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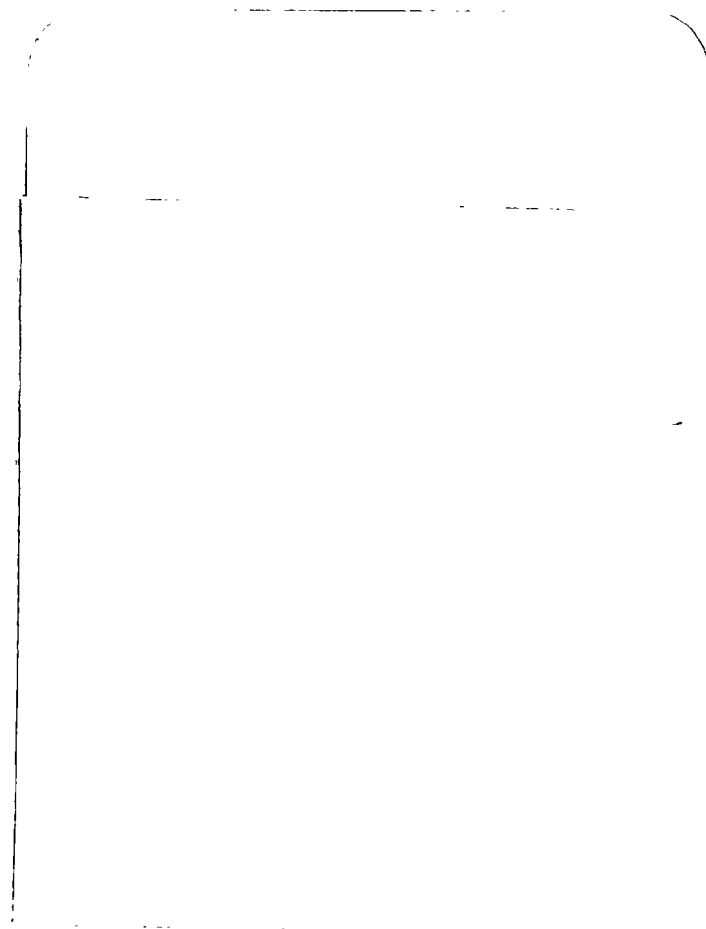
FIELD MANUAL

BORDER SECURITY/ ANTI-INFILTRATION OPERATIONS

HEADQUARTERS, DEPARTMENT OF THE ARMY

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BORDER SECURITY/ANTI-INFILTRATION OPERATIONS

CHAPTER 1

INTRODUCTION

Section I. GENERAL

1-1. Purpose

This manual provides doctrinal guidance for commanders and staffs at all levels, to carry out border security operations involving combat, combat support, and combat service support units. Throughout this manual, the term "border security" also applies to measures taken to provide security along seacoasts.

1-2. Scope

Border security operations are discussed with general applications of doctrine to unit operations when the infiltration threat is less than 300 people. The planning and the conduct of border security operations and the modifications of units and materiel allocations necessary for operations in specific environmental areas are addressed. Much of the materiel addressed herein is considered in generic terms, since specific items are in various stages of development and specific references may be found in classified documents published by US Army Materiel Command.

1-3. Application

The doctrine and techniques presented herein are applicable to Army forces involved in border security operations: specifically, to cold war conflict, to include stability operations; generally, to limited war. The doctrine presented may be applicable to forces of friendly nations if trained and provided with the specialized materiel discussed herein. Navy sea blockades, including Navy inshore undersea warfare support, are considered to be separate border security systems.

1-4. Comments and Changes

Users of this manual are encouraged to submit recommendations to improve the publication. Comments should be keyed to the specific page, paragraph, and line of the text in which the change is recommended. Reasons will 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 Commanding General, USACDC Concepts and Force Design Group, Alexandria, Virginia 22314. Originators of proposed changes that would constitute a significant modification of approved Army doctrine may send an information copy, through command channels, to the Commanding General, USACDC, Fort Belvoir, Virginia 22060, to facilitate review and followup.

