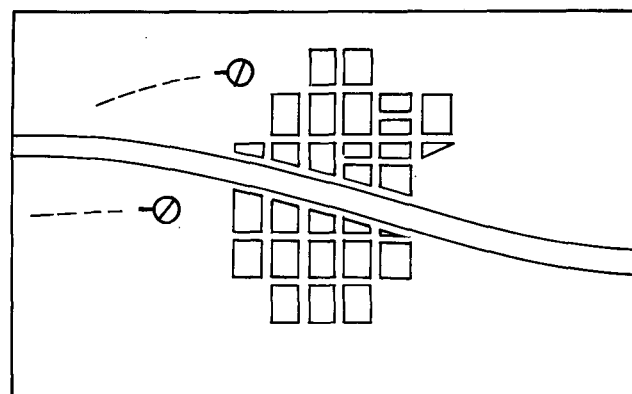
Figure 4-5. Air cavalry troop conducting aerial route reconnaissance for an airmobile force.

FM 17-37

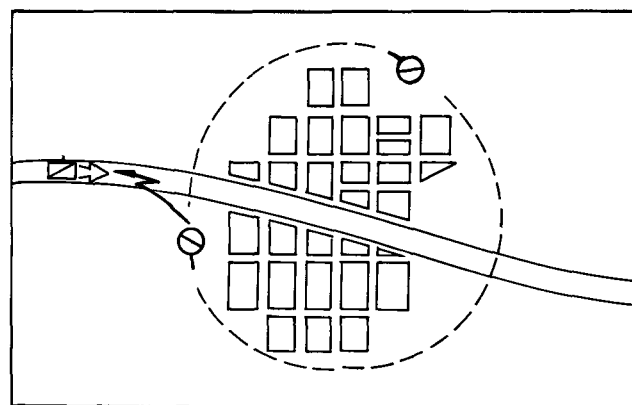
b. Information pertaining to start points, aircraft control points, flight altitudes, formations, release points, landing zone(s), and weather along the route(s) should be reported promptly to the supported unit.

4-10. Zone Reconnaissance

a. When the enemy's location is in doubt or when it is desired to determine the most suitable of several available routes, a zone reconnaissance may be assigned. Factors that determine the width of the zone are the surface concealment, key terrain features within the zone, time available, visibility, anticipated enemy action, and the frontage covered by the supported unit. Zone reconnaissance is more detailed and time consuming than is route reconnaissance. Zones are established by boundaries which should be defined by easily recognizable terrain features such as roads, streams, and ridge or tree lines. The air cavalry troop conducts zone reconnaissance using the same techniques as in route reconnaissance. The troop command post and necessary trains will



PHASE I



PHASE II

Legend
Aerial routes-----
Team Leader's Air to Ground Communications

Figure 4-7. Aero scout team reconnoitering a town.

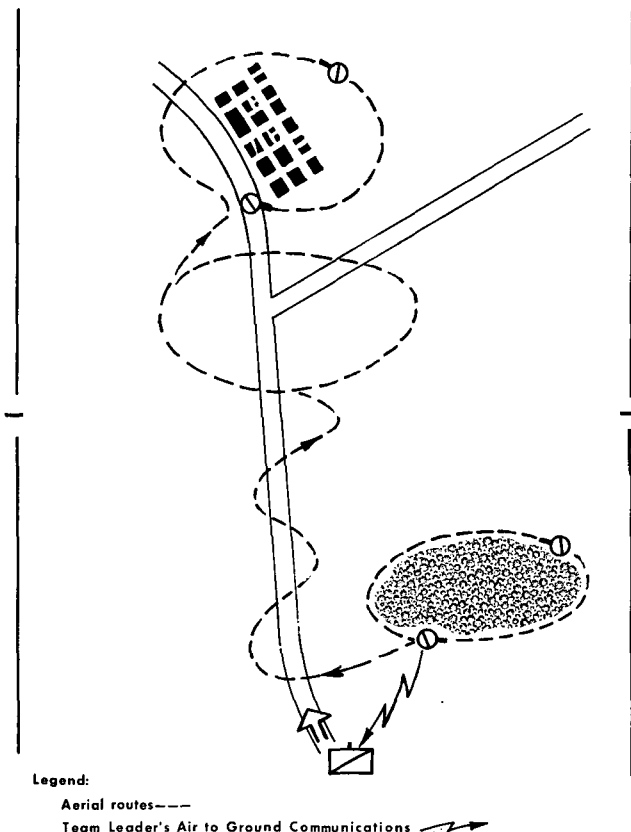
advance by establishing laager positions near the center of the zone.

b. The aero scout platoon can most effectively perform zone reconnaissance operating in teams, in conjunction with other elements of the air cavalry troop or ground reconnaissance elements.

c. Normally, the aero rifle platoon will be air-lifted into areas which cannot be adequately reconnoitered from the air. It may be used to reconnoiter routes, bridges, and obstacles. The platoon can be rapidly employed anywhere in the zone due to its organic air mobility, with the aero weapons platoon furnishing escort and direct fire support.

4-11. Area Reconnaissance

a. Area reconnaissance is performed to gain information of a locality such as towns, woods, landing zones, or crossing sites over a water obstacle. In an area reconnaissance, the platoons move by the best available (usually the -mōst



Legend:
Aerial routes-----
Team Leader's Air to Ground Communications

Figure 4-6. Aero scout team conducting a zone reconnaissance.

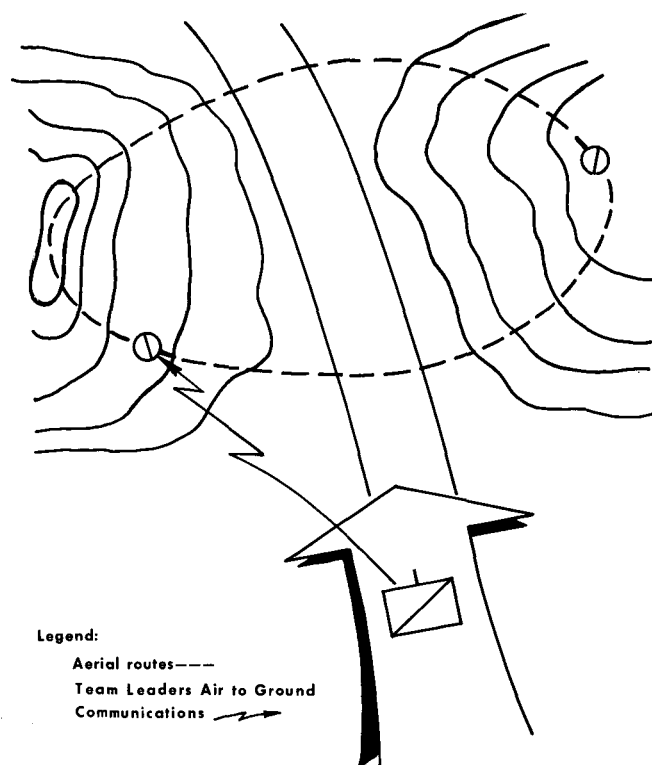


Figure 4-8. Aero scout team reconnoitering a defile.

direct) route to the area to be reconnoitered, with the troop establishing a laager position in or near the area. During movement to the area to be reconnoitered, unless otherwise ordered, the platoon should report and bypass enemy opposition. When

the platoons arrive at the designated area, they perform reconnaissance in the same manner as for zone reconnaissance.

b. While moving from the location where the mission was first assigned to the area to be reconnoitered, the troop may move along one air route or by teams along multiple air routes, depending on the task organization required to accomplish the mission. If continuous area reconnaissance is required, two area scout teams will perform the mission, allowing the platoon to retain the capability of relief on station.

c. The aero scout platoon commander plans the reconnaissance in detail to insure that the area is systematically covered with particular emphasis on roads and trail, terrain, and suspected enemy locations.

d. The aero rifle platoon leader makes a detailed map study of the area for possible landing zones, and makes tentative plans for accomplishing the reconnaissance mission when dismounted. In areas where aerial observation is restricted, dismounted reconnaissance is accomplished by elements of the aero rifle platoon.

e. The aero weapons platoon can act as scouts; form mixed teams with the aero scouts; provide escort and direct fire support to the aero rifle platoon, or remain in the assembly area until the situation is developed. Their use in any one of these roles depends on the commander's judgment.

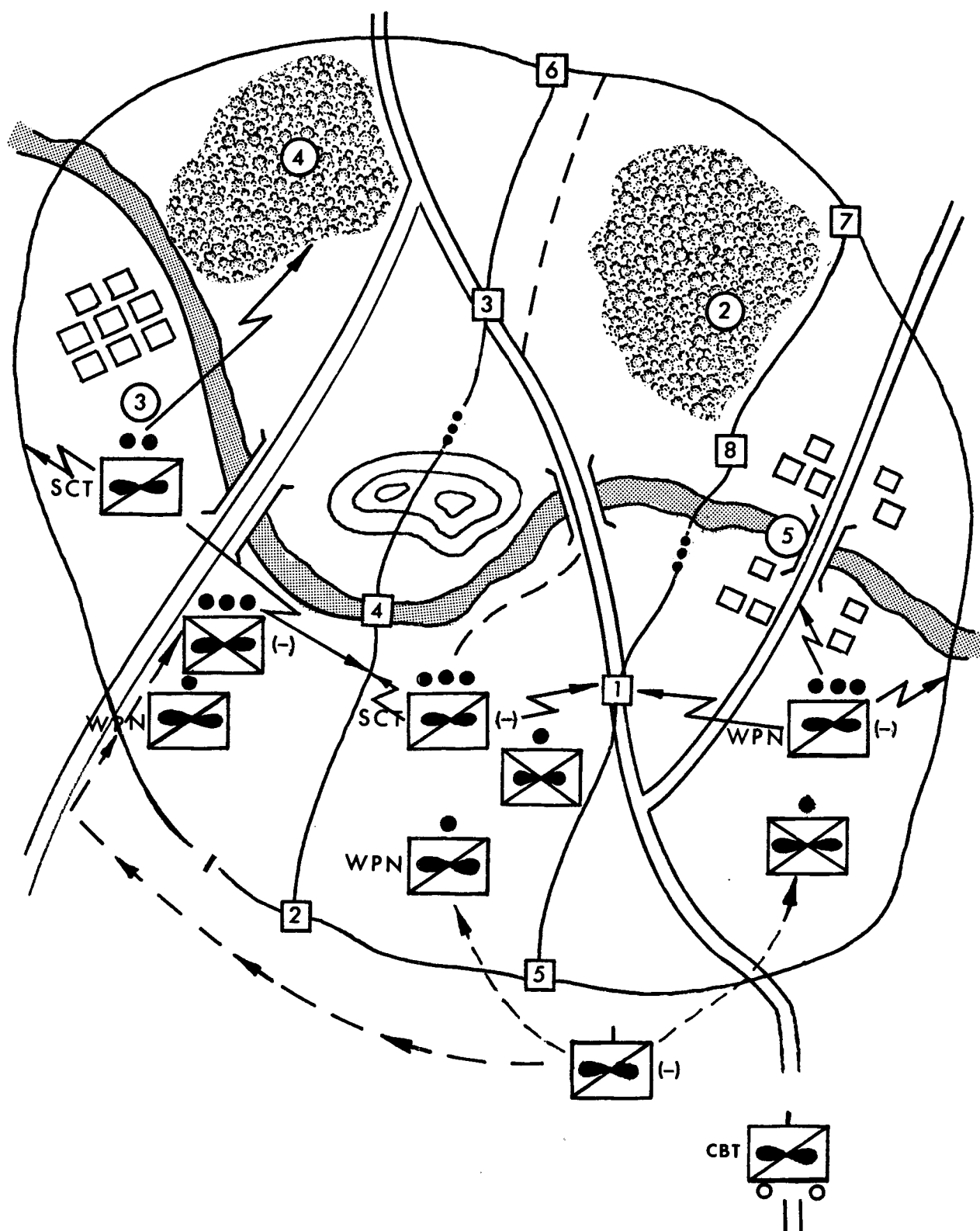


Figure 4-9. Air cavalry troop conducting an area reconnaissance.

CHAPTER 5

SECURITY OPERATIONS

(STANAG 2079)

Section I. EMPLOYMENT

5-1. General

a. The size of the security force is determined by an analysis of the factors of METT. The air cavalry troop is well suited for use as a security force because of its mobility, firepower, and extensive and flexible communication means. The troop may be employed on security missions alone or as part of a larger force. FM 17-1 covers the principles of security.

b. The air cavalry troop may often be required to operate over broad frontages in the performance of security missions. The troop can be assembled quickly for a given mission, then rapidly accomplished by offensive or defensive action, delay, or a combination thereof.

5-2. Employment Concepts for Security Operations

a. When performing security missions, the aero scout platoon must provide the protected force adequate and timely warning of hostile approach. The aero scout platoon performs this missions as a part of a larger force. The aero scout platoon's

primary role, when a part of a security force, is reconnaissance. The distance that the aero scouts operate from the protected force varies in accordance with an analysis of the factors of METT by the security force commander. This distance should be far enough from the protected force to afford that force time and space to react to any enemy threat that develops.

b. As part of a security force, the aero rifle platoon may establish listening posts or observation posts, conduct dismounted patrolling, establish limited blocking positions, or conduct limited attacks in conjunction with the other elements of the troop.

c. The aero weapons platoon's primary role is to provide direct aerial fire support for other elements of the security force. The platoon may conduct semi-independent operations to harass and disrupt enemy forces and to deceive them as to the true locations of the main body of the security force. The platoon may also provide an additional aerial reconnaissance capability for the troop.

Section II. TYPES OF SECURITY OPERATIONS

5-3. Advance Guard

a. The air cavalry troop may be employed as an advance guard for the parent squadron or as part of an advance guard for the unit it is supporting. The troop, when acting as the advance guard for the squadron, should operate at a distance far enough in advance of the squadron to insure that it has the time and space necessary to react to an enemy threat. See FM 17-1 for a more detailed discussion of advance guard.

b. The air cavalry troop, as part of an advance guard, normally acts as the extension of the adv-

ance guard. When performing this mission, the troop regulates its movement on the movement of the ground elements with sufficient distance to provide the commander of the advance guard sufficient time and space to react to an enemy threat. The troop normally performs both aerial and ground reconnaissance in this mission. When the troop is advancing on a broad front, it may be necessary to employ provisional teams. The troop uses assembly positions as it advances to insure combat service support and control of continuous operations.

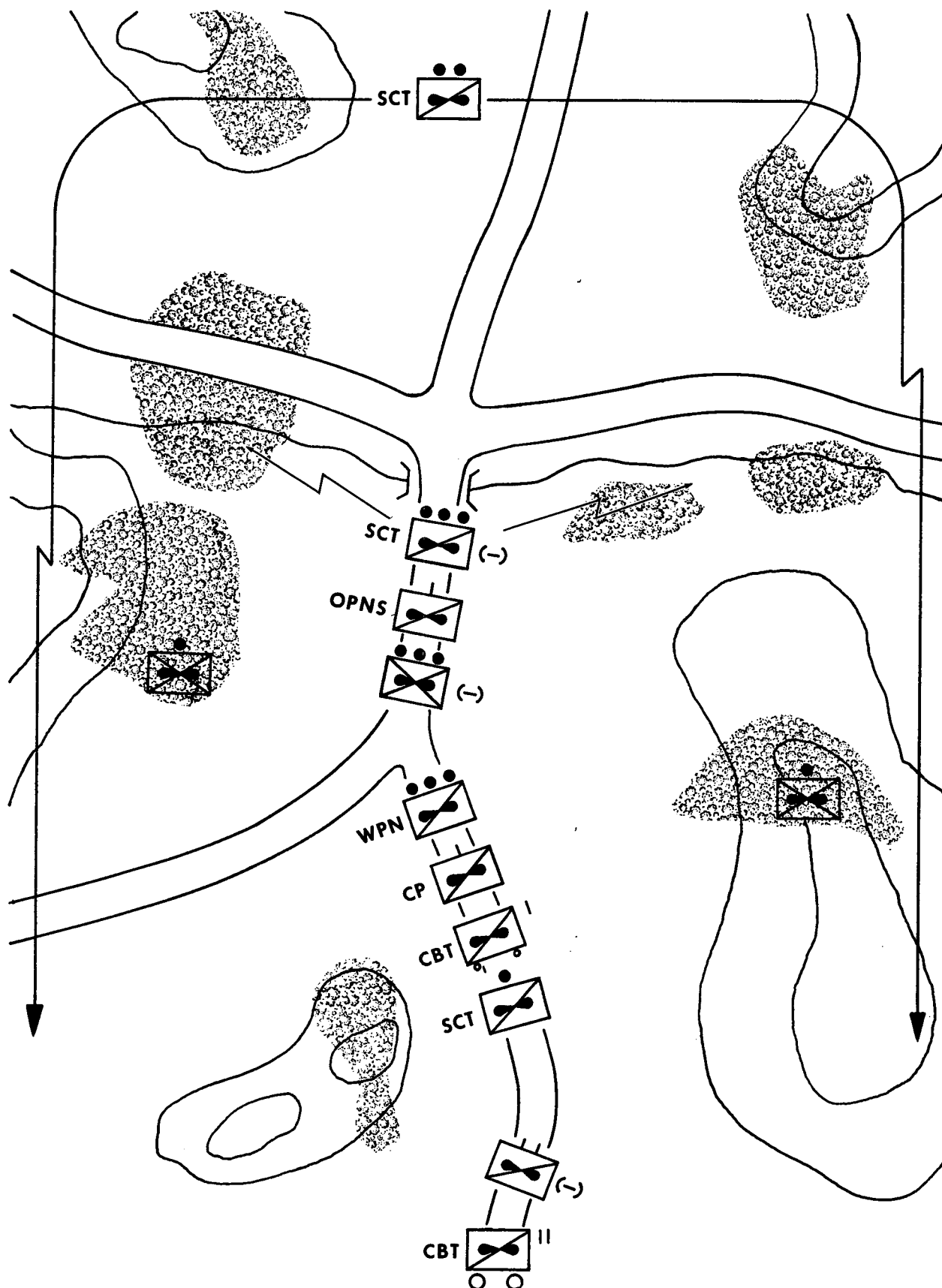


Figure 5-1. Air cavalry troop as an advance guard.

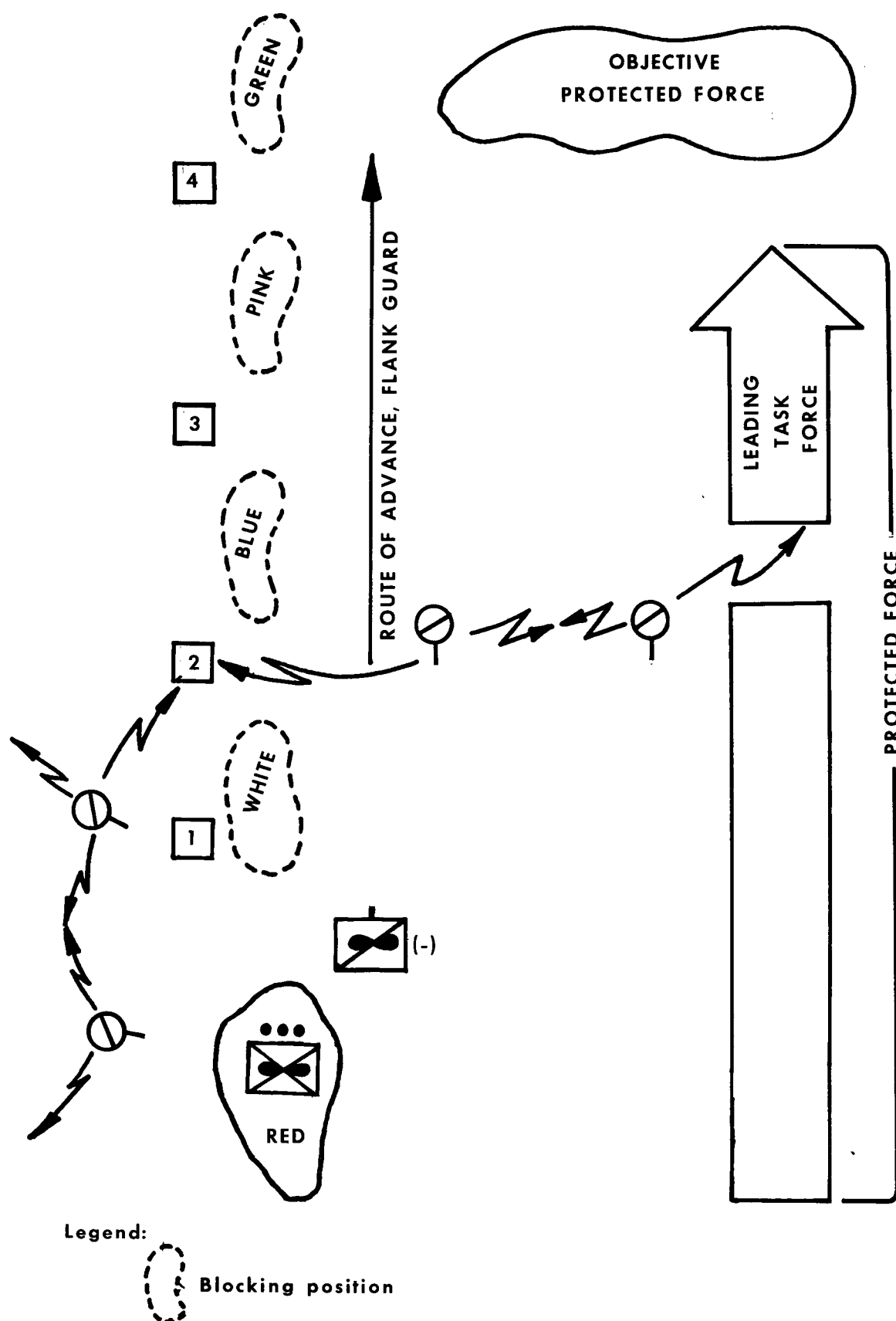


Figure 5-2. Air cavalry troop as flank guard for a larger unit.

c. Contact with the enemy is promptly reported. The troop develops the situation to determine the size, strength, and disposition of the enemy forces, and within its capabilities, the troop takes necessary action to defeat the enemy or force his withdrawal. The combined aerial firepower of the aero weapons and aero scout platoons is used offensively to neutralize the enemy force. The aero rifle platoon may air assault limited objectives to engage the enemy force, but must avoid decisive engagement. When the enemy force is of such a size and disposition that the troop cannot defeat it, the situation is reported to the advance guard commander. The troop may be directed to bypass the enemy and continue, or to maintain enemy contact until ground elements arrive. When ground elements arrive, the troop is employed to provide security to the flanks and rear during the attack.

d. When the advance to contact is prolonged, logistical support for the troop is provided by mobile logistical elements from higher headquarters.

5-4. Flank Guard

a. The air cavalry troop normally performs flank guard missions as part of its parent squadron or supported unit. Without reinforcement, e.g., ground cavalry of the squadron, the troop can effectively occupy only one blocking position, as the only ground-holding force available is the aero rifle platoon. The troop may perform a screening mission when the squadron is operating on a board front as a flank guard (fig 5-2).

b. When the troop is to perform a flank guard mission as an independent force, the troop commander plans the mission in the following sequence:

(1) Initially, he makes a map reconnaissance of the area of operation and selects the most likely avenues of enemy approach. He selects a series of blocking positions on the flank that generally parallel the axis of advance of the protected force. The blocking position should be at sufficient distance from the flanks of the protected force to permit timely warning of enemy approach and to provide the protected force with sufficient time and maneuver space to react to an enemy threat. The blocking positions should be located in such a manner as to deny the enemy ground observation and direct fire on the protected force. Blocking positions should be within supporting range of the artillery of the protected force. If the flank guard force encounters a superior enemy force, the posi-

tions should be far enough from the protected force to provide sufficient terrain for the conduct of a delaying action toward the protected force.

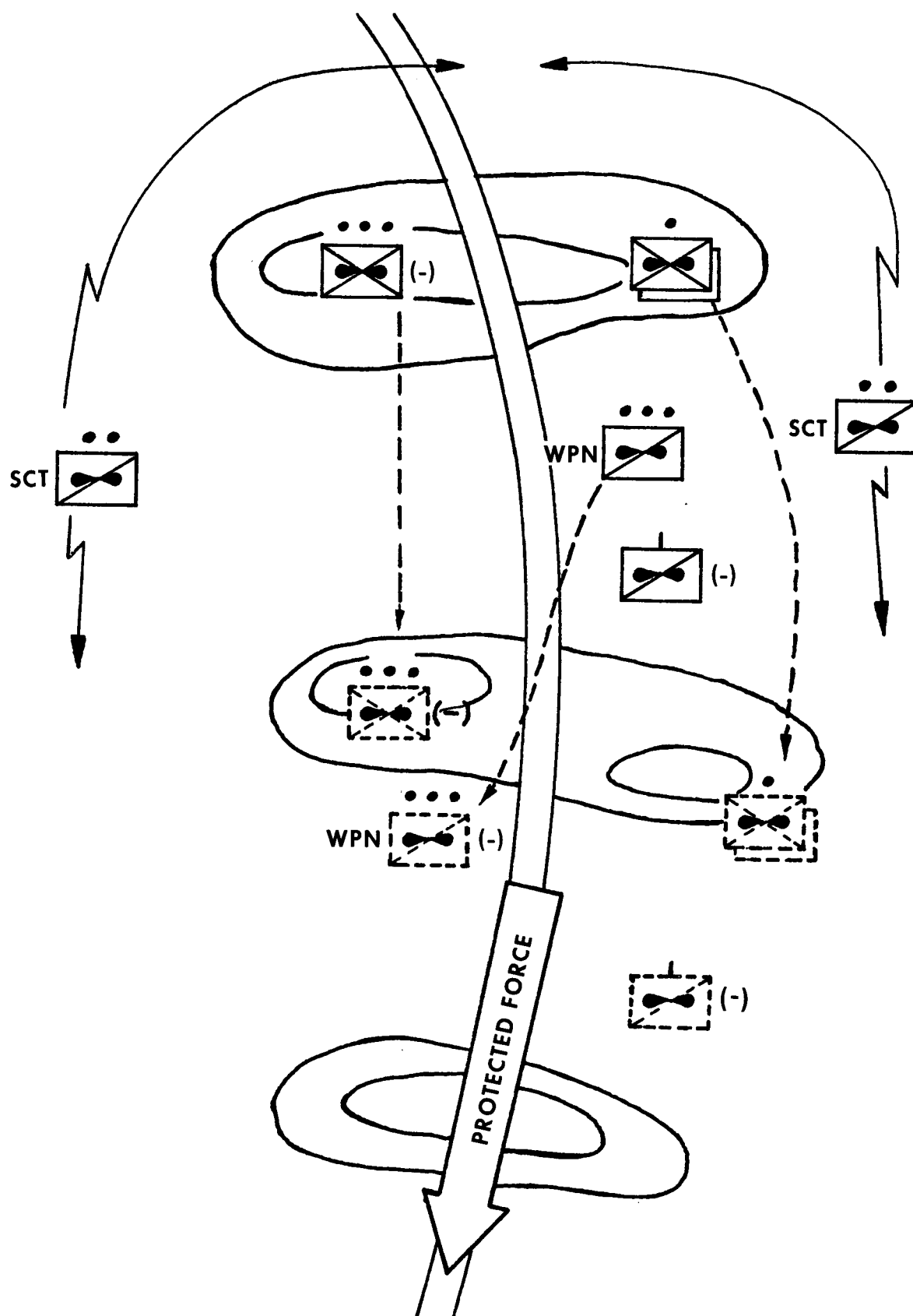
(2) The air cavalry troop does not require road space for the advance of its combat elements. Troop assembly positions are selected to enable the troop to orient its movement on the movement of the protected force. The troop commander develops a scheme of maneuver that enables the troop to seize and hold blocking positions.

c. During the conduct of a flank guard operation, the aero scout platoon is employed to conduct reconnaissance and surveillance by establishing an air screen beyond the line of blocking positions, to the front of the flank guard along the route of advance, and between the flank guard and the enemy threat. The platoon maintains contact with the rear of the lead elements (TF) of the protected force. The aero rifle platoon may establish dismounted OP's in front of blocking positions or, when necessary, occupy a blocking position. When the aero rifle platoon is dismounted, either manning observation posts or occupying a blocking position, the platoon aircraft must be in a position to rapidly pick up the elements and relocate them as the flank guard advances. The platoon can most effectively establish four observation posts. This provides good radio communication and sufficient troops for patrolling and manning OP's. When the flank guard is overextended, the platoon may establish a maximum of eight OP's. When eight OP's are manned, there are insufficient troops for patrolling and the platoon must be supplemented with binoculars and radios.

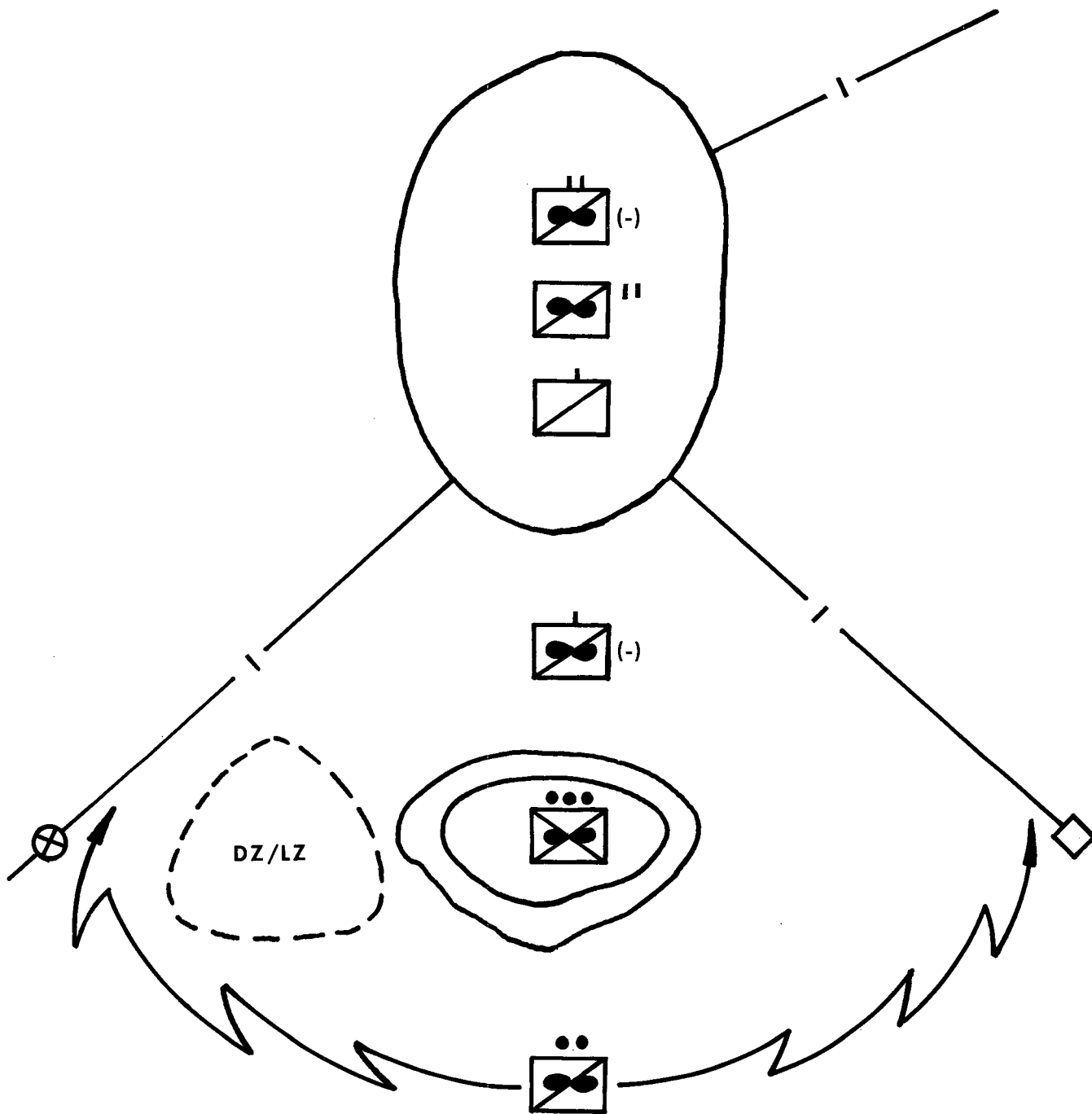
d. The aero weapons platoon provides direct aerial fire support for the other elements of the troop, or when necessary, complements the aero scout reconnaissance effort by forming mixed platoon. The troop's exceptional mobility permits rapid assembly of its elements at any location along the flank of the protected force to counter an enemy threat.

5-5. Rear Guard

a. The rear guard follows the protected force at a distance prescribed by the main force commander and usually moves along the same axis as the main force. It is prepared to intercept and engage enemy forces that attempt to attack the rear of the protected force. When attacked by a superior enemy force, the rear guard employs a delay to accomplish its mission (fig 5-3).



AGO 20026A



Note: Periodic aerial and ground patrols are conducted between OP's, DZ's, and contact points.

b. When planning a rear guard operation, the troop commander—

(1) Studies the terrain and selects positions along the prescribed axis of advance or withdrawal.

(2) Plans a method of movement (normally the troop moves by bounds).

(3) Plans to screen toward the enemy, toward the protected force, and to the flanks of his blocking positions, and to maintain contact with the rear of the protected force.

(4) Plans and coordinates fire and engineer support.

c. In conducting the rear guard, the aero scout platoon reconnoiters to the front and flanks of the blocking positions, and provides early warning of enemy approach or enemy attempts to bypass the rear guard. The aero rifle platoon moves by bounds from one blocking position to the next, prepared to execute a delaying action if required. The aero weapons platoon covers the movement, prepared to provide direct fire support when necessary. The scout platoon also maintains contact with the protected force.

d. The aero rifle platoon complements the troop aerial screening force by establishing dismounted observation posts or ground positions designed to delay, or it may remain in the troop laager position as a troop reaction force for rapid employment to destroy or repel small enemy forces.

e. When selecting the location of OP's, the following should be considered:

(1) Overlapping fields of observation with other OP's.

(2) Concealment of OP's and access to landing or pickup zones.

(3) Cover and concealment during landing and extraction of personnel.

(4) Maintenance of communication.

(5) Avoidance of landmarks.

(6) Patrolling between OP's.

f. Ground observation posts are normally located on a forward slope for maximum observation and background concealment. The OP personnel should be airlifted to the reverse slope and move on foot to the OP's location. The platoon operates a screen most effectively when not more than four OP's are assigned. This provides good radio communication and sufficient troops for patrolling and manning OP's. The platoon can establish a maximum of eight OP's; however, when

eight OP's are manned, there are insufficient troops for patrolling and the platoon must be supplemented with binoculars and radios. OP's make accurate and timely reports and direct the fires of supporting elements to harass any advancing enemy forces. The OP's may engage and destroy small enemy patrols. The OP's withdraw on order, normally by airlift, to successive OP positions.

g. The troop engages all enemy forces that threaten the rear of the protected force. The aero scout platoon will direct supporting fires on an approaching enemy force. The troop fights a delaying action from one blocking position to the next, trading space for time. The aero weapons platoon may be employed beyond the position to engage the enemy force by offensive action to delay or disrupt its advance.

h. The troop elements operate from preselected assembly positions between the delay position and the protected force.

5-6. Rear Area Security

a. The air cavalry troop will normally perform rear area security as part of its parent squadron or other supported unit. The troop commander must coordinate the efforts of the troop with those of other combat elements in the area. He must avoid stereotype operations of patrols, observation posts, and listening posts to prevent the occurrence of predictable patterns of activities (fig 5-4).

b. The air cavalry troop as part of the rear area security force may be required to:

(1) Conduct aerial surveillance of the rear area and lines of communication.

(2) Provide air escort and screen the flanks of columns along routes.

(3) Conduct route reconnaissance for columns advancing along a route.

(4) Establish OP's throughout the rear area.

(5) Conduct dismounted patrolling in the area.

(6) Provide security for an installation in the area.

c. The supported force may be given the mission of securing a supply route or escorting unit trains along a designated route. In the performance of this type of lines of communication mission, the aero scout platoon may be required to:

(1) Provide continuous aerial surveillance of the assigned route.

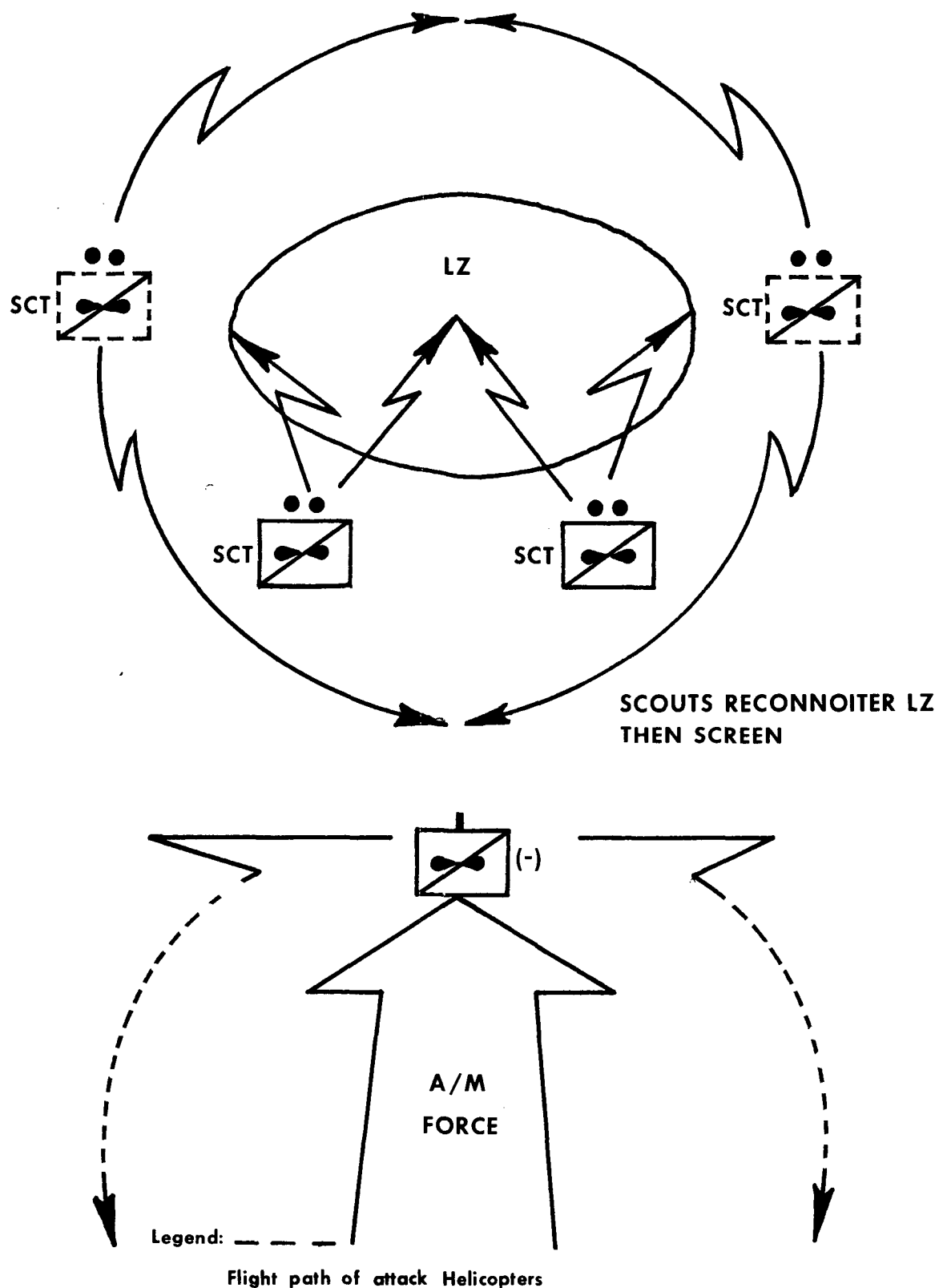
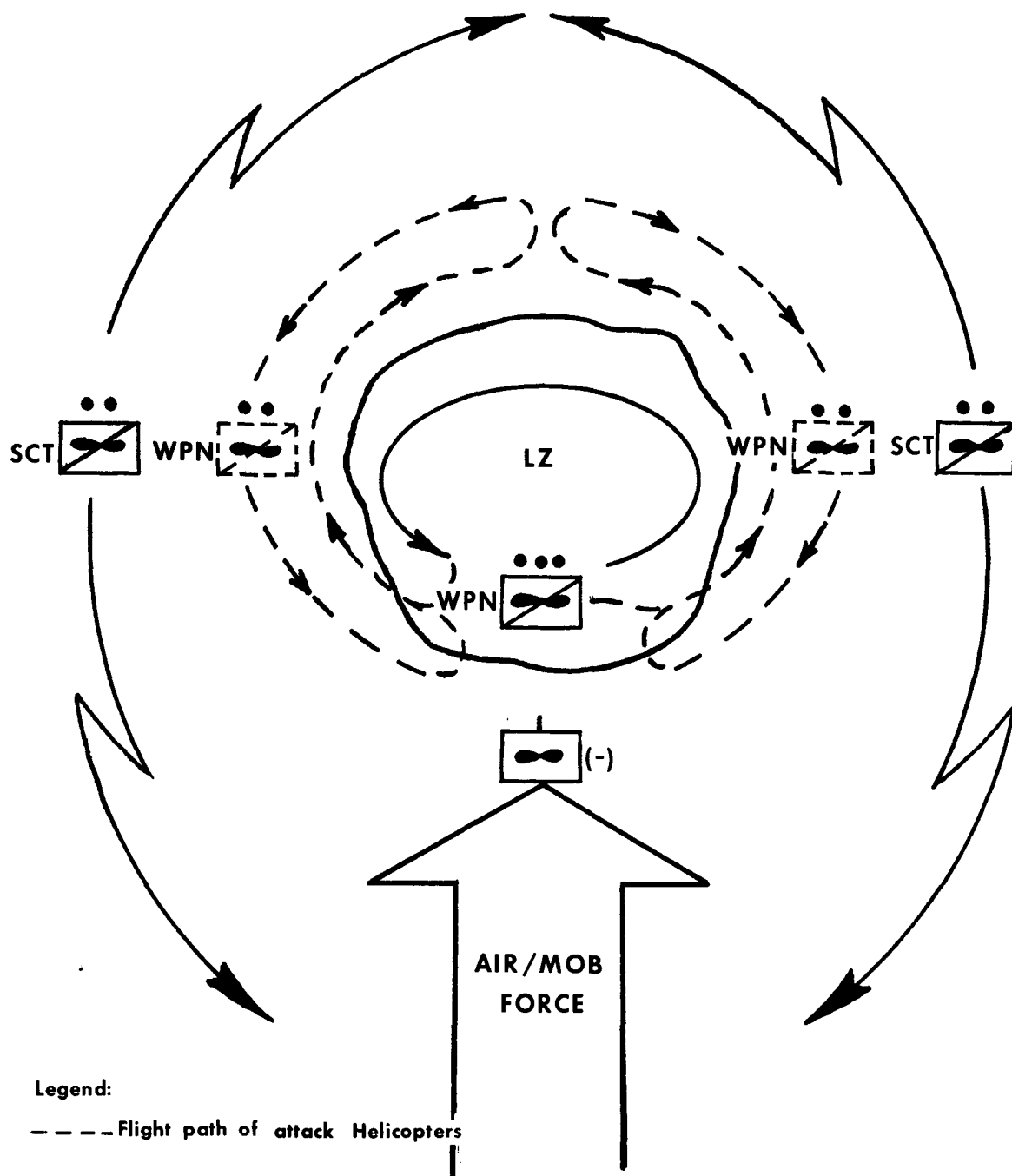


Figure 5-5. Air cavalry troop providing aerial escort, landing zone reconnaissance and security, and support for an airmobile force.



Aero weapons platoon delivers assault fire on LZ then assumes seal off and fire support role.

Figure 5-5—Continued.

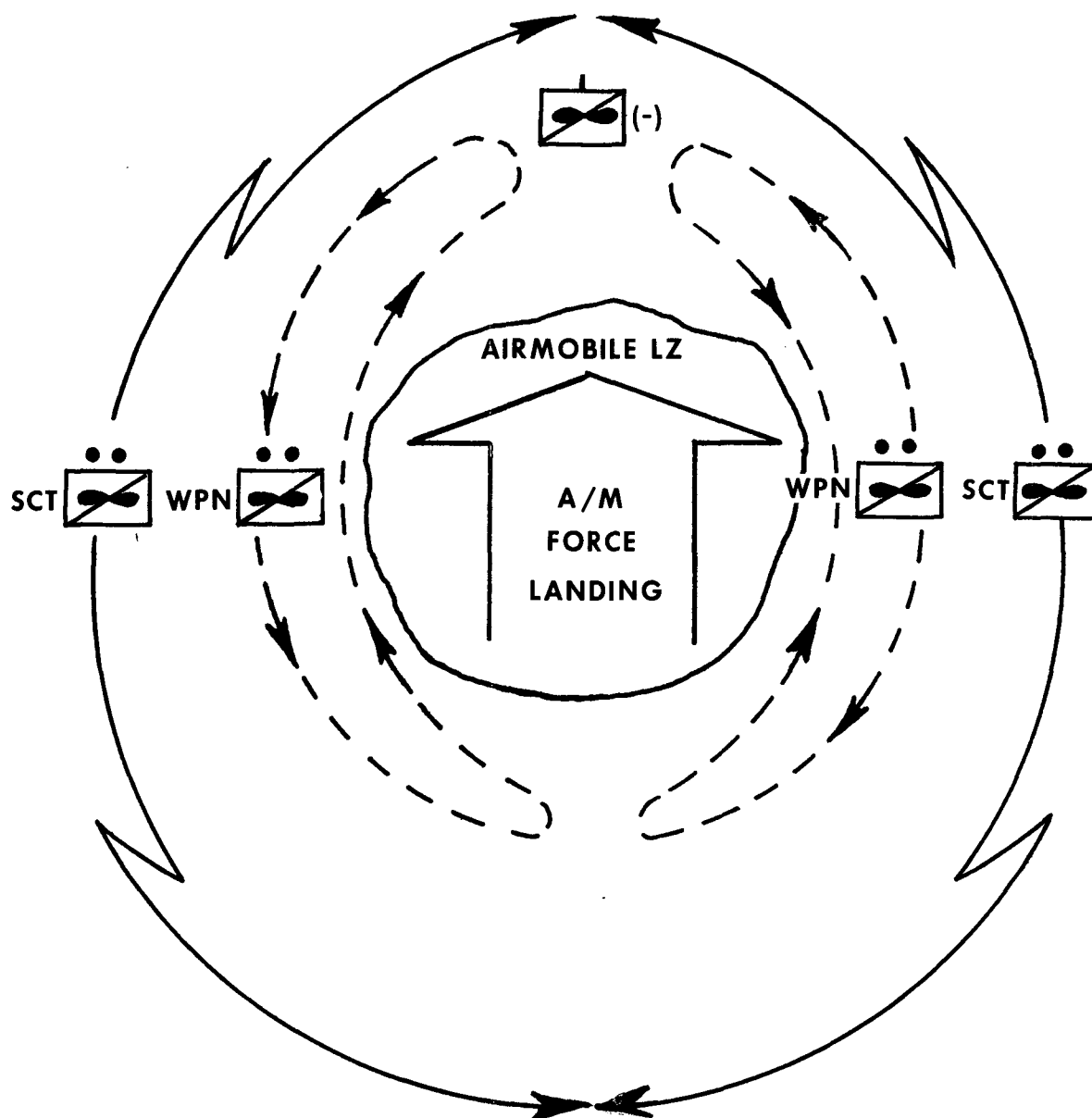
(2) Establish an air screen along a sector of the route.

(3) Provide aerial security and screen the flanks of ground convoys moving along the designated route.

(4) Conduct route reconnaissance for trains moving along the route.

d. The aero rifle platoon establishes OP's on the terrain overlooking the route, and the aero weapons platoon is prepared to provide direct aerial fire support.

FM 17-37

**Legend:**

----- Flight path of attack Helicopters

Figure 5-5—Continued.

e. The air cavalry troop has a limited capability for providing security for an installation. When required to conduct such operations, the aero scouts will establish an air screen around the installation perimeter to detect an enemy threat and provide early warning. The aero rifle elements establish OP's and conduct dismounted patrolling to provide early warning of an enemy threat. The aero weapons platoon provides direct aerial fire support for the other elements of the troop.

f. Because of its speed of maneuver and flexibility, the air cavalry troop is well suited to react when the rear area is threatened by airborne, air-mobile, or guerrilla attack. The aero scouts will perform an area surveillance of the rear area and continuously observe open areas suitable for landing zones or drop zones and potential assembly areas for enemy forces. The aero rifle platoon may establish OP's emplace obstacles throughout the area, or periodically conduct dis-

mounted patrols in areas that are potential assembly areas for guerrilla forces. When an enemy threat develops, the air cavalry troop is rapidly employed, for quick reaction, to engage and fix the enemy force. The aero scouts may guide the rear area security force to the threatened area. The aero weapons platoon is prepared to provide direct aerial fire support for the other elements of the troop and can be used to engage enemy troops.

5-7. Security Force for Airmobile Operations (When Directed)

a. A security force for an airmobile force operates to the front and flanks of an airmobile force formation en route to, and from a landing zone; provides security in and around the landing zone until ground security is established; and provides security for aircraft departing the landing zone.

b. The aero scout platoon, as part of a security force, precedes the airmobile formation reconnoitering the air routes for possible enemy threats to the airmobile force. On arriving at the landing zones, the platoon conducts aerial reconnaissance in and around the landing zone. The aero scouts may employ reconnaissance by fire and observation of the landing zone to detect any enemy presence. Upon arrival of the formation, the aero scouts will conduct an air screen around the landing zone until the lift aircraft depart. After the lift aircraft have departed and the ground ele-

ments have established security, the aero scouts may rejoin the airmobile formation and precede it in an air route reconnaissance role.

c. The aero rifle platoon, as part of the security force, can provide security for the airmobile force during the landing phases by preceding the airmobile force to the landing zone and establishing a perimeter defense. Once the airmobile force has landed and is prepared to assume its primary mission, the aero rifle platoon may be extracted or remain in the landing zone for security during cargo or equipment delivery.

d. The aero weapons platoon provides security for air cavalry and airmobile forces enroute to the landing zone, during the landing phase, and during the departure of the force aircraft from the landing zone. The platoon may deliver assault and/or suppressive fires and assist the aero scout platoon and aero rifle platoon by firing on targets of opportunity.

5-8. Screening Force

a. A screening task is characterized by the employment of few forces over a wide area. The air cavalry troop may appropriately and effectively conduct a screening mission as part of its parent squadron or independently for a supported unit.

b. The troop performs a screening mission by maintaining surveillance over an extended frontage to the front, flank, or rear of a moving or stationary force and provides early warning by observing, reporting, and maintaining visual contact with all enemy forces encountered. The troop conducts a screening mission with aero scouts reconnoitering along the designated front or patrolling between OP's and the aero rifle elements establishing surveillance OP's along the front. The aero weapons elements provide direct aerial fire support, or complement the aero scouts by forming mixed platoon teams when the frontage is too wide for the aero scouts to cover effectively.

c. Observation posts should be located on terrain that provides the best field of observation. The aero rifle platoon can most effectively occupy four OP's. Eight OP's may be assigned, although when occupying more than four OP's, the platoon cannot perform patrol action.

d. The air cavalry troop, deployed over a wide area, observes and reports enemy activity. Elements of the troop may engage small enemy patrols within their capability. When an enemy force posing a threat to the screened force ap-

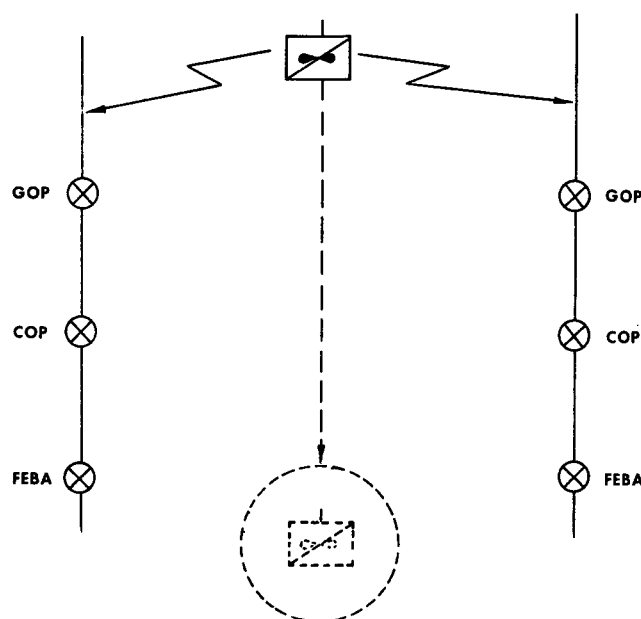


Figure 5-6. Air cavalry troop as part of a security force (screen) in the defense.

FM 17-37

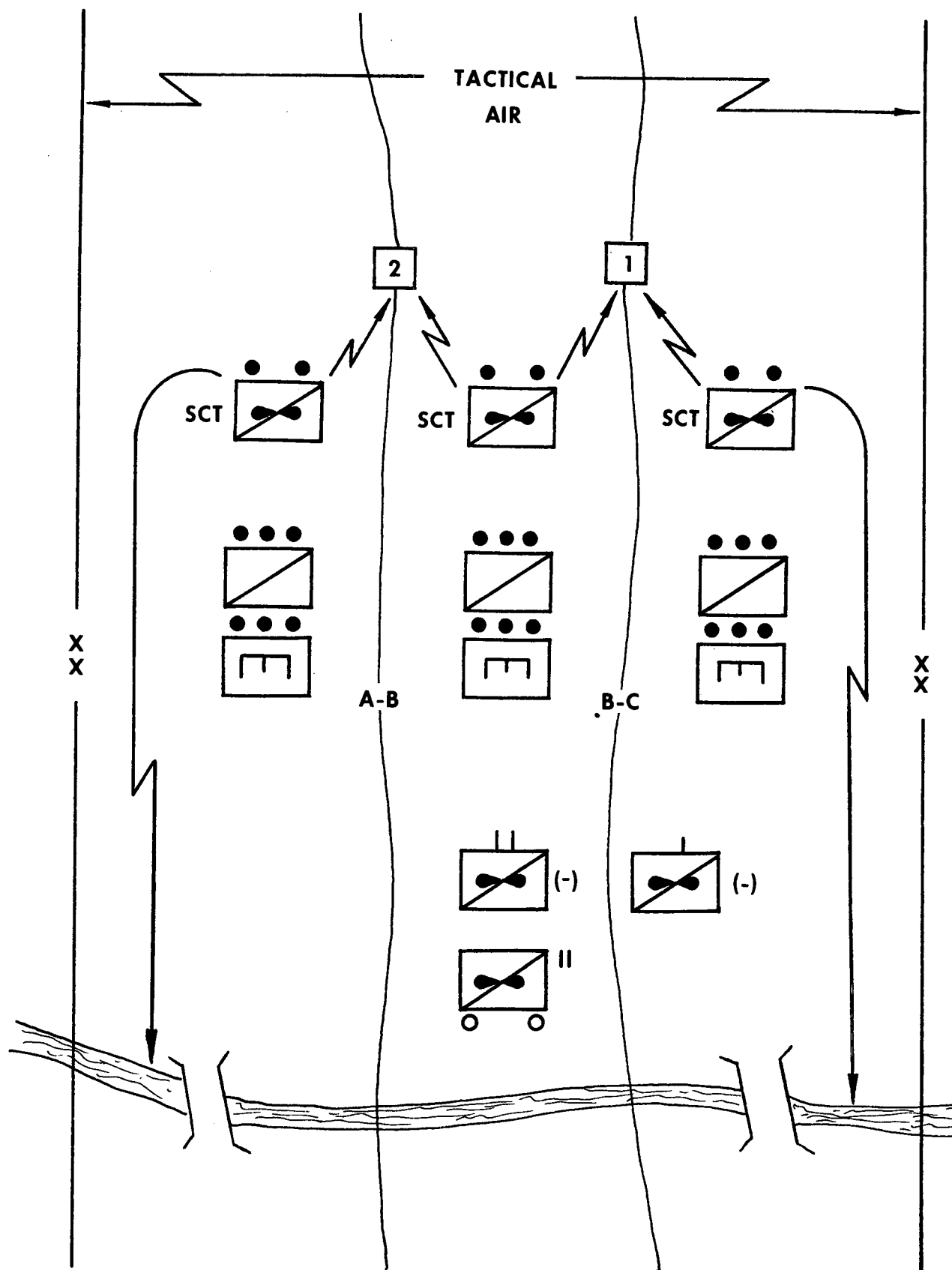


Figure 5-7. Air cavalry troop as part of a covering force.

proaches, it is reported by the fastest means available. The enemy is kept under observation, and indirect and direct fires are used to harass, disrupt, or delay his advance. The troop may be required to rapidly assemble and conduct a delaying action to give the screened force time to react.