1-5. Terminology

The terms used in this manual are based on those defined in AR 310-25 and related publications. Terms applicable specifically to border security are discussed below.

a. Border Security. Steps taken to counter any threat posed by an exterior force illegally attempting to cross international borders.

b. Detection. The function of determining that an infiltration attempt took place, will take place, or is taking place. It can be accomplished by a variety of means including the use of several types of sensing devices such as acoustic, seismic, pressure, infrared, radar, or light intensification; covert and overt intelligence, and intercepted enemy communications.

c. Host Country (HC). A nation in which representatives or organizations of a state or nation are present because of government invitation and/or international agreement. This nation's border may also be subject to infiltration and warrant protection against such attempts.

d. Infiltration Attempt. Efforts of varying sizes of infiltrating forces to cross the international border.

e. Influence Sensor. A device that detects an

individual through some physical interaction that registers on the device.

f. Intercept Forces. Combat arms units with varying degrees of mobility that seek to engage infiltrators to destroy, capture, or neutralize them.

g. Neutralization. Rendering enemy personnel or materiel incapable of interfering with a particular operation.

h. Night Vision Device. A device that enhances the night visual capability of man.

i. Scatterable Mines. Mines that can be scattered by ground troops from a vehicle-mounted dispenser, by an aircraft dispenser, or by crew-served weapons such as field artillery, missiles, and rockets. Scattermining is classified, according to its employment, as obstacle, retrograde, anvil, and interdiction. The detailed doctrine describing these terms is published in FM 20–32A, a supplement to FM 20–32.

j. Self-Neutralization. A built-in or insertable feature that automatically causes an artificial obstacle to become neutralized at a predetermined time. Self-neutralization can be accomplished by self-sterilization (resulting in an ineffective obstacle) or by self-destruction (resulting in complete elimination of the obstacle).

k. Sensor. A technical means of extending man's senses. Sensors in this manual include unattended ground sensors (seismic, acoustic, etc.), attended ground sensors (radar, night vision devices), and aerial sensors (SLAR, infrared, and airborne personnel detectors).

l. Specified Strike Zone. An area designated for a specified period of time by the host country in which there are no friendly forces or populace and in which targets may be attacked on the initiative of the appropriate commander.

m. Systems Trace. An outline of a reasonably well-defined line of positions where physical obstacles, detection devices, or forces emplaced near a border for the designed defense of fixed international borders and other boundaries against the flow of infiltration traffic.

n. Tactical Area of Operation. That area of the border security system parallel to the international border with a rearward depth of sufficient magnitude (approximately 13 kilometers) to accommodate combat/combat support units engaged in the operation. The tactical area is composed of the following zones:

(1) *Surveillance zone.* That area adjacent to and parallel with the international border with a rearward depth of approximately 5 kilometers. When manned by US units, the rear boundary of the battalion manning the border will coincide with the rear of the surveillance zone. The company rear boundary will be approximately 4,000 meters rear of the border with platoon observation post strongpoints located approximately 3,000 meters rear of the border (fig. 4–1). The platoon outpost will monitor the sensor and verification equipment for early warning, adjust field artillery and airstrikes, and delay or neutralize infiltration attempts within their capability. The front portion will contain wire barriers, minefields, surveillance devices, and specified strike zones. The population ideally would be completely relocated to enable free fire and maneuver.

(2) *Security zone.* That area parallel to and immediately to the rear of the surveillance zone, extending to a depth of approximately 3 kilometers. This zone quarters the headquarters, tactical operations centers, reaction forces, and combat support/combat service support units of the brigades (fig. 4–1). The population will normally be completely relocated to enable free fire and maneuver throughout.

(3) *Maneuver zone.* That area parallel to and immediately to the rear of the security zone extending to a depth of approximately 10 kilometers. The maneuver zone should quarter the division headquarters and operations centers, their reaction forces, and respective combat support/combat service support units (fig. 4–1). Partial population relocation may be needed to establish specified strike zones along known or suspected infiltration routes and insurgent base camp areas planned as landing zone sites or base camp areas.

o. Unattended Ground Sensors (UGS). A family of sensors that are deployed for ground surveillance, operate automatically, and are remotely monitored. They include both radio frequency (RF) sensors and line sensors, the distinction being that the latter transmit their sensings to a readout device (annunciator) by wire rather than by radio. Line sensors area of influence is generally directed along a linear trace.

Section II. CONCEPT OF OPERATIONS

1-6. Border Security Role

Border security operations are normally the responsibility of civil police, paramilitary border security forces, or customs police. Such forces exercise law enforcement, intelligence, and counter-subversive duties as directed by appropriate local national authority. Should infiltration and insurgent activities increase, the capabilities of local forces may be inadequate. In such a situation, the local armed forces may assume the duties of law enforcement and border security. US military forces may be requested to supplement or replace the HC's military forces by mutual agreement with the HC.

a. The growth and continuation of insurgent forces and their eventual success greatly depend on support from external powers. During the formative stage of insurgent forces, frontiers with countries lending support to these forces must be guarded to prevent infiltration of men and materiel.

b. Border security operations are politically sensitive. The missions assigned combat units are tempered by political considerations to a greater extent than those assigned combat support or combat service support units. The mere presence of an outside military force operating along national borders will cause adverse propaganda. The use and actions of the military force in such environments are subject to scrutiny and adverse criticism regardless of the motivation leading to their employment. Military commanders must be acutely aware of the political implications and overall sensitivity of their mission and must exercise judgment to avoid unnecessary criticism.

1-7. Authority

In situations where US Army units are operating to support a host government, the authority of the US commander is defined by agreements between the governments concerned. The Chief of the US diplomatic mission, as the representative of the President, is the senior coordinator of all US agencies and services in such a country. He negotiates and defines the relationship between US and HC military forces.

1-8. The Threat

The primary threat is the penetration of the border by infiltration. The infiltrator's mission is to traverse the border, preferably in stealth, to perform intelligence, sabotage, assassination, or other insurgent missions. He is willing to fight if challenged, but open combat is not ordinarily the mission. The enemy may initiate harassment or diversionary attacks against border security outposts to create international political tensions or divert attention from an associated infiltration attempt. The threat could later escalate to overt attack across the border which would require readjustment and possible commitment of major forces to counter the attack.

1-9. Political Factors

While the commander charged with a border security mission is not directly involved with HC politics, he must understand the national political structure. The political environment influences the operation of local society and, as such, directly concerns the commander. His relationship with local political leaders is important. Border security demands a high degree of influence over the population in the immediate border area especially when it has not been relocated. Cooperation with local political leaders and police is essential to minimize troop requirements to perform civil tasks normally done by local civil government. The civil-military operations officer (CMO) serves as the principal staff assistant to the commander in all matters pertaining to political (as well as economic, social, and psychological) aspects of his unit's operations. Civil affairs units are assigned, as appropriate, to assist commanders in the execution of their missions and the discharge of their responsibility, insofar as there is interaction between the activities of the military and those of the local government and population. All units and staff sections, however, are involved in activities that impact on the population; consequently, they must be fully aware of the political (as well as the economic and psychological) implications of their actions.

1-10. Enemy Tactics

a. *Infiltration.* The size of infiltration units generally varies from individuals to small units of up to 300 personnel. Massed units attempting penetration are considered a conventional threat and must be dealt with accordingly. Infiltrators utilize rugged terrain and vegetation concealment, avoiding natural approaches when possible. Infiltration of populated areas through big cities is accom-

plished by individuals or small groups using the normal entry points and the local transportation system. They can best infiltrate the cities during the daily traffic rush hours and on special occasions when traffic is heavy.

b. Exfiltration. In areas where intelligence or rear area sabotage are the infiltrator's mission, exfiltration will be a problem. Diversionary feints may be used to confuse defending forces and to draw attention from routes used by exfiltrating personnel. Therefore, the border security system must be able to counter crossing attempts from any direction. Detection equipment resources of reserve and support units are sited to the rear and flank of the systems trace to provide all-round surveillance throughout the unit area.

1-11. Operations

Border security operations may vary according to the physical characteristics along the border; i.e. well-defined, populated, and developed areas, ill-defined areas; mountainous areas; etc. This paragraph discusses operations considering three border conditions: well-defined border areas, developed areas, and sparsely populated and ill-defined border areas. Additionally, the factors of detection, command/control/communications, and response are discussed in relation to the success of the border security system. In general, the border security system is physically organized into zones of surveillance, security, and maneuver. Forces aided by reliable surveillance equipment detect infiltrators as they cross the border. The commander then conducts operations to intercept, destroy, or otherwise neutralize the infiltrator. Surveillance forces are supported by responsive intercept forces, firepower, air support, and naval gunfire, if feasible, to assist in destruction or neutralization of the enemy. Tactical areas of responsibility should be assigned to facilitate coordination with political officials while avoiding habitual alinement of military boundaries with political boundaries. In most countries, borders are divided into segments for the delineation of responsibilities and control. Populace control zones are established parallel to the boundary to restrict or deny civilian movement in the operational area.