5-9. Covering Force

a. The covering force engages in any types of action necessary for the successful accomplishment of its mission. When participating as part of an advance covering force, the air cavalry troop normally conducts a route or zone reconnaissance. When employed as part of a rear covering force, When participating in a flank covering force mission, the techniques employed are similar to those of a flank guard operation. The primary difference is that a covering force operates at a greater distance from the protected force than a guard force. This distance is greater than the range of normal supporting artillery of the protected force; therefore, artillery support must be provided to the covering force. The air cavalry troops are well

suited to perform as part of a covering force. The covering force must not become decisively engaged or allow itself to be bypassed or enveloped (fig 5-7).

b. The air cavalry troop normally operates as part of a covering force when the covered force is advancing to contact, is engaged in area or mobile defense, or is conducting a retrograde movement.

c. When the troop is employed as part of a covering force for an advancing unit, it performs reconnaissance within its assigned zone to locate enemy forces. When contact with the enemy is made, the troop attacks and destroys or disperses the enemy, within its capability, without becoming decisively engaged. An enemy force may be bypassed on order of the squadron commander.

d. The air cavalry troop may be employed as part of a covering force for a unit conducting a retrograde operation. The troop conducts delaying actions in the area designated by the commander of the protected force. The troop may be assigned a sector and be reinforced by other squadron elements in conducting the delaying action.

CHAPTER 6

ECONOMY OF FORCE OPERATIONS

(STANAG 2099, 2134)

6-1. General

a. The air cavalry troop normally conducts offensive, defensive, and retrograde operations when acting in an economy of force role; however, these operations may also be necessary to accomplish reconnaissance and security missions.

b. Due to its mobility, the air cavalry troop can perform an economy of force role, but the commander must be cognizant of its limited ground retention capability.

6-2. Offensive Operations

a. The air cavalry troop may be employed in the attack as part of the air cavalry squadron or it may assist the attack of a larger force by attacking to accomplish its economy of force mission. It will seldom attack as part of a larger force to seize a portion of the force objective. The troop may attack with or without additional elements under its operational control. It may attack by employing air and dismounted elements or by air elements only. Normally, the dismounted element does not attack without the direct fire support of the air elements. The troop attacks to reduce enemy positions that threaten the accomplishment of its mission, or it may be ordered to attack to delay or destroy enemy forces that threaten the supported or protected force.

b. The air cavalry troop, due to its mobility, can mass its elements rapidly to launch an attack to reduce small enemy positions that are encountered. Normally, the troop engages in offensive action as a unit.

6-3. Employment Concepts for Offensive Operations

a. The aero scout platoon is not organized to conduct independent offensive operations. It may engage in offensive actions in conjunction with other elements of the air cavalry troop or with a supported unit. The aero scout platoon may be

employed as an aerial security force to provide reconnaissance and security for the maneuver force or, to a limited extent, in the base of fire. The platoon has a limited capability to perform both roles simultaneously.

b. The aero rifle platoon may be required, within its capabilities, to attack to accomplish its assigned mission. It may attack as part of the troop or independently. Normally, the platoon is the dismounted maneuvering force in the air cavalry troop attack.

c. The aero weapons platoon will provide direct aerial fire support for the dismounted maneuvering force of the troop, or it may employ its fires in independent action against the enemy by using harassing or "hunter-killer" tactics. The platoon is capable of delivering massed aerial fires for a short period of time or continuous fire, of lesser volume, by employing only one part of the platoon at a time and relieving on station with the other. The platoon can move rapidly over wide areas, unrestricted by terrain to engage targets of opportunity or to support the offensive action of friendly forces. The platoon normally operates as part of the air cavalry troop in the conduct of offensive actions.

6-4. Preparation for the Attack

a. The air cavalry troop commander uses all available time to prepare the troop for the attack. He issues a warning order, makes an estimate of the situation and tentative plan, makes a personal reconnaissance, completes the plan, and issues his oral order. At all times, he must actively supervise the execution of orders.

b. In organizing for combat, the air cavalry troop commander may use his elements as organized or he may cross attach elements to form provisional units. When the provisional organization has been announced by the troop commander, the leaders to which additional elements are attached coordinate their actions.

c. Coordination with other units is accomplished during the reconnaissance. If the attack is to be made over or in conjunction with friendly units the troop commander or his liaison representative contacts the commanders of those units and accomplishes coordination. This includes determining the location of leading ground elements, the use of recognition signals, the plan of supporting fires, and suitable fire control measures. Linkup by ground troops is coordinated if required. (This is generally planned in limited objective operations by the troop.)

d. Before the troop attacks, the commander normally makes a personal air reconnaissance with his subordinate leaders accompanying him. If time or the situation does not permit a personal reconnaissance, a detailed map study is made. During the reconnaissance, the commander seeks the following information:

- (1) Exact location of enemy positions.
- (2) Exact or possible location of enemy air defense weapons.
- (3) Flight routes to the objective.
- (4) Landing zones and direction of attack for air and dismounted elements.
- (5) Enemy activities that might reveal enemy plans.
- (6) Positions of friendly units.
- (7) Fields of fire from air and ground positions.
- (8) Location and extent of natural obstacles that may be used to advantage.
- (9) Key terrain features to assist in control.

6-5. Plan of Attack

a. The plan of attack is designed to insure teamwork and maximum coordination within the attacking force throughout the operation. The plan must be simple, but must cover all essential details. It includes the who, what, when, and where, and possibly how and why of troop actions in carrying out the assigned mission.

b. The scheme of maneuver includes the composition of the maneuver force, reserves, the location of landing zone and approach route to the objective, and the method of advance.

c. The fire support plan includes plans for employment of organic aerial and supporting fires, and signals for lifting or shifting the fires.

d. The plan of attack will include provisions for security of the dismounted maneuver force during

the attack; for consolidation of the position, for reorganization after the attack; and, if appropriate, for resumption of the advance.

6-6. Conduct of the Attack

a. The air cavalry troop attacks by fire and maneuver. Air-to-ground fires are used to neutralize, disorganize, and destroy the enemy forces. The dismounted element moves onto the objective to complete the destruction of enemy forces. The troop commander places himself where he can best control the air and ground elements during the attack. He maintains communications with his attacking elements and with higher headquarters. Radio is the primary means of control but alternate control means, such as pyrotechnic signals, should be planned.

b. When the aero scout platoon is employed as an air security force, it will perform continuous reconnaissance of enemy positions, reporting any changes in strength or disposition of the enemy. It will observe any weakness in the enemy defense and keep the commander of the attacking force informed. While the attack is conducted by the

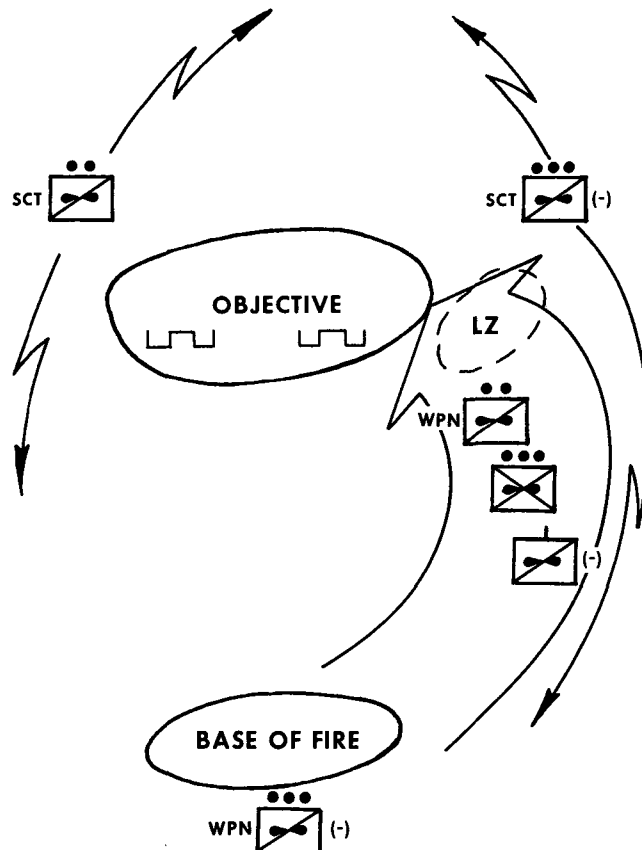


Figure 6-1. Air cavalry troop in a coordinated attack.

maneuver force, the aero scouts screen to the flanks and rear to prevent enemy surprise attack. When the attacking force is air assaulted into the attack position, the aero scouts reconnoiter the landing zone prior to and during the landing. After the objective is reached, the aero scouts provide security to the front, flanks, and rear during consolidation and reorganization, and maintain visual contact with any enemy forces that may have been driven from the objective.

c. Normally, the aero rifle platoon is the assault force in a coordinated troop attack. The platoon is airlifted by its organic lift aircraft into a landing zone by using favorable air routes. When terrain and the situation permit, the landing zone is selected to permit the platoon to approach an enemy position from the flanks or rear. Once dismounted, the entire platoon maneuvers in the attack, with the aero scout and aero weapons platoons providing security and direct aerial fire support. As the platoon is nearing the objective and the assault begins, prearranged signals are used for the support elements to lift or shift fires to allow the platoon to move onto the objective. After the platoon has taken the objective, consolidation, reorganization, and preparation for extraction or continuation of the mission is accomplished. During the dismounted attack, the aircraft orbit or loiter nearby and are prepared to extract the platoon when the mission is accomplished.

d. When operating in support of the aero rifle platoon in offensive actions, the aero weapons platoon will provide direct fire support during the air assault of the platoon into the landing zone; while the platoon is engaged in the attack, and during consolidation and reorganization after the attack; and during the extraction from the pickup zone. The aero weapons platoon leader coordinates with the aero rifle platoon so that the heaviest volume of fire is available during the assault phase of the dismounted attack. Close coordination also insures that supporting fires are shifted to the rear and flanks of the objective as the riflemen move on to the objective. The aero weapons aircraft continue to deliver harassing fires on the enemy during the consolidation and reorganization by the aero rifle platoon.

e. The aero scout platoon may assist the base of fire. It has the advantage of being able to move rapidly in and out of positions, over terrain that would be difficult or impassable for ground units. It will use firing passes in support of the attacking force. When used to assist the base of fire,

aero scout elements may locate and mark by fire the targets for the maneuver element and other supporting aerial weapons.

f. When the aero weapons platoon is engaged in independent offensive action, it employs its firepower to harass, interdict, disorganize, and demoralize the enemy. Because of its air mobility, it may penetrate enemy lines to conduct raid type operations in the enemy rear. It may engage enemy reserves, column convoys, or supply installations. By striking in irregular patterns, the enemy can be caused to devote more than normal effort to rear area security. When conducting independent engagements, the platoon commander must consider method of engagement, route to the target, direction of attack, formation, and method of disengagement. The aero weapons platoon may be committed independently as the leading element in a troop counterattack. In this case, the same factors must be considered as in any other independent engagement. FM 1-110 and FM 1-40 contain a detail discussion of employment of attack helicopters.

6-7. Action on the Objective

a. Immediately upon taking the objective, the dismounted elements deploy and prepare to repel a counterattack. The aero scout elements reconnoiter to the flanks and front of the objective to maintain contact with enemy forces that may have been driven from the objective. The aero weapons teams orbit the objective to assist in repelling a counterattack, and deliver harassing fires on the enemy.

b. When the objective is taken, the position is consolidated and the platoons are reorganized for subsequent action.

c. The objective should be consolidated in minimum time. Plans for consolidation should be SOP and should include—

- (1) Establishing local security.

- (2) Preparation to repel counterattacks, to continue dismounted action, to prepare for extraction, or to defend the position as required by the mission.

d. Actions of the platoons in reorganization include—

- (1) Reporting by all elements of the status of personnel, equipment, and ammunition.

- (2) Redistributing personnel, equipment, and ammunition, as necessary.

FM 17-37

(3) Reporting by the platoon leaders to the troop commander of the status of the platoons.

(4) Evacuation of casualties, prisoners, and damaged equipment.

(5) Resupply by the lift aircraft as time and the situation permit.

(6) Rearming and refueling all aircraft as soon as practicable.

6-8. Defensive Operations

The air cavalry troop may be forced to engage in defensive actions to perform in an economy of force role. When operating alone, its ground holding capability is limited to that of one infantry platoon. The troop normally conducts defensive operations as part of its parent squadron or supported unit. The troop is most effectively employed in an area or mobile defense when it is assigned reconnaissance or security missions for a larger unit.

6-9. Mobile Defense

a. The mobile defense employs a combination of offensive, defensive, and delaying actions. Its success depends upon offensive action of the larger reserve. The primary objective of the mobile defense is the destruction of the attacking enemy force. Further details concerning the mobile defense are found in FM 17-1.

b. The air cavalry troop is employed in the mobile defense to extend the capabilities of the larger force by performing reconnaissance, surveillance, and security tasks. Specifically, the troop is best employed to:

(1) Extend the range of operations of the security force.

(2) Perform security missions (normally screens) between fixing forces.

(3) Perform security missions for the reserve.

6-10. Area Defense

a. Area defense emphasizes retention of, or control over, specific terrain based on firepower and force deployment on position in the forward defense area to stop or repulse the attacker. The forward defense area has priority for combat power in the area defense as compared to the reserves in the mobile defense.

b. The air cavalry troop is normally employed as part of the parent squadron or supported unit during area defense. The troop may be used as

part of a general outpost or as part of an airmobile counterattack force. It is not normally assigned a sector within the battle position because of its limited ground holding capability.

c. The troop may perform as a security force for the squadron during covering force operations or when the squadron is part of the general outpost. The speed and mobility of the troop provides the capability of covering large sectors more rapidly than ground cavalry units.

d. The air cavalry troop may be used as an airmobile reserve for the squadron.

6-11. Perimeter Defense

a. The air cavalry troop often employs the perimeter defense to protect itself while in an assembly area, while performing reconnaissance and security missions, or while preparing for other actions. It normally occupies an interior sector of the perimeter of the parent squadron base or the center of the supported unit.

b. The troop commander must plan and establish passive and active security measures. Positions should be selected to provide for—

(1) Concealment from air and ground observation.

(2) Approach and departure routes for troop aircraft which do not reveal the troop location.

(3) Inaccessibility to enemy ground forces.

(4) Sod or grass areas, if available, to reduce dust clouds that may expose the position.

(5) Adequate space for dispersion of aircraft, troops, and equipment.

c. The aircraft of the troop are dispersed within the perimeter while on the ground. The aero scout elements may provide aerial screening around the perimeter. The aero rifle elements establish a series of strong points, OP's, and LP's around the perimeter on the most likely avenues of enemy approach. The aero weapons elements are prepared to employ offensive action to engage an enemy force approaching the perimeter.

d. Because of the limited ground holding capability of the air cavalry troop, the troop commander must have detailed plans for rapid evacuation of the position. With its exceptional mobility, the troop can best protect itself by evasive action in the event of an enemy threat. All flyable aircraft must be airborne immediately in the event of direct enemy threats to the perimeter.

6-12. Retrograde Operations

The air cavalry troop may be required to conduct retrograde operations independently or as part of a larger force (squadron or brigade). It may be ordered to conduct these operations or the situation may dictate the execution of a delaying action, a withdrawal, or a retirement. Normally, the troop is best employed as part of a larger force.

6-13. Delaying Action

a. A delaying action is a retrograde operation in which minimum space is traded for maximum time, and maximum punishment is inflicted on the enemy without becoming decisively engaged. FM 17-1 contains a comprehensive discussion of the conduct of a delaying action by armor units.

b. The air cavalry troop commander considers the same factors when planning a delaying action as are considered by other armor unit commanders. He must, in addition, plan to take maximum advantage of these unique characteristics of his troop:

- (1) Helicopter mobility.
- (2) Extensive and flexible communication.
- (3) Substantial aerial firepower.

c. When required to conduct a delaying action, the troop's sector, the general area of the initial and successive delay positions, and the length of time the enemy is to be delayed in front of each position are normally designated by the higher headquarters. When forced to conduct an independent delaying action, the troop commander makes essentially these same decisions as a part of his plan.

d. The commander considering assigning a delay mission to the troop must recognize the troop's limitations, particularly its limited ground capability, i.e., a platoon, and that the troop can be better employed in support of a larger force conducting a deal.

e. In preparation for a delaying action, the troop commander accomplishes the following:

- (1) Issues a warning order.
- (2) Makes an estimate of the situation.
- (3) Makes a tentative plan.
- (4) Makes a map reconnaissance.
- (5) Makes a physical reconnaissance.
- (6) Makes decision and completes the plan.
- (7) Issues his order.
- (8) Aggressively supervises.

6-14. Employment Concepts in the Delaying Action

a. The troop commander positions the aero rifle platoon on the main avenue of enemy approach into the troop sector. The aero rifle platoon occupies the defensive position. Its platoon helicopters are held in laager or orbit areas, which they depart on order to extract aero rifle elements from preselected pickup zones, and insert on the next delay position.

b. The troop commander assigns the aero scouts the mission of screening at a considerable distance to the front and flanks to detect and give early warning of enemy approach, adjust long range supporting fires on the enemy when within range, and maintain visual contact with the enemy. The aero scouts keep the troop commander fully informed of the enemy's actions. As the enemy advances, the aero scouts withdraw to the banks of the troop delay position to provide protection against envelopment of the position or surprise.

c. As the enemy approaches the troop delay position, additional fires from the aero weapons platoon, and other fire support elements, e.g., artillery and, within its capabilities, the aero rifle platoon, are placed on the enemy force as it comes within range. This continuous buildup in the volume of fire is designed to disrupt his formations, cause him to deploy, and destroy as much of his force as possible. All practicable obstacles are used in the delay.

d. When it becomes apparent to the troop or higher commander that decisive engagement is imminent, the troop is ordered to withdraw to its next delay position. The troop executive officer and the platoon sergeants should reconnoiter the next delay position, plan its organization and, within their capability, prepare it for occupation by the troop.

e. The troop commander normally withdraws the aero rifle platoon first, insuring that its helicopters use concealed or deceptive routes to the next delay position. He next withdraws the aero weapons platoon, using its fires to harass and further delay the enemy between delay positions if possible. The last elements to withdraw are the aero scouts, who maintain contact with the enemy and continue to adjust supporting fires on his forces.

f. The troop continues to delay in this fashion until the enemy is halted, the delaying mission is ordered terminated, or the troop passes over friendly defensive positions.

FM 17-37

6-15. Withdrawal

a. A withdrawal is a retrograde operation in which all or part of a force disengages from an enemy force. Contact with the enemy is maintained until the withdrawal is completed. A withdrawal may be executed during daylight or darkness, and may be forced by enemy pressure or accomplished in furtherance of future tactical operations without enemy pressure.

b. The air cavalry troop is capable of conducting a withdrawal during day or night operations. Its air mobility enables it to break contact and withdraw with relative ease. This characteristic suits it to the role of covering the withdrawal of a larger force or assisting another force to break contact. The procedure described in paragraph

6-14 for withdrawing from a delaying position applies to any other withdrawal as well.

6-16. Retirement

a. A retirement is an orderly withdrawal of troops according to their own plan and not under enemy pressure. It may be made following a withdrawal from action or when no actual contact with the enemy has been made.

b. The air cavalry troop can conduct a retirement under any tactical condition with local air superiority. It is well suited to providing security to a larger force during a retirement. It may be appropriately employed as part of the covering force or as a flank or rear guard for the larger force.

PART THREE

CAVALRY TROOP

CHAPTER 7

GENERAL

Section I. INTRODUCTION

7-1. Purpose and Scope

a. Part Three is a guide for the employment of the cavalry troop of the air cavalry squadron.

b. It covers the organization, tactics, and techniques employed by the cavalry troop. Reconnaissance, security, offensive, defensive, and retrograde operations are covered in separate sections.

7-2. Missions and Capabilities of the Cavalry Troop

a. The cavalry troop is designed to perform reconnaissance and security operations and surveillance, and to engage in offensive, defensive, and retrograde operations as an economy of force unit. It is employed on missions that complement the squadron mission or the mission of the supported unit. The cavalry troop has the following capabilities:

(1) Collection of information of intelligence value, including information on potential chemical, biological, and nuclear targets and CB and nuclear damage assessment by using ground or airmobile means.

(2) Provide bank security for a larger unit on one flank.

(3) Act as a part of a security force between two larger units.

(4) Act as part of a divisional general outpost (GOP) or a corps covering force in defensive operations, or as part of a covering force in offensive and retrograde operations.

(5) Provide a screen for a larger unit.

(6) Perform rear area security as part of a larger force.

(7) Conduct offensive, defensive, and retrograde operations in reconnaissance and security missions or perform as an economy of force, reserve, dismounted, airmobile, or mounted role; being employed as a troop or having platoons under operational control of an air cavalry troop.

(8) Conduct chemical agent detection and radiological monitoring and survey operations.

(9) Perform damage control operations as part of a larger force.

b. The cavalry troop is capable of operating as an independent force for a limited period of time. The troop may be reinforced as required by the mission.

Section II. ORGANIZATION

7-3. General

The cavalry troop consists of a troop headquarters, a maintenance section, and three cavalry troop.

7-4. Troop Headquarters, Cavalry Troop

The troop headquarters comprises the troop com-

mand post. It is the operations and administrative center of the troop and is usually under the supervision of the executive officer. It consolidates and reports information, communicates, makes liaison, and coordinates plans with higher headquarters and adjacent units. Logistical requirements of the troop are also coordinated by this section. The headquarters is composed of the troop com-

FM 17-37

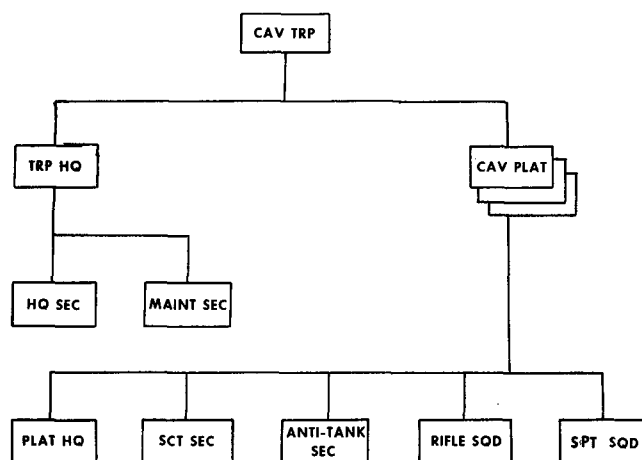


Figure 7-1. Cavalry troop organization chart.

mander, executive officer, first sergeant, supply sergeant, communications chief, liaison sergeant, three scout drivers, senior radio operator, troop clerk, and two radio operators (fig 7-2).

7-5. Maintenance Section

The maintenance section performs organizational maintenance on the vehicles, radios, and weapons of the troop. It has no vehicle evacuation capability and must depend on the squadron maintenance platoon for this support. The section is composed of the section motor sergeant, senior radio mechanic, armorer, radio mechanic, two maintenance data specialists, two wheeled vehicle mechanics, and a wheeled vehicle repair apprentice. Equipment in the section includes three trucks (3/4-ton), each with trailer.

7-6. Cavalry Platoon

The cavalry platoon consists of a platoon headquarters, scout section, antitank section, rifle squad, and a mortar squad. See figure 7-3 for organization, vehicles, and communication equipment.

a. Platoon Headquarters. Platoon headquarters consists of the platoon leader, the platoon sergeant, and a scout driver. Transportation is provided by a 1/4-ton truck.

b. Scout Section. The scout section consists of two scout squads with six men each. Each squad consists of a squad leader, assistant squad leader, two scout observers, and two scout drivers. The section leader also commands the first squad. There are two 1/4-ton trucks in each scout squad.

c. Antitank Section. The antitank section consists of a section leader, two gunners, two loaders, and two truck drivers. The platoon sergeant normally travels and operates with this section. Its main weapons are two 106mm recoilless rifles mounted on 1/4-ton trucks.

d. Rifle Squad. The rifle squad consists of a squad leader, two fire teams, and a light truck driver. Each fire team consists of a team leader, an automatic riderman, riflemen, and a grenadier. In addition to individual weapons, the squad has one light machinegun. Transportation is provided by a 3/4-ton truck.

e. Mortar Squad. The mortar squad consists of a squad leader, gunner, ammunition bearer, assistant gunner, and light truck driver. The squad is equipped with an 81mm mortar. Transportation is provided by a 3/4-ton truck with trailer.

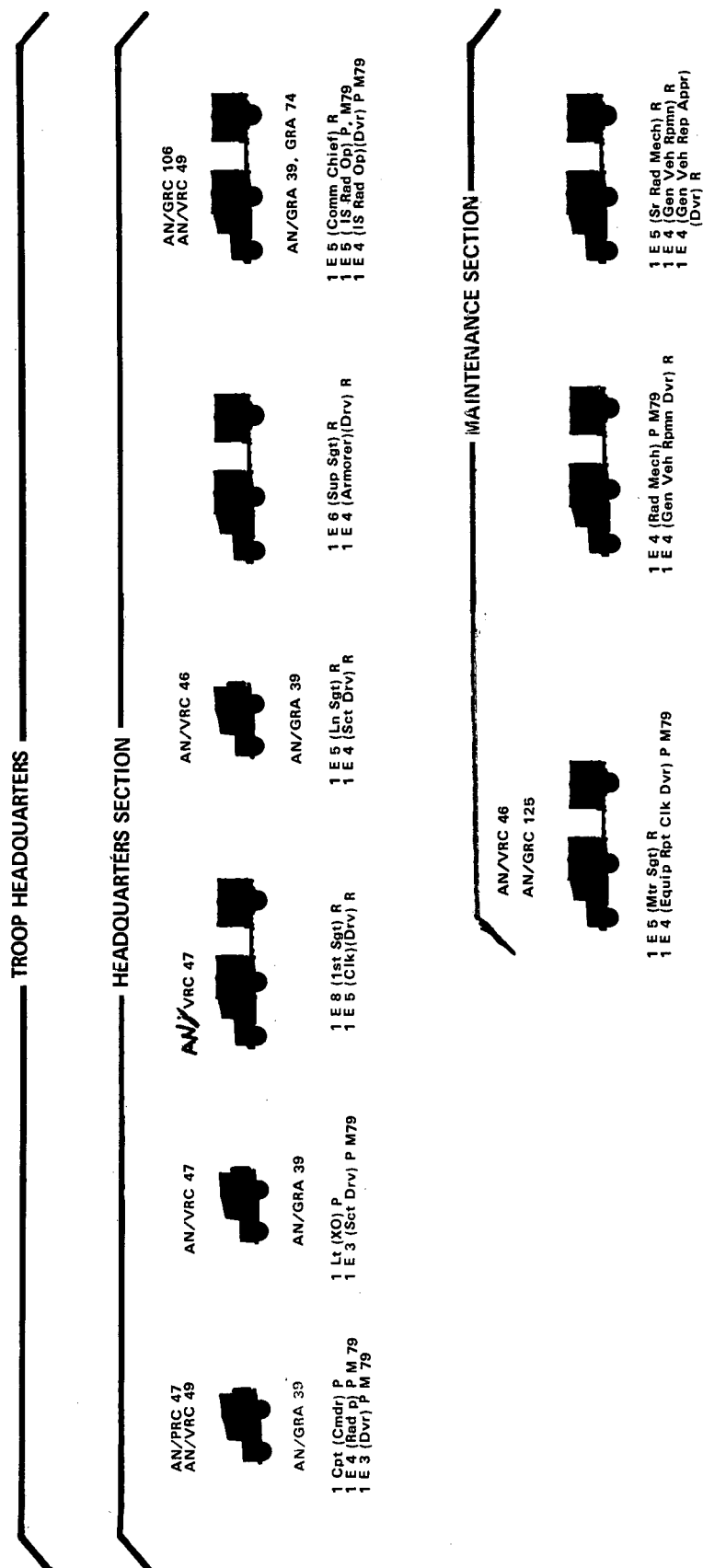
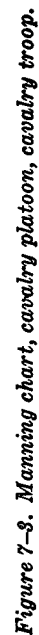


Figure 7-2. Manning chart, cavalry troop headquarters.



Section III. DUTIES OF KEY PERSONNEL

7-7. Duties of Key Personnel, Troop Headquarters

a. *Troop Commander.* Duties are explained in paragraph 3-10.

b. *Executive Officer.* The executive officer is second in command of the troop. He keeps abreast of the tactical situation and must be prepared to assume command at any time. As the principal assistant to the troop commander, the executive officer supervises the functioning of the troop support elements and the activities of the troop command post. The executive officer is responsible for the movement, location, and security of the troop command post. He insures that communication is maintained with the platoons, the troop commander, and the next higher headquarters.

c. *First Sergeant.* The first sergeant is the troop commander's administrative assistant. His duties vary from performing administrative and supply tasks to exercising authority when delegated by the troop commander. He assists the executive officer in the operation of the command post and supervision of logistical support elements of the troop.

d. *Communications Chief.* The communications chief assists the troop commander and executive officer on communications matters. He normally commands the command post vehicle and assists the executive officer and first sergeant with the operations of the troop CP. He trains communication personnel and supervises the installation, operations, and maintenance of troop communication systems. During operations, he insures that radio operators maintain efficient communication, that they record all incoming and outgoing messages, and that they are relieved properly (fig. 7-4).

e. *Liaison Sergeant.* The liaison sergeant provides direct communication between the troop command post and higher headquarters. He keeps informed of the existing tactical situation of the troop and the plans of the unit to which he is sent. He may also provide a radio relay station, carry messages and orders, and guide personnel or elements to the troop command post.

f. *Supply Sergeant.* The supply sergeant is the troop commander's supply assistant. He maintains appropriate supply records, submits reports as required, and request supplies necessary to sustain the troop.

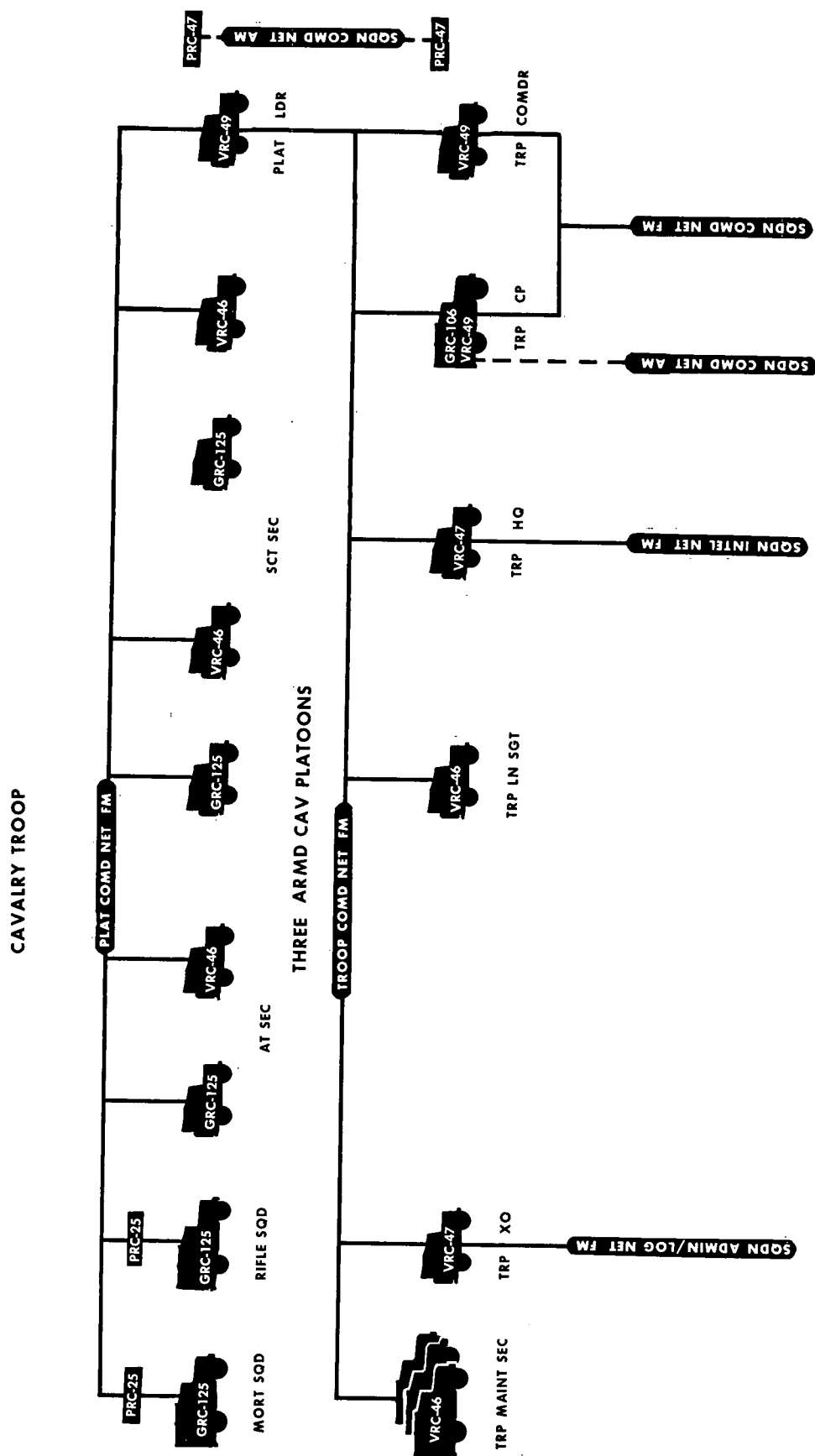


Figure 7-4. Communications schematic, cavalry troop.

Section IV. EMPLOYMENT OF THE CAVALRY TROOP

7-8. General

The cavalry troop is organized, trained, and equipped to preform reconnaissance missions and surveillance tasks; to provide security for the unit to which assigned or attached; and to engage in offensive, or defensive, or delaying action as an economy of force unit. The cavalry troop normally operates under control of the parent squadron; however, it may be attached or placed in support of a brigade or other comparable unit.

7-9. Organization for Combat

a. The cavalry troop commander is responsible for the organization for combat and employment of the platoons, operation of the troop command post, and control to troop trains. To determine the best organization of the combat force available to accomplish an assigned mission, the troop commander considers the factors of METT and the rules of engagement. The troop commander normally employs the cavalry platoons as organized. In some situations, he may reinforce one platoon with elements of another platoon or form provisional platoons (platoon teams). The troop commander may group the squads under troop control whenever it is advantageous to support the entire troop from one location.

b. Figure 7-5 illustrates several typical task organizations that can be formed by the organic elements of the cavalry troop.

7-10. Combat Support

a. The cavalry troop normally operates without attachments; however, a helicopter from squadron headquarters should be provided to facilitate command and conduct air reconnaissance. Elements of the air cavalry troop are frequently placed in support of the cavalry troop to facilitate the accomplishment of the troop mission. Artillery and engineers may be placed in support or attached. Tactical air and naval gunfire may be employed, if available, to support troop operations.

b. Usually, the supporting air cavalry elements will be an aero scout section, an aero weapons team, or a combination of these. Lift aircraft from the squadron aviation platoon or from one of the air cavalry troops may be furnished to permit one or more of the cavalry platoons (less rifle and support squad vehicles) to be employed in a rifle platoon airmobile role. When aero scout or aero

weapons support is provided, it should be used to extend and complement the cavalry troop effort by—

- (1) Screening to the front or flanks.
- (2) Reconnoitering lateral roads, dominating terrain, and areas inaccessible to surface vehicles.
- (3) Locating bypass routes around enemy positions and obstacles.
- (4) Establishing and maintaining contact with adjacent units.
- (5) Performing communications relay.
- (6) Locating favorable routes of attack and protecting flanks when the troop is required to attack to accomplish its mission.
- (7) Assisting in offensive, defensive, and delaying actions.
- (8) Establishing contact with the enemy.

c. Artillery support is usually provided by the artillery units supporting the parent squadron or the major divisional unit with which the troop is being employed. The cavalry troop will have a forward observer if artillery is in direct support of, or attached to, the squadron. When a forward observer is not available, the troop commander requests artillery support through the next higher headquarters and adjusts fire using assigned personnel.

d. Engineers may be attached to, or placed in direct support of, the cavalry troop when the situation requires their support. Engineer reconnaissance parties may be employed with the troop to collect information on roads, bridges, and obstacles.

e. Tactical air and naval gunfire support may be available to the troop. FM 61-100 and FM 17-1 give details on its employment.

f. Army aviators from aviation assets of higher headquarters may provide additional support.

7-11. Employment of Troop Headquarters

a. General. During combat operations, the troop headquarters is normally organized into the troop command post and troop trains. The troop command post is composed of the personnel and equipment required for control of the troop. The trains include the organic or attached personnel and equipment required for logistical support of the troop. FM 17-1 contains a detailed discussion of trains and logistical support.

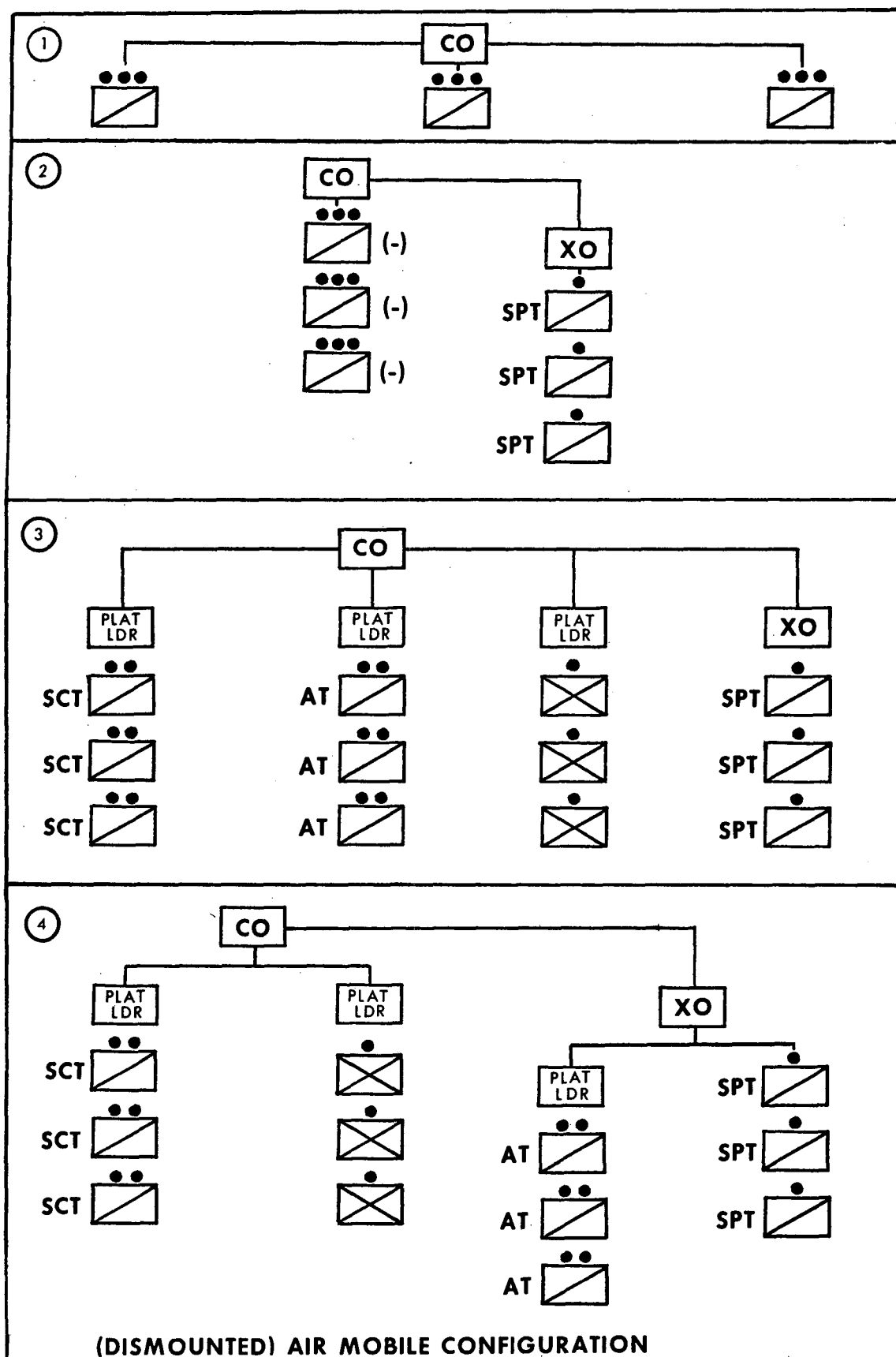


Figure 7-5. Types of task organizations for combat of the cavalry troop.

(1) *Troop commander.* When the troop is committed, the troop commander normally controls the unit from his command vehicle or from a helicopter. He may be accompanied by an artillery forward observer. The road front usually covered by the troop requires that the troop commander position himself centrally or on terrain that is favorable for communications, observation, and control.

(2) *Command post operations.* The troop command post is organized around the 3/4-ton truck organic to the troop headquarters section. Its operation is supervised by the troop executive officer who is assisted by the troop first sergeant. Other vehicles found with the CP may include the executive officers vehicle, the attached medical evacuation vehicle, and the liaison vehicle. The executive officers normally remain in or near the CP to be continually aware of the tactical situation and to be ready to assist the troop commander with troop operations.

(3) *Location.* The CP follows the combat elements of the troop by bounds during offensive operations. During defensive or retrograde operations, the command post vehicle should be located at the rear of the combat elements. When not moving, it is located in a position which permits the best communication with the troop commander, the platoons, and the squadron command post, or the command post of the supported unit. The position selected should also provide cover and concealment.

(4) *Report to higher headquarters.* The troop CP, supervised by the executive officer, forwards all situation, operation, and administrative reports to higher headquarters.

b. *Troop Trains.* Troop trains consist of the

headquarters section (minus the personnel operating the CP), maintenance section, and attached logistical elements. Troop trains may operate as unit trains or be formed into troop combat trains and field trains. Combat trains, under control of the executive officer or first sergeant, are located in the vicinity of the troop CP and consist of those elements that accompany the troop to provide immediate logistical support during combat operations. They normally include the medical aid-evacuation team, elements of the maintenance section, and attached squadron supply vehicles as required. Other organic or attached supporting elements constitute the troop field trains and are located with squadron trains or the field trains of the supported unit. For a detailed discussion of the composition and employment of the troop trains, refer to FM 17-1.

7-12. Command and Liaison

a. The commander of a cavalry troop exercises command and control of his troop through his executive officer, first sergeant, and platoon leaders. His instructions or directions are transmitted as troop order. Control means used by the troop commander are discussed in FM 17-1.

b. Liaison personnel are provided in the troop headquarters section. Normally, this liaison part is dispatched to the next higher headquarters where it conducts its operations. When detached from the parent squadron and a requirement exists for liaison with a flank unit as well as with higher headquarters, a liaison officer from the squadron headquarters should be attached to the troop for this purpose. For duties of liaison personnel, refer to FM 17-1.

CHAPTER 8

RECONNAISSANCE OPERATIONS

(STANAG 2022)

Section I. INTRODUCTION

8-1. General

a. Reconnaissance is one of the primary missions performed by the cavalry troop. The troop may conduct assigned reconnaissance missions as part of the squadron or independently when the troop is attached to another unit. Within the area to be reconnoitered, platoons are assigned zones, routes, or areas and are prepared to engage in combat as required, with their capabilities, to accomplish the mission. The cavalry troop usually performs reconnaissance to obtain information about the enemy. Reporting of enemy information will therefore take first priority. Information about the area of operations that has tactical significance, such as terrain, trafficability, and landing zones for airmobile forces, should be reported promptly. Information of available resources such as repair materials, food, water, fuel, or utilities should be reported as directed.

b. The information obtained by reconnaissance is used by commanders at all echelons in formulating their plans for future operations. Information must be timely, accurate, and reported promptly. FM 17-1 and FM 17-36 contain detailed discussions of types of reconnaissance, missions, fundamentals of reconnaissance, and additional considerations appropriate to special reconnaissance operations.

c. Reconnaissance may be accomplished mounted, dismounted, airmobile, or by a combination of these means. Normally, the troop will combine at least two of these means to accomplish its mission. Scout elements employ stealth, infiltration, observation, and movement to obtain information. When necessary, the troop will fight to accomplish its reconnaissance mission. Positive and negative information is reported.

d. The cavalry troop is organized and equipped to operate most effectively along a single major route or axis of advance when contact is imminent. When the tactical situation permits, more than one route or axis of advance can be assigned,

and the troop covers the additional routes or axes of advance with appropriate elements from the troop.

8-2. Reconnaissance Frontages

There is no established frontage for a cavalry troop to reconnoiter. The visibility, terrain, road net, anticipated enemy contract, nature of the information sought, and time available are some of the factors that influence the frontage assigned to the troop. Wider frontages may be assigned when air cavalry elements are available. The frontage to be covered by the troop is usually designated by the headquarters directing the reconnaissance operation.

8-3. Conduct of Reconnaissance Operations

a. The cavalry troop uses its communications, firepower, and mobility to conduct reconnaissance operations. Scouts are used to accomplish a mission requiring stealth or infiltration. In the conduct of a reconnaissance mission, collecting information is the primary task and must not be jeopardized by unnecessary combat with the enemy. In many situations, the troop will be required to fight to obtain the desired information. Whenever possible, the troop should avoid combat and bypass enemy resistance to accomplish the assigned mission. When required to bypass an enemy force, the troop commander must report to the next higher commander the enemy situation and his decision to bypass the enemy. When the troop must bypass and must maintain surveillance of the enemy force, the scouts or elements from an air cavalry troop may be used to accomplish this task.

b. The troop formation must provide for adequate coverage of the assigned route, zone, or area. If less than three platoons are required, the remainder of the troop may be employed as a reserve to provide depth to the formation, provide flank security, and support the forward elements

of the troop. The reserve may also be committed to find a bypass around enemy positions or to expedite the operation by reconnoitering key terrain features.

c. Figures 8-1 through 8-3 show typical cavalry troop reconnaissance formations.

8-4. Reconnaissance Instructions

a. Reconnaissance instructions must be complete and must include exactly what combat information is to be obtained, the time by which the information must be reported, where the information is to be sought, and when the mission is to be executed. Essential details include:

- (1) Pertinent information of the enemy and friendly troops.
- (2) Plans of the higher commander.
- (3) Specific information desired.
- (4) Zone, area, or route to be reconnoitered.
- (5) When, where, and how information is to be reported to the higher commander.
- (6) Time and method of departure.
- (7) Phase lines, checkpoints, contact points, objectives, and, when desirable, the times by which they are to be reached.
- (8) Rules of engagement.
- (9) Action to be taken when the mission is completed.

b. A route, zone, or area reconnaissance mission

is assigned to the cavalry platoon leader, usually by oral order by the troop commander. The platoon leaders then prepare and issue orders to their platoons. When the situation permits, they assemble their key noncommissioned officers to receive the order. After the reconnaissance has started, additional instructions are disseminated by radio, messenger, or by the platoon leaders in person.

8-5. Transmitting Information

a. Rapid transmission of information is essential to the success of any reconnaissance mission. All members of cavalry units must be indoctrinated with the need for rapid and accurate transmission of all information gathered. Use of a standard report format facilitates transmission of essential information. A unit has not fully accomplished its mission until it has reported the results of its reconnaissance to higher headquarters.

b. Information is transmitted without delay from squad or section to platoon and from platoon to higher headquarters. Positive and negative information, regardless of its apparent value, is forwarded to higher headquarters. This information may be of extreme importance to the higher headquarters when considered in conjunction with information received from other sources. Negative information is often as important as positive information.

Section II. EMPLOYMENT

8-6. Movement During Reconnaissance

a. The cavalry platoons do not have the cross-country mobility and inland waterway crossing capability of armored cavalry platoons, however, they do have the capability of being airlifted by helicopters organic to the squadron except for 3/4-ton trucks of the rifle and support squads. Both aircraft and vehicles must be reduced in weight by removal of all excess equipment prior to the airlift. Antitank section vehicles will require two lifts. Their ground and air mobility can best be exploited by aggressive action.

b. When the situation is vague or the time is critical, the platoons advance in column and at maximum speed with scout elements moving in front by bounds. The distance between vehicles varies with terrain. The antitank sections maintain observation over the area in which the scouts

are operating. The purpose of extending the formation to this degree is to permit the platoons to move at maximum speed and at the same time minimize the possibility of involving entire platoons in an ambush or trap, and to avoid exposing all elements of the platoons to enemy fire at one time.

c. When enemy contact becomes imminent or has been made, all elements of the platoons normally advance by bounds, with one element covering the movement of another.

d. During reconnaissance missions, the platoons normally advance along one axis or route in column formation. In cross-country operations, some lateral dispersion within these formations is made.

e. The scout section normally leads the platoons. Two squads normally work together and move by

bounds. This procedure assists in locating enemy positions, furnishes fire to cover the movement of leading vehicles, and insures rapid transmission of information. The following basic techniques of movement are used by scout sections:

(1) Before moving, the leader of the scout element must determine his next position and the most favorable covered and concealed route to it. During movement, scout element must move as rapidly as the situation permits, being on the alert for the enemy and ready to move quickly to cover and concealment.

(2) When approaching a position that will afford new areas of observation, the commander of the leading vehicle should stop his vehicle and dismount while deflade to prevent enemy forces beyond the position from detecting his presence. The fundamentals of individual movement discussed in FM 21-75 are applicable. When the position is secure, the overwatching scout element moves forward. When the commander and observer move forward dismounted, the driver should man the machinegun and cover their advance.

(3) Troops must not become vehicle bound. When the vehicle is stationary, they should dismount to improve observation, prevent enemy detection, and provide security.

(4) The distance of each bound is determined by the nature of the terrain and the range at which the covering element can effectively support the moving element. Normally, this distance should not exceed the effective range of the light machinegun.

(5) Movement in each bound must be completed rapidly; however, it should not be done so rapidly that efficiency of operation and coordination between elements are lost.

(6) When covering elements have been signaled forward, they should take the shortest and fastest route forward to avoid delaying the continuation of movement.

(7) When the movement of advancing vehicles is being covered, observation must be directed at terrain from which fire is expected and not at the moving vehicles. In doing so, crews of the supporting vehicles are usually able to detect enemy fire more easily and to engage hostile forces more rapidly. Vehicles within the scout squad, or scout squads with the section, should advance by employing either successive or alternate bounds.

(a) *Successive bounds.* In this method, the leading element, covered by the rear element, ad-

vances and takes up positions to support the advance of the rear element. The rear element, upon arriving at a position abreast of the leading element, halts and again supports the advance of the leading element. Only one element moves at any one time. This method is normally used when contact is imminent. This method provides more protection during movement than other methods.

(b) *Alternate bounds.* In this method, the leading element halts and takes up positions to support the advance of the rear element, which then advances past the leading element and takes up positions. The initial leading element then leapfrogs the initial rear element and advances to a new position. Only one element moves at any one time. This method of movement is usually more rapid than movement by successive bounds.

f. The antitank section usually moves by bounds, overwatching the scout section and the platoon leader.

g. The rifle squad usually follows the antitank section. It is prepared to initiate offensive action in support of the scout section, if it is required. During movement, the rifle squad provides some security to the platoon by observing to the flanks. When the antitank section halts, the rifle squad provides local security by dismounting the riflemen.

h. The support squad normally displaces forward from one firing position to another by bounds. The support squad should remain far enough to the rear of the platoon formation to allow employment of the mortar at the minimum range of the weapon. The squad leader monitors the platoon radio net to stay abreast of the situation and to keep the platoon leader advised of his status, location, and time of displacement. The support squad provides some security during movement by observing to the rear.

i. The platoon leader places himself where he can best control the platoon with particular attention to the scout sections. He must rely on the platoon sergeant to directly control the movement of the antitank section, rifle squad, and support squad.

8-7. Reconnaissance by Fire

a. Reconnaissance by fire is accomplished by firing on likely or suspected enemy positions in an attempt to cause the enemy to disclose his present position by movement or by return fire. During reconnaissance by fire, personnel with binoculars must continually observe the position being recon-

FM 17-37

noitered, so that any enemy movement or return fire will be definitely located. Reconnaissance by indirect fire has the added advantage of security for the scouts directing the fire and observing enemy reaction.

b. Reconnaissance by fire may be used when time is critical. It is made at the risk of losing surprise, but it tends to lessen the probability of moving into a well concealed enemy position without being aware of its presence. Within the platoons, reconnaissance by fire is normally accomplished by the antitank section and support squad. When scouts employ this technique, they must insure that their vehicles are in protected firing positions or they should dismount and fire from covered or concealed positions.

c. If the enemy returns fire, the unit proceeds to develop the situation. If the fire is not returned, the unit continues its mission. Caution should be exercised because reconnaissance by fire may fail to draw the fire of seasoned enemy troops.

d. If the enemy fails to return fire, it may be necessary for elements of the scout section to move to the flanks or rear of the suspected position to check it. Helicopter lift should be used whenever possible to facilitate this type of movement by the scout elements.

8-8. Action on Contact

When contact with an enemy force is made, the action taken by the platoon leader and their platoons falls into four distinct steps.

a. Deploy and Report.

(1) The platoons deploy to positions from which they can fire at or observe the enemy.

(2) The platoon leaders make a report of the enemy contact to the troop commander immediately.

b. *Develop the Situation.* The platoon leaders take the necessary action to determine the location, strength, composition, and disposition of the enemy encountered. The platoons use two methods in developing the situation, i.e., reconnaissance by fire or patrols or both.

(1) *Reconnaissance by fire.* In this method, the weapons of the platoons are fired on known or suspected positions in an effort to make the enemy disclose his position by returning the fire or by moving. See paragraph 8-7 for a detailed discussion of this method.

(2) *Patrols.* Mounted or dismounted patrols from the scout sections move to positions from which they can observe known or suspected enemy positions. The rifle squads may also be used to provide additional men for dismounted patrols. Patrols provide better security and, consequently, a better opportunity to surprise the enemy.

c. *Choose a Course of Action.* After developing the situation, the platoon leaders must choose a course of action that will take care of the immediate situation as well as assist with the assigned mission of the troop.

d. *Report.* The platoon leaders now make a complete report to the troop commander. This report includes the enemy situation as it has been developed and the course of action the platoon leaders will adopt. The troop commander normally approves the decision of the platoon leaders. He will, however, disapprove the decision if it interferes with the overall mission of the troop.

Section III. TYPES OF RECONNAISSANCE OPERATIONS

8-9. Route Reconnaissance

a. When enemy action is imminent, the troop usually is assigned one major route. In an area where little enemy action is anticipated, the cavalry troop may be assigned as many as three routes to reconnoiter. In some situations, the troop may reconnoiter more than three routes; however, such employment requires more time for completion of the reconnaissance and may subject the troop to defeat in detail.

b. The troop normally retains platoon integrity in conducting a route reconnaissance mission. If the troop is conducting a reconnaissance along a

single route, it usually advances in a column of platoons (fig. 8-1). Figures 8-2 and 8-3 indicate methods for conduct of reconnaissance on multiple axes.

c. The cavalry platoons may be directed to conduct route reconnaissance. If so, the platoons are normally assigned and can best reconnoiter one route. Route reconnaissance may be conducted forward, or to the rear, of friendly dispositions.

d. When the platoons perform route reconnaissance forward of friendly lines, enemy information is usually of primary concern. The platoons reconnoiter the route(s) assigned and all adjacent ter-

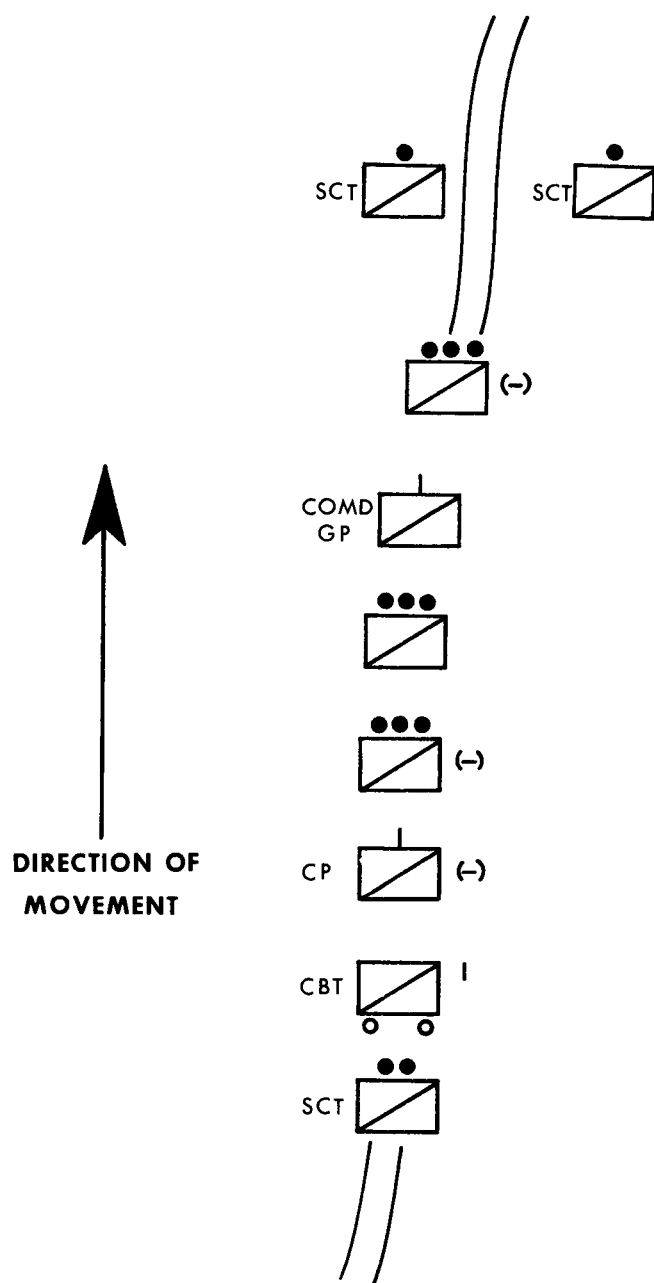


Figure 8-1. Cavalry troop conducting route reconnaissance in column formation.

rain, which, if occupied by the enemy, could influence movement along the route. The cavalry platoons operate as units, using the formation(s) best suited to the terrain and enemy situation. They take necessary steps to insure constant local security. Scouts normally lead the formations.

e. The platoons are usually supported by aero scouts from one of the air cavalry troops when conducting route reconnaissance. These aero scouts can be used to reconnoiter key or domi-

nating terrain and allow the cavalry platoons to concentrate on the route, thus enabling a much more rapid reconnaissance to be made.

f. Route reconnaissance behind friendly line is usually performed to determine the suitability of routes for the movement of larger forces or for use in retrograde operations.

g. All members of the platoons must have a working knowledge of the road, bridge, overhead clearance requirements, and inland waterway crossing capability of the force for which the reconnaissance is being accomplished. The platoons report route and bridge conditions, locations, and conditions of bypasses, fords, and obstacles, and information of the enemy and terrain that is likely to influence the movement of friendly elements.

h. Engineers should be attached to the cavalry platoons whenever they can facilitate the advance of the platoons and assist in collecting technical information. Engineers may assist the cavalry platoons by clearing mines, removing roadblocks, constructing hasty bridging, conducting bridge and defile reconnaissance, and construction, or improving bypasses.

8-10. Zone Reconnaissance

a. A zone reconnaissance is more detailed and time consuming than a route reconnaissance. When conducting a zone reconnaissance, without supporting air cavalry elements, the troop commander assigns portions of the troop zone to each cavalry platoon to coordinate movement, control fires, and fix responsibility. When air cavalry support is available, or when the troop is supporting an air cavalry troop, the troop commander may assign each platoon a route and specific locations to reconnoiter. The air cavalry elements reconnoiter the area between these routes, thereby expediting the conduct of the reconnaissance. Platoon zones are established by boundaries. Boundaries should be easily recognizable terrain features such as roads, streams, and ridge or tree lines.

b. Factors determining the width of the platoon zone are the pattern of the road net, terrain features, anticipated enemy activity, type of information desired, and time available for accomplishing the mission. The platoon can most effectively perform zone reconnaissance within a zone containing only one route. When performing this type of reconnaissance, the platoon reconnoiters and reports information on all routes, key or domi-

FM 17-37

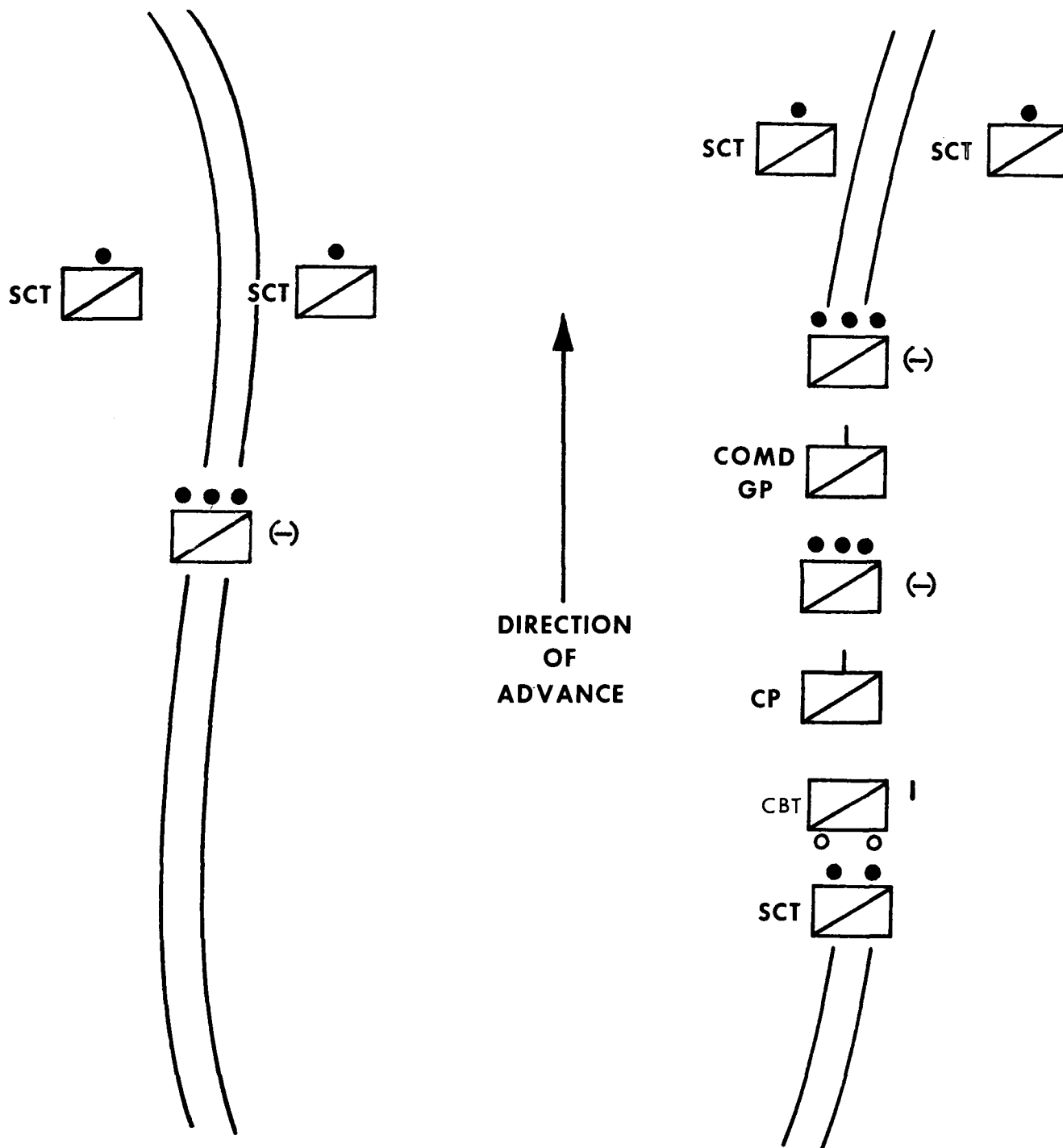


Figure 8-2. Cavalry troop conducting route reconnaissance on two axes.

inating terrain, and the location, strength and disposition of the enemy within the platoon zone. Less important terrain features in the zone are reconnoitered as time permits or the situation requires. The platoon must insure that terrain information is obtained and that no enemy forces are undetected. The platoon operates as a unit, using the formation best suited to the terrain and

enemy situation. Normally, scouts reconnoiter roads, trails, and terrain features within the zone, while the remainder of the platoon advances along the best available route or axis of advance prepared to support the scouts anywhere in the zone.

c. Aero scouts from one of the air cavalry troops should be used to reconnoiter those areas

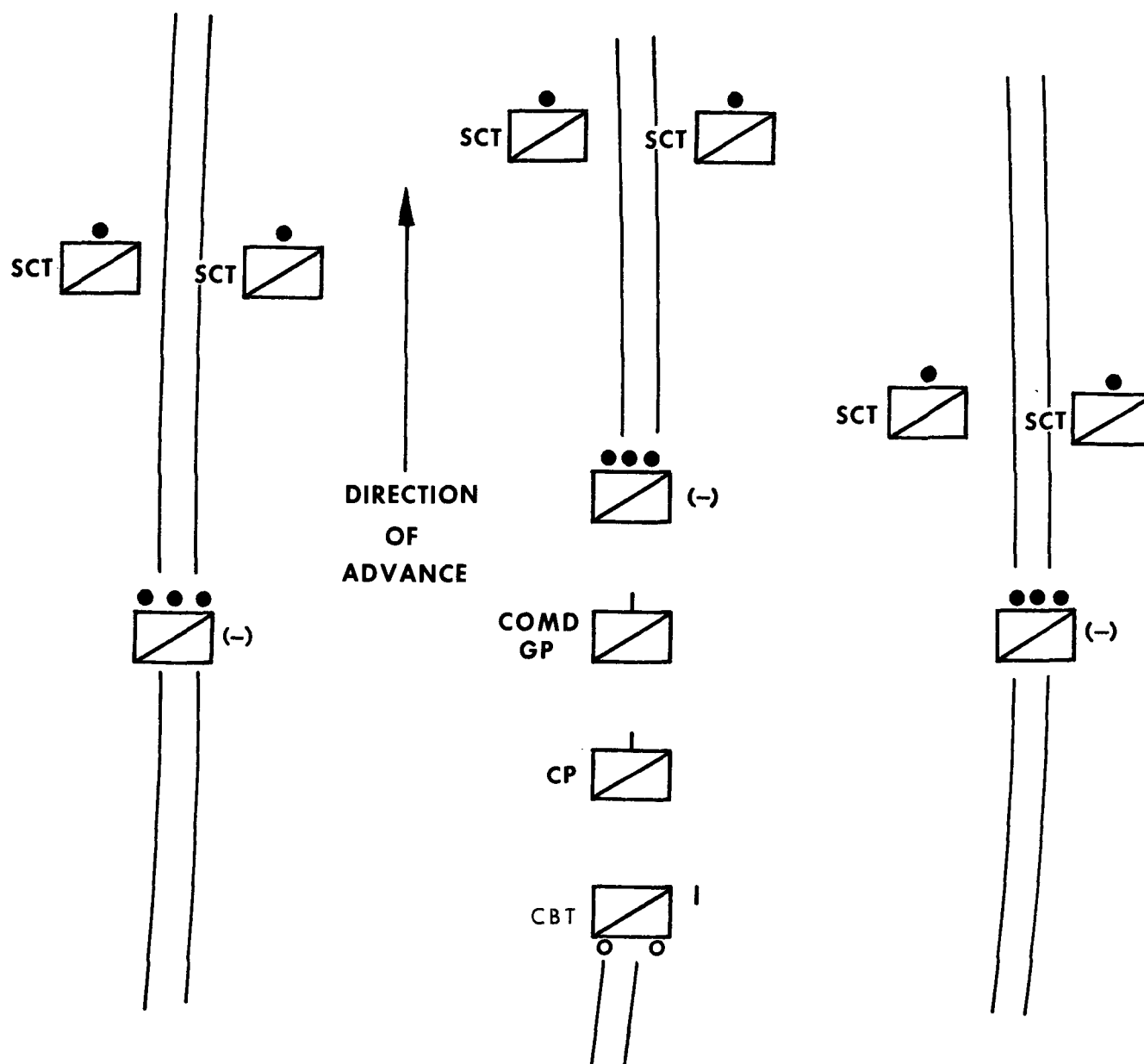


Figure 8-3. Cavalry troop conducting route reconnaissance on three axes.

which are less accessible to ground reconnaissance units.

d. The number of platoons employed depends on the situation and the time available, and is directly related to the width of the zone, number of routes, terrain, capabilities of the enemy, and availability of friendly air and other ground units. The troop command post and combat trains usually advance by bounds on the best routes available near the center of the troop zone.

8-11. Area Reconnaissance

a. Area reconnaissance is performed to gain in-

formation of a definite locality such as a town, woods, or a crossing site over water obstacles. In an area reconnaissance, the cavalry troop moves by the best available (usually the most direct) route to the area to be reconnoitered. During movement to the area to be reconnoitered, unless otherwise ordered, the platoons will report and bypass enemy opposition. When the platoons arrive at their designated areas, they perform reconnaissance in the same manner as for zone reconnaissance.

b. In moving from the location where the mission was first assigned to the area to be reconno-

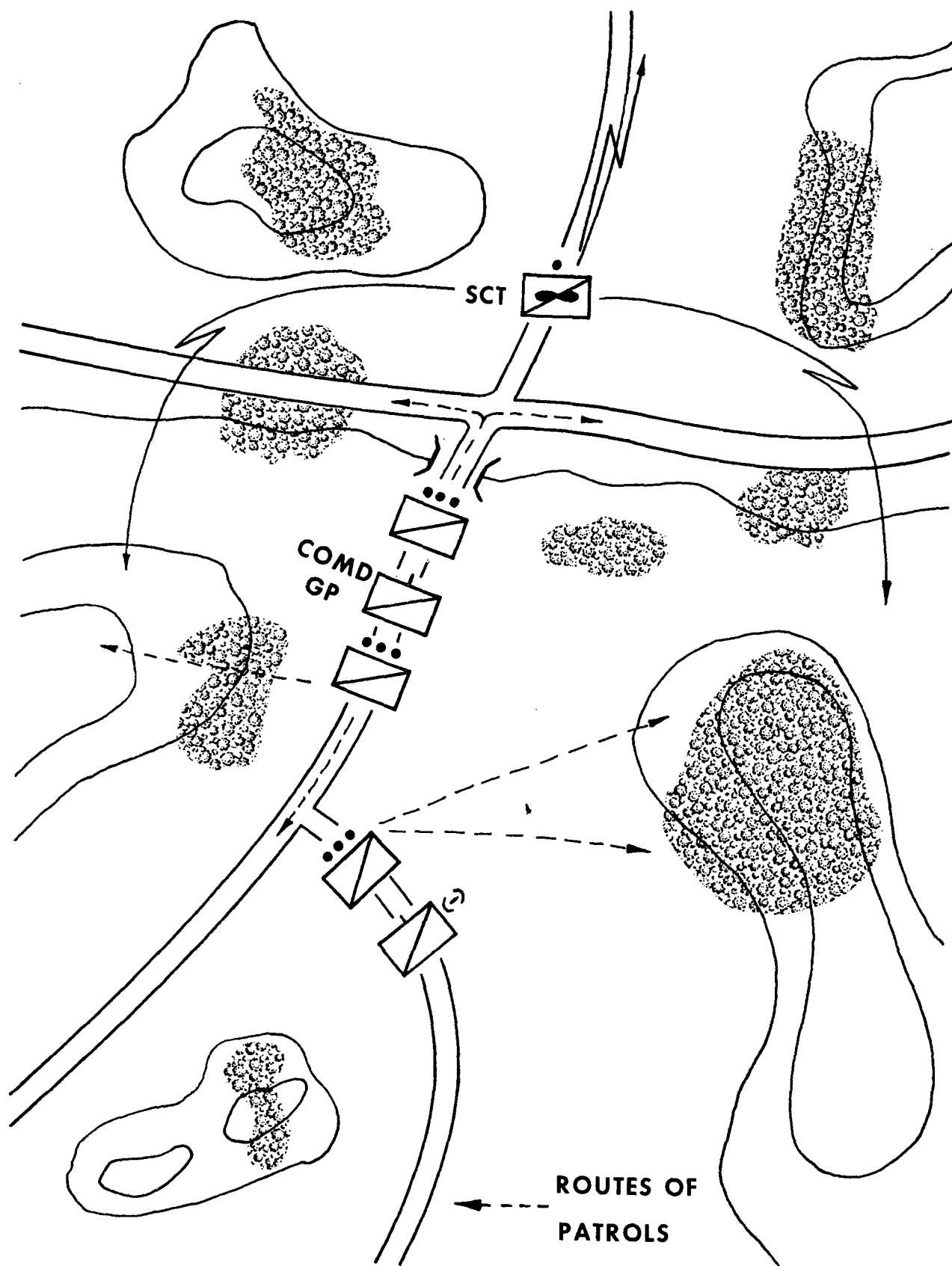


Figure 8-4. Cavalry troop conducting route reconnaissance with an aero scout team under operational control.

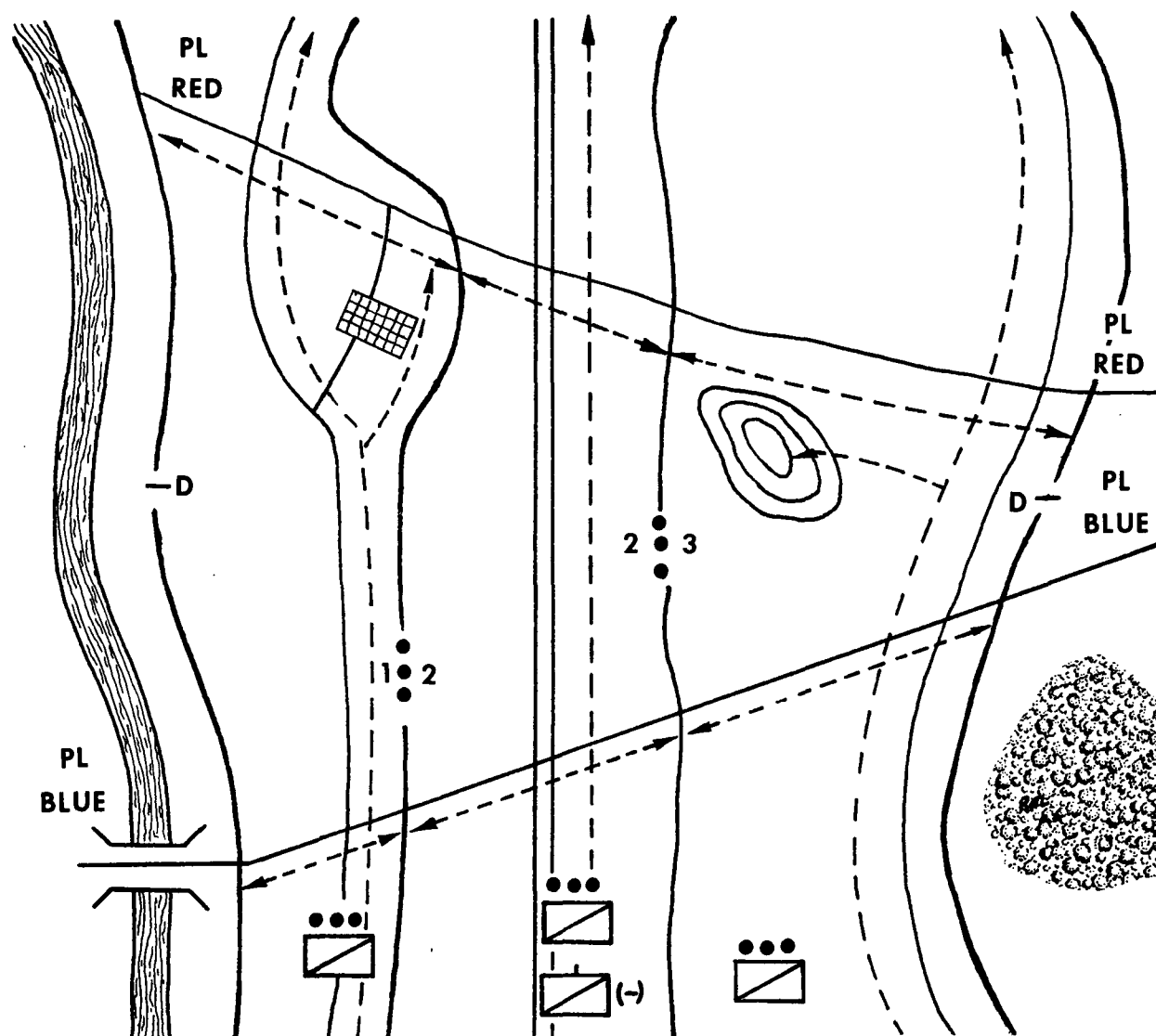


Figure 8-5. Cavalry troop conducting zone reconnaissance.

itered, the platoons adopt a formation that permits rapid, secure movement. The formation is usually the same as that used for a route reconnaissance, with the scouts leading. The platoons are frequently air lifted by elements of the squadron aviation platoon into the area to be reconnoitered.

c. The troop commander plans the reconnaissance in detail to insure that the area is systematically covered, particularly roads and trails, key terrain, and suspected enemy locations. If the area restricts vehicular movement, dismounted patrols from the scout sections and rifle squads normally reconnoiter the area.

8-12. Reconnaissance of a Bridge or Defile

Visual reconnaissance is made of suspected enemy

positions before leading elements of the platoons cross a bridge or enter into a defile. When mines, boobytraps, or ambushes are suspected, patrols reconnoiter the approaches of the bridge or defile. Reconnaissance of a ridge includes checking underneath as well as on top for mines, boobytraps, demolition charges, or weakened construction. Any demolitions located should be removed or neutralized. The antitank sections and support squads cover the movement of scout elements to the far side; the remainder of the platoon then passes over the bridge or through the defile. When it is not possible to cross a bridge, fording sites will be selected and reconnoitered. Reconnaissance will include selection of entrances and exits and checking for underwater obstacles and demolitions. In selecting fording sites, platoon personnel

FM 17-37

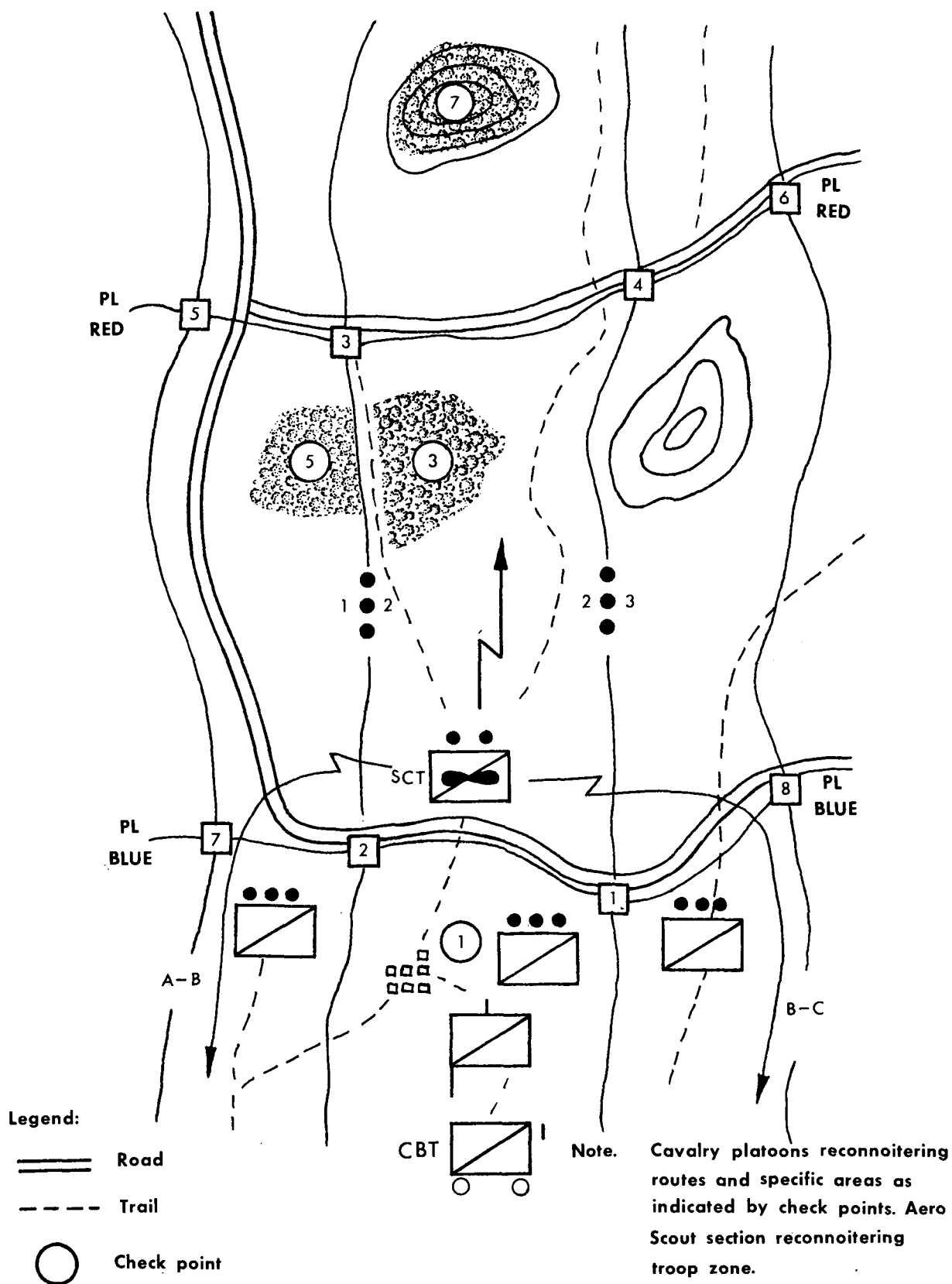


Figure 8-6. Cavalry troop conducting zone reconnaissance with an aero scout section under operational control.

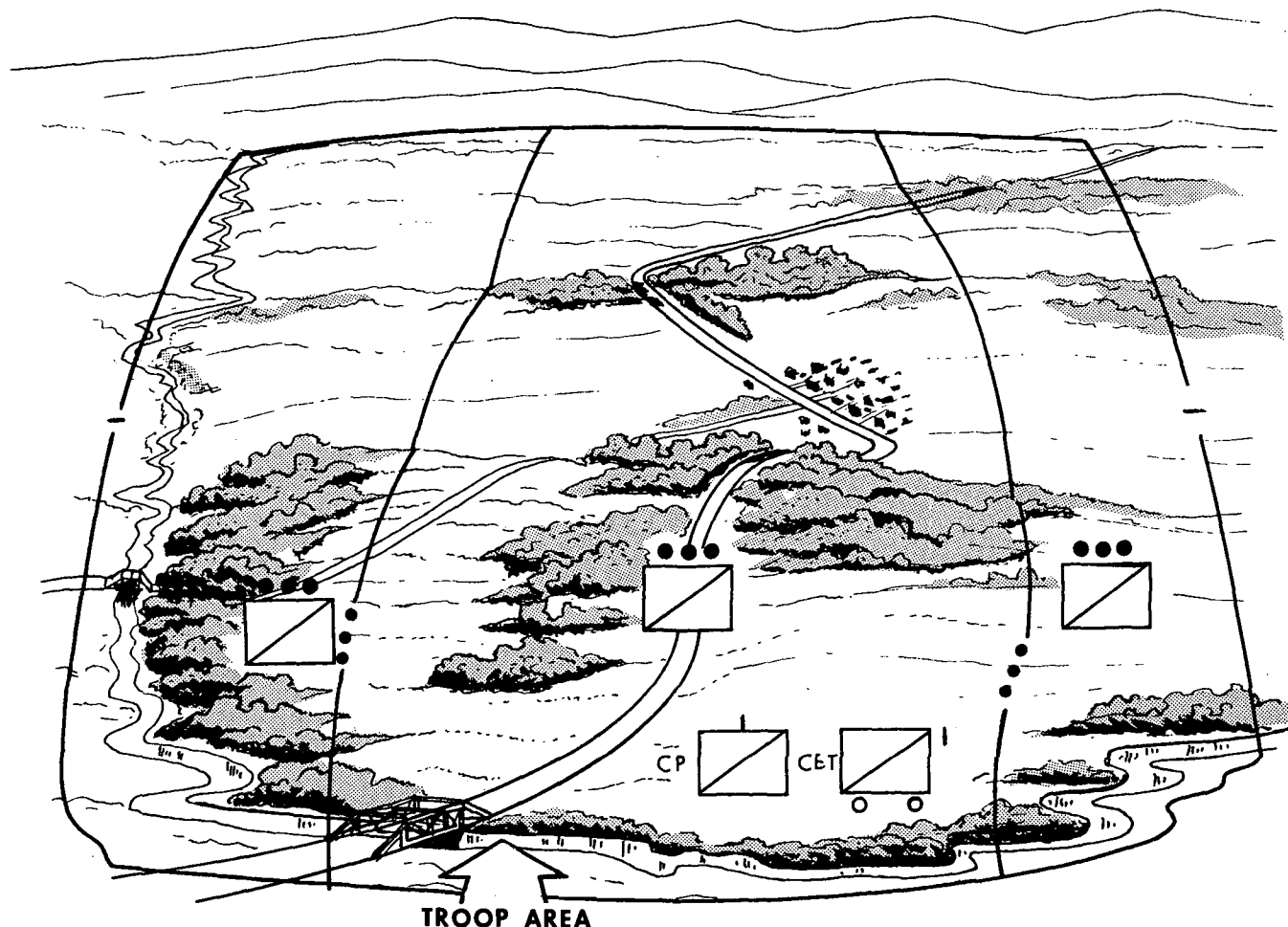


Figure 8-7. Cavalry troop conducting area reconnaissance.

must consider the inland waterway crossing capability of the unit being supported.

8-13. Reconnaissance of a Town, Obstacle, or Enemy Position

a. In reconnoitering a town, obstacle, or enemy position, the unit should make an attempt to approach it from the flanks or rear. If time is available, the reconnaissance should be dismounted; however, if time is short, the unit remains mounted. In either case, detailed observation with binoculars precedes the actual reconnaissance. If the terrain permits, scouts should be positioned where they can observe approaches other than the one being used by the platoon while reconnoitering the near edge of the town.

b. When time is available, dismounted patrols move forward, covered by the remaining elements of the platoon. The number of patrols depends upon the size of the objective and upon available approaches, cover, and concealment. If the patrols

find that the near edge of the area is clear, the remainder of the platoons, less the support squads, move forward. The dismounted patrols then continue the reconnaissance, overwatched and followed closely by the rest of the platoon.

c. A mounted reconnaissance should usually start with a reconnaissance by fire if the rules of engagement allow. Then the mounted patrol moves forward rapidly, overwatched by the anti-tank section and supported by the support squad. If the near edge of the area is clear, the overwatching elements move forward and the advance continues. Vehicles move through the area by bounds in a staggered formation, covering the buildings on the opposite side of the street by observation and fire. It is desirable for dismounted troops to precede the vehicles.

8-14. Reconnaissance at Night

a. Reconnaissance operations are slower and less effective at night than during daylight. Night

FM 17-37

reconnaissance may be limited to dismounted patrolling, observation of routes, and the use of listening posts. All available night vision devices should be used habitually. Only against light enemy resistance and with favorable terrain and routes of advance can vehicular reconnaissance be used without being preceded by dismounted patrols. Engines can be heard for considerable distances. Observation is limited, making vehicles highly susceptible to ambush.

b. When mounted reconnaissance is necessary at night, it is carefully planned after a detailed

map reconnaissance. Key individuals prepare sketches showing the road net and landmarks that can be easily identified at night.

c. Measures are taken before departure to muffle equipment noises, prevent light reflection, and reduce light from flashlights or vehicular lights.

d. Elements from the platoons move to successive positions by bounds. The degree of caution with which the platoons move is determined by the known or suspected proximity of hostile forces.

CHAPTER 9

SECURITY OPERATIONS (STANAG 2079)

9-1. General

The size of the security force is determined by an analysis of the factors of METT. The cavalry troop is well suited for use as a security force because of its mobility, firepower, and extensive and flexible means of communication. The troop may be employed on security missions alone or as part of a larger force. The principles of security operations and the fundamentals of employment for each type security action are discussed in FM 17-1. Security missions performed by the troop include advance guard, flank guard, rear guard, screening mission, and acting as part of a general outpost, covering force, and rear area security force.

9-2. Advance Guard

a. General. The cavalry troop may be employed as an advance guard for the squadron or as part of an advance guard for the unit to which attached. The troop, advancing as rapidly as the situation permits, marches far enough in advance of the protected force to insure that the force has the time and space necessary to react to an enemy threat. However, the troop must not be so far in front that it can be destroyed by enemy attack before assistance can reach it. It performs continuous reconnaissance to the front and flanks, and destroys or forces withdrawal of small enemy groups before they can hinder the protected force. Distance between the cavalry troop and the protected force is reduced under conditions of lowered visibility; and in close terrain air cavalry elements can render assistance to the advance guard by expediting movement and extending the range of reconnaissance and security.

b. Formation for Advance Guard. The troop may advance on multiple routes or in column. When moving in column, the following platoons are prepared to support the leading platoon in any action necessary to accomplish the mission. These platoons are usually employed as organized; however, their rifle elements may be grouped in provisional units under one platoon leader to provide

an attacking force for the troop. The scout sections of these platoons may be grouped to provide flank security for the troop. The support squads may be employed under troop control to provide fire support to all elements of the troop. When moving on multiple routes, a platoon is assigned to each route. In addition to the advance guard mission, the flank platoons may be required to provide flank security for the troop. If the routes are within range, the three support squads may be employed under troop control to provide mortar fire support to all platoons.

c. Conduct of Advance Guard.

(1) Once enemy forces are encountered, the troop commander takes prompt and aggressive action to develop the situation and, within his capability, employs offensive action to defeat the enemy. His actions vary according to the situation as developed by the leading platoon. Actions taken by the troop commander include these four steps:

- (a) Deploy the troop and report initial contact.
- (b) Develop the situation.
- (c) Choose a course of action.
- (d) Report the enemy situation and course of action taken to the next higher headquarters.

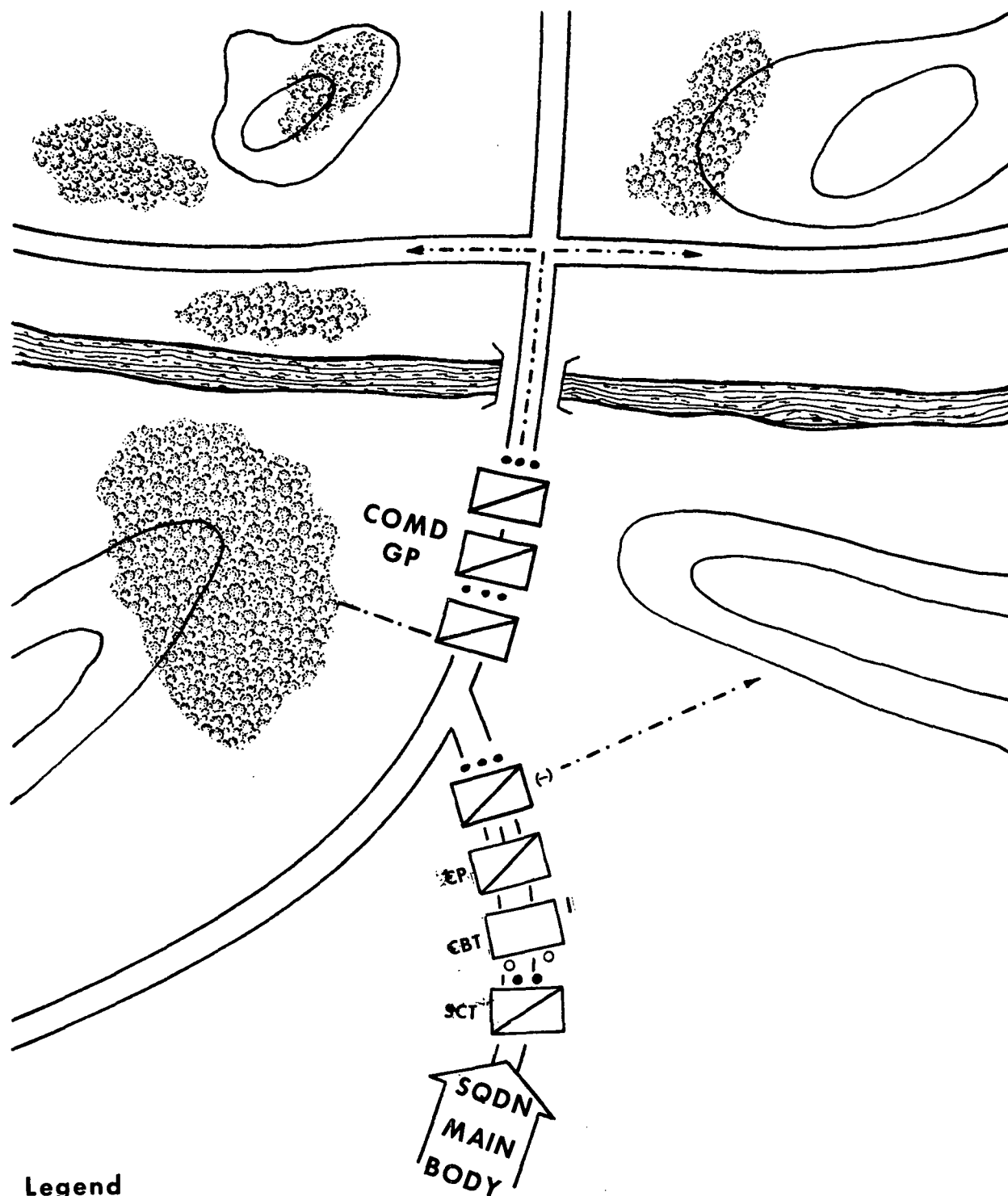
(2) When the situation requires the protected force to attack, the troop may provide security, support by fire, or join in the attack.

9-3. Flank Guard

a. The cavalry troop may execute a flank guard mission alone or as part of a larger force. When participating in a flank guard operation as part of a larger force, the troop may be assigned an advance guard or rear guard mission, or be required to initiate offensive action to seize and occupy blocking positions. It may perform a screening mission when the larger force is extended over a large area.

b. When the troop is to perform a flank guard mission as an independent force, the troop commander plans the mission in the following sequence:

FM 17-37



Legend

Ground routes - - - - -

Figure 9-1. Typical formation for the cavalry troop employed as advance guard.

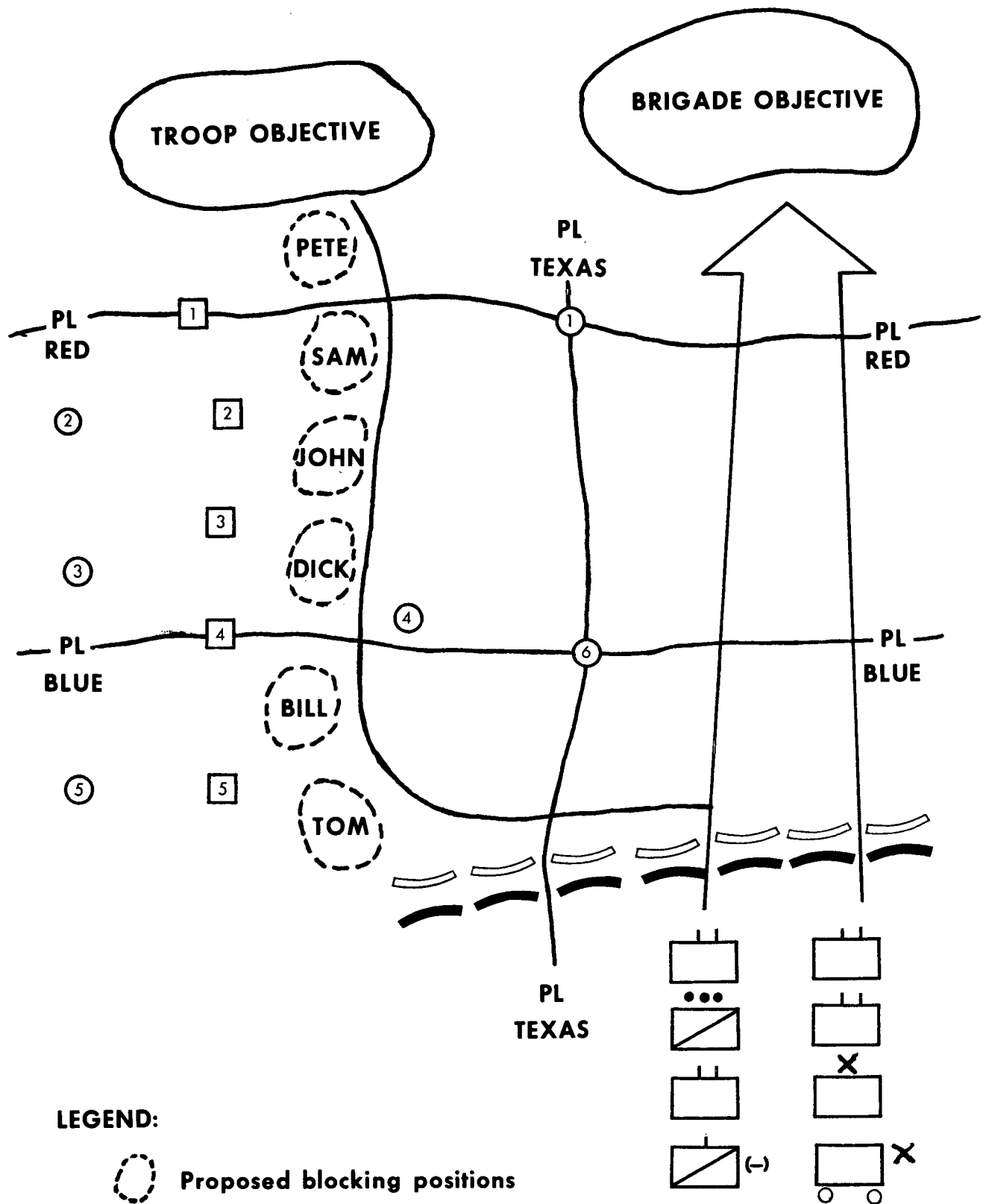


Figure 9-2. Planning for employment of the cavalry troop as a flank guard.

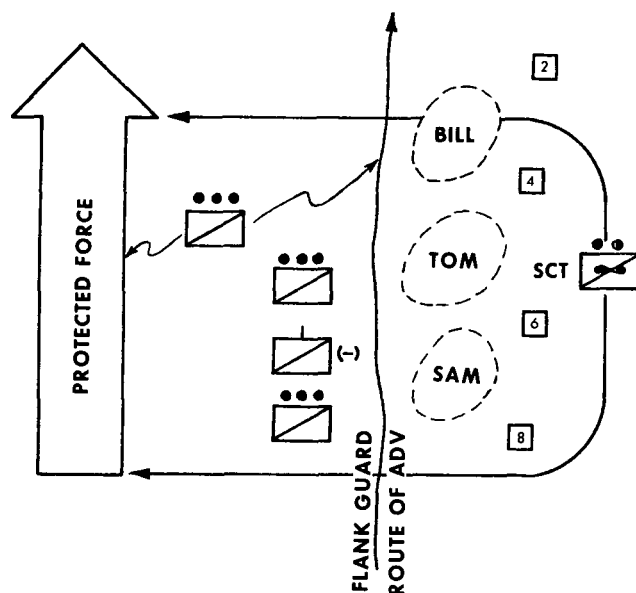


Figure 9-3. Employment of the cavalry troop as a flank guard.

(1) Initially, he makes a map reconnaissance of the area of operations and selects the most likely avenues of enemy approach from the flank. He selects a series of blocking positions, on the flank, that generally parallel the axis of advance of the protected force. These planned blocking positions should be located on defensible terrain that dominates likely avenues of enemy approach. The blocking positions should be far enough from the flank of the protected force with sufficient time and maneuver space to react to an enemy threat. The blocking positions should be located in such a manner as to deny the enemy ground observation and direct fire on the protected force. These positions should be within supporting range of the artillery of the protected force. The positions should be far enough from the route of advance of the protected force to provide sufficient terrain for the conduct of a delaying action toward the force if the flank guard force encounters a superior enemy force. However, the distance between the axis of advance or flank of the protected force and the line of blocking positions should not be so great that one cavalry platoon cannot secure this frontage.

(2) The troop commander normally selects the troop route of advance unless a route of advance has been prescribed by higher headquarters. During a penetration, the larger unit commander normally designates a specific route for the troop. The route selected should be far enough from the

axis of advance of the protected force to prevent the troop from interfering with the maneuver of the force, but within the capability of one platoon to secure the area between the force and the troop route of advance. The route should be interior to, and permit rapid access to the line of preplanned blocking positions. If a suitable route does not exist, the troop may be required to operate cross country. This may dictate that it be employed in an airmobile role since the cross country mobility of its wheeled vehicles is limited.

(3) The troop commander next develops a scheme of maneuver that will enable the troop to seize and hold selected blocking positions and secure the area between the leading task force of the protected force and the troop route of advance. The scheme of maneuver includes provisions for seizing the blocking position either by individual platoon actions or by a coordinated troop effort. The troop commander must also decide the strength required to hold the blocking positions that have been seized.

(4) Contact points must be easily identifiable, and they should be located forward of the line of blocking positions and generally between the individual blocking positions. Contact points delineate the area of responsibility for the platoon holding each position, and indicate that the platoon is responsible for the position and the area between the contact points on each flank. The platoon is required to make periodic physical contact with adjacent units at the contact points, unless the contact point and intervening area are visible from the position.

(5) The troop commander selects a fromation that permits rapid employment against enemy resistance. The formation must provide for maximum flexibility to meet any changes in the situation. The column formation provides the best control and is used to provide security for the platoons and to extend reconnaissance to the front and flanks.

(6) Employment of Army aircraft and elements of the air cavalry troops are included in the troop plan of operation.

c. During the conduct of a flank guard operation, the troop moves parallel to the axis of advance of the protected force. It regulates its movement on that of the protected force. The area of responsibility for the flank guard of an advancing force starts at the rear of the leading elements (TF) and ends at the rear of the combat elements of the protected force (exclusive of the rear

guard), unless otherwise specified. The lead platoon provides the advance guard for the troop, secures the area between the protected force and the troop route of advance, and maintains contact with the rear of the leading element task force of the protected force. If the leading platoon is not able to accomplish its three-fold task, the troop commander either employs an additional platoon or reinforces the leading platoon to the extent necessary to insure that the task is performed properly. Air cavalry elements may be used for this purpose. The remainder of the troop marches in column prepared to secure designated blocking positions on order. The decision to occupy these positions and the method of movement that the troop may employ depend on the speed with which the protected force is advancing and the enemy situation on the exposed flank. If the troop becomes overextended, the troop commander should ask for permission to screen all or part of the area or to be reinforced. When the protected force is stationary, the troop occupies blocking positions covering the likely avenues of enemy approach. When the blocking positions are occupied, the troop CP and combat trains are located far enough from the blocking positions to preclude their frequent displacement should the flank guard be required to conduct a delaying action. There are three basic methods of movement that the troop may employ to furnish the required flank protection.

(1) *Alternate bounds.* This method may be used when the protected force is advancing slowly and strong enemy resistance is anticipated against the flank guard. When all subordinate units have been employed and the protected force's advance requires the securing of additional positions to the front, the rear unit is moved forward from its previously occupied blocking position to a new one to the front.

(2) *Successive bounds.* This method is used when the movement of the protected force is characterized by frequent short halts, and enemy action against the flank guard is light. Each subordinate unit occupies designated blocking positions. When forward movement is resumed, subordinate units move and simultaneously retain their relative position in the flank guard formation as they move forward to occupy new blocking positions. Normally this method is the faster of flank guard movement against light enemy resistance.

(3) *Continuous marching.* This method is used when the protected force is advancing rapidly at a constant rate and the enemy resistance to the

flank is light. The flank guard uses a column formation and moves without halting, adjusting its rate of advance to the movement of the protected force. Air and ground elements reconnoiter to the flank as the remainder of the unit moves along the route of advance.

d. The troop operating as a flank guard for a defensive force occupies a series of preplanned blocking positions on the flank of the protected force. The blocking positions are located on key terrain that dominates likely avenues of enemy approach into the flank of the protected force. The troop is normally given a sector of responsibility that is defined by specific terrain features, contact points, and boundaries. In accomplishing the mission, the troop employs defensive tactics. If forced from its positions, it employs delaying action techniques, providing time and space for the protected force to react to the threat.

e. Operations of the troop as flank guard for a unit performing a retrograde movement are similar to those of a troop performing as a flank guard for an advancing force. The major difference is that in the retrograde movement the area of responsibility must be specified by the protected force commander.

9-4. Rear Guard

a. The rear guard follows the protected force at a distance prescribed by the force commander and usually moves on the same route. It is prepared to intercept and engage enemy forces that attempt to attack the rear of the protected force. If attacked by superior forces, the rear guard employs delaying action in accomplishing its mission. The rear guard must not permit itself to be driven into the protected force.

b. When planning a rear guard operation, the troop commander considers the following:

(1) *Terrain.* The troop commander should analyze the terrain in the area of operations. He selects a series of delay positions along the prescribed route. Depending on the terrain and existing road net, the troop may be required to guard more than one route.

(2) *Organization of the rear guard.* The troop commander must determine the number of platoons to be employed in the initial delay position. If the situation permits, he may position one platoon in depth. He assigns a troop route of withdrawal and designates the control measures necessary to insure effective control. Control measures

FM 17-37

normally employed by the troop commander include delay positions, phase lines, checkpoints, contact points, and route of withdrawal.

(3) *Security.* The troop commander plan for flank security and reconnaissance to the front and flanks of occupied delay positions. Active measures must be taken to insure that the enemy does not bypass the rear guard and attack the rear of the protected force. Plans may include assignment of a mission to one or more platoons to reconnoiter a given area to the front or flank of a position. Normally, platoons are assigned the additional mission of protecting the flanks and extending reconnaissance to the front and flanks. This is normally accomplished by scout elements operating under platoon control. Army aircraft may be used to augment the effort of the platoons by extending observation to the front and flanks. Elements of the air cavalry troops may be employed to maintain contact with the enemy and to prevent him from bypassing the rear guard and attacking the rear of the protected force. These air cavalry elements also provide the rear guard early warning of the approach of enemy forces toward the delay positions, and adjust long-range supporting fires on the enemy.

(4) *Supporting elements.* Frequently, engineers are attached to, or placed in direct support of, the rear guard. The troop commander, together with the engineer unit leader, makes and executes plans to construct obstacles to delay the enemy. The troop commander, in coordination with the artillery forward observer, develops the fire support plan for the operation. The fire support plan includes planned artillery fires, organic mortar fires, tactical air, naval gunfire, aerial fire support from the air cavalry troops, and the fires of organic crew served weapons.

(5) *Plans and actions of the protected force.* It is essential that liaison be maintained with the protected force to regulate the rate of withdrawal of the rear guard. In addition, the rear guard commander must be thoroughly familiar with the plan of the force and must have continuous communication with the force commander so that both commanders are informed of any situations that affect withdrawal of the rear guard. A liaison agent, preferably the troop liaison sergeant, may be designated to accompany the main body to maintain this liaison.

(6) *Delay positions.* Plans must include reconnaissance of delay positions. The troop commander and other members of the troop who are

not required elsewhere are used for this reconnaissance.

(7) *Command post and trains.* The troop commander must plan the movement and locations of the troop command post and the trains. Disposition of elements of the troop and the proximity of the protected force normally provide security for these elements.

c. The troop as rear guard follows the protected force by bounds, occupying successive positions, or follows the protected force by a prescribed time or distance interval. It occupies each position and remains there until the protected force has cleared the next position. The distance between the rear guard and the force should not permit the enemy to bypass the rear guard and attack the force.

d. The rear guard engages all enemy forces that threaten the rear of the protected force. It fights to insure that the enemy does not impede the movement of the force. The rear guard normally fights a delaying action, trading space for time until the enemy is no longer a serious threat to the range of effective enemy action. When contact with the enemy has been made, it is maintained until the enemy is no longer a serious threat to the protected force.

e. If the protected force is moving rapidly and there is no contact with the enemy, the rear guard moves at a given rate of march behind the force. It adjusts its rate of movement to maintain the prescribed distance behind the protected force (fig. 9-4).