a. Well-Defined Border Areas. In an area where a border is relatively short, well-defined, and strategically important and where manpower resources are available, a manned border security system employing reliable detection devices and obstacles probably will be the most effective. US

forces may be used to supplement indigenous forces, and normally the areas will be organized and manned as follows:

(1) *Surveillance zone.* The surveillance zone will contain the platoon-size, mutually supporting outposts manned by the HC's military/paramilitary force elements. The outposts will be approximately 3,000 meters or more behind the border, separated laterally by no more than 1,500 meters. (This distance is normally determined by the terrain and the types of indirect fire weapons available to the force; however, ranges in excess of 1,500 meters significantly effective reduce the manned coverage surveillance.) The platoon outpost should be equipped with at least two indirect fire weapons, radar, and other surveillance equipment. The national boundary is marked with wire fence supplemented by boobytraps and sensors. The main barrier trace is constructed as a normal defensive aid in front of the platoon outposts. The area between the boundary and the barrier fence will contain (fig. 3–5)—

(*a*) A line of unattended ground sensors to the rear in proximity to the boundary fence.

(*b*) A line of nuisance minefields to the rear of the sensors.

(*c*) A conventional wire barrier located so that visual and fire coverage from the outposts is possible.

(*d*) A barrier minefield in support of the barrier fence. Primarily the platoon outposts are responsible for conducting patrols, ambushes, and surveillance within the surveillance zone, for notifying the commands to the rear of all enemy movement detected, and for delaying movement consistent with their capability.

(2) *Security zone.* The security zone will contain a line of tactically located fire bases. The fire bases will be manned by the HC's regular military forces in company or larger size maneuver units and collocated battery-size or larger field artillery units. The fire bases will be so located that the batteries can provide mutual support to each other and to the platoon outpost within the surveillance area. Primarily, the maneuver units, supported by field artillery will—

(*a*) Relieve or reinforce the outposts under attack.

(*b*) Conduct missions to destroy infiltrating units that the platoon outposts cannot defeat.

(*c*) Canalize and delay large infiltrating or exfiltrating units until they can be destroyed by firepower or by tactical units moved forward from the maneuver zone.

(*d*) Conduct patrols and ambushes within their area of influence. Additionally, they will construct barriers and minefields within their area to delay, canalize, or neutralize enemy forces. Troops from the fire bases will conduct search and clear operations against known or suspected enemy locations in the security zone.

(3) *Maneuver zone.* The maneuver zone will contain tactically located bases manned by a battalion or larger size unit. These bases will normally be collocated with support units. Units will be positioned to guard major avenues of approach into the heartland, larger cities located in their area of operations, and major supply routes. These units must be highly mobile and must be able to perform the following types of missions:

(*a*) Relieve units under large-scale attack in forward areas.

(*b*) Neutralize infiltrating units that have been located in any area or canalized into their area of operations and deploy against exfiltrating units in all areas to and including the area to the rear of the maneuver zone.

(*c*) Conduct operations against base camps and other in-country enemy installations or units.

(*d*) Conduct training of HC military, popular forces, police, or paramilitary forces as needed on arms, equipment, and tactics.

(*e*) Construct barriers, minefields, and landing zones to aid in the control of their area of operations.

(*f*) Establish a liaison organization with the local police, paramilitary, and/or military units operating and/or stationed in and near the immediate rear of the maneuver zone. US units should be used in the maneuver zone role because their mobility, communication capability, training, equipment, and national policy make them suitable from a political and tactical viewpoint.

b. Developed Areas. In the more developed areas or where cities are located on the border of underdeveloped countries, population density limits the maximum use of firepower to neutralize the infiltrator. Therefore, additional manpower will be needed for a more substantial trace and for manning border crossing points to counter crossing attempts. In addition to a stronger manned trace, extra manpower will be needed to apprehend infiltrators or to canalize them into specified strike zones away from populated centers. Additional construction is necessary to build a more complex trace and to relocate the population away from the specified strike zones.

c. Sparsely Developed Areas. However, there are many border areas in the world where establishment of manned systems trace is impracticable, e.g., a sparsely populated, ill-defined, mountainous, jungle border. The cost of constructing and manning a systems trace in this type of terrain may be exorbitant when evaluated against the results achieved. Border security operations in isolated border areas can be made effective by using remotely emplaced unattended ground sensors and possibly mines along known or suspected infiltration routes and in traditional insurgent staging areas. Following detection and determination that a serious infiltration attempt is being made, scatterable mines may be employed to harass, delay, and canalize the infiltrators until they can be neutralized by firepower or intercept forces. FM 20-32A and FM 31-100 (Test) provide further guidance on scatterable mines and sensors respectively.

d. Factors for System Success. The success of this border security system, or any system, hinges on the factors of detection, command/control/communications, and response. In border security operations when US forces supplement indigenous forces, the following factors must be considered and resolved in order that command control can be exercised effectively.