9-5. Platoon as Rear Guard

a. *Platoon as Rear Guard for Advancing Force.* The platoon may act as rear guard for the troop or larger unit moving in column formation on one route. When the protected force is advancing, the platoon, as rear guard, detects and delays any enemy forces attempting to attack the rear of the force. The platoon follows the protected force at a distance prescribed by the force commander and usually moves on the same route of advance. The platoon employs delay techniques with its combat power oriented to the rear. The scout section is employed in the direction of movement and to the flanks to establish contact with enemy forces that attempt to move between the rear guard and the protected force.

b. *Platoon as Rear Guard for Withdrawing Force.* When the platoon provides rear guard for a withdrawing force, it employs delaying action

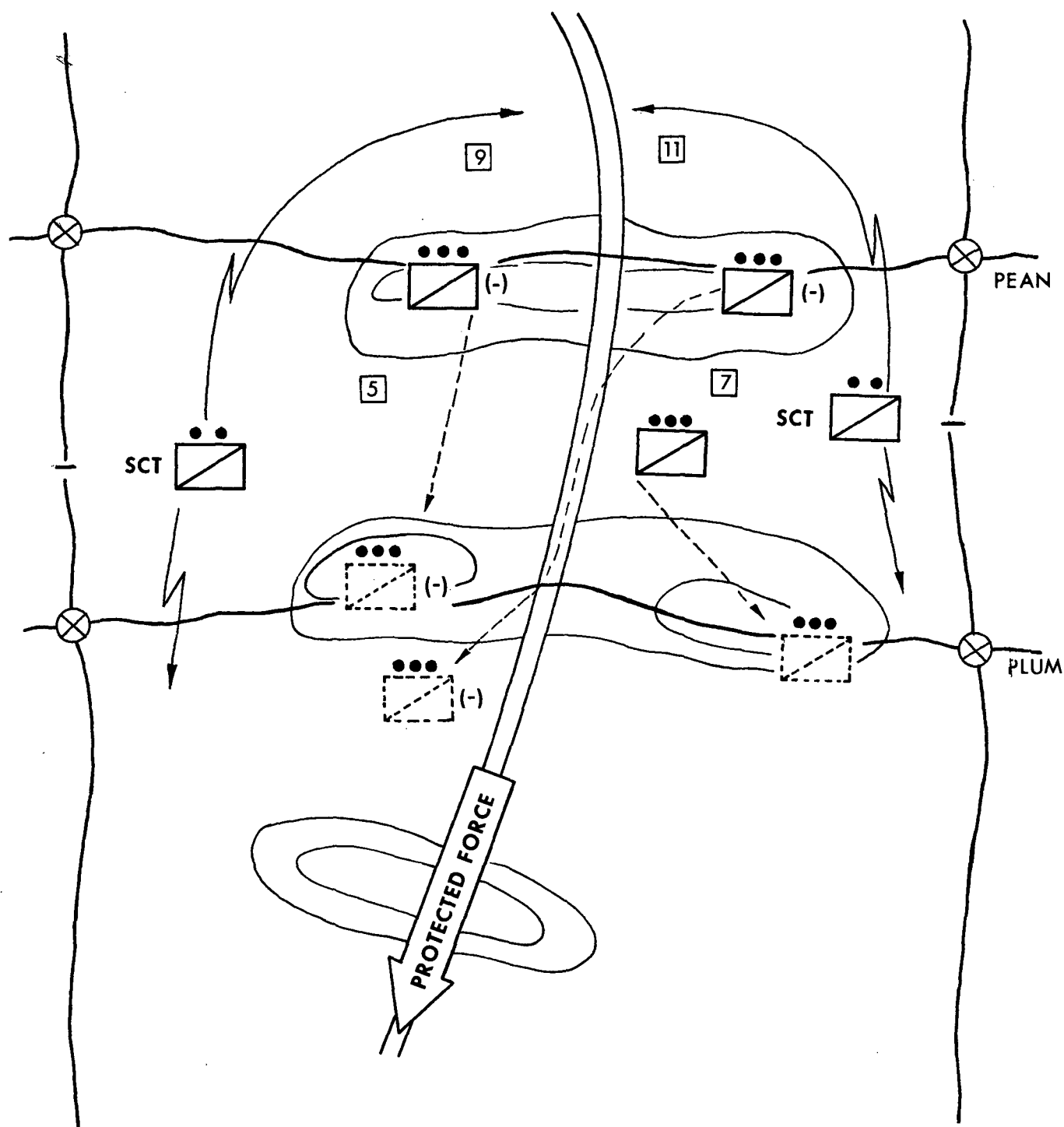


Figure 9-4. Cavalry troop in the conduct of a rear guard mission.

techniques, usually withdrawing by bounds. The rate of movement is based on that of the protected force or on prearranged plans. The platoon executes the rear guard mission along the route over which the protected force has moved, keeping itself between the force and the enemy. The platoon leader selects a series of delay positions along

the route and withdraws by bounds from one position to another. The area to the flanks must be kept under constant observation by the scouts and, when possible, by aero scouts of the air cavalry troops to prevent the enemy from bypassing the rear guard platoon. The platoon leader maintains communication with the protected force to

FM 17-37

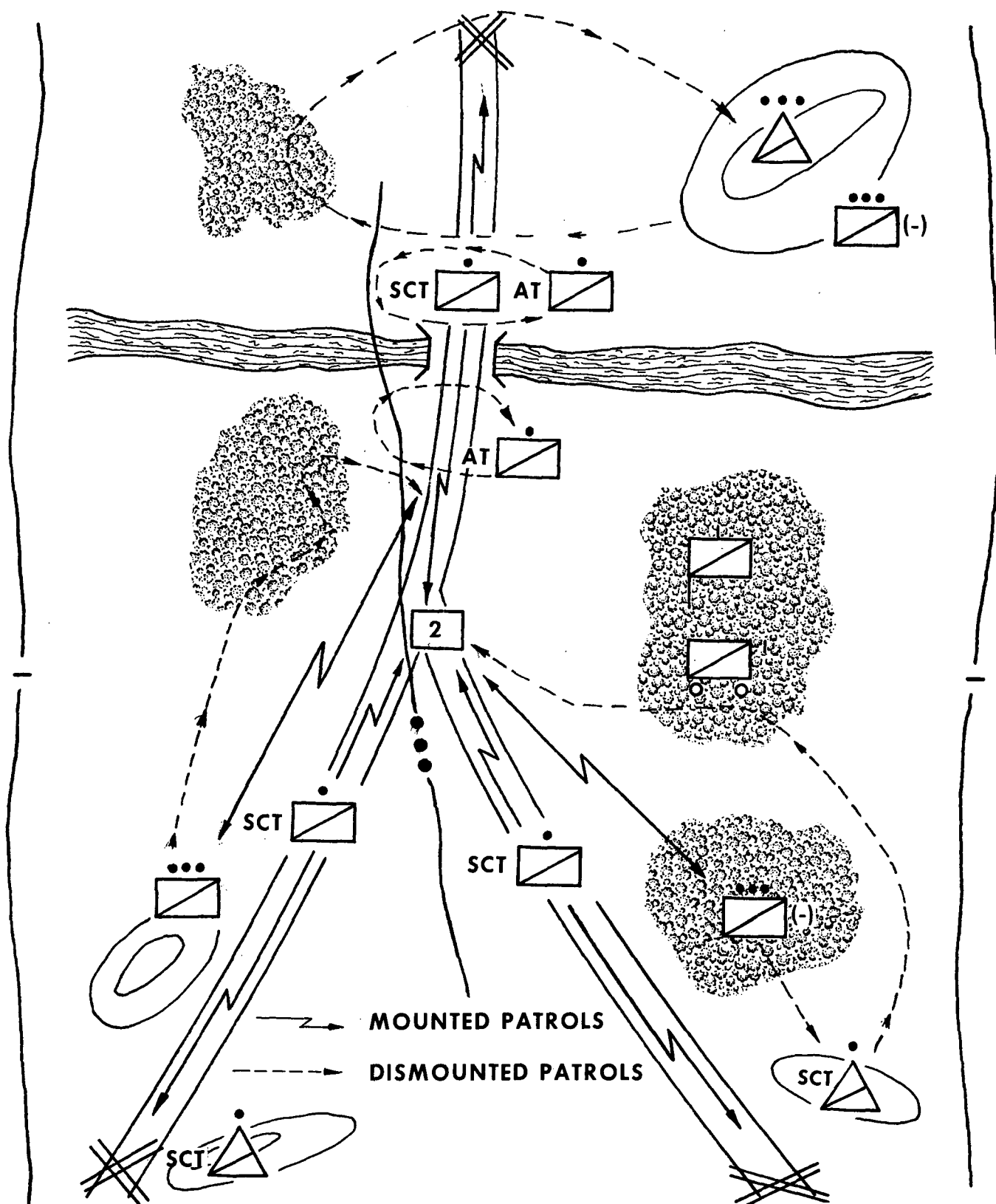


Figure 9-5. Cavalry troop as security force for lines of communication and supply.

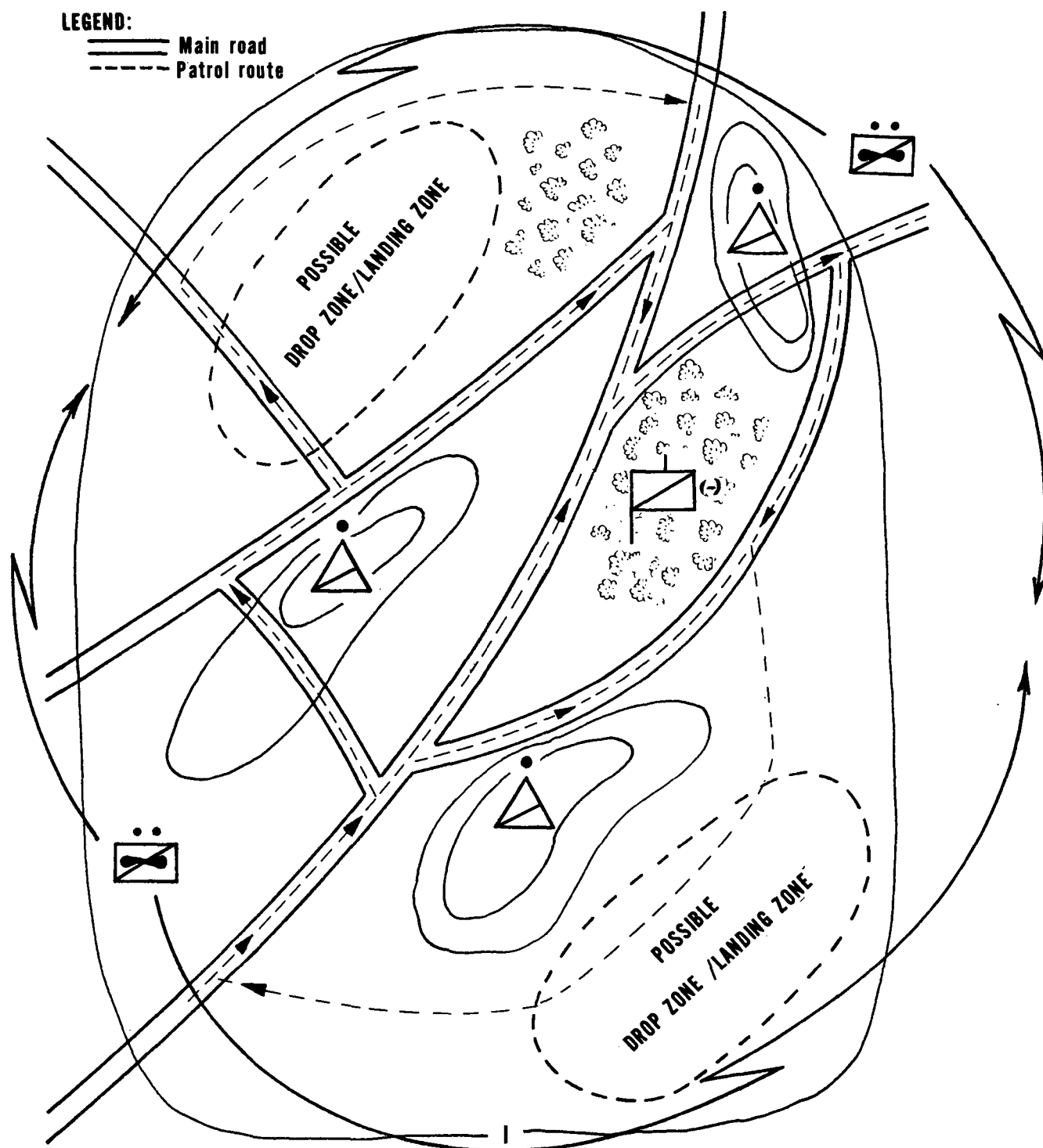


Figure 9-6. Cavalry troop deployed for defense against guerrilla, airborne, or airmobile threat in an area.

insure that his movement is in consonance with that of the force, and to keep the force commander informed of the situation.

9-6. Rear Area Security Force

The cavalry troop normally performs rear area

security as part of a larger force. The troop commander must coordinate the efforts of the troop with those of other combat elements in the area. He must also avoid stereotyped operation of patrols, OP's, and listening posts as far as time of

FM 17-37

employment, positioning, and routes of employment are concerned.

9-7. Securing Lines of Communication

a. The techniques employed to guard lines of communication vary with the terrain, the road net, the length of the lines of communication, and the type of activity expected of the enemy. The following techniques form the basis for plans to secure lines of communication:

(1) If the lines of communication to be secured extend only a short distance, platoons may be assigned areas of responsibility. Small security forces consisting primarily of scouts are placed on dominating terrain features overlooking avenues of enemy approach. The troop commander maintains as large a reserve as possible to counter any enemy threat that develops in the troop area of responsibility.

(2) If the lines of communication are long and must be guarded over a great distance, larger areas of responsibility are assigned to the platoon. Every effort is made to insure that both flanks of the route are covered by a series of observation posts. These posts have the mission of giving warning of enemy approach. The remainder of the troop patrols the line of communication and provides escort for vehicles moving through the area (fig. 9-5).

b. In employing either of the techniques discussed above, the troop commander may organize provisional platoons of scouts, riflemen, support, and antitank weapons to best accomplish the assigned mission. The scout elements are best suited for manning the observation posts and for patrolling. They may be augmented by rifle elements. The remainder of the troop is held in reserve escort convoys and to counter enemy threats.

9-8. Security Against Airborne, Airmobile, and Guerrilla Operations

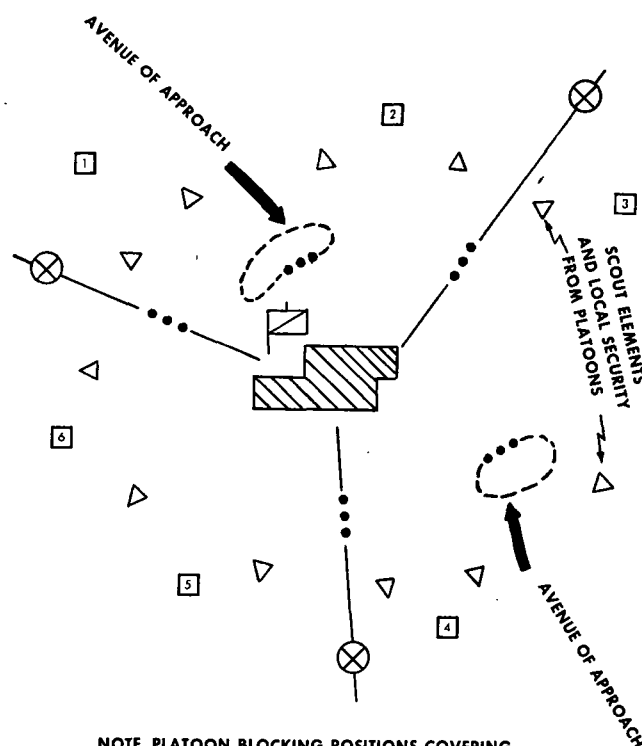
a. When protecting a rear area against enemy airborne, airmobile, or guerrilla forces, the commander deploys his troop to best counter the enemy threat. He usually accomplishes this by establishing observation posts that provide a good view of likely drop zones, landing zones, and areas where guerrilla forces may assemble, and by patrolling the entire area. The remainder of the troop is retained in central location from which it is prepared to move rapidly to any part of the troop area of responsibility.

b. Upon being assigned a mission to defend an area against airborne, airmobile, or guerrilla attack, the troop commander reconnoiters his area and selects likely drop zones for airborne forces, landing zones for airmobile forces, and assembly areas for guerrilla forces. From this, he determines where to establish observation posts, routes for patrols, and suitable assembly areas for the troop reserve.

c. The rifle squads, antitank sections, and support squads from the centrally located reserve. Patrols are conducted and observation posts established primarily by scout elements.

d. The key to success against airborne or air-landed forces is rapid deployment and the placing of maximum fires on the enemy during the early phases of his landing. The rapid movement to engage the enemy force is of paramount importance.

e. Counterguerrilla tactics include defensive actions to prevent or minimize the efforts of guerrilla actions, and offensive action directed at the destruction of the guerrilla force. Specific actions taken against guerrilla forces should be pointed toward early detection, quick application of available firepower, and rapid attack to destroy them.



NOTE. PLATOON BLOCKING POSITIONS COVERING AVENUES OF ENEMY APPROACH MAY BE OCCUPIED AS SITUATION DEVELOPS.

Figure 9-7. Cavalry troop protecting an installation.

f. Air cavalry elements, when available, should be closely integrated into the troop plan for protection against airborne, airmobile, or guerrilla forces. The highly mobile aerial firepower of these elements ideally suits them for employment in the role of finding and engaging these types of enemy forces (fig. 9-6).

9-9. Protecting an Installation

The cavalry troop may be required to protect an installation in the rear area, such as a supply installation or an element of the nuclear weapons delivery system. The troop is deployed for all-round defense of the installation. The troop commander provides for early warning of enemy approach by establishing OP's on all likely avenues of approach and by patrolling between these OP's by either ground or air patrols. The weapons of the troop must be emplaced to make maximum effective use of their firepower. Mortars and anti-tank weapons may be placed under troop control to provide for massing of fires (fig. 9-7).

9-10. Screening Force

a. A screening mission is characterized by the employment of relatively few forces over a wide area. The mission is accomplished by establishing observation posts and patrolling, when necessary, to cover all approaches into the area. The higher commander specifies the general trace of the screen, the units to be screened, and the responsibility for the area between the screening force and the screened force. The mission of a screening force is to provide early warning of enemy approach and to maintain an awareness of the activities and locations of enemy forces encountered. Forces disposed on a screening mission cannot be expected to offer significant resistance to the enemy. Screening forces fight to protect themselves and to destroy small enemy patrols.

b. Scout elements and rifle squads establish observation posts and conduct patrols across the troop sector. Support and antitank elements are positioned to support the OP's by fire.

9-11. Planning

a. The troop commander plans a screening mission as follows:

(1) Upon receipt of a screening mission, the troop commander makes a map reconnaissance. The enemy situation, the width of the sector assigned the troop, and the amount of travel in-

volved often preclude a ground reconnaissance by the commander. He may make an aerial reconnaissance if time permits.

(2) Based on his reconnaissance, the troop commander selects the general location of OP's and designates contact points between and forward of the observation posts. He makes tentative plans for the employment of each platoon. In selecting the general locations of OP's to cover likely avenues of enemy approach, he should consider the factors discussed in paragraph 5-5e.

b. The screening force may be positioned forward, to the flanks, or to the rear of the screened force. The troop commander or higher commander selects the general location for establishing a series of observation posts and contact points between and forward of the line of OP's. When selecting the location of OP's, the following should be considered:

- (1) Overlapping fields of observation with other OPs.
- (2) Concealment of OP's and access routes.
- (3) Ease of installation.
- (4) Maintenance of communication.
- (5) Avoidance of landmarks.

c. Normally, the troop command post is located well to the rear for security and on high ground for good communication.

d. Phase lines and checkpoints are used to control movement in the event the screen is forced to withdraw.

e. The troop commander coordinates artillery fires with the artillery forward observer. The plan of fire support includes harassing fires on the enemy at defiles or other confining terrain features and protective fires for observation posts and patrols. Elements of the air cavalry troops, when available, should be employed to establish an air screen beyond the OP's reconnoiter avenues of approach, maintain contact with the screened force, provide early warning of enemy approach, and direct long-range supporting fires on the enemy.

f. When the troop is operating as part of a larger force, the troop commander coordinates with adjacent units to insure that the area between units is covered.

g. Observation posts are located on the forward slopes for maximum observation and background concealment, or on the topographic crest for ease

FM 17-37

of occupation and freedom of movement. Mounted, dismounted, and aerial patrols are conducted between OP's consistent with the need for security. The cavalry platoons operate a screen most effectively when not more than three observation posts are assigned per platoon OP's are manned by the scout squads and the third by the rifle squad). This provides good radio communication and sufficient troops for patrolling and manning OP's. For short periods, the cavalry platoon can establish a maximum of six op's. The use of six op's will, however, reduce the sustained effectiveness of the screen. When six OP's are employed, they are manned by placing a scout vehicle on each of four positions, a dismounted fire team with a portable radio on the fifth position, and fire

team with the squad vehicle on the sixth OP. The disadvantages of employing six OP's are the loss of mobility for the platoon and insufficient troops for patrolling. The antitank section and support squad are positioned internally to assist in repelling small enemy patrols, extracting OP's, and providing rear security. Once enemy contact is established, knowledge of his location and activities must be maintained. The OP's withdraw, on order, to successive OP positions, maintaining necessary contact; reporting enemy strength, location, disposition, and composition; and adjusting supporting fires to impede the enemy's advance. All OP's must have a means of communication, and it is desirable to have one automatic weapon on each OP. When given permission to withdraw, the

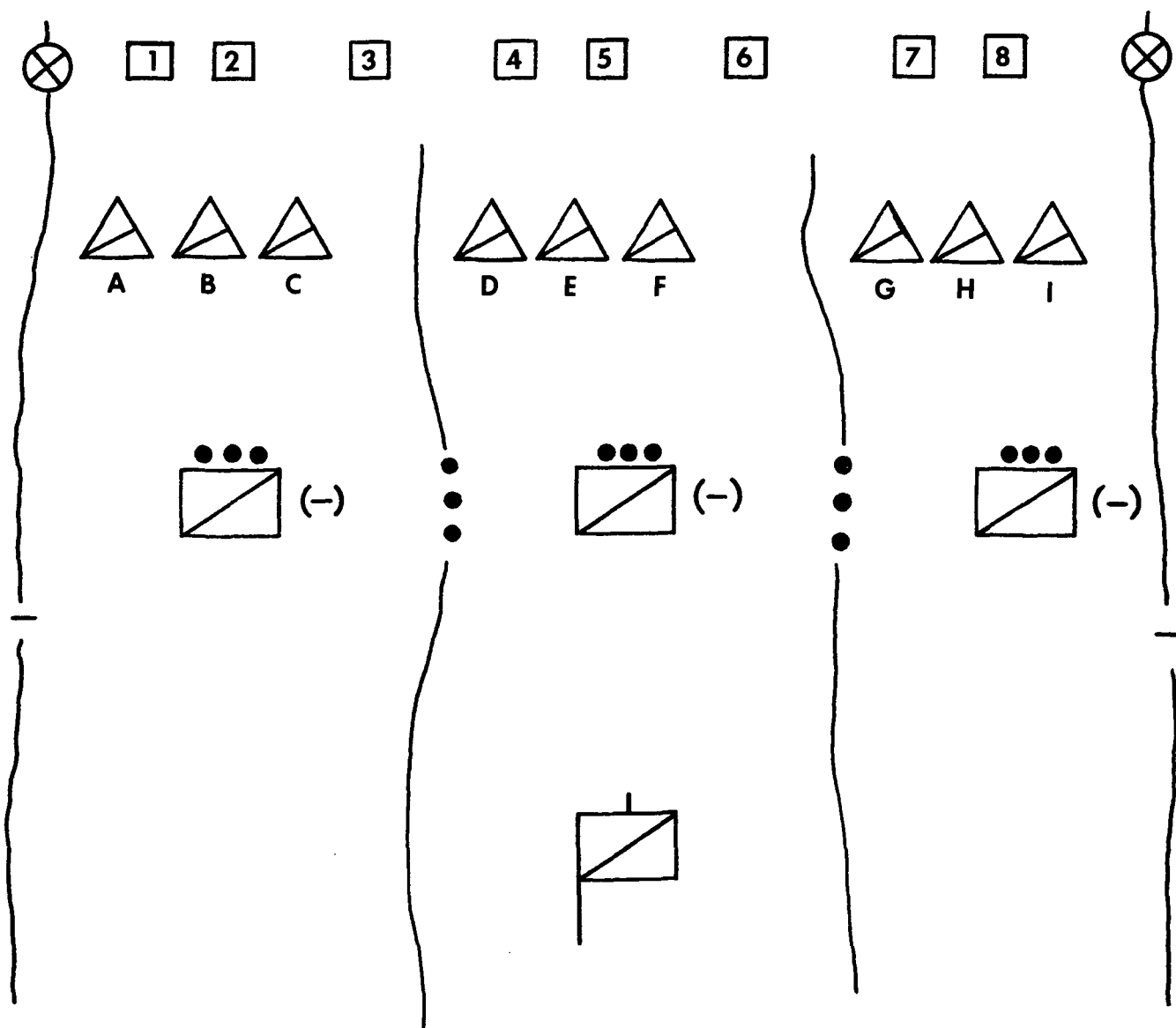


Figure 9-8. Cavalry troop employed as a screening force.

platoons move by bounds, maintaining contact and continuing to adjust supporting fires. Under some circumstances, small enemy patrols may be permitted to infiltrate the security force so that the movement of the larger enemy forces may be observed. When this is done, precautions must be taken to insure that the infiltrators do not join with other infiltrated forces and become a threat to the screened force. Maximum use should be made of aero scouts from the air cavalry troops to supplement the observation of the screening cavalry platoons.

9-12. Covering Force

a. The covering force is a mobile, tactically self-sufficient (except for combat service support for sustained periods) security force which operates at a considerable distance to the front, flank, or rear of a moving or stationary force, with the mission of achieving an early development of the situation, defeating hostile forces, if possible, and deceiving, delaying, and disorganizing enemy forces until the main force can act to cope with the situation. It engages in any type action necessary for the successful accomplishment of this mission. When participating as part of an advance covering force, the troop normally conducts a route or zone reconnaissance. When employed as part of a rear covering force, the troop normally conducts a delaying action. When participating in a flank covering force mission, the techniques employed are similar to those of a flank guard operation. The flank covering force operates at a

greater distance than the flank guard from the covered force. The covering force must not become decisively engaged, bypassed, or enveloped.

b. The cavalry troop normally operates as part of the covering force when the covered force is advancing to contact, or is conducting a retrograde movement.

c. When the troop is employed as part of a covering force for an advancing unit, it performs reconnaissance within its assigned zone to locate enemy forces. When contact with the enemy is made, the troop attacks and destroys or disperses the enemy within its capability. A small enemy force may be bypassed, if stated in the mission, or on order of the covered force commander. In either case, the location and description of the bypassed enemy force must be reported to the next higher commander. The troop must adopt a formation that provides for rapid employment against enemy resistance.

d. The cavalry troop may be employed as part of a covering force for a unit conducting a retrograde operation. The higher commander directing the covering force action designates the general line in front of which the enemy is to be held, and the time required to accomplish the mission. The time element is normally expressed in hours or days. In executing a covering force mission as part of a larger force, the troop is assigned a zone and accomplished its mission by delaying action.

CHAPTER 10

ECONOMY OF FORCE

(STANAG 2079, 2134)

Section I. INTRODUCTION

10-1. General

a. The cavalry troop normally conducts offensive, defensive, and retrograde operations when acting in an economy of force role; however, these operations will often be necessary to accomplish recon-

naissance and security missions.

b. Due to this flexibility, the cavalry can perform an economy of force role in a ground mobile or airmobile configuration, but normally is better employed as part of a larger force.

Section II. OFFENSIVE OPERATIONS

10-2. General

a. The cavalry troop engages in offensive action when it is necessary to facilitate the accomplishment of its normal reconnaissance and security missions, and in an economy of force role. It may be employed in the attack as part of the air cavalry squadron. It may assist the attack of a larger force by attacking to accomplish its primary missions of reconnaissance and security. In certain instances, it attacks as part of a maneuver element to secure a portion of the force objective. The troop may attack without benefit of additional support or reinforcements available from or through the supported unit. The troop may find it necessary to attack to reduce enemy positions that threaten the accomplishment of its missions, or it may be ordered to attack and destroy enemy forces that threaten the larger (supported) force.

b. During the advance, the troop must frequently attack to reduce small enemy positions encountered.

(1) When the troop is in a single column formation and light opposition is encountered, the leading platoon deploys and develops the situation while the remaining platoons prepare for the attack. Normally, the three platoons, less the support squads, will be committed to the maneuver element in the attack. The support squads under platoon control, or joining other indirect supporting fires, provide a base of fire.

(2) When the troop is in a double column

formation and must attack to reduce an enemy position on either route, the reserve platoon is normally used to reinforce the attack of one of the two committed platoons.

(3) When the troop is disposed along three routes and must attack along any one of these routes, other elements of the troop not in contact or not heavily engaged with the enemy may be maneuvered to reinforce or support the attack.

(4) When necessary, the entire troop is concentrated and committed to the attack. The troop may attack as organized, or like elements may be massed to form provisional platoon teams (anti-tank, infantry, scout, and support). The troop must have an established and rehearsed SOP, and all members of the troop must be completely familiar with the techniques of rapidly changing to the designated organization for combat (fig 10-1).

10-3. Preparation for the Attack

a. The troop commander uses all available time to prepare the troop for the attack. Normally, he receives a warning order from the higher commander. He immediately alerts the troop by issuing a warning order and the troop begins preparations for the attack. The cavalry troop usually completes preparation for the attack in an assembly area. The troop refuels vehicles, performs necessary maintenance, replenishes ammunition and other essential supplies, and checks all equipment to insure that it is ready for the attack.

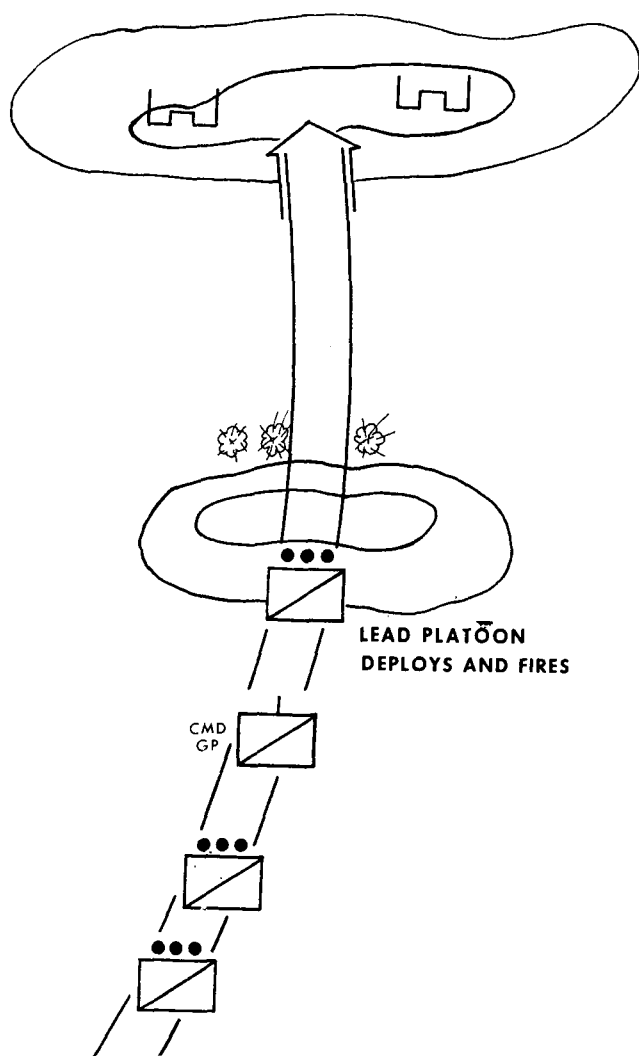


Figure 10-1. Cavalry troop reinforcing a platoon in contact with following platoons and reorganizing to engage using provisional platoons of like elements.

b. While the troop is in the assembly area preparing for the attack, the troop commander usually joins the next higher commander to receive the detailed operation order. He takes with him those personnel needed to assist in planning the attack. During the absence of the troop commander, the executive officer remains with the troop and, assisted by the remaining platoon leaders or key noncommissioned officers, makes certain that the troop is readied for combat. After he has received the order, the troop commander begins his troop-leading procedure which includes making an estimate of the situation, coordinating with adjacent and supporting units, preparing a tentative plan attack, making his personal reconnaissance, completing his plan of attack, and issuing his order to the troop. The commander

then checks the readiness of the troop to conduct the attack.

c. When the troop is involved in a meeting engagement, and is required to attack directly from march column, as is normal during a reconnaissance mission, it attacks without benefit of the formal preparation discussed above. The troop commander makes a rapid estimate of the situation, decides on a course of action, and issues the necessary fragmentary orders for the attack.

10-4. Reconnaissance Before the Attack

a. Before the cavalry troop is committed to an attack, the commander makes a map reconnaissance, then a personal reconnaissance, by air if possible, of the area of operations. If time does not permit a personal reconnaissance, the commander must rely on a detailed map reconnaissance in planning the attack.

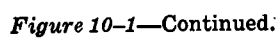
b. The troop commander arranges to have the platoon leaders and supporting unit commanders accompany him or come forward to meet him at a specified time and place. The troop commander normally completes his own reconnaissance before meeting with his platoon leaders. If available, an artillery forward observer accompanies the troop commander on the reconnaissance and assists in planning the use of supporting fires.

c. During his reconnaissance, the troop commander determines:

- (1) Positions for supporting weapons in the troop base of fire.
- (2) The avenue of approach for the maneuvering force to the objective.
- (3) When necessary, positions for antitank weapons employed in a supporting role.
- (4) Location of obstacles likely to hinder the advance.
- (5) Location of an attack position when required.
- (6) Control measures.
- (7) Location of the line of departure.

d. Air cavalry elements may be employed to develop the enemy situation and to determine the flanks and weak points in enemy defensive positions. Care must be taken not to disclose the intent or plan of the troop.

e. The troop commander should allow time for all subordinate leaders to complete troop leading procedures following issuance of the troop attack order.



10-5. Estimate of the Situation

a. The estimate of the situation by the troop commander is a continuous examination of all factors that affect the accomplishment of the mission. The commander uses the estimate of the situation as a mental checklist to insure that he considers all pertinent factors before arriving at his decision as to which course of action to follow.

b. In making his estimate, the troop commander should consider the factor of METT and rules of engagement as each pertains to the particular situation. For a detailed discussion and a sample checklist for the commander's estimate of the situation, see FM 17-1.

10-6. Plan of Attack

a. The plan of attack is designed to insure teamwork and maximum coordination within the attacking forces throughout the operation. The plan must be simple, but must cover all essential details. It includes the details of the who, what, when where, how, and why of troop actions in carrying out the assigned mission.

b. The troop plan of attack consists of the scheme of maneuver and the plan of fire support.

(1) The scheme of maneuver includes the composition of the maneuvering force, the approach route it will follow to the objective, and its method of advance.

(2) The plan of fire support includes the location and composition of the base of fire, targets to be fired on, and signals for lifting or shifting fires.

c. The plan of attack includes provisions for security during the attack, consolidation of the objective, reorganization after the attack, and resumption of the advance.

10-7. Formation for the Attack

The cavalry troop may attack in either of the two basic combat formations, column or line, or in variations thereof. A complete discussion of combat formations is contained in FM 17-1.

10-8. Maneuvering Force

a. The troop may comprise part or all of the maneuvering force during an attack conducted by a larger unit. When required to execute independent attack, the troop provides elements for both the maneuvering force and the base of fire. The maneuvering force contains maximum available combat power and seeks to strike the enemy on the flanks.

b. Scout elements may accompany the maneuvering force to provide flank security and to assist in the movement of the force by reconnoitering and recommending covered and concealed routes. Scout elements may also join with the rifle and antitank elements in closing with the enemy, adding their automatic weapons firepower to the firepower of the maneuvering force.

c. If the terrain or obstacles prevent the use of vehicles, the maneuvering force may be made up of dismounted rifle or scout squads.

d. The troop commander may employ the platoons as organized or he may make provisional groupings to take maximum advantage of the capabilities of each type element. The normal groupings combine rifle and scout squads to form the maneuvering force. These provisional platoon teams normally are commanded by platoon leaders and the executive officer.

10-9. Base of Fire

a. The base of fire for the cavalry troop during an attack will consist of supporting artillery, elements of the air cavalry troops, and tactical air or naval gunfire in addition to the organic firepower of the troop. The nucleus of the base of fire for the troop is provided by three organic mortars, and, depending on the situation, the anti-tank elements. They are retained under troop control whenever they can effectively support the troop attack. Scout elements may be used to assist the base of fire to furnish automatic weapons firepower or to provide security. The antitank sections may be used as part of the base of fire if the terrain permits.

b. The troop commander usually designates the executive officer or a platoon leader to control that part of the base of fire provided by organic elements of the troop.

10-10. Operation Order

The troop order for the attack is usually issued orally by the troop commander to his assembled key subordinates. It should be brief, clear, and complete. To insure completeness, the commander should follow the established form for an operation order. It is normally issued from a vantage point overlooking the area of operations, thus precluding the possibility of misunderstanding by the recipients. If the situation or time available precludes issuing the order at a terrain vantage

point, the troop commander may issue the order in the assembly area or at any other convenient location.

10-11. Supervision of Preparation for Attack

Supervision by the troop commander, platoon leaders, and noncommissioned officers is a continuing process. All officers and noncommissioned officers must actively supervise the actions of their subordinates to insure that their units are fully prepared for the operation. Detailed attention must be given to such matters as supply, maintenance, communication, and dissemination of information contained in the plan of attack.

10-12. Movement from Assembly Area to Attack Position

a. Movement from the assembly area to the attack position, when one is used, is made as a tactical march. The troop order of march should be planned to simplify movement into the attack position. When the troop commander is on reconnaissance or otherwise not available, the executive officer moves the troop to the attack position.

b. The troop may march as part of a larger force or independently. In either instance, it provides its own security on the march and in the attack position.

10-13. Attack Position

a. When an attack position is used, it is occupied for a minimum time. Every effort is made to move rapidly through the attack position in the specified attack formation and cross the line of departure without halting. When the situation requires that the maneuvering elements halt in the attack position, the troop commander should insure that local security is established; use is made of available cover and concealment; the troop is in the prescribed formation; and readiness of the troop is reported to the squadron commander.

b. Section and squad leaders inspect their units and correct deficiencies as the situation permits.

10-14. Conduct of the Attack

During the attack, unforeseen circumstances may require the troop commander to change his plan. He must exploit favorable developments without hesitation and must overcome obstacles as quickly as possible. In the event the committed elements cannot be shifted to take advantage of a changing situation; the next most effective methods are to

use uncommitted elements of the troop or to shift the supporting fires.

10-15. Conduct of Maneuvering Force

The maneuvering force must close on the objective in the shortest possible time. This force should be committed over terrain that is favorable for rapid movement toward the objective. Available cover and concealment should be used to gain surprise and to reduce vulnerability. The maneuvering force attempts to reach the objective by continuous movement; however, when the situation requires, fire and movement are executed by elements of the maneuvering force starting as close as possible to the objective. Dismounting of the rifle elements is based on the situation. Aggressive action is the key to a successful attack.

10-16. Conduct of Base of Fire

a. The base of fire must be able to furnish continuous fires to the maneuvering force, i.e., preparatory, assault, and protective fires.

b. On order of the troop commander, some elements in the base of fire may displace forward as the maneuvering force moves on to the objective. Elements of the base of fire should be displaced in such a manner that fire support is always immediately available.

10-17. Actions of Troop Command During Attack

a. During the attack, the troop commander locates himself where he can best influence and control his troop. He normally accompanies the maneuvering force, placing himself where decisive action is likely to develop. He should avoid placing himself so that he may become so involved with actions of a subordinate element that he cannot influence the action of the remainder of his troop. Effective use of visual signals aids in the control of the troop.

b. During an exploitation or other rapid moving offensive operations, the troop commander should be located near the head of the column or immediately behind the lead platoon.

c. Throughout the attack, the troop commander must keep the squadron or other higher headquarters informed of the situation in his troop area.

10-18. Conduct of the Assault

The desired goal in the assault is to bring the maximum firepower and shock effect of the organic

FM 17-37

and supporting elements to bear upon the enemy. All fires should be employed simultaneously over the entire objective in order to destroy the enemy as rapidly as possible with the fewest possible losses to friendly forces. The commander must achieve this complex goal by forceful and decisive action coupled with careful judgment is employing the combined arms team. The assault of a defended position is normally made by dismounted rifle and scout elements supported by the fires of the support and antitank squads. When the dismounted rifle and scout squads reach a predesignated position, or upon a prearranged signal, supporting fires are lifted or shifted to the flanks or rear of the objective to prevent escape of the enemy or to break up counterattack formations. The fires of infantry and scout weapons replace supporting fires on the objective without a break in the tempo of fire support. The infantry and scout elements close with and destroy the enemy in close combat, using assault fires. The shock effect

of assaulting infantry and supporting fires is multiplied by rapid and aggressive movement and a heavy volume of fire, including the use of hand grenades. Direct fire support by the aerial weapon systems of the air cavalry troops increases the effectiveness of the dismounted assault. As soon as the objective is secured, elements are positioned to dominate enemy avenues of approach, repel counterattacks, or continue the attack.

10-19. Actions on Objective

a. Immediately upon taking the objective, the troop deploys to repel a counterattack. Mortars and other organic weapons in the base of fire displace forward by echelon to cover by fire possible avenues of enemy approach to the front and flanks of the objective. Ground and aero scouts provide security to the front and flanks, and maintain visual contact with the enemy. Supporting artillery and tactical air are planned and used to reinforce the position against counterattack.

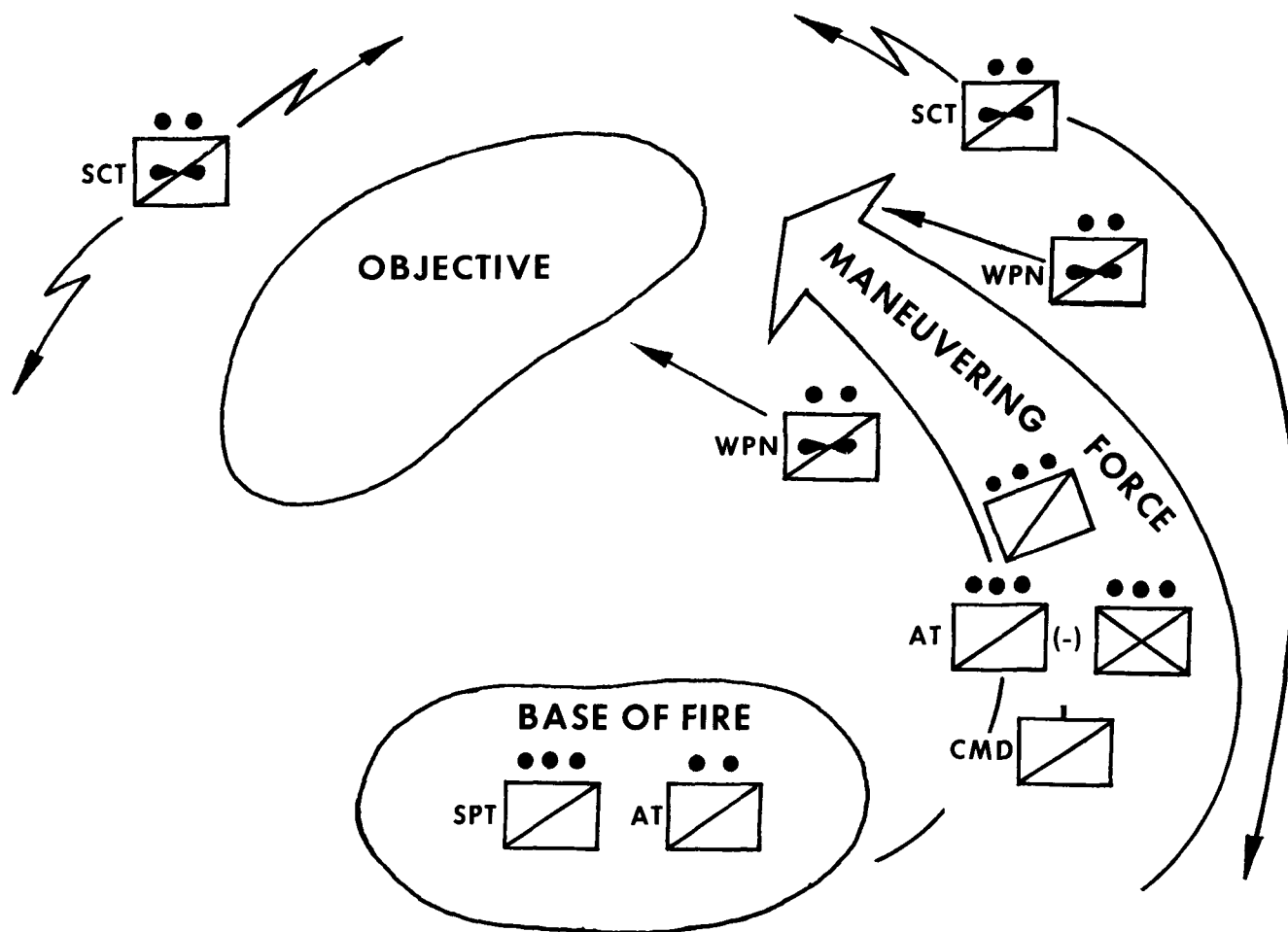


Figure 10-2. Cavalry troop in a coordinated attack with elements of an air cavalry troop in support.

b. The troop may be required to remain on or in the vicinity of the position and defend it, or it may be diverted to continue the attack. In either case, as much resupply and redistribution of supplies is accomplished as quickly as possible in the time available.

c. As soon as the troop is prepared to repel a counterattack, reconnaissance is begun in anticipation of continuing the attack. At the same time, reorganization of the objective continues. Casualties are evacuated and troops are reassigned as required to reconstitute an effective force. The unit situation, strength, and logistical status are reported to higher headquarters. Prisoners are interrogated to acquire information of immediate tactical value to the troop and are then evacuated to PW collecting points as quickly as possible.

10-20. Continuation of Attack

The cavalry troop commander should have a complete picture of the plan of the next higher commander. He makes a continuous estimate of the situation. If the plan calls for a continuation of the attack, the troop is deployed on the objective in such a way as to facilitate resumption of the advance. When this procedure is followed, only brief oral orders are required for continuation of the attack.

10-21. Employment of Air Cavalry Elements

Air cavalry elements may be used to augment and

reinforce the firepower of the cavalry troop. The heavy volume of airmobile firepower available in the three air cavalry troops of the squadron can be brought to bear at any point on the battlefield in a very short time. This massed aerial firepower may be used to gain and maintain fire superiority during the assault phase of the attack and to prevent the enemy from regrouping and counterattacking before the cavalry troop has had time to consolidate on the objective. Aero scouts can be used to protect the cavalry troop from surprise by maintaining visual contact with the enemy. The aero scouts may also reconnoiter to the rear of the enemy to locate his reserves and to discover weaknesses in his defense. The integration of the combat power of the cavalry troop and the air cavalry troops enhances the probability of success.

10-22. Use of Army Aircraft in Troop Attack

A significant factor in planning for operations of the cavalry troop is that all combat elements of the troop, excluding their 3/4-ton vehicles, are transportable by organic squadron aircraft. This gives the troop the capability to be airlifted into a position more favorable for the conduct of an attack than any positions accessible by ground vehicle alone. The troop must be thoroughly trained in airmobile operations so that full advantage may be realized from this unique capability.

Section III. DEFENSIVE OPERATIONS

10-23. General

a. The cavalry troop may be required to engage in defensive action in the performance of normal reconnaissance and security missions. In an economy of force role, the troop may be required to defend a specific area, terrain feature, or installation.

b. The troop is most effectively employed in the defense when it is assigned reconnaissance and security missions for a larger unit. Basic considerations, types of defense, and conduct of defensive actions are discussed in FM 17-1.

c. The cavalry troop may be employed in defensive operations either alone or as part of a larger force. When part of a larger force in a defensive action, the troop may participate in the mobile defense or area defense.

d. In the mobile or area defense, the troop is best employed when given a security force mission.

10-24. Organization of the Ground for Defense

a. When the enemy possesses a modern mechanized force, the primary consideration in the defense is the antitank plan. Measures for increasing the effectiveness of defensive fires and permitting maneuver by elements of the troop take precedence over other actions in organizing an area for defense. The defensive position is organized to permit delivery of maximum fires on the enemy; impede and canalize his advance; reduce the effects of his fires; and force him to mass, thereby providing a lucrative target.

b. The organization of a defensive position and

the conduct of a defensive action by the cavalry troop require the troop commander to apply the following fundamentals:

- (1) Make maximum use of terrain.
- (2) Provide security.
- (3) Insure that elements of the troop are mutually supporting.
- (4) Organize the position in depth.
- (5) Provide all-round defense.
- (6) Insure that fires are coordinated.
- (7) Continue to strengthen the position.
- (8) Provide flexibility within the defense.
- (9) Make maximum use of offensive action.
- (10) Make maximum use of time available.

10-25. Reconnaissance and Selection of Position

a. Assignment of a defensive position to the cavalry troop is normally the responsibility of the squadron or the supported unit commander. The troop commander reconnoiters his assigned area to find likely enemy avenues of approach into the troop sector. In selecting a position, the troop commander analyzes the terrain with particular emphasis on key terrain features, observation and fields of fire, cover and concealment, obstacles, accessibility of positions, and communications.

b. Detailed plans must be made for the employment of recoilless rifles, automatic weapons, mortars, and all other available fire support means. Primary, alternate, and supplementary positions are selected for all crew served weapons. The platoon leaders assign sectors of fire to each element of their platoons, and final protective fires of machineguns and mortars to insure that the entire platoon area of responsibility is covered.

10-26. Occupation of the Defense Position

Based on the results of his reconnaissance and estimate of the situation, the troop commander locates his platoons to cover the likely enemy avenues of approach into his area of responsibility. The nucleus of each platoon defense position is the antitank section and rifle squad. If there are two enemy avenues of approach into the troop sector, the troop commander may employ two platoons forward to block the avenues of approach and position the third platoon in depth. The troop commander may employ the mortars and scouts from each platoon directly under troop control. When possible, mortars are massed to support the actions of all elements of the troop. Scout sections,

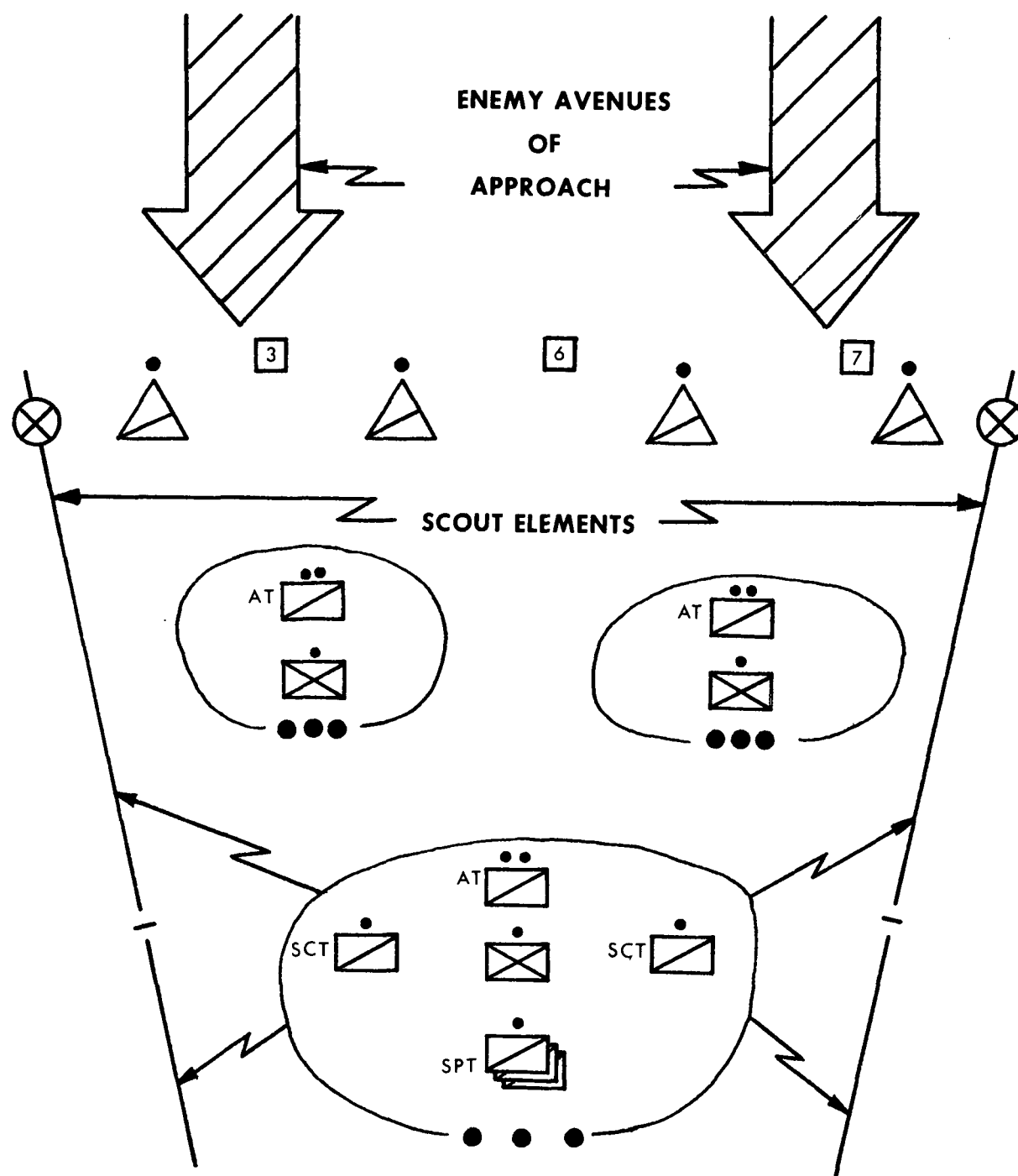
operating under troop control, may be used to provide local security by manning observation posts and by conducting patrols in the troop area. On occasion, the troop commander may elect to organize a provisional antitank platoon, rifle platoon, and scout platoon, with the support squads under troop control. In this situation, the antitank platoon will be employed to cover the most likely avenue of enemy armor approach, and the rifle squads will be disposed to provide protection for the antitank squads and cover avenues of enemy infantry approach. The antitank squads should not be employed alone but must be provided the protection of dismounted riflemen or scouts. Scout elements are used to establish OP's and patrol the areas between the troop and adjacent units. Supplementary positions are then prepared to cover other possible approaches into the flanks and rear. Time permitting, fire lanes are cleared and vehicles are moved to the alternate and supplementary positions. A range card is prepared for each crew served weapon at each defensive position to insure coverage of the platoon sectors under conditions of darkness or reduced visibility.

10-27. Platoon Defensive Actions

a. The platoon's defensive position is organized around its antitank section. The primary and alternate positions selected for its weapons cover the most likely avenue of enemy armor approach into the position. Supplementary positions are then prepared to cover other possible approaches into the flanks and rear.

b. The rifle squads are located to provide maximum firepower to the front and flanks of the positions and to protect the antitank sections. The platoon leaders designate primary, alternate, and supplementary positions for the crew served weapons, and assign sectors of fire to be covered. The fire teams are placed so they can fire across the front and flanks of the platoon defensive position. All troops dig in and make maximum use of cover and concealment. The rifle squad leaders position themselves where they can best control the actions of the squads. At least one man at the machinegun and each automatic rifle position must be alert at all times. The organization of the squad positions may be changed at night to provide better close in defense and protection.

c. The scout sections may provide security for the positions or be employed as riflemen. When the scout sections are employed to provide security for the platoon positions, they normally es-



- NOTES. 1. SCOUTS MAY BE ORGANIZED INTO A PROVISIONAL PLATOON.**
- 2. MORTARS MAY REMAIN UNDER PLATOON CONTROL OR BE
MASSED UNDER TROOP CONTROL.**

Figure 10-3. Cavalry troop in a defensive position.

establish observation posts and conduct patrols. At times, one scout squad is sufficient to give early warning of enemy approach and the other squads are used to strengthen or add depth to the platoon's defensive position. When scout elements are employed as riflemen, they should be employed by squads. The machineguns mounted on their vehicles should be dismounted to increase the defensive firepower of the platoons.

d. The support squads provide close indirect fire support for the platoons. The mortars are located far enough to the rear to permit them to fire within the defensive position. When firing, the support squads have a limited capability for providing their own security. The platoon leaders may find it necessary to use other elements of the platoons to provide security for the support squads. At night or during periods of reduced visibility, it may be necessary to move the support squads into the platoon defensive positions for security. When the platoons are occupying part of the troop sector, the support squads from all platoons will normally be employed under troop control. When employed as part of the platoon, the platoon leader designates primary, alternate, and supplementary positions for the mortar.

e. Vehicles of the platoon which are not employed as part of the defensive position should be located to the rear of the positions in concealed and defilade positions.

f. The platoons are capable of preparing obstacles and installing minefields. The installation of mines and the establishment of obstacles must not detract from the mobility of friendly forces. Emplaced mines and demolitions and prepared obstacles must be removed prior to departure from the defensive position. Use of demolitions to destroy bridges, to fell trees and to crater roads should be considered by the platoon leaders when planning the defense. The use of demolitions for these tasks must be coordinated with higher headquarters and must be in consonance with the overall plan of defense. If authority is received from higher headquarters, the platoon leaders may install protective minefields. Minefields and other obstacles should be covered by platoon direct fire weapons. Smoke may be used to reduce effective enemy observation and to confuse the enemy; however, its use must be closely coordinated with adjacent units to insure that the use of smoke does not inhibit their plan of defense. The platoons should continue to improve and strengthen their defensive positions until they are abandoned.