(1) *Detection.* The sensors, to include verification radar, must be available in all areas; therefore, US personnel must advise and assist HC personnel in placing, operating, and maintaining the equipment. This may require stationing US personnel at surveillance outposts and at security zone fire bases and liaison officers at all operation centers to collect and disseminate information obtained from the surveillance equipment back to the rear areas. Air reconnaissance and air surveillance can aid in the detection effort. Army aircraft, being responsive to the local commander, can perform visual air surveillance, airphotography, infrared reconnaissance, radar surveillance, and limited electronic reconnaissance. Occasions may arise when Air Force, Navy, or Marine Corps air units provide the preponderance of air support to Army operations. Under these conditions, the joint force commander establishes the operational procedures.

(2) *Command/control/communications.* A communications network must be installed that links the three areas and gives the users complete and dependable coverage. Wire should be the primary means with radio backup to include at least two types of radios (e.g., FM/VHF or AM-SSB/

HF). When a language difference exists, bilingual operators must be available at all operation centers and headquarters. An overall area command and operation center must be established which has complete authority over these three areas. The cross-attachment of liaison officers is paramount in the successful coordination and political approval needed between the units manning these areas. Command and control may be facilitated by use of a grid control system over the area of operations. Command/liaison/coordination can be facilitated by total integration of effort between the national internal defense coordination center and the area coordination centers. For additional details, see FM 31–23.

(3) *Response.* The commander must rapidly respond to the attempted infiltration/exfiltration with sufficient combat power to destroy the insurgent force. Firepower from close air support (CAS) and indirect fire weapons will be used to the maximum possible. This means then will be complemented by the introduction of the troops from the security and maneuver zones in the numbers needed to complete the neutralization. To enable the early use of air and field artillery firepower, forward observers and forward air controllers must be supplied to the forward units and stationed in the surveillance and security zones.

1–12. Special Operational Considerations

The generalized concepts for conducting border security operations are modified to fit special environmental conditions encountered. Operations may be conducted in jungles, mountainous areas, deserts, arctic areas, riverine areas, and coastal regions. Each geographical area has special characteristics that require modifications of generalized doctrine. The use of air surveillance and electronic warfare is an important consideration to the commander.

a. *Air Surveillance.* Air surveillance of the border area is essential to complement the detection system. Intelligence networks provide information concerning potential and successful infiltrators. Detected infiltrators are engaged by intercept forces and available fire support means.

b. *Electronic Warfare.* Electronic warfare (EW) is an effective means that can assist the commander in detecting and reducing infiltration attempts. It consists of electronic warfare support measures (ESM), electronic countermeasures (ECM), and electronic counter-countermeasures (ECCM), but also requires an understanding and consideration of the related fields of signal intelligence (SIGINT) and signal security (SIGSEC). An infiltrating force must have some means (radio, wire, courier, etc.) of controlling the movement and activities of the forces involved. Through the functions of EW, we can degrade the effectiveness of his control system when using electronic emitters. Through SIGINT, we can detect the enemy's activities with a high degree of reliability. Effective ECM used after the infiltration can deny the enemy the ability to receive radio messages, cause delays, and eliminate or reduce his reporting. A continuous need exists for ECCM procedures and practices to be built into the border security system. The related EW functions must be carefully planned to prevent or degrade the enemy's use of communications.

1–13. Training Requirements

Specialized training is required for border security operations in addition to normal advanced individual and unit training. Individual training for this mission should stress night operations, night firing, observer training, patrolling, surveillance, and reporting techniques. Technically trained personnel are required to install, operate, and maintain sensory equipment. Individual training should include familiarization with the HC's military, economic, political, and sociological aspects. Chapter 8 contains a more detailed discussion of training requirements.