10-28. Conduct of Defense

a. Success of the platoons' defense depends largely on the organization of the defensive positions and the effective use of available firepower. The defense must be conducted aggressively by engaging the enemy as soon as he comes within effective range of the platoons' weapons and increasing the intensity of the engagement as he approaches the defensive position. The platoons defend their assigned positions until the enemy is repelled or the platoons are ordered to move. The platoon leaders must be prepared to adjust their forces within the platoons' defensive positions to counter any enemy threat.

b. Defensive fires are coordinated within the platoons and with adjacent units to insure maximum effectiveness of these fires during both daylight and darkness. The antitank sections, in mutually supporting positions, cover the probable avenues of enemy armor approach. Interlocking sectors of machinegun fire must cover entire platoon fronts. The support squads, grenadiers, aero weapons squads, and other fire support elements fire into areas which cannot be covered by direct fire weapons and are prepared to fire within the platoon positions if they are penetrated.

c. In defensive situations, the cavalry platoons provide their own local security. The scouts will usually provide security to the front, flanks, and rear. The support squads assist in providing security to the rear.

10-29. Platoon Blocking Positions and Roadblocks

a. A blocking position is organized to deny the enemy access to a given area or to prevent further advance of the enemy in a given direction. The platoons may be given a mission to establish blocking positions or they may do so on the platoon leader's initiative in carrying out another mission. A blocking position may consist of a platoon defensive position that covers a likely avenue of enemy approach.

b. Where the movement of vehicles is largely restricted to roads, roadblocks are especially important to the cavalry platoon in carrying out many of its assigned missions. Before establishing a roadblock, the platoon leaders should consider all available means to obstruct, delay, and canalize the enemy. Natural obstacles, mines, demolitions, barbed wire, and logs are commonly used. Booby-traps may be used in conjunction with any of

these means. In addition, the element of surprise and the ability of the platoons to cover the obstacle by fire must be considered. The roadblock usually incorporates obstacles covered by fire; however, if the lack of time or materials precludes emplacing a physical block in the road, the platoons establish roadblocks of fire alone. After selecting the point or area along the road where the roadblocks are to be established, the platoon leaders select positions for each element of the platoons and assign tasks for preparing the position as an effective obstacle. The scout sections, supplemented by aero scouts when available, normally provide security to the flanks and assist in covering possible bypass routes that the enemy may attempt to use in avoiding the roadblocks. The antitank sections are positioned to cover the roadblocks and approaches to them. The rifle squads normally construct the obstacles and provide close-in protection for the anti-tank sections. The support squads are positioned to cover by fire those areas along the route to the roadblocks that cannot be covered by direct fire. They also cover possible bypass routes and escape routes from the roadblock area.

10-30. Mobile Defense

a. General. The cavalry troop may be employed as part of any element of the mobile defense—security force, fixing force, or the reserve.

b. Security Force.

(1) In the mobile defense, the troop normally participates as part of a larger force performing a covering force mission. It is usually assigned a sector for security of the initial position. The troop generally conducts this type mission as a delaying action (10-33).

(2) If the troop is assigned a flank security or rear area security mission in the mobile defense, it conducts the missions as described in paragraphs 9-3 and 9-6.

c. Forward Area Defense Force. When the cavalry troop must be employed as part of a fixing force, it is normally assigned a mission of screening or delay. The higher commander designates the general trace of the area to be occupied by the troop. The higher commander may designate certain blocking positions that the troop is to prepare and occupy. As soon as possible, the troop commander initiates a reconnaissance of his area and develops his plan of defense. Platoons are positioned to provide long-range fires and mutual

support. The troop is organized for combat based on the factors of METT. No reserve is held at troop level, although, if the situation permits, one platoon is positioned in depth. The position is organized for all-round defense. The plan of fire support is developed, range cards are prepared for all crew served weapons, and overlays showing the organization of the troop sector are prepared and submitted to the next higher commander. The troop CP and trains are positioned to the rear (fig 10-4).

d. Reserve. The cavalry troop may be employed as part of the reserve. The preparation and conduct of the operations of the reserve are similar to those of other offensive actions. When participating as part of the reserve, the cavalry troop is best suited for reconnaissance and security missions.

10-31. Area Defense

a. General. In area defense, the troop may be employed in one or more echelons of the defense, i.e., security force, forces in the forward defense area, or reserve. As the mission of forces in the forward defense area is retention of terrain and these forces are generally static, the troop is not normally employed as a part of these forces. The troop is most effective when it is assigned missions in which it can use its mobility and extensive means of communication to the maximum. The characteristics are best employed by the troop—

(1) Participating as part of a covering force or general outpost for a larger unit.

(2) Acting as part of the combat outpost for a brigade.

(3) Acting as part of the reserve for a larger unit.

b. Combat Outpost. The cavalry troop may be required to furnish the combat outpost for a battalion task force or a brigade. The troop commander assigns outpost sectors to the platoons. The combat outpost is normally located far enough in front of the forward edge of the battle area to deny the enemy ground observation into the battle area. Once the platoons have organized their respective positions, the troop commander coordinates their dispositions, making necessary adjustments.

(1) The troop commander coordinates with the artillery forward observer for supporting artillery fires. Fires are planned to cover possible

FM 17-37

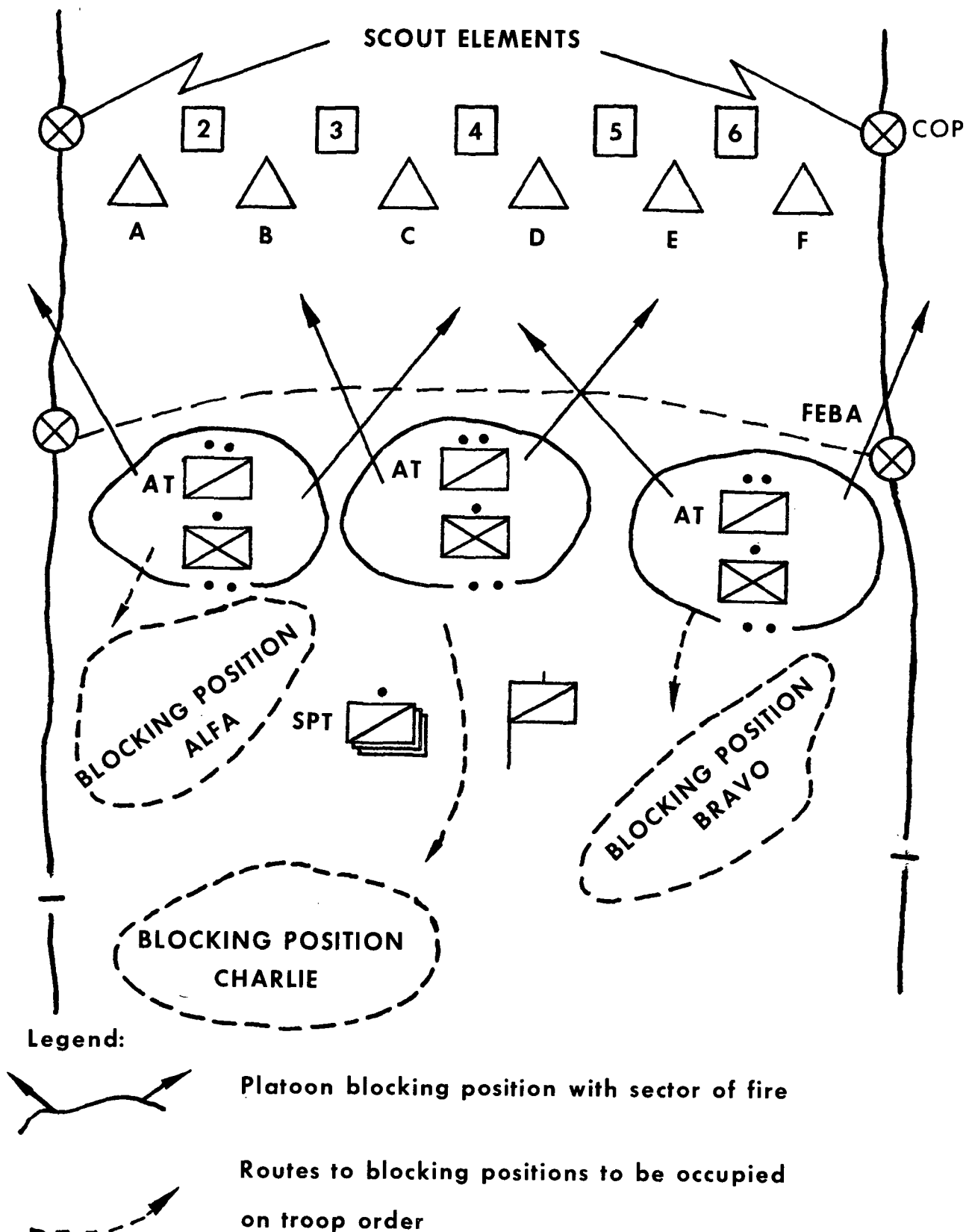


Figure 10-4. Cavalry troop as a forward area defense force (fixing force).

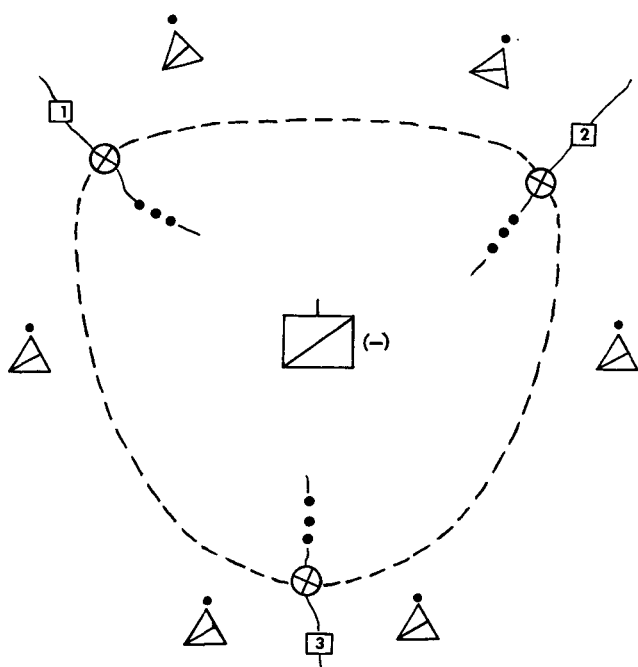


Figure 10-5. Cavalry troop in a perimeter defense.

avenues of enemy approach with particular emphasis on areas that cannot be covered with flat-trajectory weapons.

(2) Scouts maintain contact between the outposts. The combat outpost withdraws only on order unless authority to order withdrawal has been delegated to the troop commander. When withdrawing, previously reconnoitered routes which provide maximum cover and concealment are used. Routes are selected that will assist in deceiving the enemy as to the true location of the forward edge of the battle area. Several plans for withdrawal are made and the troop is prepared

for any change in the situation. Forces in the battle area are notified when all elements of the combat outpost have cleared the forward edge of the battle area.

c. Cavalry Troop as Part of Forces in the Reserve Area.

(1) The cavalry troop may be employed as part of the reserve in the area defense. The troop is best suited to perform reconnaissance and security missions for the reserve.

(2) The troop commander studies the plans for employment of the reserve, reconnoiters the area, and prepares necessary plans. He may organize the troop in any of the ways discussed for offensive action. Platoon leaders and section and squad leaders must reconnoiter the routes and areas for all possible operations of the troop.

10-32. Cavalry Troop Perimeter Defense

When operating independently, the troop must provide for its own perimeter defense. The troop commander deploys his platoons to cover likely avenues of enemy approach and establishes local security. The troop commander insures that platoon leaders employ their recoilless rifles to cover the most likely avenues of armor approach, and their riflemen provide protection for the antitank squads and cover the most likely avenues of infantry approach. The platoons employ normal defensive tactics. If the situation permits, a reserve should be maintained and positioned to permit it to move rapidly to any part of the perimeter. The disposition of the platoons should permit maneuver room for the troop reserve. The troop CP and trains are located near the center of the perimeter for security. (fig 10-5)

Section IV. RETROGRADE OPERATIONS

10-33. Delaying Action

a. A cavalry troop may be required to conduct a delaying action to accomplish an assigned mission. The troop may conduct this action as a separate unit; however, it is better employed as part of a larger force. A detailed discussion of the characteristics of delay positions and the principles of the preparation for and conduct of the delaying action are contained in FM 17-1.

b. Higher headquarters normally assigns a troop sector in which to conduct the delay, the general area of the initial and subsequent delay

positions, and designates the length of time the enemy is to be delayed forward of each position. As soon as possible, the troop commander reconnoiters the designated delay positions. He normally selects intermediate delay positions between those designated by higher headquarters and reports these to the higher headquarters. Subsequent delay positions are spaced far enough apart to force the enemy to deploy to attack each position and to reorganize after each attack. The most important factors to consider in selecting delay positions are as follows:

- (1) Avenues of enemy approach.
- (2) Key terrain that dominates the avenues of enemy approach.
- (3) Obstacles across the front and flanks.
- (4) Cover and concealment.
- (5) Observation and fields of fire.
- (6) Routes of withdrawal and lateral movement.

c. The troop commander deploys his platoons to cover likely avenues of enemy approach. The width of the assigned sector and the number of avenues of approach into the area determine the distribution of forces to be employed. When operating within a wide sector containing several routes of approach, the troop commander positions one platoon to block each avenue of approach. Whenever it is possible to support the entire troop from one firing position, the support squads are massed under troop control. When the width of the troop sector permits, a platoon is positioned in depth. This platoon is used to block small enemy penetrations, to reinforce elements of the delay positions, or to cover the withdrawal of forward elements. Changes in organization for combat or distribution of forces should take place whenever required by the tactical situation.

d. The organization of a delay position is similar to the organization of a defensive position. Most of the firepower of the troop is oriented toward the enemy; however, adequate flank and rear security must be provided. Each platoon position is organized around the antitank sections which are located to block likely avenues of enemy armor approach and to deliver long range direct fire to cause the enemy to deploy. Rifle elements are placed where they can protect the antitank sections and cover avenues of enemy infantry approach. If possible, the fires of machineguns should interlock. The troop commander prepares contingency plans for being reinforced on the delay position by the larger unit reserve. Basic factors that the troop commander must consider in occupying a delay position include:

- (1) Primary, alternate, and supplementary positions.
- (2) Routes of withdrawal.
- (3) All-round security.
- (4) Coordination with other units.
- (5) Plans for integrating all available fires.
- (6) Plans for employment of natural and manmade obstacles.
- (7) Time available.

e. The troop commander insures that each platoon makes maximum use of available time and material to improve and strengthen the position occupied by the platoon. Vehicles with mounted weapons are positioned defilade, fires are coordinated, and automatic weapons emplacements are prepared and improved. All positions are camouflaged. Range cards are prepared for all crew served weapons. Obstacles are constructed and covered by fire. The location of the platoon position and its planned fires are coordinated with adjacent units. Covered routes to the platoon route of withdrawal are selected and reconnoitered for each vehicle.

f. The fire support plan should provide for normal defensive fires, fires in support of a counterattack, and fires to cover the withdrawal. Defensive fires should concentrate on breaking up advancing enemy formations at maximum ranges. Details of the fire support plan must be known by all persons in the troop. The support squads are positioned to provide continued fire support during all phases of the delay.

g. The delaying action is accomplished in the following manner:

(1) Scout elements of the troop operate well forward of the initial position to give early warning of enemy approach; as the enemy advances, scouts withdraw to the flanks of the delay position. Scout elements providing observation to the flanks do not withdraw in any set order. They keep the enemy under constant observation and move by bounds, using routes of withdrawal other than those used by other elements of the troop.

(2) Long-range fires are brought to bear on the approaching enemy force as far forward of the delay position as possible. This usually is accomplished by artillery and mortar fire. Tactical air and air cavalry units engage enemy forces before they come within range of supporting artillery fire. Within the delay force, the recoilless rifles open fire on the enemy at the maximum effective range of the weapons. Observation posts within the delay force, the recoilless rifles open fire on the enemy at the maximum effective range of the weapons. Observation posts on the flanks of the position remain concealed and do not fire on the enemy unless forced to do so by enemy action. Maximum delay is obtained on each delay position and terrain feature; however, the delaying force will normally be withdrawn from a position before becoming decisively engaged. The delaying force withdraws to successive delay positions.

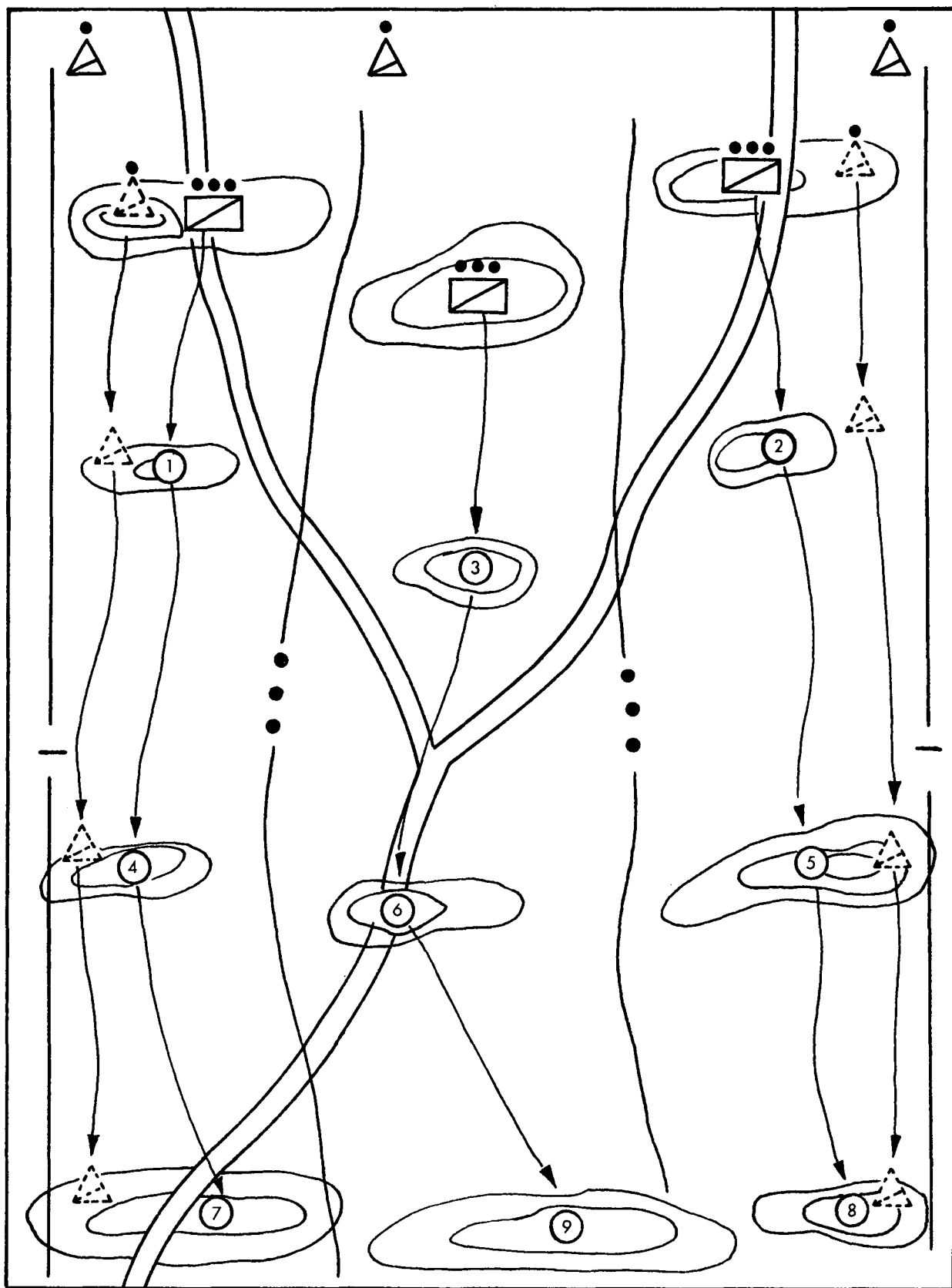


Figure 10-6. Cavalry troop conducting a delaying action with all platoons on line. Platoons delay in successive positions while scout elements provide security to the flanks.

(3) The troop commander must maintain close contact with his platoons. He attempts to locate himself with the platoon that is engaged in the most critical action; however, he must not become so involved in a platoon action that he cannot control the entire troop. The troop does not withdraw until authorized to do so by the higher headquarters. Unengaged platoons may be employed to assist or disengage heavily engaged platoons. The troop commander bases his decision to withdraw elements of the delay force on his knowledge of the situation and on reports and recommendations of subordinate leaders. He normally remains on the delay position until the last platoon withdraws.

10-34. Platoon Withdrawal From the Delay Position

a. The platoon leader remains with the last element to withdraw.

b. Scout squad leaders control the withdrawal of their squads and coordinate this movement with the withdrawal of other elements of the platoon. The scouts withdraw independently on the flanks of the platoon, maintain contact with the enemy, and continue to adjust supporting fires. The scouts report the enemy location, disposition, composition, and direction and speed of movement.

c. In daylight, to make use of its destructive firepower, the antitank section is normally the last element to withdraw from the position. The antitank squads withdraw without exposing themselves to enemy fire. At night, in dense foliage or when their observation is otherwise restricted, the antitank section may withdraw under cover of, and prior to, the rifle squad.

d. When the terrain permits good observation, the rifle squad normally withdraws before the antitank section. The squad leader must establish a means of informing his fire team leaders when to return to the squad vehicle. At night or when visibility is limited, the rifle squad usually remains on the delay position until the antitank section has withdrawn.

e. The support squad normally withdraws on order, after maximum assistance has been given to other elements of the platoon in delaying the enemy. The squad should be in a position to fire at the time the other elements of the platoon begin to disengage and begin movement to the next delay position. The squad should be displaced to the rear when its fires are no longer required to assist the withdrawal of the antitank and rifle squads.

f. Successive delay positions are organized and occupied in a manner similar to that used for the initial delay position. Before arrival of the troop, the next delay position is reconnoitered and platoon positions are organized by the platoon sergeants in coordination with the executive officer. The position is strengthened as much as time and material permit. Obstacles are created and routes are improved. When required, supplies, ammunition, and barrier material are stockpiled on the position.

g. Artillery fire support is normally available to the cavalry troop conducting a delay action. Supporting artillery initially provides long-range fires on advancing formations and continues to fire on the enemy as he advances toward the delay position. Artillery fires are also used to support counterattacks by the reserve and to cover the withdrawal of delay forces from one delay position to the next. If artillery is in direct support, a forward observer will work with the troop, otherwise fires are requested through command channels and are adjusted by members of the troop who can observe the target. Engineers assist in the delay action by destroying bridges, blocking roads, and erecting barriers. They also maintain routes of withdrawal for friendly forces. The engineers are normally controlled at squadron or higher level. Coordination is necessary so that obstacles constructed by the engineers are covered by fire and in no way impede the planned withdrawal of delay forces or the commitment of the counterattacking force. Tactical air, when available, assists in the conduct of the delay action by disrupting and harassing advancing enemy formations. Air cavalry elements from the squadron harass the advancing enemy, deceive him as to the true disposition of the delaying force, and provide early warning of enemy approach. These elements may be able to force the enemy to deploy one or more times in front of the delay positions, thus providing more time to the delay force for strengthening their positions.

10-35. Ambush by Platoon in Delaying Action

a. An ambush is a tactical maneuver to entrap an enemy force and destroy it. Troops participating in an ambush wait in a concealed position for an opportune time to attack an unsuspecting enemy force.

b. The frequency with which a cavalry platoon can employ an ambush is limited by the terrain and enemy action. The platoon must be capable of

destroying the enemy force that it intends to ambush; otherwise, the platoon may become engaged so decisively that it is unable to withdraw. An ambush prepared by a platoon should be organized so that the leading and rear elements of the enemy column are engaged simultaneously. If possible, fire should be placed on the entire enemy column to preclude employment of their weapons against the platoon.

c. In an ambush, elements of the platoon are positioned to deliver maximum firepower on the enemy force. Antitank squads are positioned to deliver direct fire on all vehicles in the ambush or to employ their antipersonnel munitions against dismounted enemy infantry. The rifle squad is positioned to prevent the escape of dismounted infantry. The scout section will be placed to provide security or where it can add to the firepower of the ambush. This section will be used to help seal off the ambush. The support squad delivers indirect fire on the ambushed force. It is also prepared to fire on routes of escape or reinforcement.

10-36. Withdrawal

a. A withdrawal is a retrograde operation in which all or part of a force disengages from an enemy force. Contact with the enemy is maintained until the withdrawal is completed. A withdrawal may be executed during daylight or, preferably, darkness or conditions of reduced visibility, and may be forced by enemy pressure or accomplished in furtherance of tactical operations without enemy pressure. The cavalry troop may be required to conduct a withdrawal to reach a position from which it can begin other action. A troop may be required to withdraw alone or as part of a larger force. If conducting an independent withdrawal, the troop must provide for its own security and take action to insure a successful disengagement. One platoon may act as the security for the remainder of the troop during a withdrawal. If conducting a withdrawal as part of a larger force, the troop may withdraw under cover of security elements provided by another unit, or it may act as or be part of the security force or reserve for the larger unit. The troop can make a successful withdrawal either in daylight or at night. If a withdrawal is to be made at night, the decision should be made sufficiently in advance to permit planning, coordination, and a daylight reconnaissance of routes of withdrawal.

b. The commander of a troop executing a withdrawal must designate:

(1) The new position or assembly area which should be behind the line of contact and should be designated early enough to permit reconnaissance of the area.

(2) Provisions for preparation and occupation of the new position, which should include necessary defensive measures, disposition of the troop trains and command post, and guides for units moving into the area.

(3) The troop may be assigned a route of withdrawal by the higher headquarters. When the troop is operating on a broad front, it is desirable that each platoon be given a separate route of withdrawal. The commander must exercise strict control over movement during the withdrawal. If the withdrawal includes a movement through a defensive position occupied by another unit, coordination is required. The troop commander designates a representative, normally the executive officer, to coordinate with the unit through which the troop will withdraw. Coordination and control measures must be disseminated to all platoons. Plans should include provision for guides from the unit through which the troop is withdrawing, communications arrangements, and mutual recognition signals.

(4) The troop commander may designate one platoon as a rear guard. If the troop is withdrawing as part of a larger unit, it may be assigned the mission of providing the security force.

(5) Higher headquarters designates the time for withdrawal of the troop. Based on this time, a schedule must be prepared for the entire operation. The time of withdrawal of the security force must permit the main force to completely break contact with the enemy.

(6) Troop trains and the CP vehicle(s) should be designated as the first elements to withdraw. They are followed by those elements that permit an orderly withdrawal of the troop and still maintain unit integrity. The support squads, if operating under troop control, should be withdrawn early so that they are in position to provide indirect fire support for other elements when they begin to withdraw. The security force is the last element to withdraw.

c. In a withdrawal under enemy pressure, the troop commander normally employs about one third of his unit as a security force. The force protects the withdrawal of the troop main body and withdraws on order of the troop commander. To disengage from enemy contact, the security

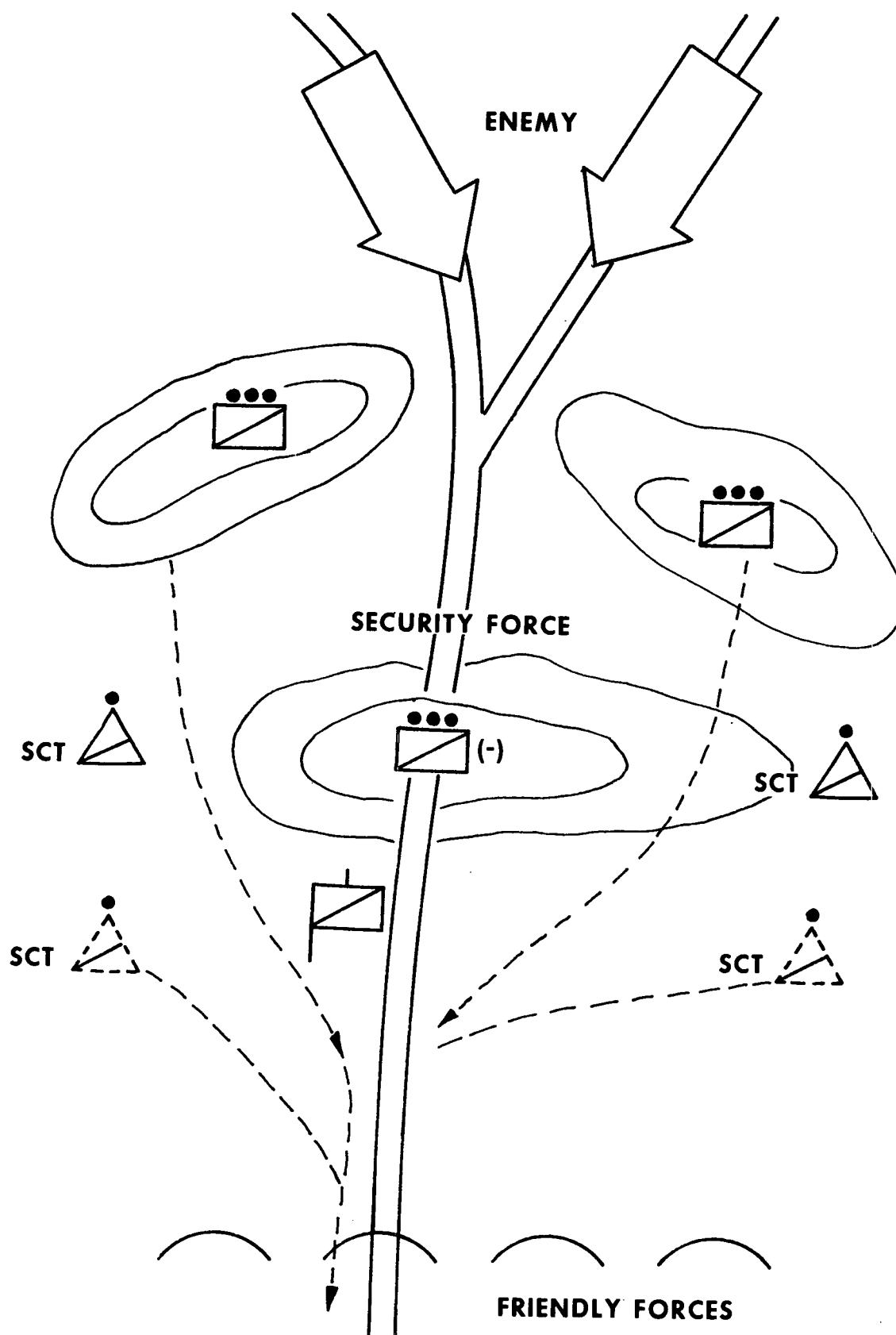


Figure 10-7. Cavalry troop in a withdrawal.

force moves to a position at the rear of the troop. The remainder of the troop executes a delaying action through the security force, breaks contact with the enemy force, forms into march columns, and continues its rearward movement under cover of the security force. A limited-objective counter-attack by the security force may be necessary to disengage the troop. Once the troop main body has withdrawn, the security force employs fire and movement (rearward) until it passes through friendly forces or disengages from the enemy.

d. In a withdrawal under enemy pressure, the troop may be designated as all or part of the reserve for a larger unit. When employed in this manner, the troop may—

(1) Employed as, or part of, a counterattacking force to permit withdrawal of a unit that is heavily engaged. Such a counterattack is a limited-objective attack.

(2) Employed as, or part of, a security force to occupy a position from which it can protect by fire the withdrawal of the units in contact with the enemy.

(3) The first element to move to the rear when it is not required to assist other units in disengaging from the enemy. When the troop is given a security force mission for a larger reserve force, it organizes for combat and conducts its actions in essentially the same manner as the security force in the mobile defense. A troop in contact with the enemy and not required to provide its own security, disengages from action in a manner similar to that of a unit conducting a withdrawal in a delaying action.

e. A night withdrawal reduces the effectiveness of enemy air attacks and observed ground fire. It is easier to deceive the enemy at night; however, control is more difficult and movement is slower. Detachments are left in contact with the enemy, and may consist of a cavalry platoon or elements of each of the three platoons. If a provisional detachment is left in contact, the troop commander

designates the executive officer or a platoon leader to command it. Coordination must be achieved within the detachment, between this detachment and the withdrawing element, and with adjacent units. Matters of command and control must be clearly specified. A detachment left in contact should use deceptive measures to create the impression that a much larger force is remaining in position. Such deceptive measures include those actions normally associated with operations in a fully manned position. Normal communications traffic is maintained and the same pattern of supporting fires is employed to add to the deception.

f. Units withdraw at night in generally the same manner as in daylight. Additional reconnaissance of routes and coordination with other elements is required. All platoons, minus their security, move simultaneously, if possible. Formations are closer and movements are made with greater emphasis on secrecy and security than during daylight withdrawals. Conditions may permit a unit to withdraw so rapidly that the enemy cannot interfere with the movement. If a commander is certain that this is possible, he may execute a night withdrawal without the use of a security detachment during this type move (fig 10-7).

10-37. Retirement

a. A retirement is an orderly withdrawal of troops according to their own plan and without pressure by the enemy. It may be made following a withdrawal from action or when no actual contact with the enemy was made. The cavalry troop usually executes a retirement as part of a larger force.

b. The cavalry troop, as part of a larger force, is best suited to be employed as a security force during a retirement. Appropriate security force missions include employment as part of a covering force or as a flank or rear guard for the main force executing the retirement.

PART FOUR

AIR CAVALRY SQUADRON

CHAPTER 11

GENERAL

Section I. INTRODUCTION

11-1. Purpose and Scope

Part Four is a guide for the employment of the air cavalry squadron of the airmobile division and separate air cavalry squadrons. It covers organization and employment of the air cavalry squadron in reconnaissance and security operations and in offensive, defensive, and retrograde operations as an economy of force unit.

11-2. Missions and Capabilities

a. The air cavalry squadron performs three types of missions: reconnaissance, security, and economy of force. The squadron is organized, equipped, and trained to engage in offensive and defensive combat, surveillance, or in retrograde operations in the execution of these missions. The squadron is best employed as a unit.

b. The air cavalry squadron has the following capabilities:

(1) Conducting air and ground reconnaissance over broad fronts and to extended depths.

(2) Collecting and reporting information of intelligence value, including information of potential CB and nuclear targets and CB casualty and nuclear damage assessment, employing air and ground observation.

(3) Protecting or screening a flank or flanks.

(4) Providing security or maintaining contact between elements of a unit or between adjacent units.

(5) Acting as part of a covering force in offensive and retrograde operations and as a general outpost in defensive operations.

(6) Conducting chemical agent detection and radiological monitoring and survey operations.

(7) Exploiting the success of other units and the effects of mass destruction weapons (including conventional strategic bombardment or chemical and biological agents).

(8) Performing area damage control operations and providing forces for rear area security.

(9) Providing a security force for airmobile operations.

(10) Conducting, when suitably reinforced, extended semi-independent combat operations.

(11) Providing a highly mobile counterattack and pursuit force.

(12) Conducting offensive, defensive, or delaying actions as required.

11-3. Combat Service Support

The tactical success of the air cavalry squadron requires adequate combat service support. To provide this support, detailed prior logistical planning is essential, for large volumes of class III A and class V supplies are habitually required. Supplies should be prepositioned where possible. Aerial resupply by nonorganic aviation should be planned for and coordinated prior to any operation. Supply, medical evacuation, transportation, and maintenance must be adequate in quantity and responsiveness to the needs of the squadron. The procedures for all aspects of combat service support, the logistical elements available to the squadron commander, and the employment of the squadron trains are covered in detail in FM 17-1, FM 54-2, and FM 61-100.

Section II. ORGANIZATION

11-4. General

The air cavalry squadron consists of a headquarters and headquarters troop, three air cavalry troops, and a cavalry troop. The air cavalry troop and cavalry troop organizations are discussed in chapters 3 and 7. The squadron organization is shown in figure 11-1.

11-5. Headquarters and Headquarters Troop

The headquarters and headquarters troop of the

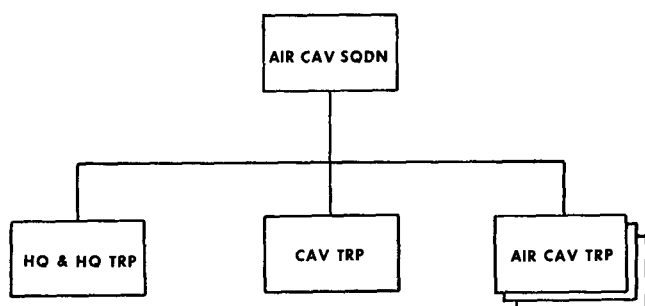


Figure 11-1. Organization chart, air cavalry squadron.

air cavalry squadron consists of squadron headquarters and the squadron headquarters troop. The squadron headquarters is made up of the squadron commander and his staff. Headquarters troop consists of a troop headquarters, squadron headquarters section, communication platoon, support platoon, maintenance platoon, and the aviation platoon (fig. 11-12).

11-6. Mission of Headquarters and Headquarters Troop

The mission of the headquarters and headquarters troop is to provide command, administration, communication, supply, medical, transportation, and maintenance support for the squadron.

11-7. Squadron Headquarters, Functions and Staff

The squadron headquarters provides command and control for the squadron. It consists of the individuals necessary to command, control, train, and employ the squadron. These are the squadron commander, executive officer, personnel staff of-

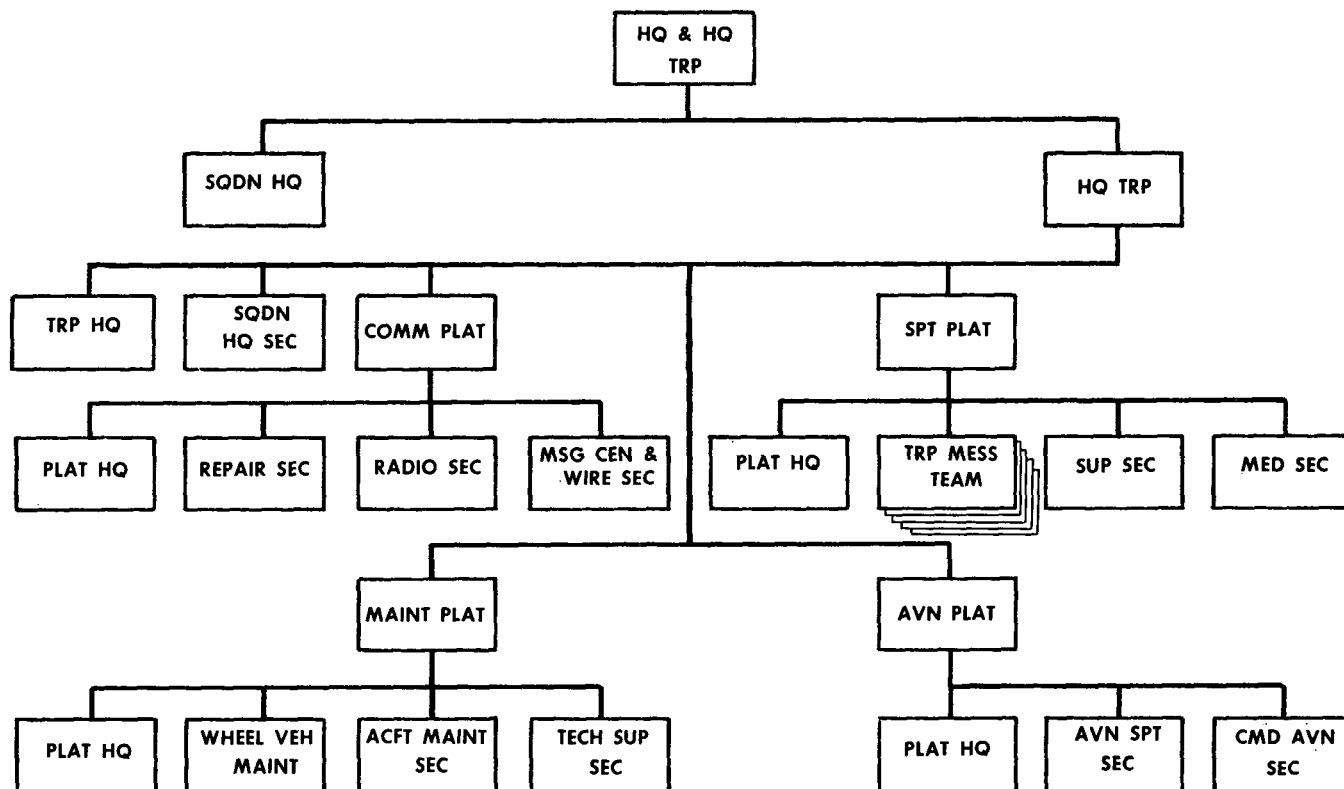
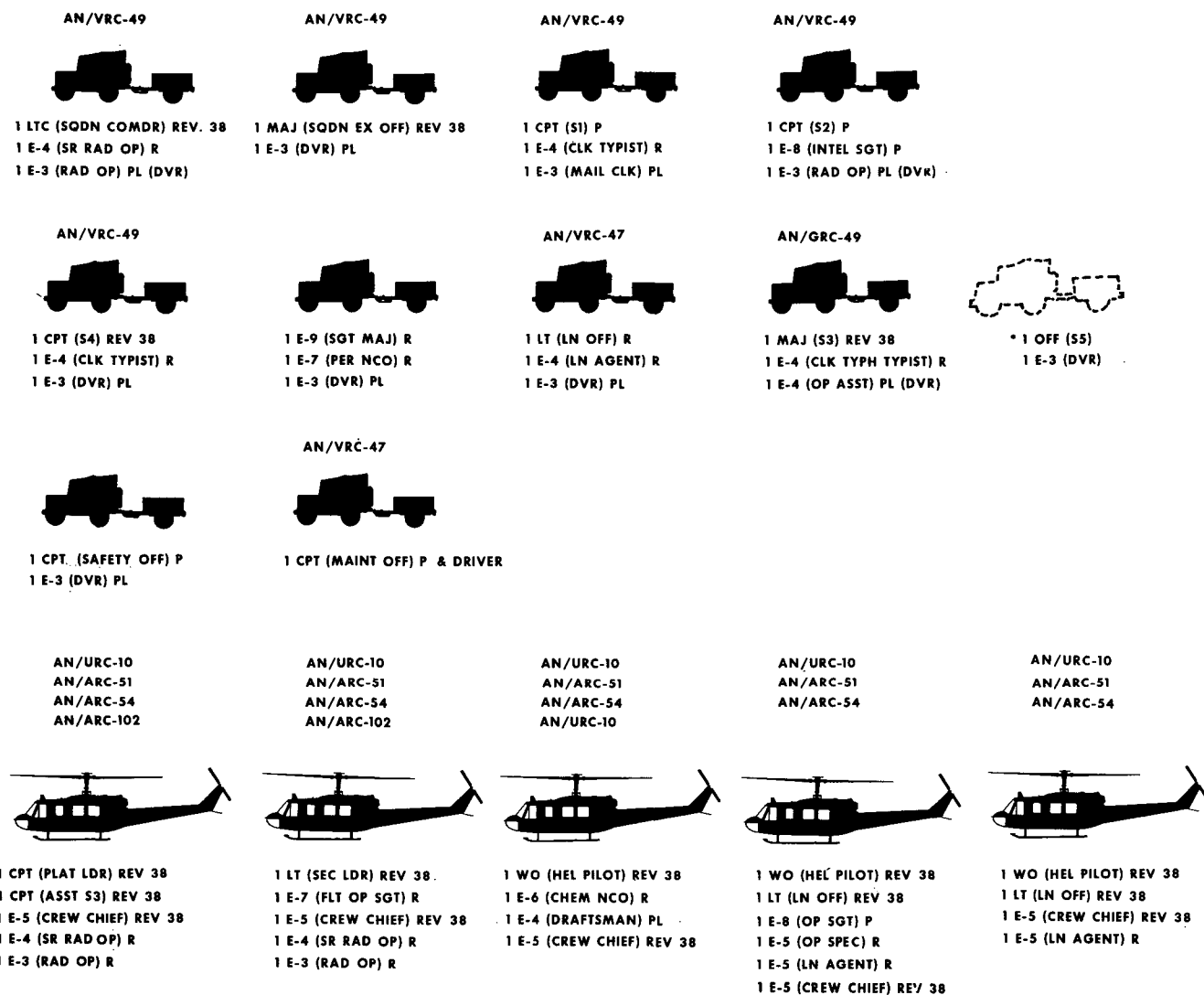


Figure 11-2. Organization chart, headquarters and headquarters troop, air cavalry squadron.

AIR CAVALRY SQUADRON

SQUADRON HEADQUARTERS



* Note — When authorized by Theater Commander.

Figure 11-3. Organization chart, headquarters and headquarters troop, air cavalry squadron.

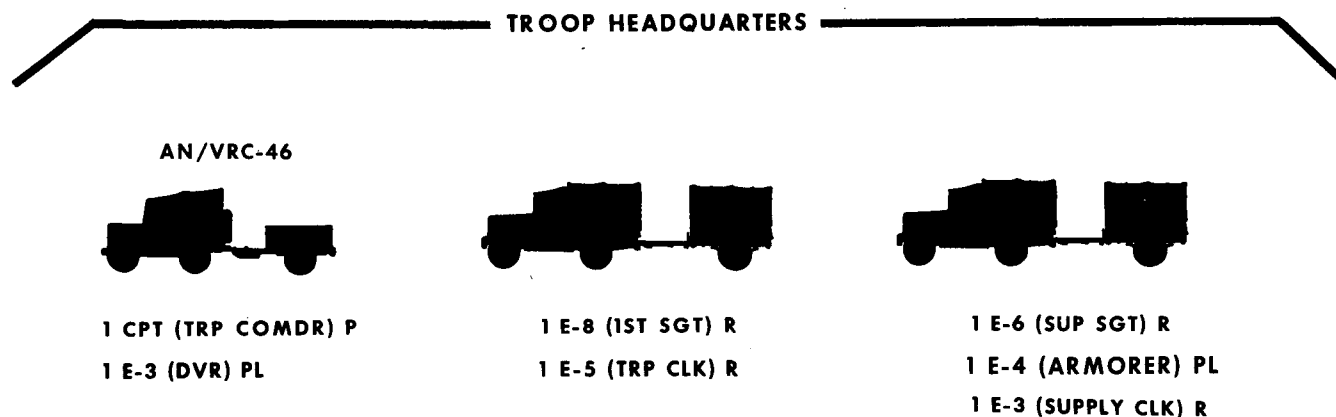


Figure 11-4. Organization chart, headquarters and headquarters troop, air cavalry squadron.

FM 17-37

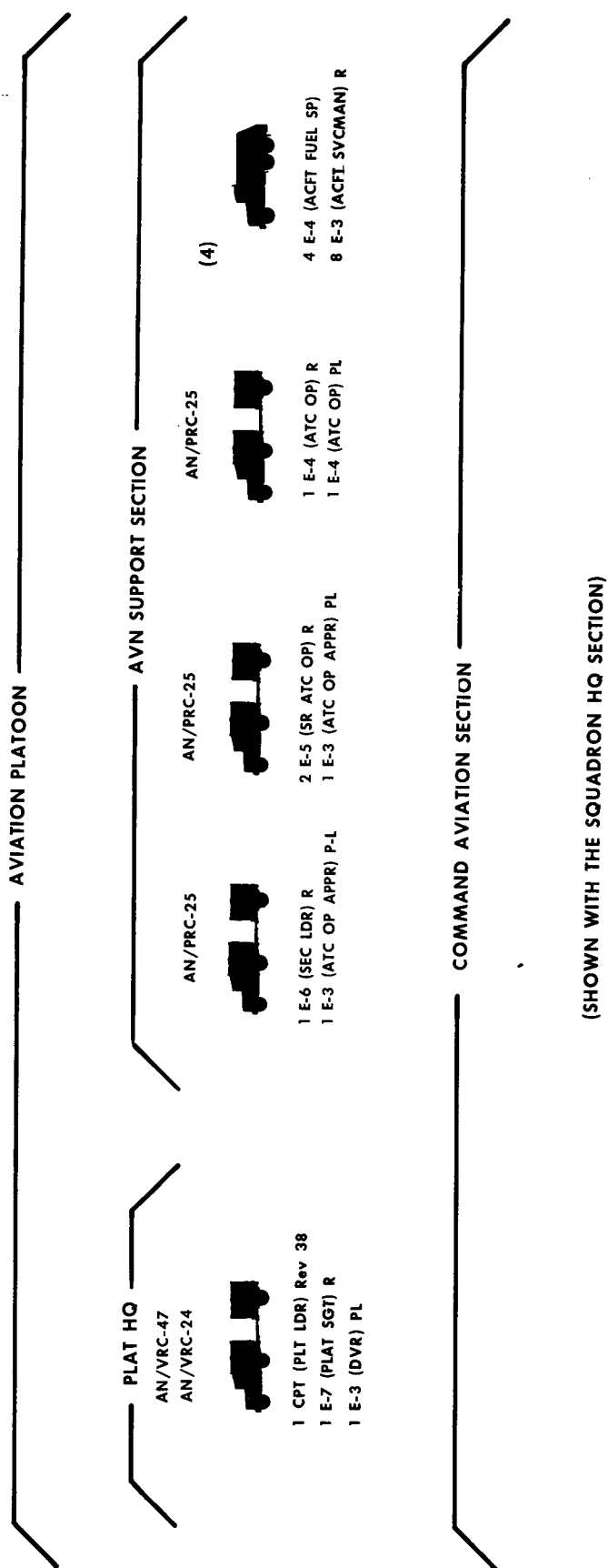


Figure 11-5. Organization chart, headquarters and headquarters troop, air cavalry squadron.

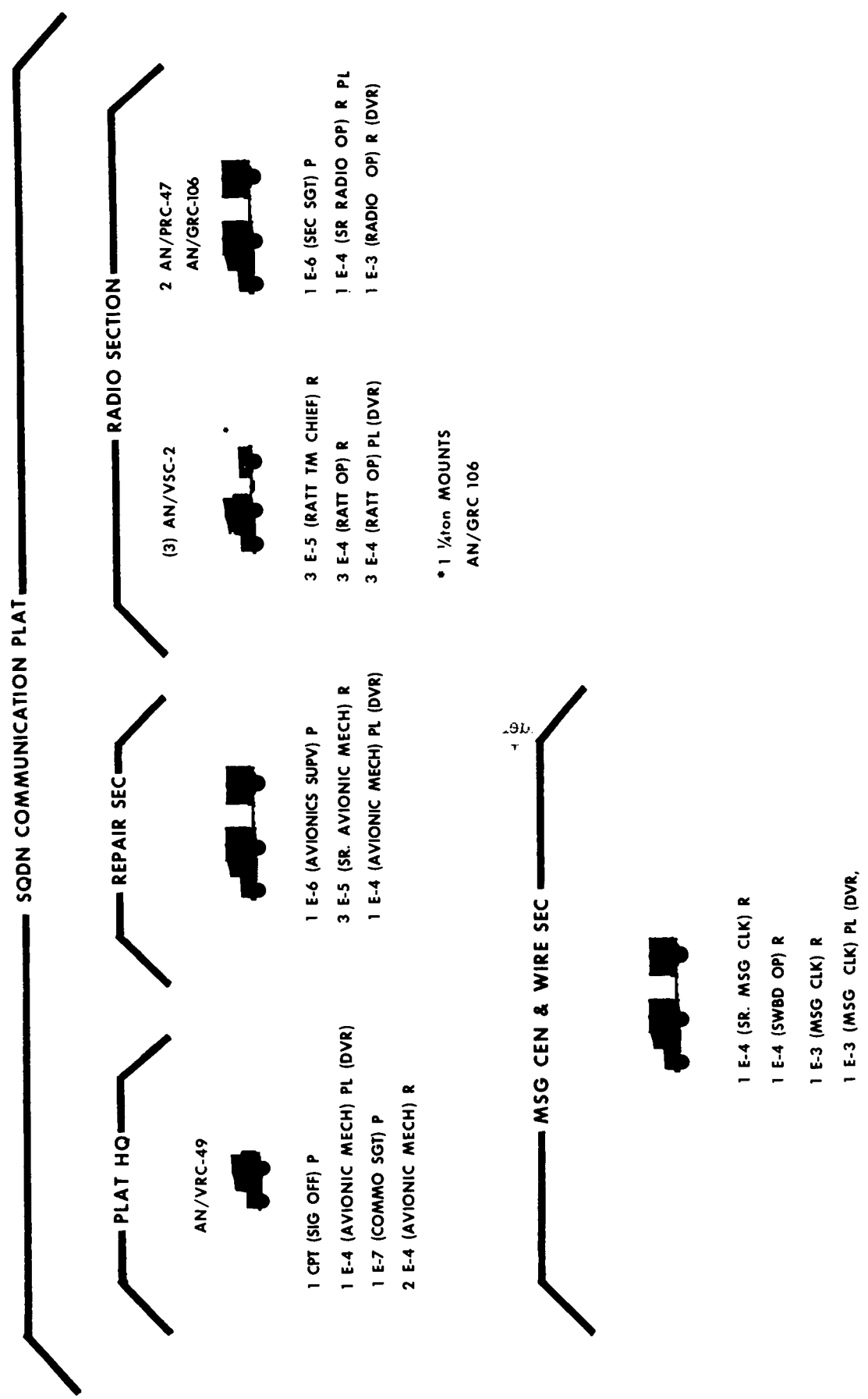


Figure 11-6. Organization chart, headquarters and headquarters troop, air cavalry squadron.

FM 17-37

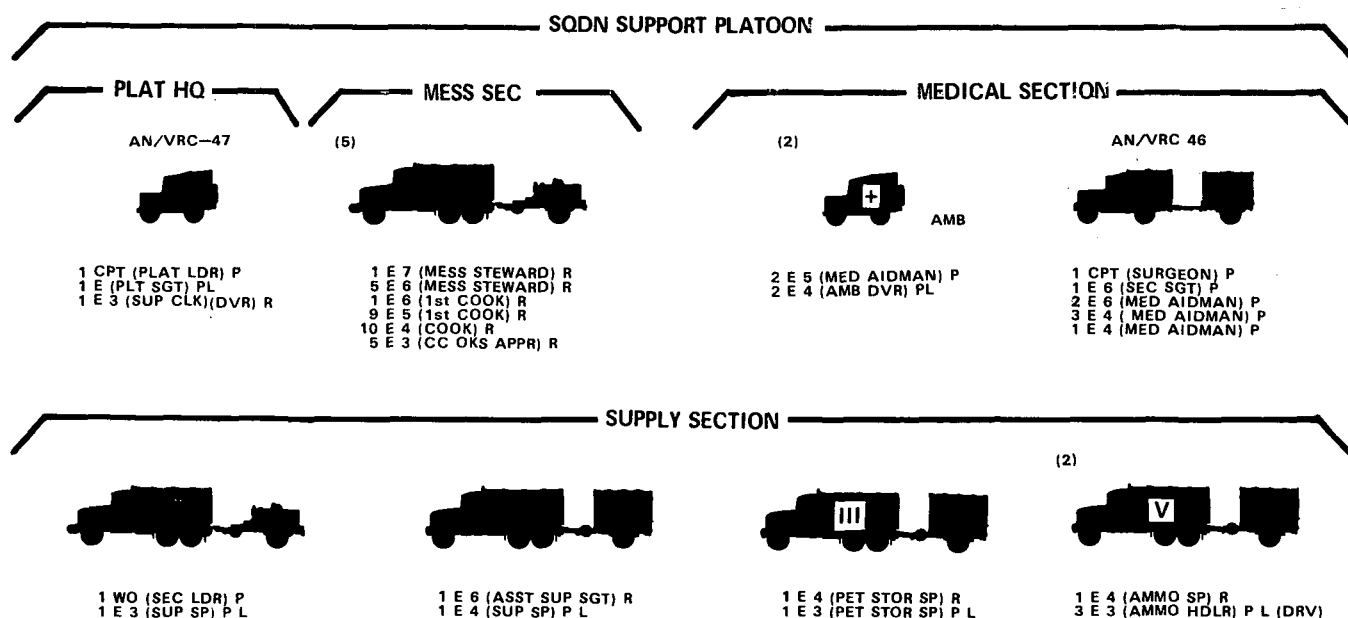


Figure 11-7. Organization chart, headquarters and headquarters troop, air cavalry squadron.

ficer (S1), intelligence officer (S2), operations and training officer (S3), logistics officer (S4), surgeon, maintenance officer, safety officer, and sergeant major. A civil-military operations officer (S5) will be authorized by the theater commander when required by the mission of the squadron. In this organization, the maintenance and safety officers are primary staff officers reporting directly to the squadron commander. For a detailed discussion of the duties of the squadron commander and his staff, see FM 1-15, FM 17-1, and FM 17-95.

11-8. Troop Headquarters

The troop headquarters is organized to provide administrative support for the troop and squadron headquarters. For a discussion of the duties of key personnel, see FM 17-1.

11-9. Squadron Headquarters Section

The squadron headquarters section provides the bulk of the enlisted men for the staff sections and the ground vehicles needed for command and control of the squadron.

11-10. Squadron Communication Platoon

The squadron communication platoon, supervised by the squadron signal officer, contains sufficient men, equipment, and organic transport to provide for the installation, operation, and maintenance of the squadron communication system to operate in the required squadron and higher headquarters

nets. Communications requirements are met by the use of voice radio, radio teletypewriter, air messenger, and limited wire. Radio, both vehicular and aircraft types, are the primary means of communication due to frequent displacement, extended distance, tactical operations. Wire is used within a CP or base areas and, when feasible, between fairly static headquarters. Radio communications between the troops and the squadron or supported unit conform to the standard procedure of command, operations/intelligence, and administrative/logistical nets. Squadron to division or supported unit reflect similar nets, plus spot and air request nets (fig 11-9).

11-11. Squadron Support Platoon

The support platoon is organized with the men, vehicles, and equipment to provide the mess, medical, and supply support required by the squadron to sustain itself for limited periods of combat.

11-12. Maintenance Platoon

The squadron maintenance platoon is organized with sufficient men, equipment, and organic transport to provide wheel vehicle maintenance, aircraft maintenance, rigging for aircraft recovery, and technical supply operations.

11-13. Squadron Aviation Platoon

The squadron aviation platoon provides the personnel and equipment to furnish the command and

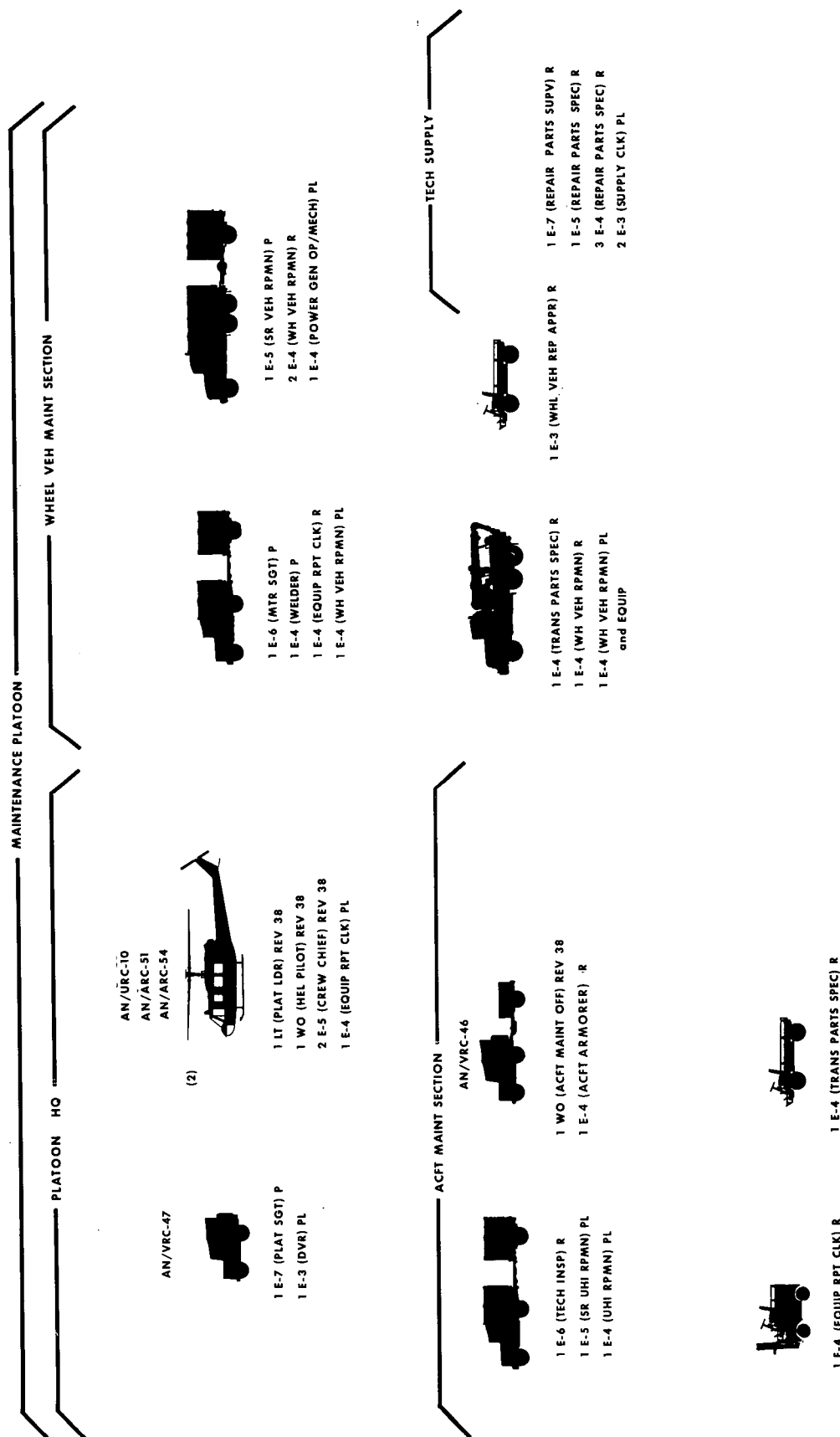


Figure 11-8. Organization chart, headquarters and headquarters troop, air cavalry squadron.

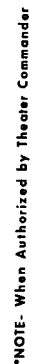


Figure 11-9. Headquarters and headquarters troop communication schematic.

control helicopters for the squadron commander and staff, and to establish air traffic control. It contains sufficient equipment to establish a maximum of three heliports for day and night operations.

It is capable of providing air traffic control and combat service support at two heliports for limited (periodic) operations.

Section III. COMBAT SUPPORT

11-14. General

a. The material contained in this section is applicable to all air cavalry squadrons.

b. The air cavalry squadron may operate without attachments; however, combat support may be provided by artillery, air defense artillery, engineers, Army aviation, tactical air, and naval gunfire. Other combat units such as airmobile infantry may be attached for a particular operation.

c. Although tank and infantry units are not combat support units, they are combat units which can provide operational assistance to the air cavalry squadron.

d. The attachment of infantry with an airmobile capability is often necessary to give the squadron the combat power required for the successful conduct of independent operations. Airmobile infantry may be employed intact or elements may be placed under the operational control of air cavalry troops to reinforce their combat power.

e. When a tank unit is attached to the squadron, it should be employed as a unit under the control of the squadron commander. The heavy firepower and cross-country mobility of the tanks combines easily and effectively with the air mobility and versatility of the air cavalry units, producing a mutually complementary team. The air cavalry elements can expedite the movement of the tanks by selecting favorable routes and by detecting enemy forces. Tanks can deliver heavier, more devastating firepower than can be delivered by the air cavalry units.

11-15. Artillery Support

a. When the squadron is operating beyond the range of cannon artillery of the division artillery, artillery support will normally be provided by the aerial artillery battalion. The squadron commander and the artillery commander or his representative

coordinate the supporting artillery fires with the squadron plan of operations.

b. Air defense artillery support may be provided by attached or supporting air defense artillery units of the division and/or the area air defense system. Use of non-air defense weapons in the air defense role must be SOP for the squadron. FM 17-1, FM 17-36, and FM 44-1 contain discussion of unit air defense.

11-16. Engineer Support

Engineers can be in direct support of or attached to the squadron to perform demolition functions; assist the cavalry troop or squadron trains in crossing inland waterways; assist in clearing, crossing, and installing obstacles; make technical reconnaissance; clear landing zones, construct landing pallets in inaccessible areas; and perform road maintenance to assist in the movement of ground elements. Normal engineer support for a squadron is furnished by a combat engineer platoon, but this may be increased to a company when the squadron conducts independent operations and when circumstances warrant. Engineers may be employed under squadron or troop control.

11-17. Army Aviation Support and Naval Gunfire

External Army aviation support may be required for the tactical movement of the cavalry troop, logistical support of the squadron when it is in remote locations, and for airlifting combat support elements such as artillery or engineers into remote site. This support is furnished from the aviation assets of higher headquarters.

11-18. Tactical Air Support

Tactical air support or naval gunfire can be made available to support the squadron. See FM 17-1 and FM 16-100 for details on their employment.

Section IV. ORGANIZATION FOR COMBAT

11-19. General

The air cavalry squadron commander is responsible for the organization of his squadron for combat. To determine the best organization for combat to accomplish an assigned mission, he considers the factors of METT.

11-20. Organization for Combat

a. The squadron commander normally employs the air cavalry troops and the cavalry troop directly under squadron control without change in troop organization.

b. Certain situations may require a temporary

reorganization of one or more air cavalry troops and the cavalry troop to accomplish a specific mission. The squadron commander shifts or cross-attaches the elements of troops to form troop teams of appropriate size and containing the required ratio of aero weapons, aero scouts, aero riflemen, and cavalry platoons to best accomplish the mission.

c. Organic squadron units should not be detached from the parent organization. Any such detachments greatly reduce the ability of the squadron to fulfill its capabilities and accomplish all assigned missions.

Section V. EMPLOYMENT, HEADQUARTERS AND HEADQUARTERS TROOP

11-21. General

The organization of the troop permits flexibility in its organization for combat. It provides control and coordination of, and combat service support to, the air cavalry and cavalry troops of the squadron. During combat operations, squadron headquarters usually operates in two echelons, the command post and the squadron trains. Composition of the command post and trains varies with the situation.

11-22. Squadron Command Post

a. The squadron command post contains the personnel and facilities to control combat and administrative operations of the squadron. The command post maintains communication with higher, adjacent, supporting, and subordinate units. It receives and forwards intelligence information and situation reports; makes and coordinates plans for current and future operations; provides for liaison with higher and adjacent units, and controls liaison agents from supporting and lower units. The command post usually includes the squadron commander, the staff, and such liaison personnel as are necessary. During offensive operations, the command post usually moves with one of the air cavalry troops and is secured by being located in that troop's assembly area. In defensive or retrograde operations, the command post is usually located well to the rear so as not to interfere with combat operations.

b. The squadron commander and his command group operate from command and control aircraft and position themselves so that they can best con-

trol combat operations. This command group consists of the squadron commander, selected staff and/or liaison officers, sufficient radios to permit entering all required nets, and some means of protection. This group enables the commander to operate away from his command post to obtain personal knowledge of the situation, exercise leadership, and control the operation during critical periods.

11-23. Command Post Organization

a. The headquarters troop commander is responsible for the organization, security, and movement of the command post under the staff supervision of the squadron SI.

b. The plan for internal arrangement of the squadron command post must provide for communication, efficient functioning, security, and access to available road nets and landing zones for the command and control helicopters of the squadron headquarters and air cavalry troops. In the organization of a command post, the following should be practiced whenever possible:

(1) The command post should be located to provide maximum communication capability.

(2) Sections should be located within the perimeter for security.

(3) The message center should be close to the entrance.

(4) The operations and intelligence sections should be centrally located.

(5) When the commander and the executive

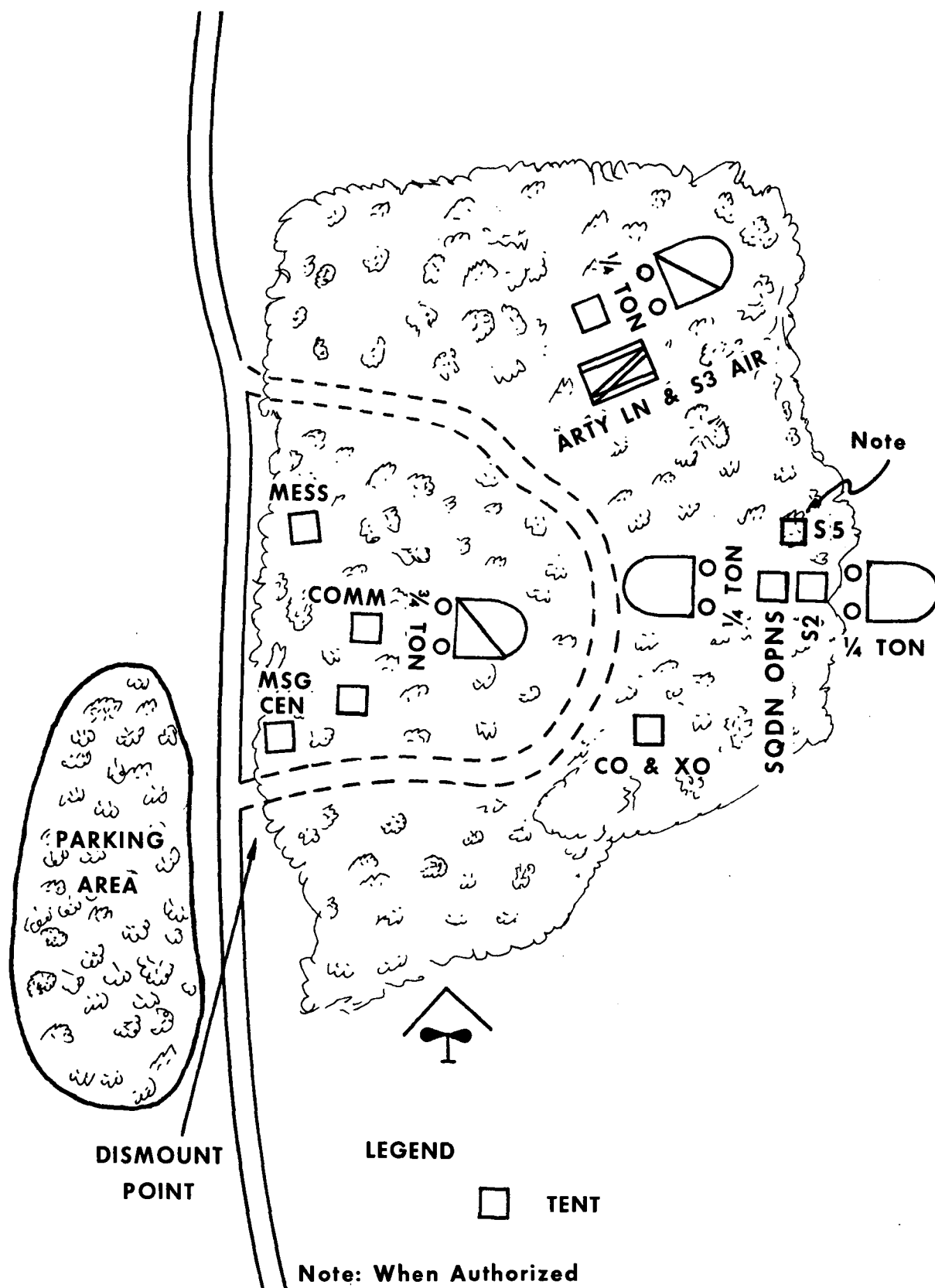


Figure 11-10. A typical arrangement of the elements of a squadron command post.

FM 17-37

officer are at the command post, they should be located near the operations and intelligence sections.

(6) Liaison personnel should be readily accessible.

(7) A suitable landing and parking area for command and control helicopters must be available (fig. 11-10).

c. During combat operations, the squadron command group normally remains mobile and operates from one or more of the helicopters from the aviation platoon. The command post is located to facilitate continuous communication, both with the troops and with higher headquarters; the extensive communication capability of the squadron command post enables the staff to operate efficiently when airborne or when operating from vehicles on the ground. When the command post is going to be located in one position for an extended period of time, ground radios are used and the staff operates from tents, bunkers, buildings, or other ground shelters.

11-24. Squadron Trains

Squadron trains consist primarily of the elements of the squadron that provide logistical support. The organization, location, and employment of the squadron trains depend upon the mission, time and space factors, and the tactical situation; thus, no standard composition or type deployment by echelon is postulated. Normally the trains are located within the perimeter of a larger unit for security. Expedited, high volume, refueling and rearming facilities must be present to support all tactical operations, and are often provided on a multi-user area basis concept by other organizations. These facilities usually are available at division base areas and/or established airfields.

11-25. Command, Control, and Coordination

a. The squadron commander controls and coordinates operations of the squadron through the command group and the staff.

b. In the operation of the air cavalry squadron headquarters, it is essential that communication be maintained and that information be constantly exchanged between the command post and the command group when it is operating away from the command post. The command post must keep itself and higher headquarters informed of the squadron situation. To do this, the command post staff must be familiar with the decisions, locations, and actions of the squadron commander. On the other hand, the commander cannot satisfactorily command the squadron unless he is aware of the squadron situation as a whole and of current information from higher and adjacent headquarters. To insure a high degree of coordination, the executive officer relays orders and information and makes decisions as authorized by the commander. The commander, with the command group, must locate himself where he can be in constant communication with the command post and where he can best supervise the activities of the squadron. To insure prompt logistical support, close coordination and communication must be maintained between the squadron command post and the squadron train. This coordination is usually accomplished by the timely exchange of information between the S4 and the support platoon leader who controls the field trains.

c. Command and control of the squadron is facilitated by the efficient use of liaison personnel. Liaison personnel are employed by the executive officer to accomplish coordination, exchange information, and aid in the unity of effort. The air cavalry squadron maintains liaison with higher and adjacent headquarters. Liaison officers spend most of their time at the headquarters to which they are sent, maintaining communication with the parent unit. They have sufficient radios to operate in the squadron operations and intelligence net and one other net, which allows them to receive information directly from the troops or from the squadron command post and pass it directly to the headquarters to which they were sent. They also transmit information from the headquarters to which they were sent to the squadron.

CHAPTER 12

RECONNAISSANCE OPERATIONS (STANAG 2022)

Section I. INTRODUCTION

12-1. General

a. The air cavalry squadron is one of the principal reconnaissance agencies for any unit which it supports. The air cavalry squadron accomplishes its reconnaissance missions by employing its troops alone or reinforced. The missions of the air cavalry troops and the cavalry troops are assigned so as to be complementary whenever possible. Ground elements are used to give more detailed coverage of areas in which aerial reconnaissance is limited by some feature such as dense foliage.

b. The air cavalry squadron is employed to collect information in the area of influence of the unit which it is supporting. The squadron may be directed to determine the location, composition, and disposition of enemy forces, including the local reserves immediately in rear of the line of contact or general reserves deeper in the enemy rear, and specified information of the area of operations.

12-2. Reconnaissance Frontages

a. No set distance is prescribed for the width of the front to be covered by the air cavalry squadron in performing a reconnaissance mission. The information desired, the time available, and the factors of METT influence the frontage assigned to the squadron.

b. The air cavalry squadron can effectively reconnoiter three major routes by assigning one route to each air cavalry troop. This allocation normally permits two or three secondary routes to be reconnoitered by each troop, if enemy contact is not probable.

c. The air mobility of the squadron makes it ideally suited for reconnaissance to great depths and in areas which are inaccessible to ground reconnaissance units. The squadron reconnaissance effort should not be considered to be a series of

independent actions conducted by aero scout, aero rifle, aero weapons elements and cavalry units, but rather as a highly coordinated, combined effort of these elements.

12-3. Reconnaissance Missions

The squadron commander determines routes, zones, or areas to be reconnoitered by the troops of the squadron. Responsibility must be fixed and duplication of effort avoided. Maximum freedom of action is allowed subordinate commanders in executing reconnaissance missions. Instructions for reconnaissance operations should be specific, so that each troop commander has an objective toward which he can direct the efforts of his troop. Instructions should also be specific as to what the unit is to do after completing the reconnaissance mission and the time that the mission is to be completed.

12-4. Reconnaissance Orders and Instructions

a. Instructions may be issued to the squadron commander as an oral order or as a written operations order. Priorities are established when more than one mission is assigned.

b. Instructions by the squadron commander are issued orally, by an overlay-type order, or by a combination of both. When possible, troop commanders are assembled to receive an order initiating a new action. This insures complete understanding and coordination of measures pertaining to fire support and movement during the operations. Objectives, routes, zones, or areas are assigned by the squadron commander. After the operation is under way, fragmentary orders are usually issued by radio. Other means frequently used to deliver instructions include messengers, members of the squadron staff, and personal contact between the squadron and troop commanders.

FM 17-37

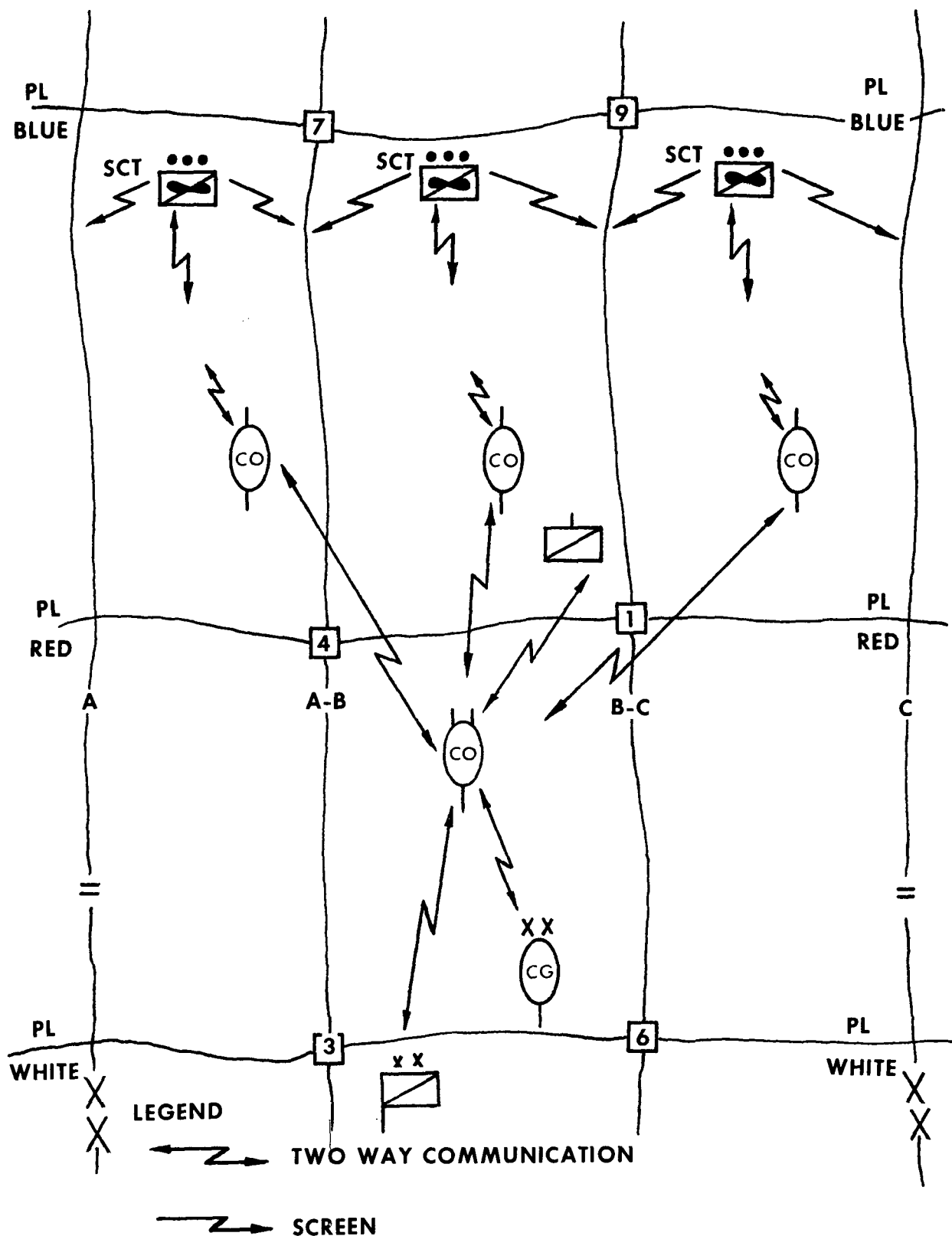


Figure 12-1. Control of air cavalry squadron operations and reporting of information.

12-5. Reporting Information by Elements of the Squadron

a. Prompt reporting of accurate information is essential to the success of any reconnaissance mission. The standing operating procedure (SOP) facilitates reporting of important information. Information of contact with the enemy and terrain information vital to a higher headquarters are reported at once.

b. The squadron staff insures that all information, both positive and negative, of the enemy, terrain, and weather is reported to higher headquarters, disseminated to appropriate elements of the squadron, and used in planned squadron operations. Information is normally reported over the operations intelligence radio net; however, if the information is of particular significance it may be reported over the command radio net.

Section II. EMPLOYMENT

12-6. General

a. Reconnaissance is executed aggressively, making full use of the squadron's air and ground mobility. The squadron coordinates and directs the efforts of the air cavalry troops and the cavalry troop. When contact is made, each element of the squadron develops the situation to determine the strength, composition, and disposition of the enemy. Elements of the squadron may attack if necessary to gain required information. When the resistance cannot be overcome by a platoon or troop attack, the squadron commander may commit additional forces, or he may order the unit to disengage and bypass the enemy to continue the reconnaissance mission.

b. Reconnaissance missions assigned to the squadron will normally require the commitment of all troops. If part of the squadron is uncommitted, it is designated the reserve.

12-7. Control During Reconnaissance Operations

a. The squadron commander controls and coordinates operations of his troops from a position affording communications with all troops. Usually a command and control helicopter is used for this purpose. With this capability, he is prepared to move rapidly to any element of the squadron. The squadron commander normally operates with his command group which contains the necessary personnel and control facilities to facilitate his control of the squadron (fig. 12-1).

b. Control measures are used only to the extent necessary for coordinating the efforts of elements of the squadron and preventing interference among troops. Maximum freedom of action is granted the troop commanders, and rules of engagement are always specified.

Section III. TYPES OF RECONNAISSANCE OPERATIONS

12-8. Route Reconnaissance

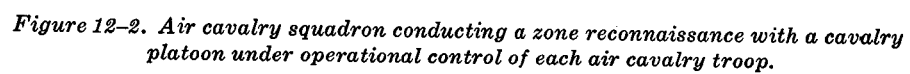
a. The air cavalry squadron as a unit is not normally assigned a route reconnaissance mission. Usually, the squadron will obtain the route information desired by the higher headquarters while acting as a covering force in the advance; when assigned the mission of reconnoitering in the division or corps area; or by employing subordinate troops to reconnoiter specific routes, zones, or areas. When enemy action is imminent or anticipated, reconnaissance missions are usually assigned on the basis of one major route per troop.

b. In the execution of reconnaissance missions, the cavalry troop may be employed as a unit or its platoons may be used to reinforce the ground reconnaissance capability of the air cavalry troops. When employed as a unit, the cavalry troop is

usually supported by elements of an air cavalry troop. This combining of air and ground reconnaissance permits much more rapid and thorough reconnaissance that can be accomplished by either element alone. When the cavalry platoons are placed in support of the air cavalry troops, they may be employed on the ground in their vehicles or they may be employed in the role of additional aero rifle units. When employed in their normal ground role, the tactics and techniques presented in chapter 4 apply. When employed in the airborne role, the tactics and techniques discussed in chapter 8 apply.

12-9. Zone Reconnaissance (fig. 12-2.)

a. Zone reconnaissance is more thorough and time consuming than route reconnaissance. The



squadron normally obtains the information required by using zone reconnaissance techniques while conducting a covering force operation during the advance. The squadron commander assigns troop zones by designating boundaries for each troop. Boundaries are designated along easily recognizable terrain features. Troops must reconnoiter all routes and key terrain within the assigned zone. The number of troops to be employed depends on the information required, the time available, and a consideration of the factors of METT.

b. The squadron can most expeditiously conduct a zone reconnaissance by combining the efforts of both air and ground elements. The capabilities of air and ground cavalry units are optimized when they operate in conjunction with each other. Elements of the air cavalry squadron may be cross-attached to form troop teams when conducting a zone reconnaissance. In some situations, it may be advisable to employ the cavalry troop as a unit, providing its operations are closely coordinated with those of the air cavalry troops. The tactics and techniques discussed in chapter 4 apply to the air cavalry troop in the conduct of a zone recon-

naissance and those in chapter 8 to the cavalry troop in this mission.

c. The squadron command post and trains may advance by bounds on routes available in the zone or they may remain in one location until a new larger area is selected.

12-10. Area Reconnaissance

(fig. 12-3).

When the squadron is assigned an area reconnaissance mission, it moves to the area by aerial and ground means or, when required, by aerial means alone and performs the area reconnaissance by using zone reconnaissance techniques. Troop areas of responsibility are defined by boundaries within the area. As area reconnaissance is the most thorough of the three types of reconnaissance, the squadron can most expeditiously conduct area reconnaissance by combining the effort of air and ground elements. As in the zone reconnaissance, the platoons of the cavalry troop may be placed under the operational control of the air cavalry troops to provide for closest possible integration of the complementary capabilities of each unit. A cavalry platoon is under the operational control of each air cavalry troop.

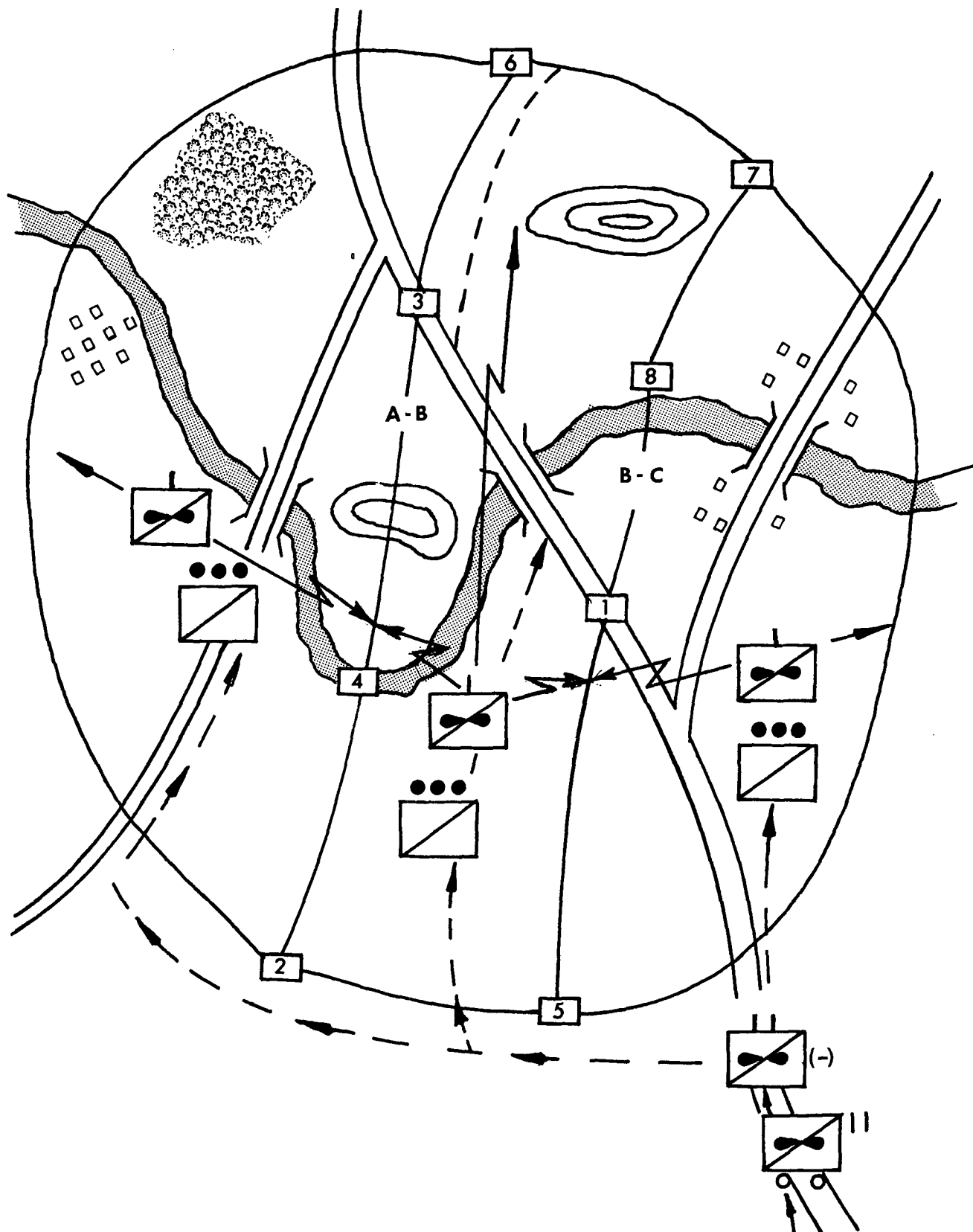


Figure 12-3. Air cavalry squadron conducting an area reconnaissance with cavalry platoons employed in an airmobile role without their vehicles.

CHAPTER 13

SECURITY OPERATIONS

(STANAG 2079)

Section I. INTRODUCTION

13-1. General

a. The purpose of security operations is to prevent observation and surprise and to gain and maintain freedom of action. Security is achieved by providing for the detection of a threat; for enough time to react to the threat; and for the avoidance, neutralization, or destruction of the threat. The air cavalry squadron accomplishes security missions by employing its troops, alone or reinforced, to conduct offensive, defensive, or delaying actions as required to accomplish the mission. The commander employs the troops so that their capabilities are best used and so that the efforts of ground and air elements are complementary.

b. The squadron may be reinforced with additional combat or combat support elements as necessary for the accomplishment of the mission. These reinforcements should be compatible with the squadron in terms of mobility and flexibility.

c. The squadron is designed to provide security

for a corps, division, or a major subordinate command of a division. It may be employed as flank guard, rear guard, screening force, or as a rear area security force. It may also be part of a covering force and, when so employed, the squadron should be reinforced with appropriate combat and combat support elements.

d. The air cavalry squadron does not normally conduct advance guard operations due to the mobility differential with supported elements, which fails to maximize its aerial capabilities; its limited ground capability; and the fact that it is not primarily an offensive force.

13-2. Frontage for Security Operations

The air cavalry squadron, due to its airmobile character, may be employed over broad frontages when engaged in security operations. The dispersion of forces which from the assignment of broad frontages can be offset by the ability to mass rapidly the aerial firepower of the squadron.

Section II. FLANK GUARD OPERATIONS

13-3. General

a. As a flank guard for the division, the squadron normally protects one flank. In some situations, an air cavalry troop may be detached and assigned the mission of providing security for the brigade with the least vulnerable flank of the division.

b. The protected force commander specifies the units to be protected or the zone of responsibility. Usually, the flank guard responsibility begins at the rear of the leading battalion task force and ends at the rear of the combat elements of the protected force, exclusive of the rear guard. When performing a mobile flank guard mission, the air cavalry squadron operates along an axis of ad-

vance. The axis generally parallels the axis of the protected force and is along key terrain which dominates likely avenues of enemy approach. When the protected force halts, the squadron establishes blocking positions on key terrain to protect the force. While moving, the aero scouts screen to the front of the line of the key terrain features to detect the approach or presence of enemy forces. The scouts may also maintain contact between the leading elements of the squadron and the rear of the leading element task force. The aero rifle platoons and the cavalry platoons are designated to secure and occupy specified blocking positions on order. The aero weapons elements are usually held under troop or squadron control, prepared to deliver massed fires

FM 17-37

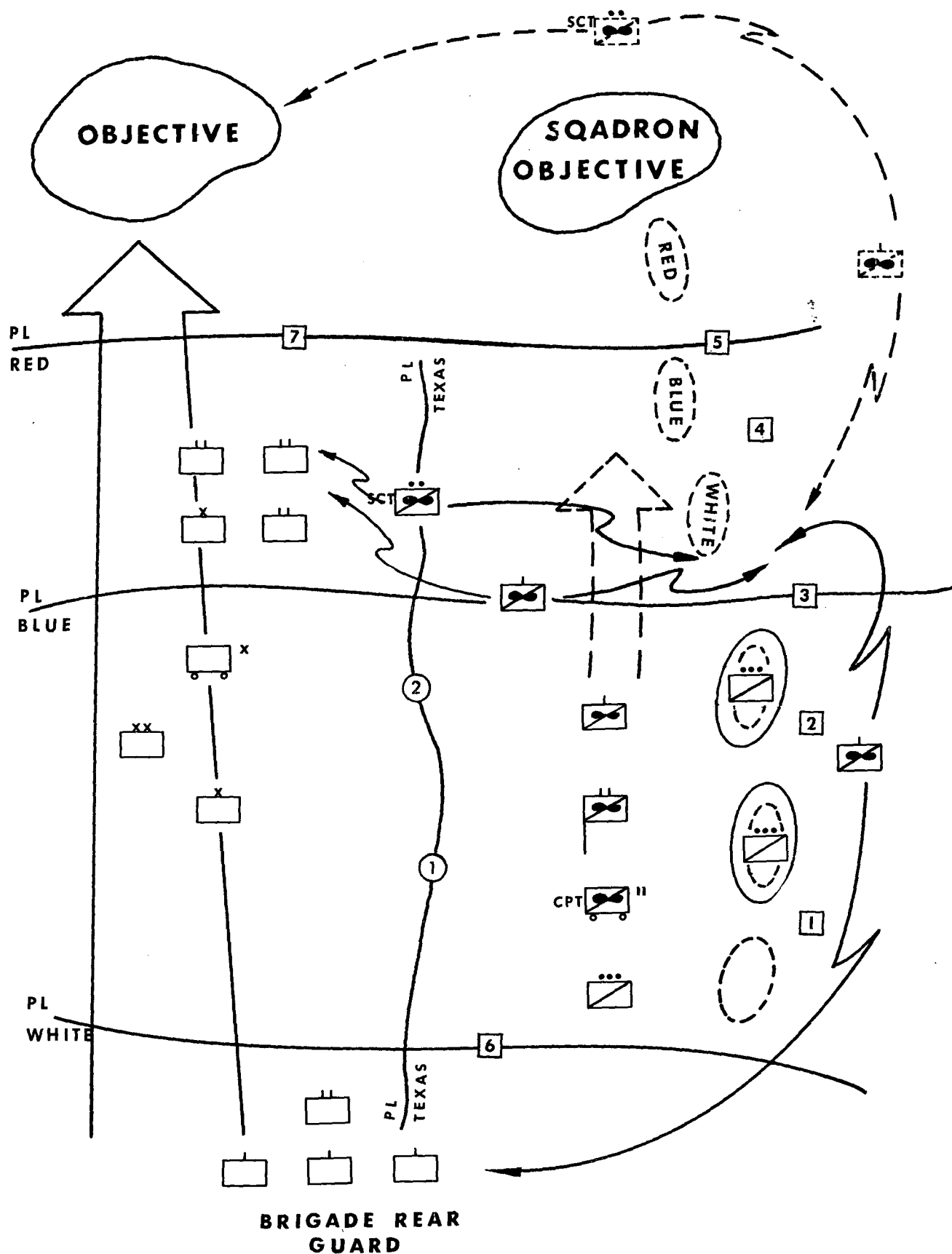


Figure 18-1. Air cavalry squadron as a flank guard.

AGO 20026A

on any enemy threatening the flank of the protected force. The squadron commander may find that he can most efficiently control the squadron by organizing like elements into provisional troops (aero scout troop, aero rifle troop, aero weapons troop, and cavalry troop). When it is necessary for elements to occupy blocking positions, these elements usually move by alternate bounds in organic or attached helicopters.

c. Since the air cavalry squadron does not require road space for its primary combat elements, it is well suited for providing flank security for a larger force during the exploitation and pursuit or when attacking out of a bridgehead. As soon as the lead battalion task force of the protected force conducting the exploitation is through the gap created by other forces, the aero scout elements can be in position on the shoulder of the penetration to provide early warning of enemy approach. The squadron elements can be introduced into the area of operations as elements of the protected force pass through the gap. The squadron elements do not interfere with the ground movement of the force.

d. The cavalry troop may be employed in an airmobile role to occupy blocking positions or it may be assigned the mission of securing the area between the rear of the leading element task force and the axis of advance of the squadron. If it is used in the airmobile role, it may be shuttled by the aircraft of the aero rifle platoon's lift sections of the three air cavalry troops, or additional helicopters may be attached from outside the squadron for this purpose.

13-4. Flank Guard Planning and Conduct

a. The commander plans a flank guard mission in the following sequence:

(1) He initially makes a map reconnaissance of the area of operations and selects the most likely avenues of enemy approach. He selects a series of blocking positions on the flank that generally parallel the axis of advance of the protected force. These blocking positions should be on defensible terrain that dominates likely avenues of enemy approach and provides the force with sufficient time and maneuver space to react to an enemy threat.

(2) The commander normally selects the squadron axis of advance unless it is designated by higher headquarters. The squadron axis should be far enough from the protected force that the

squadron does not interfere with the maneuver of the force but is within the capability of the cavalry troop to secure the area between the force and the squadron axis of advance if that unit is assigned that security mission.

(3) The commander next develops a scheme of maneuver that will enable the squadron to secure and hold selected blocking positions and secure the area between the landing task force of the protected force and the squadron axis of advance.

(4) Contact points are selected at easily identifiable locations forward of and generally between blocking positions.

(5) The squadron commander selects a formation and organization for combat that will permit rapid employment against enemy resistance.

(6) The squadron commander decides what combat support will be required and arranges for it to be furnished.

(7) The squadron command post and combat trains will normally move along the squadron axis of advance (fig. 13-1).

b. During a flank guard operation, the squadron moves parallel to the axis of advance of the protected force and regulates its movement on that of the protected force. The aero scouts of the squadron perform an air screen in front of the line of blocking positions. The aero rifle platoon and, if required, the cavalry elements occupy the blocking positions and move by alternate bounds. The aero weapons elements are held in a central location to serve as quick reaction force to place massed firepower on any enemy threat.

c. The squadron operating as a flank guard for a defensive force occupies a series of blocking positions on the flank of the force. The squadron is normally assigned a sector that is defined by specific terrain features. In accomplishing its mission, the squadron uses defensive tactics. If forced from its positions, it employs delay action techniques to provide time and space for the protected force to react to the threat.

d. Operations of the squadron performing flank guard for a unit engaged in retrograde movement are similar to those in an advancing situation.

e. One special consideration for planning the employment of an air cavalry squadron in a flank guard mission, and all missions, is the requirement for large quantities of aviation fuel and ammunition in the area of operation. The squadron

FM 17-37

commander must coordinate with the protected force commander for the establishment of

secure forward refueling and rearming points for the squadron.

Section III. REAR GUARD OPERATIONS

13-5. General

a. During the advance, the rear guard defeats or delays hostile forces attempting to attack the rear of the protected force and collects stragglers. It follows the protected force at a distance prescribed by the force commander and usually moves on the same axis of advance as the force. During the withdrawal, the rear guard protects the disengagement of the protected force. It employs delay tactics and withdraws by bounds, basing its rate of movement on that of the protected force or moving in accordance with prearranged plans.

b. The air cavalry squadron may be employed as a rear guard for a division or a major subordinate command during an advance or withdrawal. It may be reinforced with appropriate combat and combat support elements. The squadron follows behind the protected force and executes delay actions if the force is threatened. All routes to the flank of the squadron are reconnoitered. Aero scouts screen the rear and flanks of the squadron and provide warning of enemy approach, or attempt to bypass the rear guard. The cavalry and aero rifle elements move by bounds from one preselected position to the next, prepared to execute a delay action if required. The aero weapons platoons are prepared to support the movement or delay action with organic fires as necessary. Aero scouts maintain contact with the protected force.

13-6. Rear Guard Planning and Employment

a. The squadron commander selects positions along the route or routes of the protected force from which the squadron can protect the force from enemy action. He designates forces to occupy these positions and assigns them delay or counterattack missions. The units of the squadron occupy the positions by bounds.

b. The movement of the rear guard is regulated on the movement of the protected force. It may

move to maintain prescribed time or distance interval from the protected force. Suitable delay positions are selected between the squadron and the rear of the protected force. The bulk of the squadron is held in central locations from which it can react to an enemy threat. Aero scouts screen to the flanks and rear of the squadron to give early warning of an enemy threat. The remainder of the squadron will delay in preselected positions or counterattack to repel or destroy the enemy. The squadron must not allow itself to be bypassed or driven in on the protected force (fig 13-2).

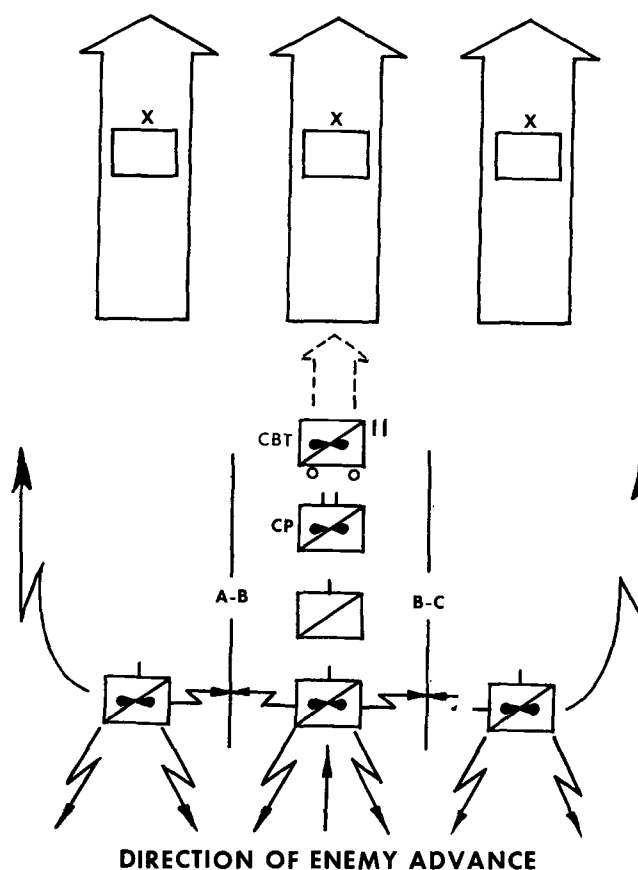


Figure 13-2. Air cavalry squadron as a rear guard.

Section IV. REAR AREA SECURITY OPERATIONS

13-7. General

When the squadron is engaged in rear area security operations, the coordination of operational plans with units and installations in the area of opera-

tions is essential. Communication and liaison must be maintained with these units and installations. Tactics and techniques discussed for stability operations (para 16-3-16-12) are applicable to rear area security operations.

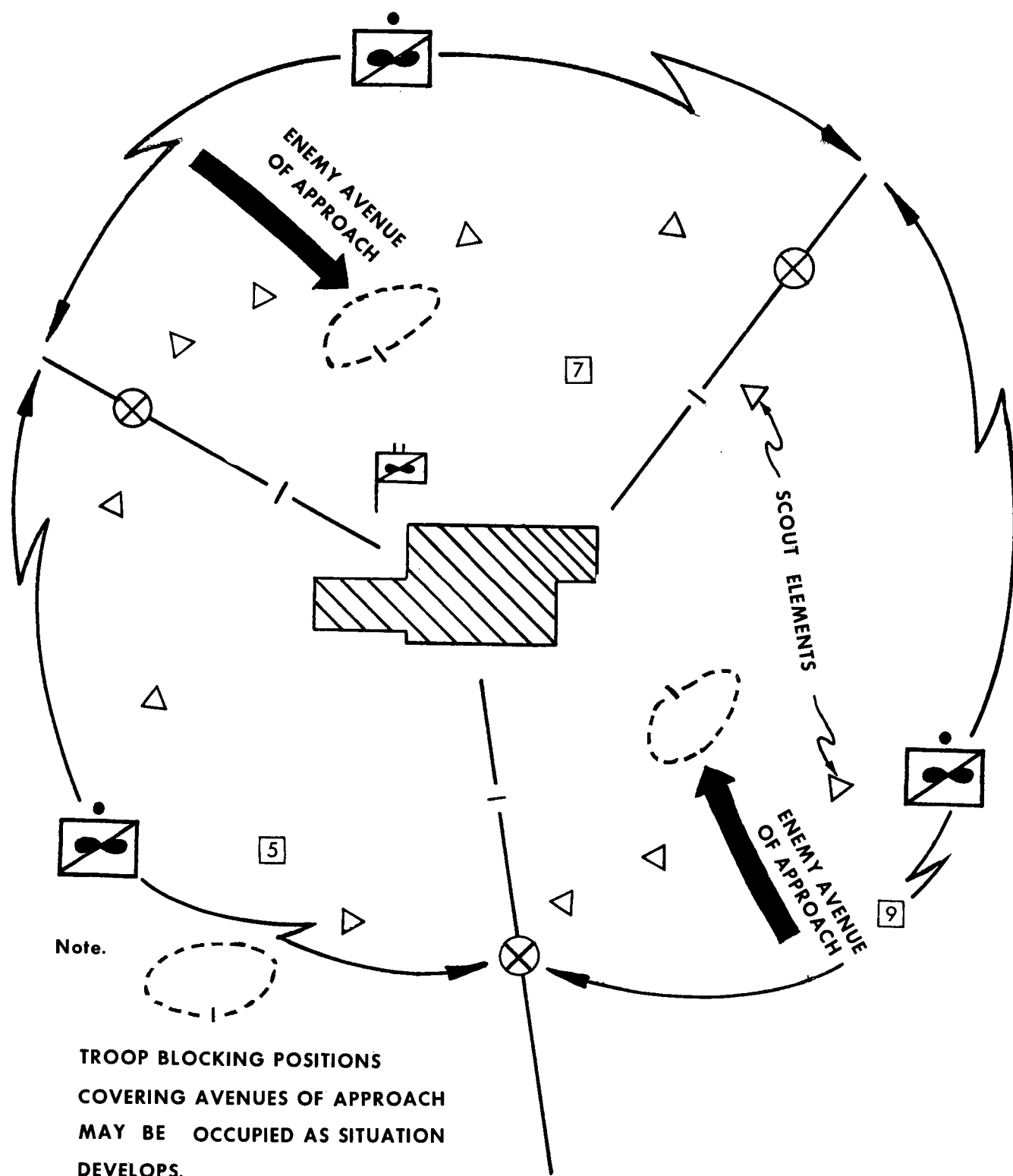


Figure 13-3. Air cavalry squadron protecting an installation in a rear area.

13-8. Protecting Routes of Communication

a. The method employed to guard routes of communication varies depending upon the factors of METT. Lines of communication may be protected by establishing a series of observation posts and mobile patrols throughout the area of responsibility. A centrally located mobile reserve is then employed according to the information received from the observation posts and patrols. If the area is too large to be protected in this manner, it becomes necessary to increase the number of mobile patrols and to locate the reserve in small groups at various points throughout the area. The commander of the rear area security force must retain command of the scattered reserve groupings so that they can be massed by airmobile means to counter a major threat.

b. Air and ground elements are usually combined to patrol the main supply routes and to escort convoys through threatened areas. The combination of air and ground cavalry elements enables the convoy to move more rapidly than would be possible with a single type of escort element.

13-9. Protecting an Installation

When an air cavalry squadron is assigned the mission of protecting an installation, the commander normally designates sectors for all elements, retaining a reaction force under squadron control. The organization of the area and actions of the squadron are the same as in all-round defense (fig 13-3).

13-10. Security Against Airborne, Airmobile, and Guerrilla Forces

a. When protecting rear areas against attack by enemy airborne, airmobile, and guerrilla forces, the squadron commander deploys his units by placing air/ground observation posts and obstacles near likely drop or landing zones or potential assembly areas for guerrilla forces, and by patrolling the area of responsibility by aerial and ground patrols. He and his subordinate commanders must avoid stereotyped operations so that the enemy cannot detect a pattern of operation and take advantage of it. Reserve elements are positioned so that they can be moved rapidly by air or ground means to attack any enemy force.

b. The squadron commander reconnoiters the assigned area to determine likely drop zones, landing zones, or assembly areas. The squadron area of responsibility is then divided into troop

areas of responsibility which are assigned the air cavalry and cavalry troops as appropriate. As large an airmobile reserve as possible is held by squadron. This may consist of one or more aero rifle platoons or a combination of aero rifle and cavalry platoons. The troops cover their assigned areas by employing zone reconnaissance techniques, obstacles, and by stationing air and ground OP's to maintain surveillance over likely landing zones, drop zones, and assembly areas.

c. The key to success against airborne, airmobile, or guerrilla force attack is rapid reaction. Immediate deployment to counter an attack is of such paramount importance that units may be committed in a hasty attack. Maximum firepower is brought to bear on the enemy as early as possible after his landing or attack is detected. Movement to reinforce any engaged element must be accomplished rapidly. Ground and air patrols insure early detection of the enemy, and these elements bring all available fires to bear on the enemy. Aero weapons elements are moved rapidly to the area of engagement to harass and disorganize the enemy before he has a chance to organize his forces (fig 13-4).

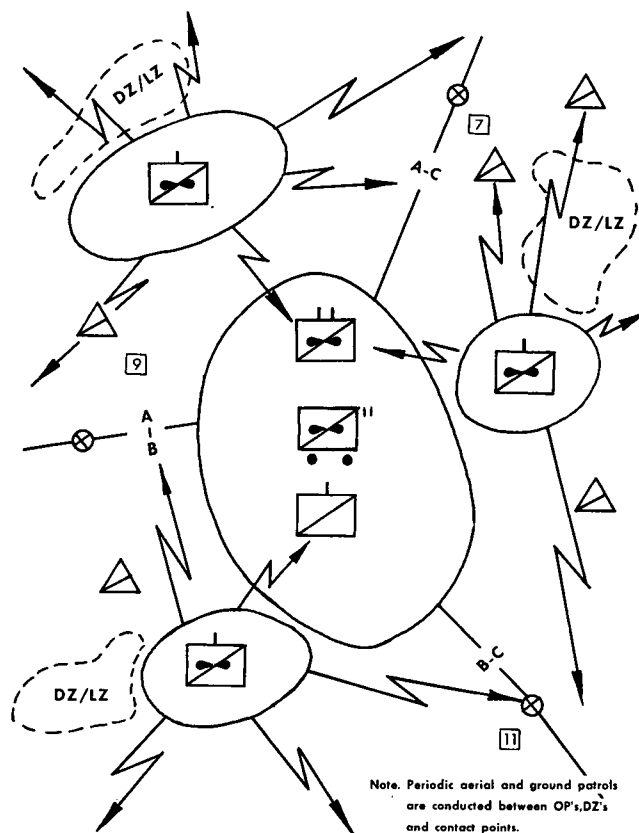


Figure 13-4. Air cavalry squadron employed over a large area as a rear area security force for a larger unit.

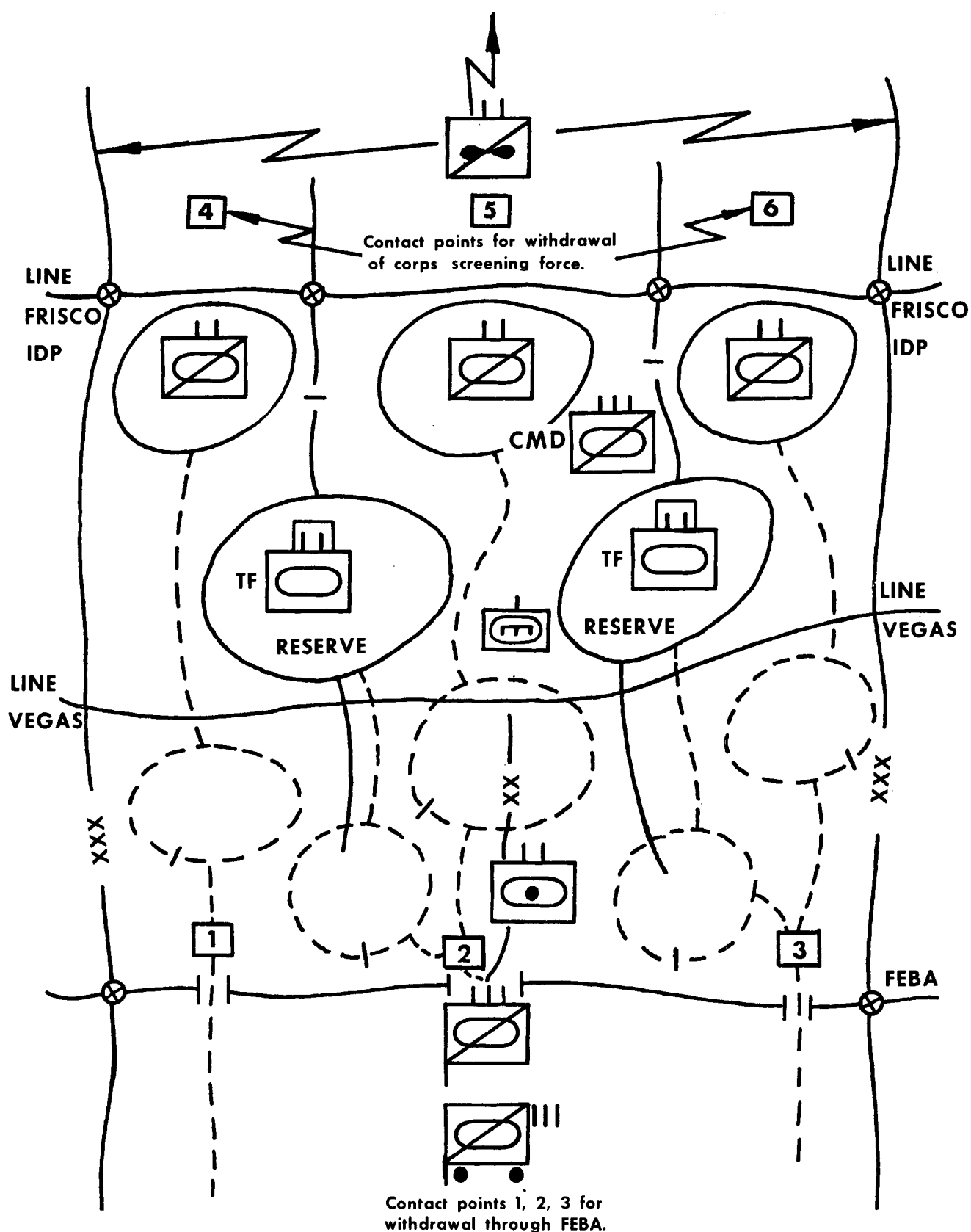


Figure 13-5. Air cavalry squadron performing a screening force mission.

Section V. SCREENING FORCE OPERATIONS

13-11. General

a. The screening mission is accomplished by establishing a series of ground and air observation posts and patrols capable of observing enemy approaches into the designated sector or zone.

b. A screening force is not capable of offering strong resistance to the enemy. It protects itself and, within its capability, destroys or disperses small enemy elements that attempt to penetrate the screening position.

13-12. Squadron as Screening Force

a. The squadron may be used as a screening force when operations of the division have created extended flanks, when gaps between major subordinate elements cannot be secured in force, or are not considered critical enough to require security in strength. Screening operations require the use of mission-type orders and decentralized execution by troops and platoons.

b. The area to be screened is divided into troop

zones by the squadron commander. These zones are screened by establishing ground and air observation posts and patrols. A reserve is not normally maintained at squadron level because the extended frontage which dictated establishing the screen usually requires all the squadron resources. The air cavalry squadron, due to its airmobile capability, can successfully screen large frontages (fig 13-5).

c. When forced by enemy action, the squadron withdraws to successive, selected phase lines. Positive knowledge of the location and activities of the enemy is maintained while the withdrawal is made. Supporting fires or aero weapons elements may be employed to impede the advance of the enemy.

d. When an enemy force approaches the screen, it is engaged by long-range supporting fires and by aero weapons elements. The elements of the screen take all possible actions to delay and disorganize the enemy. The screened force must be given sufficient time and space to bring effective forces to bear on the enemy threat.

Section VI. GENERAL OUTPOST AND COVERING FORCE OPERATIONS

13-13. General

a. A general outpost or a covering force may operate to the front, flank, or rear of the covered force beyond the local security elements.

b. The squadron may be employed as part of a covering force for the corps in offensive and retrograde operations, or as part of the division general outpost in defensive operations. When so employed, it normally provides reconnaissance and security to the covering force; however, although not normal, it may be employed in an economy of force role and given a zone or sector, in which case it should be reinforced by appropriate combat and combat support elements.

c. When the squadron is operating in the economy of force role as part of an advance covering force and is not in contact with the enemy, the squadron commander normally plans to advance on a broad front to establish contact. Until contact is established, the squadron employs zone reconnaissance techniques. The squadron commander will designate a reserve for employment to maintain the momentum of the advance or to develop the situation. The cavalry troop, in an airmobile role, is normally given this mission. Once

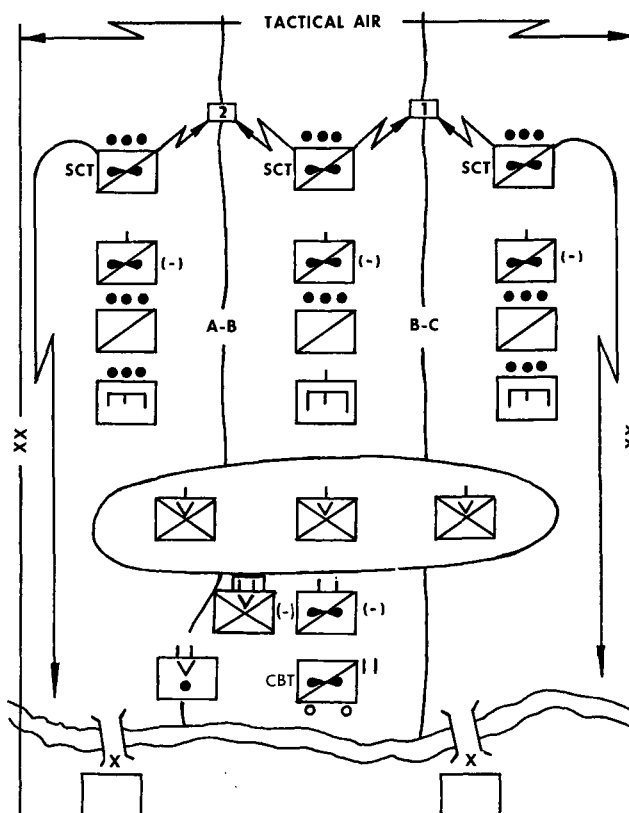


Figure 13-6. Air cavalry squadron advancing in zone as part of a covering force.

contact with the enemy is established, the squadron commander develops the situation and, within the squadron's capabilities, defeats, disorganizes, deceives, or delays the enemy. During this phase, the squadron may attack, defend, or conduct a delaying action. After this forward security mission has been accomplished, the squadron may be employed to provide rear area security, move to the flanks of the covered force for security, or become part of the reserve.

d. In executing the economy of force role in a general outpost or covering force operation, the air cavalry squadron moves aggressively to develop the situation and to insure that the enemy does not threaten or surprise the protected force.

(1) During movement to contact, small

enemy forces may be bypassed by the covering force; however, the covering force commander must notify the covered force commander. A small air cavalry element may be left to maintain contact with the enemy. The reserve, if constituted by the covering force commander, may be used to destroy small enemy forces that are bypassed by the leading elements of the covering force.

(2) After contact is gained and the squadron has developed the situation, or when the squadron is assisting in the GOP of the division in a defensive operation, the squadron deceives the enemy as to the location of the protected force and delays the enemy efforts to advance. Ambushes may be employed by the squadron to add to the delay of the enemy. Aero scouts provide a screen for the squadron.

CHAPTER 14

SURVEILLANCE

Section I. INTRODUCTION

14-1. General

a. Surveillance involves orientation on, and systematic, continuous observation of an area, route, or specific location; integrating accurate, positive and negative activity information reports; and avoiding engagement except for self-defense.

b. Surveillance is an inherent part of all combat operations, and will frequently be a specific task for a platoon or troop in support of squadron reconnaissance or security missions.

14-2. Types of Surveillance

Surveillance may be visual, electronic, or photographic in nature, or may be a combination of these types.

14-3. Frontages and Depths

Surveillance frontages and depths assigned for air cavalry squadron units are based on the factors of METT and rules of engagement, and do not con-

form to any standardized, stereotyped distance measurements. Air cavalry units can accomplish surveillance tasks over much larger areas than they can secure or reconnoiter due to their inherent aerial characteristics.

14-4. Tasks

The air cavalry squadron can effectively perform the following surveillance tasks while conducting other primary missions:

a. Determination of militarily significant activity or the absence of such activity.

b. Target acquisition, fire adjustment, and damage assessment for fire support means.

c. Location and identification of enemy units and observation of likely avenues of enemy approach and lines of communication within the assigned area of operations.

d. Observation of routes and key terrain within friendly rear areas.

Section II. EMPLOYMENT

14-5. Planning for Surveillance

Surveillance tasks and procedures are similar to screening missions, and the same planning factors are applicable. Surveillance tasks are generally passive in nature, and normally require the efforts of a platoon or troop. The commander plans to accomplish surveillance tasks with the minimum expenditure of resources consistent with the requirements.

14-6. Conduct of Surveillance

a. After development of the surveillance plan by the squadron commander and his staff, each troop is assigned a portion of the squadron frontage.

b. The cavalry troop may be assigned a portion of the frontage, or one or more platoons may be

placed under the operational control of an air cavalry troop for use in the airmobile dismounted role. When employed as a troop, the cavalry troop generally conducts the surveillance task in the mounted mode using modified screening techniques.

c. The air cavalry troops utilize the aero scout teams rotated on station to provide continuous coverage. The aero rifle platoons may be used to establish OP's/LP's on appropriate terrain, thus reducing the width of frontage which must be covered by continuous surveillance by the aero scout elements. The aero weapon platoons will normally remain on ground alert to react in support of the other troop elements. The air cavalry troop may receive a cavalry platoon under its op-

FM 17-37

erational control. Normally, this will be provided to permit additional OP's/LP's to be employed or to provide the troop commander with a reaction force in the event the aero rifle platoon becomes engaged.

d. The squadron commander must plan for the eventuality that one of his elements will become engaged during surveillance operations. He may designate one troop as a reaction force, or if all

troops are committed to the surveillance task, he may assign the reaction force missions as a "be prepared" mission to one or more troops. When combat operations develop to a degree that requires engagement beyond that required for self-defense, the commander should request permission to reduce frontages if necessary. Progressive increase of enemy contact may require the squadron to withdraw or assume delaying tactics.

CHAPTER 15

ECONOMY OF FORCE OPERATIONS (STANAG 2099, 2134)

Section I. INTRODUCTION

15-1. General

a. The air cavalry squadron in an economy of force role utilizes offensive, defensive, and retrograde operations to execute the mission. On many

occasions, these operations will be necessary to accomplish reconnaissance and security missions.

b. Due to its high mobility and organic firepower, the air cavalry squadron can perform an economy of force role.

Section II. OFFENSIVE OPERATIONS

15-2. General

a. The air cavalry squadron can participate in all types of offensive operations, i.e., movement to contact, reconnaissance in force, coordinated attack, exploitation, and pursuit.

b. The air cavalry squadron employs or participates in a form of maneuver (i.e., the penetration, frontal attack, or envelopment) in the conduct of offensive operations to accomplish economy of force missions, independently or as part of a larger force. At squadron level, the forms of maneuver are integrated and nondiscrete; however, the squadron habitually executed vertical envelopments as a major form of maneuver in all operations. As part of a larger force executing a form of maneuver, the squadron normally provides security and patrols lines of communication, secures and holds terrain features for short periods of time, or is committed on an independent task. The air cavalry squadron usually operates under division or corps control, however, it can be attached to a brigade.

c. For a detailed discussion of offensive operations and forms of maneuver, see FM 17-1.

15-3. Movement to Contact and Reconnaissance in Force

a. In a movement to contact, the air cavalry squadron is a means for the division to gain or reestablish enemy contact to develop the situation prior to decisive engagement. The squadron can

act as a security force or covering force for a larger unit or conduct this operation as an independent unit.

b. The air cavalry squadron conducts a reconnaissance in force as a limited objective operation to determine enemy location, disposition, strength, planned fires, and reserves. Restrictions may be placed on the force commander to preclude a general decisive engagement. The squadron can execute this mission, independently or as part of a larger force.

15-4. Coordinated Attack

a. General. A coordinated attack is an attack designed to close with, capture, or destroy enemy forces by a combination of firepower, maneuver, and close combat. The squadron can conduct this operation independently or as part of a larger force.

b. Frontage in the Coordinated Attack.

(1) The frontage to be covered by the air cavalry squadron in the attack is determined by the factors of METT. The frontage must be sufficient to allow for maneuver, yet not be so wide that it taxes the limited attack capabilities of the squadron, and that elements of the squadron cannot be mutually supporting.

(2) The squadron normally operates over a broad front when in open terrain or when performing as part of a covering force for a larger unit conducting an offensive operation. It nor-

FM 17-37

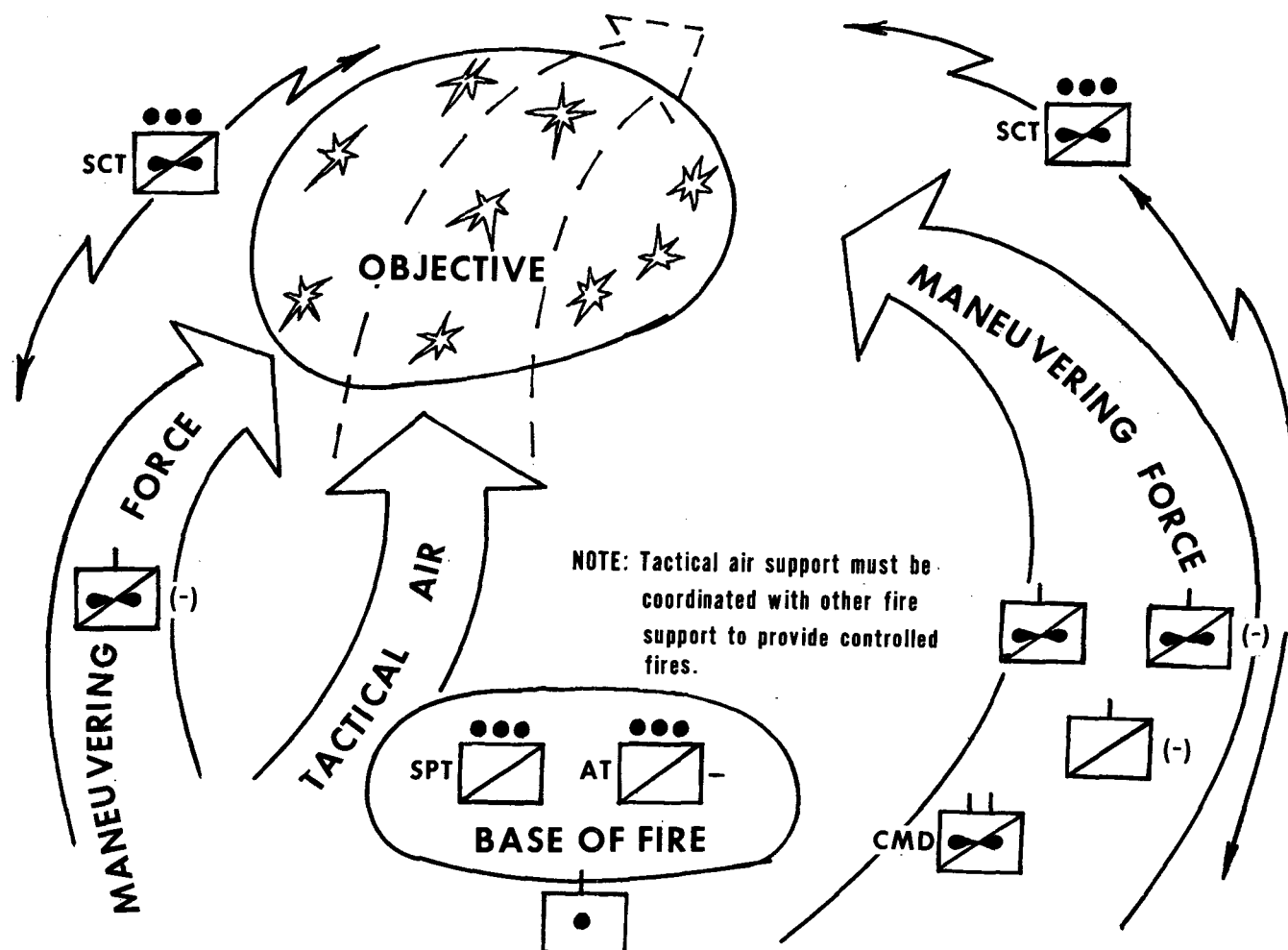


Figure 15-1. Air cavalry squadron in a coordinated attack.

mally operates on a relatively narrow front to concentrate available combat power when required to attack a prepared enemy position, when operating in heavily forested areas, or when limited visibility prevails.

c. Distribution of Forces in the Coordinated Attack. When conducting independent offensive operations, the squadron is normally divided into a maneuvering force and a base of fire. If sufficient forces are available after the requirements of both the maneuvering force and base of fire are met, a reserve may be designated (fig 15-1). Cross-attachment is a common procedure used in force composition for offensive operations.

d. Maneuvering Force.

(1) The maneuvering force should consist of the air cavalry troops and the scout and rifle elements of the cavalry troop. The squadron commander must insure that the maneuvering force contains sufficient combat power to accomplish the mission. The aero scouts are employed to provide security for the squadron by screening the flanks of the maneuvering force.

(2) The maneuvering force attacks, usually by air assault, to close with and destroy the enemy. Fire and movement in the maneuvering force is employed as dictated by the situation. The maneuvering force, by utilizing its airmobile capability, is employed against the enemy flanks or rear. As the enemy position is reached and overrun. Assault fires of all available ground and direct fire aerial weapons are intensified to compensate for the lifting or shifting of supporting fires.

e. Base of Fire. In a squadron attack, the base of fire is provided by the mortars of the cavalry troop, the antitank weapons of the cavalry troop, aero weapons platoons, artillery, aerial artillery, and when available, tactical air and/or naval gunfire.

f. Reserve.

(1) Combat forces of the squadron should be held out as a reserve only after adequate forces have been allocated to the maneuvering force and the base of fire. The reserve, if designated, may be employed initially to reinforce the base of fire or to provide security. As the attack progresses, the reserve is used to exploit the success of the maneuvering force.

(2) When enough forces are not available to constitute a reserve, the squadron commander must use other measures to influence the action such as providing depth to his formations, maneu-

vering his supporting fires, and making full use of the squadron's mobility to shift elements to the most critical point.

g. Preparation for the Coordinated Attack. To accomplish offensive missions quickly and effectively, the air cavalry squadron attacks with aggressiveness, speed, and violence. The conduct of such attacks requires thorough planning.

h. Plan of Attack.

(1) Upon receipt of a plan of attack or operation order from higher headquarters, the squadron commander formulates his plan of attack. The plan of attack includes the scheme of maneuver and the plan of fire support. Troop leading procedures to be used by the commander are discussed in detail in FM 17-1.

(2) In planning for a squadron attack, the commander must consider the factors of METT. His plan must be practical and capable of rapid and forceful execution.

i. Control Measures. To maintain control of his squadron during the attack, the squadron commander uses those control measures that are necessary for success.

j. Conduct of the Coordinated Attack.

(1) Once the squadron attack is launched, it must be executed with aggressiveness and violence, using all available firepower. Under cover of the support provided by the base of fire, the maneuvering force closes rapidly with the enemy. From the moment this force dismounts in the assault position, its movement must be as rapid as the terrain and enemy fires permit. The dismounted movement is assisted by direct fires from the aero weapons platoons. Each subordinate commander must be impressed with the fact that troop losses are often proportionate to the time required to close on the objective. When the assault is launched by the maneuvering force, fire is delivered continuously so that when supporting fires are shifted or lifted, the enemy is constantly under heavy fire until he is destroyed or captured. Aggressive leadership at all levels of command increases the probability of success.

(2) The squadron commander places himself where he can best control and influence the actions of the squadron. Most often he is with the maneuvering force; however, he should not become so involved with the actions of one element that he is unable to control the entire squadron. During the attack, he depends on radio communication to control the squadron. The S3,

artillery liaison officer, and forward air controller may accompany the squadron commander.

k. Conduct of Maneuvering Force.

(1) The maneuvering force directs its movement toward the enemy flank or rear, using covered or concealed routes to the assault position or landing zone. Movement toward the objective is aggressive, with fire and movement techniques being employed only when necessary to sustain forward movement.

(2) The maneuvering force assaults the objective in a deployed formation to close with and destroy the enemy.

l. Conduct of Base of Fire.

(1) All weapons in the base of fire begin firing, on order, at designated targets or areas. The purpose of LZ preparations is to destroy, neutralize or immobilize enemy troops, vehicles, positions, and antiaircraft measures on or in the vicinity of the LZ(s), approach and departure routes, the objective, or for feints, and are part of the fire support plan. The major threats to Army aircraft are obstacles, e.g., mines and antihelicopter stakes, and antiaircraft capable weapons, which are reduced by short, intense preparations combining tactical air, artillery, and attack helicopters. When the maneuvering force arrives on the objective or masks supporting fires, the base of fire lifts or shifts its fire to the side of the objective toward which the assaulting force is driving the enemy.

(2) Direct fire weapons in the base of fire and, as required, other elements of the base of fire are prepared to displace forward on order and may participate in the reorganization on the objective.

m. Consolidation, Reorganization and Continuation of the Coordinated Attack.

(1) The actual occupation of the objective is a critical stage of the attack. This is the stage during which control is most difficult and the time when an aggressive enemy delivers a carefully planned and coordinated counterattack, covered by all available supporting fires. When the squadron has assaulted and seized an assigned objective, it enters into activities called "actions on the objective." These actions are consolidation and reorganization. In nuclear warfare, actual seizure of the objective may often be followed by either a continuation of the attack or a rapid move to dispersed locations from which the squadron can dominate the objective, but avoid

presenting a lucrative target to the enemy. Such actions will be in accordance with plans made by a higher commander.

(2) As soon as leading elements of the assaulting force reach the objective, the following consolidation actions are taken with the greatest possible speed:

- (a) Destroy remaining enemy resistance.
- (b) Establish observation posts and outposts and dispatch patrols.
- (c) Position elements of the squadron to continue the attack or to defend the area.
- (d) Move to dispersed locations to avoid presenting lucrative targets.
- (e) Submit requests for artillery and air support.
- (f) Displace the base of fire to support the continuation of the attack or for the defense of the position.

(3) Reorganization pertains to actions taken to restore maximum combat effectiveness of the unit and restore control. These actions include:

- (a) Troop commanders report their combat status, including disposition and status of personnel, equipment, and supplies.
- (b) Redistribute personnel.
- (c) Treat and evacuate casualties and prisoners of war.
- (d) Supply ammunition, fuel, and other essential supplies.
- (e) Restore communications.
- (f) Maintain equipment.

(4) During the reorganization and consolidation phase, the aero scouts and aero weapons elements are usually employed to provide security to the front and flanks of the squadron, to harass the enemy rear and flanks, and to prevent him from regrouping for a counterattack or organizing new defensive positions. These elements also warn the squadron of the approach of enemy reserves and take all possible action to harass and delay the advancing enemy.

n. Continuation of the Coordinated Attack. Unless otherwise directed, the air cavalry squadron continues the attack to prevent the enemy from reconstituting his defenses, to exploit initial success, or execute its next mission. The squadron commander must be aware of the overall plan of the next higher commander and make a continuous estimate of the situation to insure that his actions are in consonance with that plan. The squadron commander adopts formations that enable the unit to continue the attack rapidly.

Troop commanders will require only brief oral orders to resume the attack.

15-5. Exploitation and Pursuit

a. General.

(1) Exploitation is the phase of the offensive that destroys the enemy's ability to reconstitute an organized defense or to conduct an orderly withdrawal. During an exploitation by the division, the air cavalry squadron is normally employed on a security mission. In some situations, the squadron may be employed in an economy of force role.

(2) Pursuit is a phase of the exploitation that has as its primary purpose the capture or destruction of retreating enemy forces. The squadron may be employed as a part of the covering force to regain contact with the enemy, to protect the flank or rear of the division, or to engage and harass a retreating enemy force.

b. Air Cavalry Squadron in the Exploitation.

(1) When the zone of action assigned to the division is unusually wide and enemy resistance is weak and disorganized, the division commander may assign an axis of advance or zone for the air cavalry squadron in the exploitation. The squadron's axis of advance or zone is normally on one flank of the division, however, the mission is primarily one of the exploitation rather than flank security.

(2) The squadron is usually assigned an axis of advance that will permit it to advance on a broad front. The command group operates well forward to enable the commander to take full advantage of the mobility of the squadron. Small enemy forces should be bypassed if their defeat will impede the accomplishment of the squadron's primary mission. When enemy elements are bypassed, the next higher commander must be informed of the location and estimated strength of the bypassed elements. The heavy volume of air-mobile firepower available to the squadron commander is used to harass the retreating enemy, and the aero rifle elements may be used to secure or destroy bridges in the rear of the retreating enemy forces. The characteristics of mobility, firepower, and extensive and flexible communication make the air cavalry squadron ideal for an exploitation mission against a disorganized and retreating enemy.

c. Air Cavalry Squadron in the Pursuit.

(1) When the division is engaged in the pursuit, the air cavalry squadron is best employed as part of the encircling force. The mission of the

encircling force is to get to the rear of the enemy and block his retreat. This mission is assigned when the bulk of the division has become engaged with the enemy and a light mobile force is needed to make a rapid encirclement. The squadron in the encircling maneuver uses air assaulted aero rifle elements or cavalry to secure defiles, bridges, and key terrain features before they can be secured by the enemy force. Aero rifle elements are closely supported by the aero scouts and aero weapons. The cavalry troop may be airlifted to join the aero rifle elements to provide more combat power in the encircling force or retained as a reaction force (fig 15-2).

(2) The mission of the direct pressure force is to attack continuously preventing disengagement and subsequent reconstitution of enemy defenses and inflicting maximum casualties. As a direct-pressure force, the squadron, as part of a larger force, advances along its assigned axis to close with the retreating enemy quickly. The commander takes advantage of the airmobility of his firepower to bypass the enemy rear guard and engage the enemy main body. When the enemy halts and attempts to establish a defensive position, the squadron continues to maintain constant pressure by fire and by employing offensive tactics.

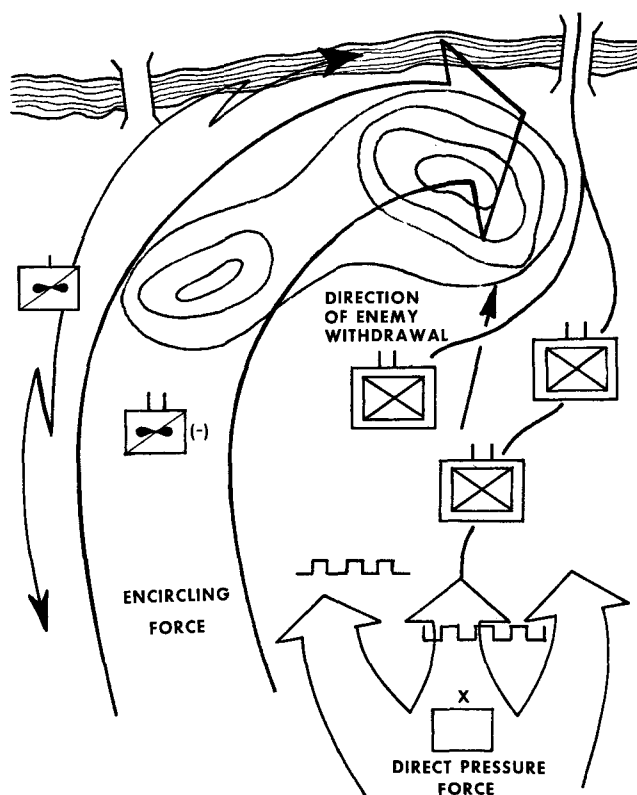


Figure 15-2. Air cavalry squadron in the pursuit.

Section III. DEFENSIVE OPERATIONS

15-6. General

a. The air cavalry squadron may be required to conduct defensive operations in performing reconnaissance, security, or economy of force missions.

b. The squadron may participate in either a mobile defense or area defense. In addition, when performing reconnaissance or security missions, the squadron may be forced to adopt an all-round defensive posture.

c. The air cavalry squadron commander organizes and conducts the defense through application of the following basic considerations: (FM 17-1 contains a complete discussion.)

- (1) Proper use of terrain.
- (2) Security.
- (3) Mutual support.
- (4) Defense in depth.
- (5) All-round defense.
- (6) Flexibility.
- (7) Maximum use of offensive action.
- (8) Dispersion.
- (9) Integration and coordination of defensive measures, including:
 - (a) Fire planning.
 - (b) Barrier planning.
 - (c) Mutual support.
 - (d) Surveillance planning.
- (10) Time available.

d. When the enemy possesses a modern mechanized force, the primary consideration in the defense is the antitank plan.

15-7. Employment of Air Cavalry Squadron in Defensive Operations

a. The air cavalry squadron is best suited for employment in reconnaissance and security missions, and surveillance tasks during defensive operations. The squadron is normally employed as part of a larger force. The squadron rarely engages in an independent defensive operation, except in accomplishing a reconnaissance or security mission.

b. When the squadron is employed as a security force, its withdrawal through the FEBA is more easily coordinated with the fixing forces or forces in the forward defensive area than is the case with a ground security force. This is because its major combat elements can withdraw over the FEBA rather than through it.

c. The decision to use the squadron to organize blocking positions in the mobile defense or as part of the forces in the forward defensive area in the area defense must receive careful consideration by the higher commander, as the squadron's ground holding capability is extremely limited. Its employment in this manner should be undertaken only when this need is greater than reconnaissance or security requirements.

15-8. Squadron as Division General Outpost in Defense

a. When performing a general outpost mission, the squadron is normally a part of the GOP which is reinforced with appropriate combat and combat support elements. The general outpost seeks to destroy the enemy within its capability, employing all available supporting fires and its organic combat power.

b. Tactics employed by the squadron as part of a general outpost are basically the same as for a delaying action. The commander organizes his forces to operate on a wide front with little depth. Early development of the situation is essential. The ground outpost commander must be informed of the enemy strength, composition, and dispositions by the most expeditious means available.

c. For a detailed discussion of the employment of the squadron as part of a general outpost, see paragraphs 15-14b and 15-15b.

15-9. Economy of Force Role in the Defense

The squadron may be employed under division control to screen a gap between forces occupying dispersed defensive positions. One or more troops may be attached to or placed under the operational control of a brigade occupying a defensive position for the purpose of screening a gap, operating as the brigade covering force, or maintaining contact with an adjacent unit.

15-10. Reconnaissance and Selection of Defensive Positions

The squadron commander makes as complete and detailed a reconnaissance of the area as the time and situation permit. This should include a ground and air reconnaissance of the squadron sector. From these, he determines the key features and the likely avenues of enemy approach. He designates positions for the air cavalry and cavalry

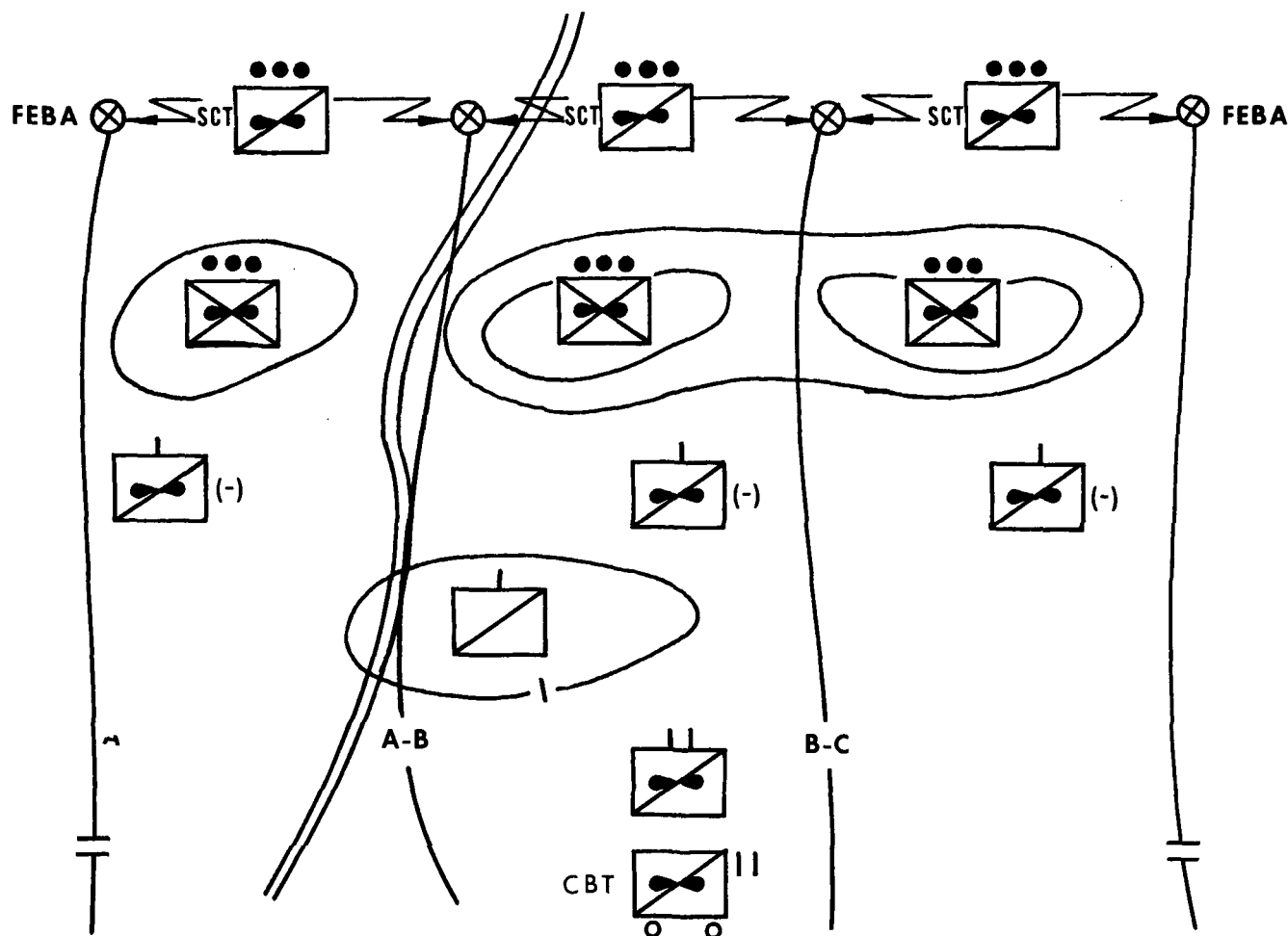


Figure 15-3. Air cavalry squadron in the defense.

troops that cover the likely avenues of enemy approach.

15-11. Organization and Preparation of Defensive Position

a. Troop blocking positions are organized to control key terrain features. The location of these positions depends on the importance of the terrain and of the enemy avenues of approach they dominate. Supplementary and alternate positions are selected and prepared by each troop to permit the squadron commander to withdraw or shift his forces to adjust to the situation. Forces occupying troop blocking positions should be mutually supporting. Any gaps between troops should be covered by air and ground observation and patrolling.

b. The squadron commander designates the general trace of the positions, troop boundaries, other control measures, and those positions which he considers key to the squadron defense.

c. If the width of the squadron sector permits, the commander disposes the squadron in depth.

d. Provisions for the security of the squadron during occupation, organization, and preparation of the defensive position are essential. The commander may make each troop responsible for its own security or he may assign the mission to one troop that is later to be positioned in depth.

e. The squadron command post generally occupies the least vulnerable positions within the defensive position, but must be located to facilitate control and support of all troops (fig 15-3).

15-12. Strengthening the Position

Strengthening the squadron defensive position includes measures taken to prepare the position and ground counterattack routes. Obstacles, including mines, are located to divert or stop the enemy attack and hold the enemy in areas covered by antitank, artillery, mortar, and automatic weapons fire. The use of demolitions to destroy

FM 17-37

bridges, fell trees, and crater roads should be considered in strengthening the position. The air cavalry squadron may exercise considerable freedom in executing obstacles since they do not seriously impede movement by the squadron, however, this does not eliminate the requirement to fully coordinate the obstacles with higher headquarters. Supplementary positions are prepared and strengthened to be occupied in the event of an enemy attack from other than the most likely direction. Strengthening of the position is continuous for as long as the position is occupied.

15-13. Fire Planning in Defense

a. The fire support plan provides for bringing the enemy under fire as early as possible, for increasing the fire as he nears the defensive positions, for breaking up his assault, and for reducing penetrations of the defensive position. Defensive fires must be planned carefully to insure that they are effective during both daylight and darkness.

b. The squadron fire support plan includes detailed plans for coordination of artillery, mortars, antitank, automatic weapons, organic aerial fires, and tactical air. As soon as the squadron commander has selected troop positions, a fire support plan is prepared that includes long range fires, close defensive fires, final protective fires, and fires to support the attack of the reserve.

c. Fires should be planned on critical areas such as likely avenues of approach and possible enemy assembly areas. A detailed discussion of fire support planning is contained in FM 6-20-2.

15-14. Mobile Defense

a. *General.* Elements of the mobile defense consist of the security force, fixing forces, and reserve (FM 17-1). The air cavalry squadron may participate as all or part of any of these elements. The squadron is best suited for employment in the security force or the reserve.

b. *Squadron as General Outpost in Mobile Defense.*

(1) When employed as general outpost, the squadron initially operates well to the front of the FEBA. Once contact with the enemy is made, it is maintained throughout the general outpost action. Maximum use is made of natural and artificial obstacles to impede the advance of the enemy.

(2) Upon completion of the general outpost mission, the air cavalry squadron may be assigned another reconnaissance, surveillance, or security

task of it may revert to a reserve mission. Under certain circumstances, the squadron might be directed to reinforce or occupy a strongpoint.

c. *Squadron as Part of Forward Defense Force.* In the mobile defense, the air cavalry squadron may be required to organize and screen a blocking position in an economy of force role. This type mission is not normally assigned the air cavalry squadron when other forces are available.

d. *Squadron as Part of the Reserve.* The air cavalry squadron may be employed as part of the division reserve, usually after it has performed a general outpost mission and has withdrawn through the forward defense. The squadron may be used to perform reconnaissance, surveillance, or security tasks for the division reserve. Operations of the reserve are similar to any other offensive operations.

15-15. Area Defense

a. *General.* In the area defense, the air cavalry squadron is most effective when assigned missions that make maximum use of its mobility, firepower, and extensive communications. These missions may include providing a security force on the general outpost, providing security for a division flank or within the division area, acting as all or part of the reserve, or acting as part of the forward defense forces in an economy of force role.

b. *Squadron as the General Outpost in Area Defense.*

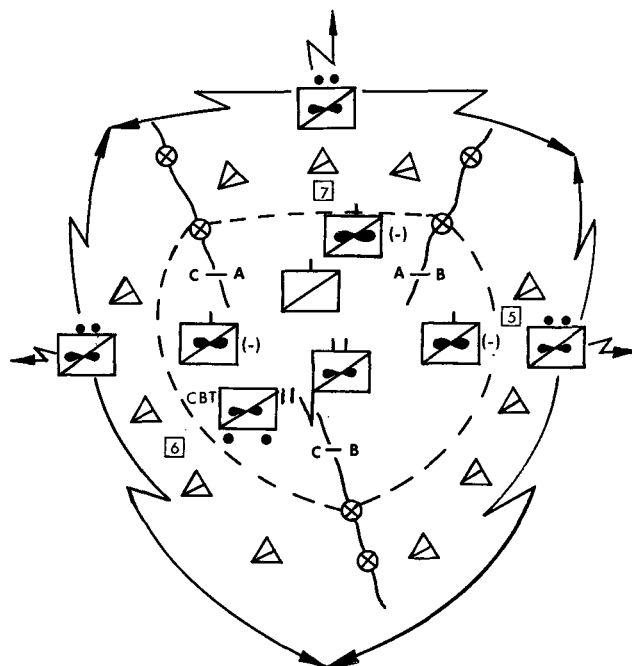
(1) When employed as part of the general outpost, the squadron is part of a force which should be reinforced with appropriate combat and combat support elements. The general outpost is normally controlled by the division commander. The mission of the general outpost, similar to that of the covering force, is to give early warning of enemy approach, to disorganize him, to delay his advance, to deceive him as to the exact location of the battle area, and to destroy him within the capability of the general outpost force.

(2) The squadron accomplishes its portion of a general outpost mission in the same manner as a delaying action. The delay is discussed in paragraph 15-20.

c. *Squadron as Reserve in Area Defense*

(1) When the squadron is designated as the reserve, it may be employed to plan and execute counterattacks or to prepare positions to extend the depth of the battle area and protect the rear of the larger unit.

b. Squadron as Part of a Larger Force. When a larger force is employing a perimeter in the defense, the air cavalry squadron may provide all or part of the security force, occupy a portion of the defensive perimeter, or participate as all or part of the reserve.



c. Squadron Employing the Perimeter Defense. The air cavalry squadron normally operates independently at a relatively great distance from other elements of the division. It must frequently employ the perimeter defense to protect itself while preparing for other actions. Usually, the situation requiring establishment of a perimeter defense allows little time for detailed prior planning. Each troop on the perimeter is assigned a sector covering possible avenues of enemy approach. Troops organize the ground in as much detail as time permits. Planning and conduct of the defense follow the techniques previously discussed, however, emphasis must be placed on mutual support and counter-infiltration measures (fig 15-4).

There are three types of retrograde operations: The delay, the withdrawal, and the retirement. Definitions and detailed discussion of each type is contained in FM 17-1.

15-19. Control Measures

a. Control measures used in retrograde operations include phase lines, coordinating points, checkpoints, contact points, sectors, routes, and those measures associated with tactical marches.

b. In selecting control measures, the commander should allow maximum freedom of action at the small unit level; however, missions and directions for execution will be more detailed than in other operations.

15-20. Delaying Action

a. General.

(1) The squadron, although it is better suited to support a larger force conducting a delay, can, if required, conduct a delaying action. The effectiveness of the squadron in delaying actions is significantly increased by attaching combat and combat support elements to increase the combat power of the squadron. The squadron usually delays on successive positions within a narrow sector. Higher headquarters normally assigns the squadron a sector for delay, the general trace of the initial delay position, successive delay lines, the period of delay, contemplated future actions, and any limitations. The higher commander cannot expect the squadron to provide the same period of delay as would a battalion size ground force due to the squadrons limited ground capability.

(2) Terrain will be an important consideration for the higher commander contemplating an assignment of a delay mission to the squadron. The key terrain in the proposed sector must be such that it gives the maximum advantage to the small ground elements of the squadron over the advancing enemy.

(3) Delay positions are not normally organized in great depth. They are strong in firepower, with the bulk of the force concentrated on likely avenues of enemy approach. An air cavalry squadron conducting a delay action is normally divided into two major echelons, the delaying force and the reserve. Troops do not usually designate a reserve. The squadron commander influences the action by maneuver and allocation of supporting fires. Execution of a delay action within assigned zones and between squadron delay positions is decentralized to troop level. The troops normally select intermediate delay positions between the squadron delay positions. The squadron commander controls the delay by assign-

ment of troop zones and designation of squadron delaying positions.

b. *Reconnaissance and Selection of Delay Positions.* Delay positions may be designated by higher headquarters, in which case intermediate delay positions may be selected between those specific positions. A reconnaissance to select delay positions must be made as early as possible. Likely avenues of enemy approach are located and plans are made to deny their use by the enemy. In selecting delay positions, the squadron commander considers the same factors as in selecting any defensive position. He selects positions affording long-range fields of fire and covered or concealed routes of withdrawal. An area in which the armed helicopters can move freely to strike advancing enemy columns in front of the delay positions is desirable. In planning his delaying action, the squadron commander attempts to select terrain which favors the employment of his airmobility against the enemy.

c. *Disposition of Forces for Delaying Action.*

(1) The squadron commander assigns troop zones corresponding to the most likely avenues of approach available to the enemy. Where possible, each troop is assigned one avenue and the terrain which dominates it. Routes of withdrawal are not as critical for the air cavalry squadron since its combat elements are not as limited by terrain as are ground-mobile elements.

(2) The squadron reserve, usually airmobile, is located where it can block the enemy or rapidly reinforce the delaying force at any threatened point.

(3) The squadron command post and trains are located well to the rear to avoid the requirement for frequent displacement and interference with the combat elements of the squadron. The command group remains well forward with the delaying force and withdraws with the last elements of the squadron to withdraw.

d. *Task Organization for Conducting a Delaying Action.* The task organization is based on consideration of the factors of METT. Troops are normally employed as organized; however, elements of the cavalry troop may be placed under operational control of the air cavalry troops to increase the ground capability during the delay.

e. *Security in Delaying Action.*

(1) During a delaying action, the enemy makes every effort to envelop and destroy the delaying force. The squadron commander must be particularly careful that the enemy does not turn

his flank or surprise him in position. Continuous reconnaissance by the aero scouts provides one of the best sources of security. Coordination with adjacent units is essential to avoid presenting an exposed flank to the enemy.

(2) If elements of the delaying force are not in contact, action must be taken to prevent surprise of the delaying force and to provide early warning of enemy approach. The aero scouts are well suited to perform this task. Ground observation posts, replaced by listening posts at night, are placed in the front of the delay positions to provide additional security.

(3) Air cavalry units in a delaying action must provide their own flank security by all-round observation, air and ground patrols, and by maintaining contact with adjacent units. All-round, detailed reconnaissance by the delaying force enables them to determine likely avenues of approach by which the enemy might envelop the position. These avenues are kept under constant surveillance to prevent the enemy from surprising the delaying force.

f. Organization of the Ground for Delaying Action.

(1) Planning considerations for the organization and occupation of a delay position are generally the same as for any defensive action. Boundaries may extend to the rear through the next line of delay positions and forward to the limit of the effective range of supporting weapons or limit of ground observation.

(2) When assigning sectors to the troops, each major enemy avenue of approach is assigned in its entirety to one troop. Boundaries are assigned so that terrain features that control fire and observation into a sector are assigned to the troop having responsibility for that sector.

(3) Natural obstacles are exploited in organizing the delay position. Artificial obstacles are also used to improve the position. Obstacles alone must not be relied on to halt the enemy. One important factor, when planning obstacles for the delay by air cavalry units, is that the maneuver elements of the air cavalry units are not affected by the surface obstacles, consequently, greater freedom may be enjoyed in the employment of surface obstacles. All obstacles must be covered by fire if they are to cause maximum delay to the enemy.

g. Delay on Successive Position.

(1) Delaying on successive positions is the type of delaying action most frequently conducted

by the air cavalry squadron. When this type of delaying action is used, all air cavalry troops of the squadron are normally committed to the delay positions. The cavalry troop is usually held as the reserve, or part of its platoons are placed under the operational control of the air cavalry troops to increase their capability to conduct the delaying action.

(2) Delay on successive positions requires improvement and occupation of each natural delaying position. Delay is not only accomplished from these positions, but also between those positions on intermediate troop or platoon delaying positions. Terrain is never given up unnecessarily; instead, every opportunity to cause delay to the enemy is exploited. Minimum space is traded for maximum time.

(3) The initial delay position (IDP) is organized and occupied by the air cavalry troops and may be reinforced by a cavalry platoon or other unit of comparable size. In some cases, the initial delay position is occupied before contact is established with the enemy. In such cases, the aero scouts reconnoiter to the front to establish contact with the enemy. The aero scouts, by adjusting long-range supporting fires on him, and the aero weapons, by attacking his formations, delay his advance toward the initial delaying position. The enemy force is engaged by additional weapons systems as he comes within their maximum range, so that the volume of fire to which he is subjected increases as he nears the initial delay position. These fires impede his progress, cause him to deploy prematurely, and take other actions which slow his advance toward the initial delay position.

(4) Each position is occupied until the enemy threatens decisive engagement or envelopment. When maximum delay has been achieved and it becomes apparent that further occupation of the position will result in decisive engagement, withdrawal to the next position is initiated in accordance with prearranged plans and on order of the next higher commander. Each withdrawal is coordinated with adjacent units.

(5) When ordered to withdraw, the squadron displaces directly to the rear and occupies the next designated delay positions. Ground elements displace first followed by the air elements which continue to delay the enemy while withdrawing. During the movement to the next delay position, the enemy is kept under constant surveillance by the aero scouts and continually harassed by supporting fires and organic aerial fires. The same

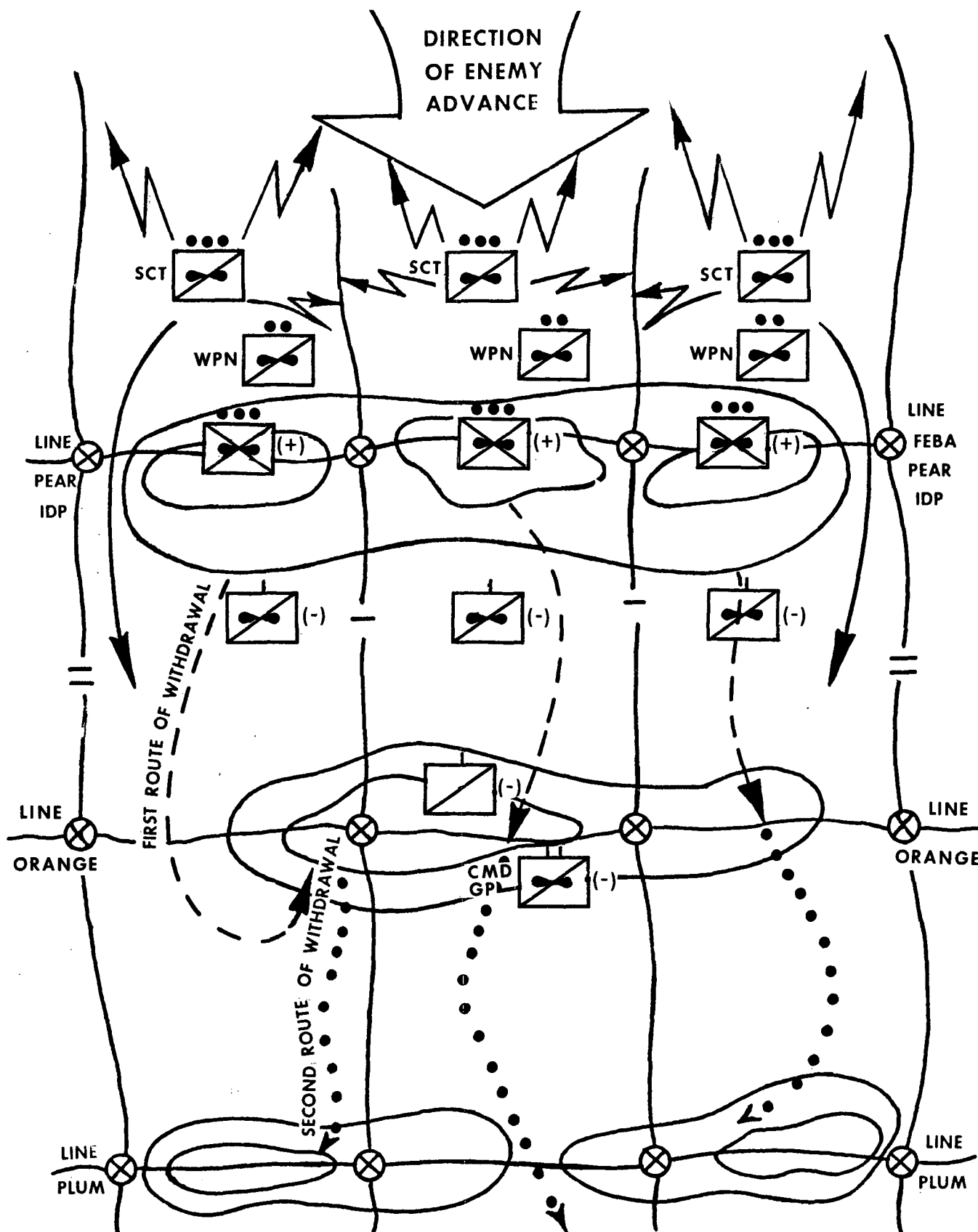


Figure 15-5. Air cavalry squadron conducting a delaying action on successive delay positions.

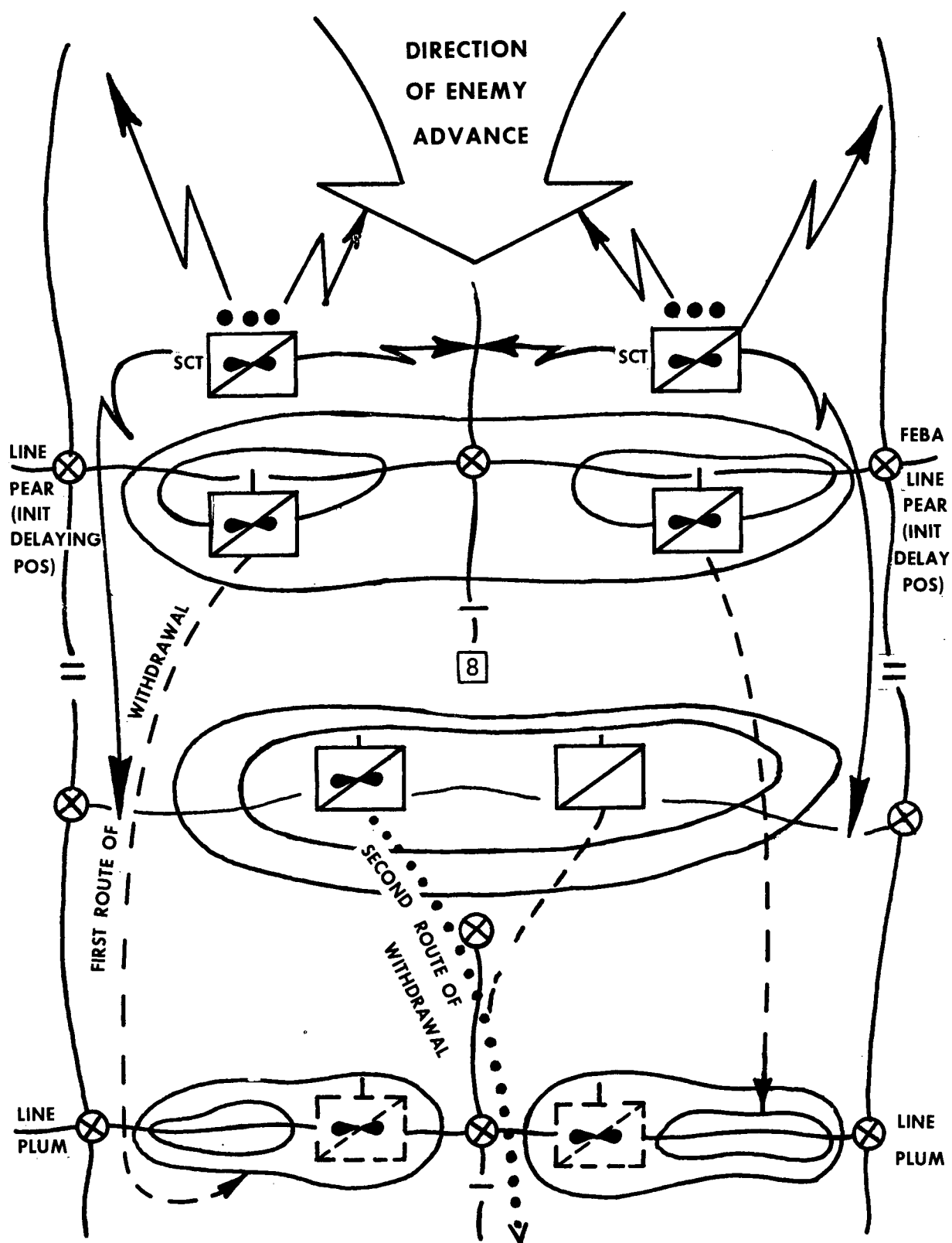


Figure 15-6. Air cavalry squadron conducting a delaying action on alternate delay positions.

procedure, employed on the initial position, is repeated at each successive position with maximum delay being the goal (fig 15-5).

h. Delay on Alternate Positions.

(1) When the squadron is operating on a very narrow front, the squadron may elect to delay on alternate positions. When employing this technique, the squadron is divided into two elements. The first element occupies the initial delay position and engages the enemy. The second element occupies and improves the second delay position.

(2) Units on the initial delay position delay the enemy as discussed in *g*(3) above. They delay on the initial delay position, and between it and the second delay position, then withdraw through the second element which has prepared and is occupying that position. The first element then proceeds to the third delay position and occupies and improves it, while the second unit is delaying on the second position and between the second and third position. The elements alternate in this manner for as long as the delay is to be conducted.

(3) This method of delay has the advantage of providing more time for improvement of each delay position. The air cavalry squadron is well suited for this method of operation because it presents few problems when passing over and through the rearward element (fig 15-6).

15-21. Withdrawal

a. General.

(1) The purpose of a withdrawal is to preserve or regain freedom of action or to draw the enemy into an unfavorable situation.

(2) A withdrawal is classed as under enemy pressure or not under enemy pressure. In either case, contact is maintained with enemy forces to provide for security and deception and to prevent a rapid enemy advance. When the division is conducting a withdrawal, the air cavalry squadron may be employed as a rear guard for the division. An air cavalry troop may be employed to protect the withdrawal of the squadron.

(3) Orders for the withdrawal are prepared in detail and will include:

(a) New location to be occupied and disposition of units within the location.

(b) Sectors or routes of withdrawal to be used by subordinate units.

(c) Provision for security forces and other security measures.

(d) Combat deception measures.

(e) Control measures.

(f) Provision for evacuation or destruction of supplies.

(g) Evacuation of casualties.

(4) Plans for the withdrawal should be formulated and disseminated in advance to permit subordinate units to make a daylight reconnaissance of routes and assembly areas.

b. The Effects of Daylight and Darkness on Withdrawal of Air Cavalry Squadron. Because of the reduced effectiveness of the organic aerial firepower and extraction capability at night, the air cavalry squadron withdraws during daylight when possible. The rapidity of movement over any terrain by the aerial elements of the squadron makes it relatively easy for them to break contact and withdraw during daylight. The ground elements maintain contact with the enemy until relieved of the requirement to do so, either by passing through friendly front lines, or being relieved of the mission by a higher commander. When no longer required to maintain contact, the aerial elements break contact and withdraw along a route different from that used by the ground elements to deceive the enemy as to the direction of movement of ground elements.

15-22. Retirement

a. General. A retirement may be made following a withdrawal or when there has been no actual contact with the enemy. When a withdrawal precedes a retirement, the retirement begins after the main forces have broken contact with the enemy and march columns have been formed.

b. Conduct of the Retirement. In a retirement, the aero scouts are the last element to leave the battle area. During the retirement, definite routes and march objectives are assigned. Security for the protected force is provided by advance, flank, and rear guard action, with early warning provided by the aero scouts. The air cavalry squadron may be assigned the rear guard mission. It accomplishes this mission as discussed in paragraphs 13-5 and 13-6.

PART 5

SPECIAL OPERATIONS

CHAPTER 16

GENERAL

(STANAG 2088)

Section I. INTRODUCTION

16-1. General

This chapter is a guide for employment of air cavalry units in special operations. It covers stability operations, reconnaissance behind enemy lines, chemical and radiological monitoring and survey operations, area damage control operations, night operations, logistics, riverine operations, and battle drill.

16-2. Scope

These mission type operations are discussed only as they concern the air cavalry squadron. Information on other types of special operations in which the air cavalry squadron may participate is covered in FM 17-1.

Section II. STABILITY OPERATIONS

16-3. General

a. The doctrine for the employment of air cavalry units presented in the preceding chapters is applicable in stability operations.

b. Those characteristics of stability operations with the greatest impact on air cavalry operations are—

(1) The considerably larger areas, as opposed to those in conventional operations, within which tactical units habitually operate.

(2) Operations may be in support of U.S., host country, or allied forces, or combinations thereof.

(3) The organization and characteristics of the enemy are quite different from those expected in conventional war.

(4) Insurgent forces usually do not mass except to execute offensive operations. Finding and fixing the enemy becomes the major task.

(5) Insurgent installations are not massed. Their installations are small, dispersed, and difficult to locate and destroy.

(6) The insurgent forces are capable of

massing in any direction for offensive action, and rapidly dispersing so that rapid reaction forces are essential.

(7) Political, economic, sociological, and psychological considerations may dictate the nature of military operations, to include severely defining and limiting the rules of engagement.

16-4. Missions

Air cavalry units may expect employment in offensive or defensive operations, actions, or techniques as follows:

- a. Area reconnaissance and surveillance.
- b. Reconnaissance in force.
- c. Raids.
- d. Damage assessment and exploitation of supporting fires.
- e. Pursuit.
- f. Ambush.
- g. Reaction operations and coordinated attacks.
- h. Encirclement.
- i. Security.
- j. Economy of force.

16-5. Area Reconnaissance and Surveillance

a. Air cavalry units accomplish area reconnaissance and surveillance as a squadron operation, as troops in support of committed brigades, or simultaneously with the accomplishment of other missions.

b. When conducting an area reconnaissance mission, the squadron assigns each air cavalry troop an area, designates the frequency of coverage and indicates the intensity of coverage expected. This area may be the area of operations of a supported brigade, a part of the squadron area of operations or a separate troop area of operations. Whenever possible, a troop is allowed to operate in the same area for an extended period of time so that complete familiarity with the area is acquired by members of the troop. In this way, small changes in the area can be detected with a greater degree of reliability than if the troop areas are changed frequently.

c. The large areas to be reconnoitered usually require the employment of the entire air cavalry troop to accomplish the mission. The aero scouts, reinforced with elements of the aero weapons platoon, accomplish the detailed aerial reconnaissance. The aero rifle platoon conducts detailed ground reconnaissance of areas which are inaccessible to aerial observation. Any aero weapons elements which are not committed with the scouts, provide direct fire support to the troop.

(1) The troop commander makes a detailed map reconnaissance of the area to be reconnoitered.

(2) Based on his map reconnaissance, he decides on a plan for accomplishing the reconnaissance.

(3) He issues his order for the reconnaissance, specifying a mission for each subordinate unit of the troop.

(4) He supervises the execution of the mission and adjusts his plan to meet the changing situation.

(5) He reports both positive and negative information to higher headquarters.

(6) He makes a personal reconnaissance of the area of operations while supervising the execution of the troop mission and revises his initial plan to provide better coverage of the area if subsequent coverage is required.

d. The aero scouts habitually use the low altitude techniques discussed in this paragraph to maximize their ability to observe activity on the

ground. They search the area in detail, reporting all significant sightings to the troop command post. They remain alert for inconsistencies in the appearance of the area. They seek indications of the enemy such as footprints in the trails and near streams, fresh earthworks, signs of increased travel along roads or trails, smoke or ashes from cooking fires, structures in areas where people would not normally live (based on prior knowledge of the customs of the people of the host country), or an increase or decrease in usual activities in the area. They examine all personnel to determine sex, age, type clothing worn, tools or equipment being carried, activity in which engaged, attitude toward the scouts and pattern of activity in an area. Aero rifle elements may land to make a more detailed reconnaissance of road or bridge conditions, the contents of structures, or to more closely examine suspicious individuals.

e. The aero rifle platoon is normally held in the troop assembly area in readiness to respond to calls for their support of the reconnaissance effort. When called, they respond with only the required elements (the situation may require a squad, more than one squad, or the entire platoon). In accomplishment of the troop reconnaissance mission, the aero rifle elements usually accomplish the ground reconnaissance. As reaction flights, they also engage small groups of enemy, which may have been detected by the aero scouts, to capture or destroy them. During and after the initial reconnaissance of an area, the aero rifle platoon will be employed almost continuously in the manner described. During subsequent surveillance of the area, aero rifle elements are employed as frequently, but usually they are used in an offensive rather than a reconnaissance role.

f. The aero weapons platoon may remain in the troop assembly area to provide direct on-call support to the aero scouts, support the air assault and ground operation of the aero rifle elements, or reconnoiter the operational area to detect and engage targets of opportunity. When enemy contact is expected, one team is usually kept on station to provide immediate direct fire support to the aero scouts or aero rifle elements. This practice is expensive in terms of aircraft utilization and should not be employed unless required.

g. The cavalry troop may be assigned an area of operations, it may be employed on another squadron mission, or a portion of its platoons may be placed under the operational control of the air cavalry troops to reinforce their ground recon-

naissance capability, or it may be held as a squadron reaction force. The employment of this troop is significantly influenced by the cross-country movement capability of its wheeled vehicles. It is usually most effectively used when employed in an airmobile role.

f. The aero weapons platoon may remain in the troop assembly area to provide direct on-call support to the aero scouts, support the air assault and ground operation of the aero rifle elements, or reconnoiter the operational area to detect and engage targets of opportunity. When enemy contact is expected, one team is usually kept on station to provide immediate direct fire support to the aero scouts or aero rifle elements. This practice is expensive in terms of aircraft utilization and should not be employed unless required.

16-6. Reconnaissance in Force

a. Air cavalry units may be required to accomplish a reconnaissance in force independently or as part of a larger force.

b. When operating as part of a larger force on reconnaissance in force operations, air cavalry units are best employed as the searching and fixing force. Their airmobile reconnaissance capability enables them to gain and maintain contact with small groups on foot and with extremely elusive groups of the enemy more readily than is possible for most other units. Their heavy volume of airmobile firepower can be concentrated at any point in the area of operations of the division in a very short time.

c. When conducting independent reconnaissance in force operations, air cavalry units are capable of detecting enemy forces of any size and of destroying enemy forces of multicompany size. The squadron employs fire and maneuver in the attack by using all organic and supporting fires as a base of fire, and elements of the cavalry troop (usually in an airmobile role) or the aero rifle platoons of the air cavalry troops as the maneuvering force. The ability to attack from several directions at once increases the shock effect of the attack. The subordinate units employ normal reconnaissance and offensive tactics.

16-7. Raids

a. Air cavalry units have a capability for conducting raids in stability operations. The probable lack of an effective enemy air defense usually per-

mits the squadron or troops almost complete freedom of movement to any point in the area of operation. The squadron or troops can penetrate deep into enemy sanctuaries or base areas, perform a raid type mission to capture prisoners, destroy key installations, or make a show of force, and depart with relative immunity from enemy counteraction.

b. Raids may be accomplished by the entire squadron or by one air cavalry troop. The depth of the raid is usually limited only by the radius of action of the unit's helicopters. A typical raid mission might be to seize all men of military age from a village deep in the enemy base area for intelligence and psychological exploitation. The air cavalry troop assigned the mission may be reinforced with one cavalry troop assigned the mission may be reinforced with one cavalry platoon in an airmobile role. It plans an air route to the objective which will permit surprise. A plan of search is formulated which includes the designation of landing zones, boundaries, phase lines, objectives, pickup zones, and time phasing. The fire support plan will include plans for support by organic aero weapons teams; artillery, if in range; and tactical air. The aero scout and aero weapons platoons may furnish teams to screen around the village to prevent the escape of enemy forces. The plan provides for evacuation of prisoners by the lift aircraft of the aero rifle platoon shuttling back to the IPW team at the division or brigade CP. A reaction force is maintained by squadron or higher headquarters to assist in the extraction of the committed platoons if they become heavily engaged. Air cavalry units are very well suited to conduct raids of this type in stability operations (fig. 16-1).

16-8. Damage Assessment and Exploitation of Supporting Fires

Air cavalry units may be assigned the mission of exploiting supporting fires and assessing the damage caused by them. These fires may be heavy bomber strikes, heavy naval gunfire bombardment, or other heavy area-type fires. When accomplishing this mission, the air cavalry troop times its arrival in the target area to coincide with the cessation of fires. When notified that the last bombs or rounds have impacted, the aero scouts and aero weapons teams commence an intensive reconnaissance of assigned areas with a primary mission of detecting any enemy in the target area and a secondary mission of making the damage

FM 17-37

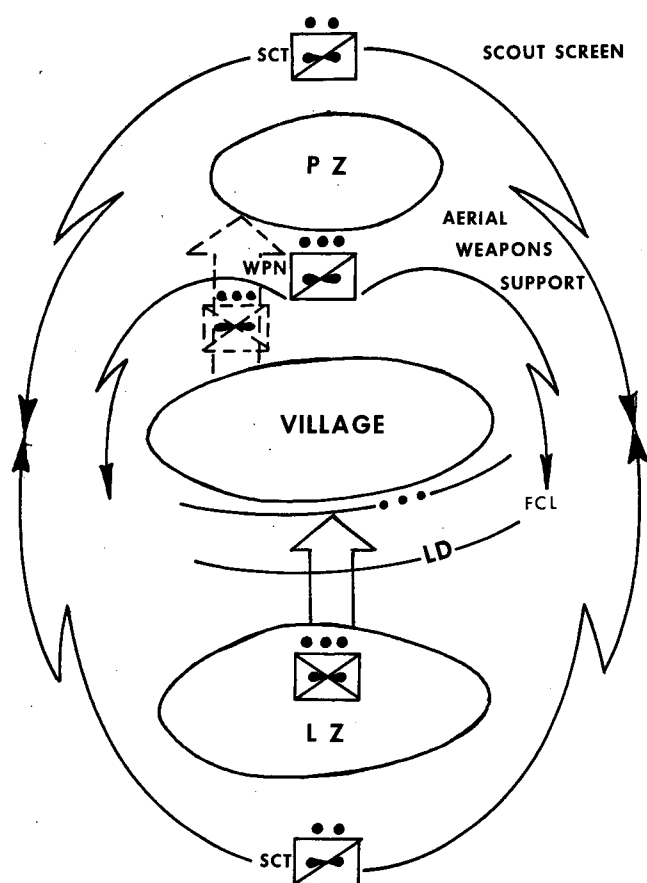


Figure 16-1. Air cavalry troop conducting a raid on a village, to secure prisoners or for other purposes, in support of stability operations.

assessment. If an enemy force is encountered in the target area, the air cavalry element take action to develop the situation, or may air assault for a detailed offensive operation and report to the headquarters directing the operation. The enemy force is engaged if its defeat is within the capability of the exploiting force. If the force is too large to be engaged, this fact is reported to the higher headquarters which will usually commit a reaction force to the exploitation. The cavalry troop in an airmobile role may constitute the reaction force. Reports of damage are made by the air cavalry elements as directed by the higher headquarters.

16-9. Pursuit

The insurgent forces will normally attempt to break contact and exfiltrate from the area of contact whenever the situation is not favorable for their continuing the action. When this maneuver is attempted by the enemy, it is difficult for dismounted friendly forces to maintain contact with the enemy and prevent his exfiltration. Air cav-

alry units are particularly well suited to conducting a pursuit under these conditions. The commander may employ the aero scout and aero weapons elements to maintain contact with and harass the withdrawing enemy, and the aero rifle elements to establish blocking positions or ambushes to impede the withdrawal and inflict casualties on the enemy. Every effort is made to canalize the enemy into areas where contact can be maintained by the application of supporting fires or by ground action. When contact is lost with this type enemy, it may be difficult or impossible to regain; thus, continuous engagement is the key to contact, and every effort of the squadron is therefore directed at maintaining contact. The higher headquarters is kept informed of the actions of the enemy and factors of terrain, weather, and friendly forces which help in the formulation of plans for defeating the enemy.

16-10. Ambush

Air cavalry units may be assigned the mission of establishing ambushes along enemy routes of movement and lines of communication. The squadron commander normally employs aero rifle elements and/or cavalry elements as the ambush force. The platoon is normally lifted into the vicinity of the ambush site. Deceptive air assaults or extractions are used to deceive the enemy as to the actual landing zone used by the platoon. The platoon then moves on foot to the ambush site. Landing of the platoon is usually just prior to nightfall to enable the platoon to move under cover of twilight to the ambush site. Emphasis must be placed on moving by stealth to preserve secrecy. Once in the ambush site, the platoon takes measures to prevent its being surprised by the enemy. Leaders insure that every man knows his mission, when to open fire, and actions he is to take after the ambush. Supporting fires are planned to seal off the escape routes of the enemy force. Use of antipersonnel mines will be integrated into overall planning; each member of the platoon will know where these mines are located. Direct aerial fire support may be planned in conjunction with artificial illumination when the terrain and vegetation in the ambush site permits its employment (fig. 16-2).

16-11. Reaction Operations and Coordinated Attacks

Air cavalry units, because of their capability to rapidly mass aerial firepower and airmobile rifle

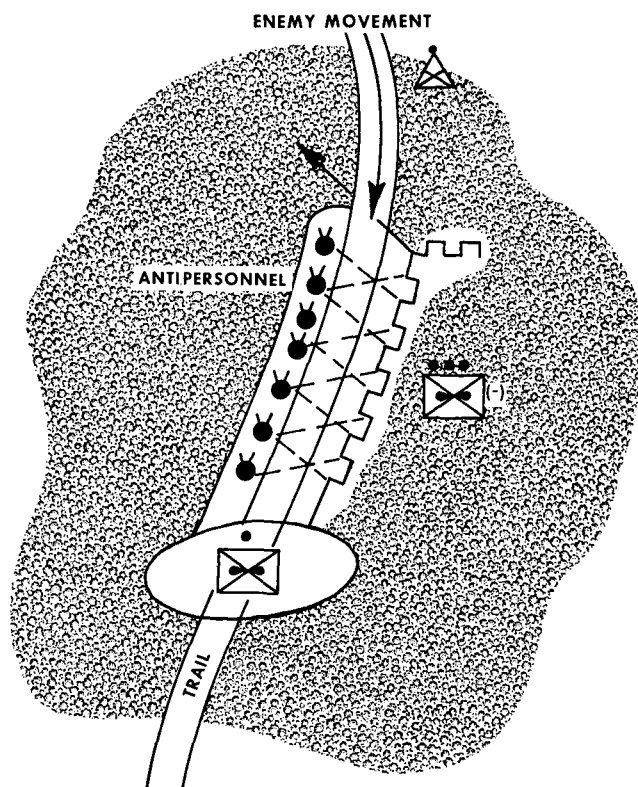


Figure 16-2. Aero rifle platoon organizing an ambush in support of stability operations.

units at any point in the area of operations, are well suited for the role of reaction force for the higher headquarters. They may be assigned a reaction force mission as a primary mission for all or part of its force, or the reaction mission may be assigned as an additional mission. In stability operations, the larger force is usually disposed in a cellular manner; that is, brigades or subordinate units are spread over the entire area of operations in small forward bases from which they initiate tactical operations. These forward bases are frequently the target for enemy ground and mortar attack. The commander should prepare reaction plans for each forward base in the area of operations. These plans should include the location of landing zones in the vicinity of the bases, route or axis from the landing zones to the

base, scheme of maneuver for the reaction force, fire support plan, and a plan for actions after the enemy is repulsed. These actions should normally include pursuit and maximum destruction of the enemy force while he is massed. Specific units should be designated for the accomplishment of the reaction operation and these units should rehearse the plans. Complete coordination with supporting artillery, tactical air, and other supporting fires should be made when the plans are formulated. Complete and coordinated reaction planning will not only prevent loss of friendly forces but will also provide for the engagement of the insurgent force when he is most vulnerable, that is, massed for the attack.

16-12. Encirclement

Once the insurgent force has been found by reconnaissance, it must be fixed, fought, and finished. One of the most successful ways of doing this is by the conduct of an encirclement. The air cavalry unit can best be employed in an encirclement by conducting an air screen outside the encircling force to prevent the enemy from escaping the encirclement. In this mission, the screen is oriented inward rather than outward, as is more normal. The mission of the screen is the detection and destruction of all enemy forces attempting to exfiltrate the encircled area. The air cavalry unit is capable of performing this mission in daylight or at night. When planning a screen at night, maximum use of artificial illumination and night vision devices must be planned. Coordination between the air cavalry commander and the commander performing the encirclement is required to permit the most effective employment of the air cavalry elements with the least possibility of accidental engagement with friendly elements on the ground. The unit must be particularly alert for the development of gaps between ground elements, as those elements move to close the circle. When a gap is detected, the air cavalry elements take appropriate action to prevent the enemy from exfiltrating through the gap (fig. 16-3).

Section III. RECONNAISSANCE DEEP IN ENEMY AREAS

16-13. General

a. The mobility of the air cavalry troops of the air cavalry squadron make them ideally suited for conducting reconnaissance deep in enemy areas. They may rely on aerial operations alone or they may combine aerial and dismounted aero rifle elements

for the mission. This type of operation demands the utmost in aggressive and imaginative leadership by junior leaders.

b. These operations are conducted to exploit a valuable means of obtaining information of immediate tactical value to division or larger unit

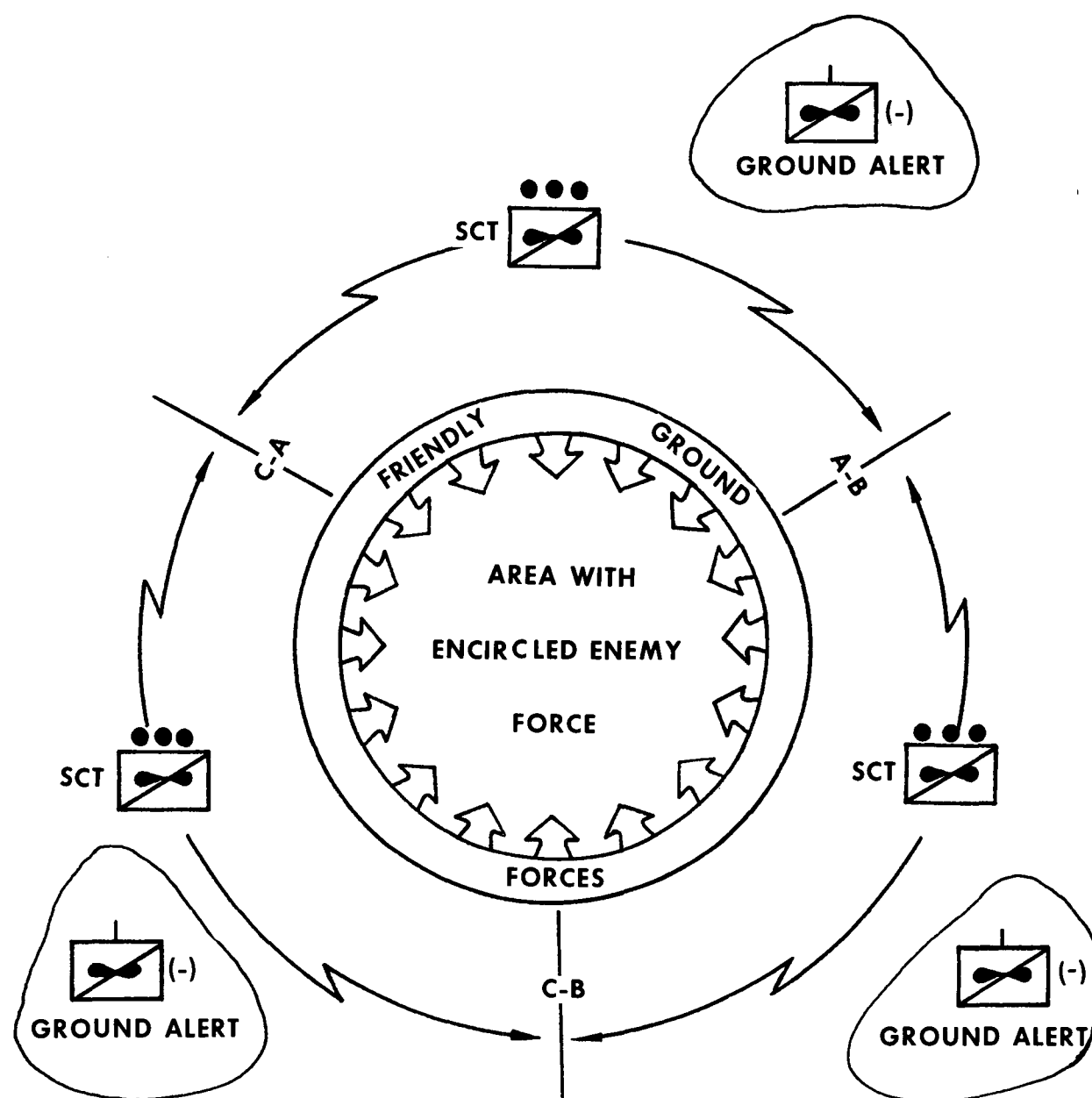


Figure 16-3. Air cavalry squadron as part of an encirclement to contain and destroy or capture an enemy force.

commanders. They are intended to complement other organizations which may be available, such as, long-range patrols and unconventional warfare forces.

16-14. Missions

Small air cavalry elements operating deep in enemy areas are particularly effective in accomplishing the following missions:

a. Location of target for employment of tactical air, artillery, or nuclear fires.

b. Observation and control of tactical air and artillery fires.

c. Damage assessment.

d. Radiological monitoring or survey.

e. Route and area reconnaissance.

f. Location and identification of enemy units and installations.

g. Surveillance of enemy routes and lines of communication.

16-15. Methods Employed to Get Deep into Enemy Areas

The most common method of getting into enemy areas is by infiltration by aero scouts during darkness or when visibility is otherwise reduced. Dismounted patrols from the aero rifle or cavalry platoons may infiltrate enemy areas, or dismounted elements may be left behind during retrograde operations for the purpose of observing and reporting enemy activities.

16-16. Employment Deep in Enemy Areas

a. The platoons of the air cavalry troops may be employed by team, section, platoon, or platoon team. The aero scouts normally perform this type of mission, although other elements of the troop may be used.

b. Successful operations in enemy areas depend on minimum exposure, consequently, the aerial elements employ covert flying techniques, move under cover of darkness or bad weather, and avoid towns, roads, or other likely areas of enemy troop concentration.

c. The aerial elements depend on speed and

daring to accomplish their mission. Their rapid movement capability, together with the ability to use ground cover and concealment, enhances their ability to surprise the enemy. They exfiltrate the enemy areas at a point different from that used for the initial infiltration. They move to their reconnaissance objective by indirect routes, changing their direction of flight frequently so as to confuse the enemy as to their intentions.

d. The plans of the elements going deep in enemy areas must be simple, yet complete. The leader must retain flexibility to permit adjustment to changing or unexpected developments. He must plan an adequate fuel reserve to allow for unexpected changes in flight routes due to enemy action.

e. The aerial reconnaissance element (aero scout and aero weapons teams) may take on the role of hunter-killer teams while in the enemy rear. They may engage targets of opportunity to confuse the enemy, to disrupt his supply lines, and to disorganize and demoralize his reserve.

f. The squadron and troop SOP should contain guidance for conducting reconnaissance in enemy areas.

Section IV. CHEMICAL AGENT DETECTION AND RADIOLOGICAL MONITORING AND SURVEY OPERATIONS

16-17. General

a. Air cavalry units are particularly suited to the accomplishment of chemical agent detection and radiological monitoring and survey missions in conjunction with other operations. The air cavalry troop are equipped with the necessary detecting and monitoring devices and their personnel are trained to perform these missions. This section discusses these operations in general terms as applicable to air cavalry units.

b. Detailed guidance on the conduct of CBR operations is given in FM 3-12, FM 21-40, FM 21-41, FM 21-48, MT 3-210, and TM 3-220.

16-18. Detection and Monitoring Operations

a. Chemical agent detection and radiological monitoring is a command responsibility performed by the air cavalry squadron. It is essentially a protective measure taken to safeguard the combat readiness of the command. Chemical agent detection incorporates all actions taken to detect the presence and give warning of toxic chemical agents by use of chemical agent detector kits,

which include detection paper, detection crayon, or alarm devices, if available. Detailed information on the chemical agent detection kit is in TM 3-6665-253-12.

b. Radiological monitoring activities may be conducted on a periodic or continuous basis using ground or air methods or both. When a unit is moving, it is normally advisable to assign the advance guard the additional mission of continuous monitoring to prevent movement into an area of dangerous contamination without warning. Once the unit occupies an area, periodic monitoring will normally suffice.

c. The objective of radiological monitoring by air is to determine the presence or absence of significant levels of radiological contamination and not to determine accurate ground dose rates, unless the monitor is specifically directed to do so.

16-19. Survey Operations

a. Survey operations are organized under the following structure.

(1) *Survey party.* A survey party normally

consists of a monitor and an assistant. The survey party may be mounted in a ground vehicle, on Army aircraft, or dismounted as required by the type of contamination. The assistant may drive the vehicle, fly the aircraft, and operate the radio. A ground survey party may be augmented by additional persons for security.

(2) *Control party.* A control party is a group of individuals which coordinates the efforts of two or more survey parties under its control and reports radiological data to the appropriate higher echelon.

(3) *Survey team.* A survey team consists of a control party and two or more survey parties.

b. When an air cavalry unit is assigned a radiological survey mission, the size, number of individuals, and composition of the survey team are based on a consideration of the qualified personnel available, equipment on hand, the size of the area to be surveyed, the accessibility of the area by ground and air means, and the specific information desired. Care must be taken that the cumulative dose of radiation acquired by the team mem-

bers does not exceed dosages specified by the commander.

c. Aerial radiological surveys are normally called for by the commander when ground and aerial monitoring data are inadequate for the conduct of operations. Large ground areas can be covered by aerial surveys within minimal time and terrain constraints at exposure levels considerably below those that would be received by ground survey teams.

d. When aerial radiological survey data is incoming or not available, the commander may require that a detailed ground survey be conducted to provide radiological data for the conduct of operations. Ground survey missions are normally conducted by platoon units with aero rifle or cavalry platoon headquarters acting as the control party.

16-20. Reporting Data

Appendix C to FM 3-12 specifies the procedures and format for reporting chemical and radiological data.

Section V. AREA DAMAGE CONTROL

16-21. General

a. Area damage control operations consist of measures taken before, during, and after mass-destruction or mass casualty attack or natural disaster to minimize their effects. In forward areas, these measures are directed primarily toward minimizing interference with combat operations and the loss of men and materiel. In rear areas, combat elements can assist nontactical units with measures to prevent interference with support operations.

b. Damage control activities are a command responsibility. The commander at each echelon is responsible for planning, training, and implementing area damage control measures.

c. FM 19-45-1 (Test) discusses damage control operations in greater detail.

16-22. Squadron Area Damage Control Operations

a. Air cavalry units, with extensive organic air mobility, are well suited for damage control operations. The squadron, or parts of the squadron, may be required to perform these operations in the squadron area or in the area of another unit.

Subordinate elements of the squadron, as organized, may be employed to perform these operations. The squadron may be required to conduct area damage control missions while engaged in other combat operations. When this occurs, it may be necessary to organize and commit provisional area damage control units.

b. Organization of the squadron area damage control elements is usually prescribed in the prescribed in the squadron SOP. Elements that squadron SOP. Elements that will be organized are as follows:

(1) *Control and assessment team (CAT).* This organization is the squadron command and control headquarters for conducting squadron area damage control activities.

(2) *Squadron rescue squad.* This squad will be established at squadron level. It will be assembled on order and attached to a control and assessment team for area damage control operations.

(3) *Troop rescue squad.* One rescue squad will be established by each air cavalry and cavalry troop. They will be assembled on order and attached to a control and assessment team for area damage control operations.

16-23. Troop Area Damage Control Operations

a. The air cavalry troop, cavalry troop, or portions of either, may be required to participate in area damage control operations. The troop is required to organize and train a troop rescue squad. Additional elements of the troop may be required to perform these functions under some conditions.

b. The functions of area damage control accomplished by the troops are as follows:

- (1) Rescue and remove casualties from affected areas.
- (2) Administer first aid.
- (3) Perform limited, hasty decontamination.
- (4) Conduct radiological monitoring.
- (5) Chemical agent detection.

Section VI. NIGHT OPERATIONS

16-24. General

Air cavalry is employed in night operations the same as day operations; however, due to the lack of optimum visual references, some reduced effectiveness occurs which requires greater detail in planning, navigation, coordination, control, orders, increased night vision and observation device use, and a significantly higher level of individual and unit proficiency. This section deals with the special aspects of night employment techniques; otherwise material in other chapters applies.

16-25. Reconnaissance Operations

a. The aero scouts have the primary mission of reconnaissance assisted by the night vision and observation devices and/or firepower of other air cavalry elements. A day familiarity with the area is desirable to reduce night navigation errors and to maintain orientation. A detailed map reconnaissance and analysis is required which includes:

- (1) Area coverage courses with headings, times, and distances.
- (2) Identifiable features such as rivers, roads, and towns.
- (3) Location of, frequencies, and range fans of artillery; location of friendly elements.
- (4) Coordinated illumination plans for ground and aerial means.
- (5) Terrain clearance altitudes and navigational assistance, maximum use of night devices, intelligence information, and rules of engagement.

b. The aero scouts gather information within their capability. When beyond it, they can request illumination or more sophisticated night devices from other air cavalry elements. They may also request that aero rifle elements be airlanded, when adequate information acquisition is not feasible from the air. If enemy contact is made, they adjust artillery fire or request aero weapons elements for which they give target information, vectors and provide marking. Other air cavalry

elements, except the scouts, are always committed on a task-required basis.

16-26. Night Offensive Operations

a. Air cavalry units execute limited objective night offensive operations independently, or as part of a larger force, or to linkup with other ground forces, usually against light enemy threats (due to air cavalry's limited ground holding capability). Offensive operations are either armed reconnaissance missions or air assault type actions.

b. Armed reconnaissance missions by the aero weapons elements, assisted in target acquisition by the surveillance, sensors, or illumination of other troop elements, is basically engagement of known targets of opportunity along routes, waterways, or specified areas. Planning for these missions includes:

- (1) Detailed map and navigation analysis.
- (2) Tactical and communication procedures.
- (3) Air and ground coordination of illumination and artillery.
- (4) Positive location of friendly positions.
- (5) A troop safety buffer zone around the engagement area.
- (6) Downed aircraft procedures.
- (7) Intelligence date.
- (8) Rules of engagement.

c. When the other troop elements acquire a target by sensor or flares, they give vectors and target data to the weapon elements; if target acquisition is by searchlight, the "light ship" transmits "mark" and orbits so the light beam remains fixed on the target. If a free fire area, the weapons elements immediately attack using their sensors or available illumination, or make an identifying pass in a positive identification area, and then attack if proved hostile. Care must be taken to fire and break prior to entering the light to prevent illuminating the attack aircraft and possible loss of night vision on the part of the aircraft crew.

The weapons elements provide the necessary damage assessment. These techniques are repeated as the mission dictates.

d. Offensive operations utilize the air assaulted aero rifle and/or cavalry elements as the maneuvering force, the aero weapons elements as the base of fire, and aero scout elements for screening and limited fire support. During the consideration of the ground tactical plan, a decision is made whether the landing is to be illuminated or nonilluminated based on the desire for surprise, the security and suitability of the landing zones, and availability of pathfinders. A day and night reconnaissance of the pickup zone(s) (PZ), the flight routes, and the landing zone(s) (LZ) (primary and alternate) is conducted to determine the size, suitability, condition, identifiability, obstacles, approaches, departures, and headings for the PZ's and LZ's and to verify recognizability of control points and times between points. This reconnaissance must be made in an unobtrusive manner, fitting in with normal aircraft traffic to preclude the enemy from being alerted to the operation. LZ's and PZ's must be free of dust and larger than those used during day operations. Normally, the first lift of an insertion and the last lift of an extraction are the largest lifts. Planning includes complete, integrated use of the ground tactical plan, the landing plan, the air movement plan, the staging plan, and if applicable, the linkup or extraction plan. The sequential functional considerations can be divided into PZ, en route, air assault, and ground actions.

(1) *PZ*. Number of lift aircraft, number of troops, troops per aircraft, formation, control, communications, and station, start engine, and takeoff times and reports.

(2) *En route*. Flight routes/corridors (primary, alternate, and return) and altitudes which avoid enemy anti-aircraft capabilities, have clear airspace, and furnish terrain clearance are selected. This includes recognizable control points with headings, times, and distances.

(a) Start point (SP).

(b) Air control point (ACP).

(c) Communication checkpoint (CCP).

(d) Release point (RP).

These points are reported during mission execution. Navigational assistance may be provided by vector aircraft, ground elements at control points, or navigational aids. Formations, airspeed, escort roles, and orbit areas are prescribed.

(3) *Air assault*. Headings, times, and dis-

tances from the RP(s) and landing/takeoff azimuths and formations to and from the LZ(s) are planned. The air assault may be illuminated or nonilluminated, depending on the tactical effect desired and the existing tactical situation. Nonilluminated landings are unusual for air cavalry elements and require the insertion of pathfinders prior to the assault to furnish terminal navigation and landing guidance. Normally, air cavalry units will make illuminated landings, preceded by short, intense, artillery, and/or aero weapons preparation. Artillery fires are lifted or shifted as the flight departs the RP(s), illumination and aero weapons preparation is started, and the flight's suppressive fires are started on medium final approach. There is no break between the phasing of artillery preparation, aero weapons preparation, and the flight's (with escort) suppressive fires. This fire is continued until landing. When clear of the troops on the LZ during takeoff, suppressive fires are continued until a safe altitude or area is reached.

(4) *Ground actions*. At this time, the escort aero weapons elements return to the LZ to assist the on-station aero weapons elements with providing direct fire support for the aero rifle/cavalry elements. Prior to engagement in support of the ground elements or the linkup plan, there must be positive air to ground communications and positive identification of ground troop locations or trace. Normally, extraction is planned for daylight. Rotation on-station by aero weapons elements must be carefully controlled to allow refueling or rearming and still provide constant fire support availability until the objective is consolidated and reorganized. Aero scouts provide continuous surveillance, screening, and limited fire support during the entire operation.

16-27. Night Defense/Delay Operations

a. The aero rifle elements are normally inserted during daylight on a position blocking the main avenues of enemy approach into the unit's zone and prepare the position with particular attention to the effective integration of night devices. The lift aircraft may orbit away from the position or laager in a secured area in an on call status. A PZ/LZ must be selected on, or adjacent to, the position which allows extraction of all elements in one lift, or reinforcement in the defense. Provisions for landing guidance and on call identification of the friendly force are made. The aero scouts screen at a considerable distance to the fronts and flanks, making maximum use of night devices and coordinated illumination, while the

aero weapons elements are held in the laager area until contact is made. If the aero scouts have difficulty in detecting, locating, and identifying enemy activity, other air cavalry elements with more sophisticated night devices or illumination can assist.

b. When contact is made, the aero scouts maintain it and immediately request and adjust indirect fires upon the enemy. Simultaneously, aero weapons elements are alerted and proceed to the area and integrate their fires with the artillery fire. The aero scouts give target information and vectors, and mark targets. The aero weapons elements attack as soon and as heavily as possible, inflicting maximum, rapid, detailed destruction at as great a range as possible from the defensive/delay position, causing the enemy to develop the situation, disrupt and impede the enemy advance, and deceive it as to the location of the defensive/delay position. Consideration should be given to utilizing continuous illumination once contact is made, since it permits rapid, accurate, maximum acquisition and destruction in minimum time. As the range between the enemy and the friendly position decreases, the intensity and volume of fire increases. Extraction to the next delay position

should occur prior to decisive engagement, which for night air cavalry operations is usually when the enemy is within maximum effective range of crew served weapons. Alert and preparation for the extraction start when the enemy is beyond maximum effective crew served weapons range. Reinforcement in the defense of the position should be executed prior to the enemy moving into effective crew served weapons range, or the reinforcing elements should be inserted into an alternate LZ to preclude excessive aircraft losses.

16-28. Logistics

Air cavalry night operations require detailed logistical planning and support execution. Facilities for rapid refueling, rearming, and maintenance must be close to provide responsive tactical support. Ammunition and flares should be prestocked and mated in quantity, fuel points should have a high rate of flow and multiple outlets, and maintenance teams to repair armament, aircraft, avionics, and effect downed aircraft recovery should be present. Due to peaking of traffic loads, rigid control and detailed procedures must be implemented to smoothly regulate the flow of landings, takeoffs, taxiing, and parking.

Section VII. RIVERINE OPERATIONS

16-29. Riverine Operations

a. Air cavalry units conduct riverine operations as part of a joint force and provide support in the same manner as for more conventional missions. Air cavalry units supporting riverine operations are capable of providing continuous day and night surveillance and interdiction of the waterways, as well as flank security, to the waterborne force.

b. Responsive support is provided to waterborne, riverine task force(s) by displacement to laager areas along the task force vessels' routes and close to the force objectives. Air cavalry unit

elements are employed on a specific task basis, not on a possible contingency basis, to maximize aircraft availability for valid missions.

c. FM 31-75 (Test) contains detailed guidance for the employment of Army forces in riverine operations.

16-30. Joint Coordination

Mission execution requires detailed coordination and planning at all levels of command within the riverine force, particularly integration of all phases of fire support, due to the joint service nature of riverine operations.

Section VIII. BATTLE DRILL AND FORMATIONS

16-31. Battle Drill

Standard aviation battle drills are applicable for air cavalry units (FM 57-35).

16-32. Formations

a. Standard aviation formations are applicable

for the aero rifle platoon as its elements normally deploy as an airmobile force.

b. Formations for the aero scout and aero weapons platoons will differ due to the elements deploying as teams and the peculiarity of air cavalry missions. However, standard formations will be used on air movements or whenever feasible (FM 57-35).

APPENDIX A

REFERENCES

A-1. Army Regulations (AR)

- | | |
|--------|---|
| 310-25 | Dictionary of U.S. Army Terms. |
| 320-50 | Authorized Abbreviations and Brevity Codes. |

A-2. Department of the Army Pamphlets (DA Pam)

- | | |
|-------|---|
| 310-3 | Index of Doctrinal, Training and Organizational Publications. |
| 310-4 | Index of TM's, TB's, STA's, SB's, LO's. |

A-3. Field Manuals (FM)

- | | |
|----------------|--|
| 1-15 | Divisional Aviation Battalion and Group. |
| 1-40 | Attack Helicopter Gunnery. |
| 1-60 | Army Air Traffic Operations. |
| 1-100 | Army Aviation Utilization. |
| 1-110 | Armed Helicopter Employment. |
| 3-12 | Operational Aspects of Radiological Defense. |
| 17-1 | Armor Operations. |
| 17-36 | Divisional Armored and Air Cavalry Units. |
| 17-95 | The Armored Cavalry Regiment. |
| 19-45-1 (Test) | Rear Area Protection. |
| 21-30 | Military Symbols. |
| 21-40 | Chemical, Biological and Nuclear Defense. |
| 21-41 | Soldiers' Handbook for Defense Against Chemical, and Biological and Nuclear Warfare. |
| 21-48 | Chemical, Biological, and Radiological and Nuclear Defense Training Exercises. |
| 31-75 (Test) | Riverine Operations. |
| 44-1 | U.S. Army Air Defense Artillery Employment. |
| 54-2 | The Division Support Command and Separate Brigade Support Battalion. |
| 57-35 | Airmobile Operations. |
| 61-100 | The Division. |

A-4. Technical Manuals (TM)

- | | |
|---------------|--|
| 3-210 | Fallout Prediction. |
| 3-220 | Chemical, Biological and Radiological (CBR) Decontamination. |
| 3-6665-253-12 | Operator and Organizational Maintenance Manual: Detector Kits, Chemical Agent. |

INDEX

	Paragraph	Page		Paragraph	Page
Area damage control.....	16-21	16-8	Reserve.....	15-14d	15-8
Operations.....	16-22, 16-23	16-8, 16-9	Duties, key personnel.....	11-8, 11-10	11-6
Organization.....	16-22	16-8	Economy of Force.....	15-1	15-1
Battle drill and formations.....	16-31, 16-32	16-11	Employment.....	12-6	12-3
Chemical agent detection and radio- logical monitoring and survey			Engineer support.....	11-18	11-9
operations.....	16-17	16-7	Headquarters and head- quarters troop.....	11-5	11-2
Operations.....	16-18	16-7	Infantry support.....	11-16	11-9
Reporting.....	16-20	16-8	Missions and capabilities...	11-2	11-1
Survey.....	16-19	16-7	Offensive operations.....	15-2	15-1
Night operations.....	16-24	16-9	Actions on the objective.....	15-4m	15-4
Defense/delay.....	16-27	16-10	Base of fire.....	15-4e	15-3
Logistics.....	16-28	16-11	Conduct of the attack...	15-4g	15-3
Offense.....	16-26	16-10	Consolidation, reorgani- zation and continua- tion of the attack....	15-4m	15-4
Reconnaissance.....	16-25	16-9	Coordinated attack.....	15-4a—g	15-1—15-3
Reconnaissance deep in enemy areas	16-13	16-5	Control measures.....	15-4i	15-3
Employment.....	16-16	16-7	Direct pressure force...	15-5c	15-5
Methods.....	16-15	16-7	Distribution of forces...	15-4c	15-3
Missions.....	16-14	16-6	Employment.....	15-2b	15-1
Riverine operations.....	16-29, 16-30	16-11	Encircling force.....	15-5c	15-5
Special operations.....	16-1, 16-2	16-1	Exploitation and pursuit.....	15-5	15-5
Stability operations.....	16-3	16-1	Frontages.....	15-4b	15-1
Ambush.....	16-10	16-4	Maneuvering force.....	15-4d	15-3
Area reconnaissance and sur- veillance employment.....	16-5	16-2	Plan of attack.....	15-4h	15-3
Damage assessment and exploi- tation of supporting fires....	16-8	16-3	Preparation for the attack.....	15-4g	15-3
Encirclement.....	16-12	16-5	Reserve.....	15-4f	15-3
Missions.....	16-4	16-1	Organization.....	11-4	11-1
Pursuit.....	16-9	16-4	Organization for combat.....	11-21, 11-22	11-10
Raids.....	16-7	16-3	Reconnaissance operations...	12-1	12-1
Reaction operations and coordi- nated attacks.....	16-11	16-4	Area reconnaissance....	12-10	12-5
Reconnaissance in force.....	16-6	16-3	Conduct.....	12-6	12-3
Squadron, air cavalry.....	11-1	11-1	Control.....	12-7	12-3
Army aviation support.....	11-19	11-10	Employment.....	12-6	12-3
Artillery support.....	11-17	11-9	Frontages.....	12-2	12-1
Combat service support....	11-3	11-1	Missions.....	12-3	12-1
Combat, support.....	11-16	11-9	Orders and instructions...	12-4	12-1
Command, control, coordi- nation.....	11-25	11-12	Route reconnaissance...	12-8	12-3
Command post.....	11-24, 11-25	11-12	Transmitting infor- mation.....	12-5	12-3
Defensive operations:			Zone reconnaissance...	12-9	12-3
Area defense.....	15-15	15-8	Retrograde operations.....	15-17	15-9
Considerations.....	15-9	15-6	Control measures.....	15-19	15-10
Economy of force.....	15-6	15-6	Delaying action.....	15-20h	15-14
Employment.....	15-13	15-8	Delay on alternate positions.....	15-20h	15-14
Fire planning.....	15-15	15-8	Delay on successive positions.....	15-20g	15-11
Forward defense force...	15-14b	15-8	Disposition of forces...	15-20c	15-10
General outpost force...	15-15b	15-8	Initial delay position...	15-20f	15-11
Mobile defense.....	15-14	15-8	Obstacles.....	15-20b	15-10
Organization and prep- aration of position...	15-11	15-7			
Reconnaissance and se- lection of position...	15-10	15-6			

FM 17-37

Stability operations—Continued

Squadron, air cavalry—

Continued

Retrograde operations—

Continued

	Paragraph	Page
Organization.....	15-20d	15-10
Reconnaissance and se- lection of delay position.....	15-20b	15-10
Reserve.....	15-20a(3)	15-10
Retirement and con- duct of.....	15-22	15-14
Security.....	15-20e	15-10
Task organization.....	15-20d	15-10
Types of operations.....	15-18	15-9
Withdrawal.....	15-21	15-14
Withdrawal, day and night.....	15-21b	15-14
Security operations:		
Covering force opera- tions, planning con- duct.....	13-6	13-4
Flank guard operations.....	13-3	13-1
Flank guard planning and conduct.....	13-4	13-3
Frontages.....	13-2	13-1
General outpost opera- tions.....	13-13	13-8
Missions.....	13-1	13-1
Protecting an installa- tion.....	13-9	13-6
Protecting routes of communication.....	13-8	13-6
Rear area security operations.....	13-1	13-1
Rear guard.....	13-5	13-4
Rear guard planning and conduct.....	13-6	13-4
Screening force conduct.....	13-12	13-8
Screening force opera- tions.....	13-11	13-8
Screening force planning.....	13-12	13-8
Security against airborne, airmobile and guerrilla force attack.....	13-10	13-6
Squadron aviation platoon.....	11-15	11-9
Squadron communications platoon.....	11-12	11-6
Squadron headquarters.....	11-11	11-6
Squadron headquarters section.....	11-7, 11-11	11-2, 11-6
Squadron maintenance platoon.....	11-14	11-9
Squadron support platoon.....	11-13	11-9
Surveillance.....	14-1	14-1
Employment concepts.....	14-6	14-1
Frontages and depths.....	14-3	14-1
Planning.....	14-5	14-1
Tasks.....	14-2, 14-4	14-1
Tactical close air support.....	11-20	11-10
Tank support.....	11-16	11-9
Trains.....	11-24	11-12
Troop headquarters.....	11-9	11-6

	Paragraph	Page
Troop, air cavalry.....	3-1	3-1
Air rifle platoon.....	3-8	3-2
Aero scout platoon.....	3-7	3-2
Aero weapons platoon.....	3-8	3-2
Aero assault.....	6-6b	6-2
Artillery support.....	3-17c	3-11
Assembly areas (laager areas).....	3-13c	3-11
Aviation section.....	3-5	3-2
Combat support.....	3-14	3-11
Command, control, communi- cations.....	3-15b	3-11
Economy of force.....	6-1	6-1
Defensive operations.....	6-8	6-4
Area defense.....	6-10	6-4
Mobile defense.....	6-9	6-4
Perimeter defense.....	6-11	6-4
Delaying action.....	6-13	6-5
Duties, key personnel.....	3-10, 3-11	3-8
Employment.....	3-13	3-11
Engineer support.....	3-14b	3-11
Fire support.....	6-5c	6-2
Maintenance section.....	3-6	3-2
Missions and capabilities.....	3-2	3-1
Offensive operations.....	6-2	6-1
Actions on the objective.....	6-7	6-3
Consolidation.....	6-7	6-3
Conduct of the attack.....	6-6	6-2
Employment concepts.....	6-3	6-1
Fire support.....	6-5c	6-2
Plan of attack.....	6-5	6-2
Preparation for attack.....	6-4	6-1
Reconnaissance.....	6-4d	6-2
Reorganization.....	6-7	6-3
Organization.....	3-3	3-1
Organization for combat.....	3-13	3-11
Reconnaissance operations.....	4-1	4-1
Actions on contact.....	4-7	4-3
Area reconnaissance.....	4-11	4-8
Employment concepts.....	4-5	4-2
Frontages.....	4-2	4-1
Instructions.....	4-3	4-1
Reporting and trans- mitting information.....	4-4	4-2
Reconnaissance in force.....	4-6	4-3
Route reconnaissance.....	4-8	4-4
Route reconnaissance, air.....	4-9	4-5
Zone reconnaissance.....	4-10	4-8
Retrograde operations.....	6-12	6-5
Delaying actions.....	6-13	6-5
Retirement.....	6-16	6-6
Withdrawal.....	6-15	6-6
Security operations.....	5-1	5-1
Advance guard.....	5-3	5-1
Covering force.....	5-9	5-13
Employment concepts.....	5-2	5-1
Flank guard.....	5-4	5-4
Rear area security.....	5-6	5-7
Rear guard.....	5-5	5-4
Screening force.....	5-8	5-11
Security force for airmobile operations.....	5-7	5-11
Tactical air support.....	3-14d	3-11
Troop headquarters.....	3-4	3-1
Trains.....	3-15	3-11
Troop, cavalry.....	7-1	7-1
Air cavalry support.....	7-10	7-7

Troop, air cavalry—Continued

	Paragraph	Page		Paragraph	Page
Artillery support.....	7-10	7-7	Actions on contact.....	8-8	8-4
Cavalry platoon.....	7-6	7-2	Area reconnaissance.....	8-11	8-7
Combat support.....	7-10	7-7	Conduct.....	8-3	8-1
Command post.....	7-11a(2)	7-9	Employment concepts.....	8-6	8-2
Defensive operations.....	10-23	10-7	Frontages.....	8-2	8-1
Area defense.....	10-31	10-11	Information.....	8-5	8-2
Conduct.....	10-28	10-10	Instructions.....	8-4	8-2
Combat outpost.....	10-31b	10-11	Reconnaissance, bridge or		
Employment.....	10-23	10-7	defile.....	8-12	8-9
Forward defense forces.....	10-30c, 10-31c	10-11	Reconnaissance by fire.....	8-7	8-3
Minefields and obstacles.....	10-29b	10-10	Reconnaissance, night.....	8-14	8-11
Mobile defense.....	10-30	10-11	Reconnaissance, town,		
Organization.....	10-24	10-7	obstacle or enemy		
Perimeter defense.....	10-32	10-13	position.....	8-13	8-11
Reserve.....	10-30	10-11	Route reconnaissance.....	8-9	8-4
Security force.....	10-30	10-11	Zone reconnaissance.....	8-10	8-5
Duties, key personnel.....	7-7	7-5	Retrograde operations:		
Economy of force.....	10-1	10-1	Ambushes.....	10-35	10-16
Employment.....	7-8	7-7	Conduct of delaying action.....	10-33	10-13
Engineer support.....	7-10d	7-7	Conduct of withdrawal.....	10-36	10-17
Missions and capabilities.....	7-2	7-1	Delaying action.....	10-33	10-13
Maintenance section.....	7-5	7-2	Fire support plan.....	10-33	10-13
Offensive operations.....	10-2	10-1	Location of new position.....	10-36	10-17
Actions on the objective.....	10-19	10-6	Organization of delaying		
Air cavalry support.....	10-21	10-7	position.....	10-33	10-13
Army aviation.....	10-22	10-7	Preparation and occupation		
Attack position.....	10-13	10-5	of new position.....	10-34	10-16
Base of fire.....	10-9	10-4	Priority of withdrawal.....	10-34	10-16
Conduct.....	10-14, 10-15, 10-18	10-5	Retirement.....	10-37	10-19
Consolidation.....	10-19	10-6	Routes of withdrawal.....	10-34	10-16
Continuation.....	10-20	10-7	Security force.....	10-36	10-17
Employment concepts.....	10-2	10-1	Successive delaying		
Estimate of the situation.....	10-5	10-4	positions.....	10-34	10-16
Formations.....	10-7	10-4	Withdrawal.....	10-36	10-17
Maneuvering force.....	10-8, 10-10	10-4	Security operations.....	9-1	9-1
Movement to attack			Advance guard.....	9-2	9-1
position.....	10-12	10-5	Covering force.....	9-12	9-13
Operation order.....	10-10	10-4	Flank guard.....	9-3	9-1
Plan of attack.....	10-6	10-4	Protecting an installation.....	9-9	9-11
Preparation for the attack.....	10-3	10-1	Rear area security.....	9-6	9-9
Reconnaissance before the			Rear guard.....	9-4	9-5
attack.....	10-4	10-2	Screening force.....	9-10	9-11
Reorganization.....	10-19	10-6	Security against ambushes,		
Supervision.....	10-11	10-5	airmobile and guerrilla		
Organization.....	7-3	7-1	operations.....	9-8	9-10
Organization for combat.....	7-9	7-7	Securing lines of communi-		
Reconnaissance operations.....	8-1	8-1	cations.....	9-7	9-10
			Tactical air support.....	7-10	7-7
			Trains.....	7-11	7-8

By Order of the Secretary of the Army:

Official:

KENNETH G. WICKHAM,
*Major General, United States Army,
The Adjutant General.*

W. C. WESTMORELAND,
*General, United States Army,
Chief of Staff.*

Distribution:

To be distributed in accordance with DA Form 12-11 requirements for the Air Cavalry Squadron.

AGO 20026A