CHAPTER 2

INFILTRATION TACTICS AND VULNERABILITIES

2-1. General

Knowledge of enemy infiltration tactics is useful in devising means to counter intrusion attempts. This chapter contains information gained through operational experience, summarizes tactics used by infiltrators, and describes various infiltrator vulnerabilities.

2-2. Infiltrator Objectives

Infiltrators cross national boundaries into another country—

a. To establish underground insurgency organizations.

b. To provide reinforcements, replacements, and logistic support to insurgent or regular enemy forces already in the country.

c. To instigate confusion and distrust of the existing government.

d. To collect military, political, economic, and sociological intelligence information.

e. To disseminate propaganda, exploiting public issues.

f. To disrupt friendly relations between friendly forces and the host government.

g. To conduct raids/sabotage against civilian and military installations, communications, and facilities.

h. To conduct terrorist activities against government officials through assassination and kidnaping.

i. To harass border security personnel.

j. To control and eventually annex portions of the target country adjacent to the border.

k. To overthrow the government in power and to install a government amicable to the insurgent's political philosophy.

2-3. Infiltration Tactics

a. General.

(1) Infiltrators can be expected to be thoroughly trained and briefed regarding their mission, enemy location, movements, and methods of operation. Prior to the actual infiltration attempt, infiltrators sometimes spend 1 or more days making visual reconnaissance of the border to determine guard and security procedures, troop complacency, and any intelligence that would facilitate the infiltration.

(2) Routes are selected on consideration of border security troop emplacements. The infiltration routes generally avoid known manmade obstacles, observation posts, guard posts, ridgetops, valley floors, and possible ambush posts. In effect, the infiltrator avoids those areas where it is most feasible to observe or detect him. Difficult paths, cliffs, rocky mountainsides, and mined areas, not normally traveled, are likely infiltration routes.

(3) Infiltrators may disguise themselves in the uniforms of the target country military forces, or in the clothing of the target country civilian. However, they may wear their own uniforms if they are operating as guerrilla forces.

(4) Infiltration usually takes place at night or during periods of poor visibility. Movement is generally slow and stealthy, especially in areas where obstacles such as mines are expected. However, when the route of infiltration is well known, infiltrators have been known to "blitz" through delay systems. When infiltrators believe they are under surveillance, they move short distances and pause for as long as 30 minutes or more to observe the area in all directions. They generally move in single file with 2 to 5 meters distance between men. The lead man does the mine probing and observing.

(5) The infiltrators usually disperse when they are detected and fired on. They usually change their direction of travel, but eventually regroup at a predesignated rendezvous point. Once detected, they can be expected to return fire

in volume if they are unsure of their ability to escape using stealth.

(6) When being pursued, infiltrators try to confuse and mislead their pursuers. They are trained to step on rocks and grass to prevent leaving footprints. Often they intentionally discard items and make footprints to mislead the pursuers as to the direction of escape.

(7) When operating near populated areas, the infiltrator will attempt to merge into the population, especially if he is carrying a forged ID card. In the more developed countries, this method will be the most used, especially at border crossing points during periods of peak population traffic. Unless it is an integral part of his mission, the infiltrator will normally avoid military installations.

b. Intelligence Agents.

(1) Intelligence infiltrators usually travel light with only food and equipment necessary to sustain them to their interim or final destination.

(2) Infiltrators generally, but not necessarily, move in teams. In infiltrating agents across borders, two or more escorts who are politically reliable, physically fit, thoroughly familiar with the local area, and have been trained in reconnaissance techniques and cross-country travel are assigned to guide and aid in the infiltration of the intelligence agent or agents.

(3) Infiltrators may carry radios for maintaining contact with their base headquarters after successful infiltration. Normally they do not use them during the infiltration attempt.

c. Sea Infiltration. Infiltration by sea routes generally follows the principles of infiltration over land routes. In some cases when small groups of individuals are infiltrated, large vessels with radar are used to transport them near the landing area and smaller boats are used for landing. On beaching, the infiltrators rapidly move inland to seek sanctuary in uninhabited areas or they quickly mingle with the population.

d. Insurgency Support.

(1) The outside sponsoring power develops major routes for infiltrating supplies and troops into the host country. The point of entry into the host country depends on the opposition encountered. The infiltrator moves along uncongested routes when possible.

(2) Supplies and personnel are infiltrated over the same routes but through separate systems. Supplies are moved from way station to way station over the infiltration routes until they are infiltrated into the target country. Each way station is manned with personnel to carry out transportation, security, communications, or liaison functions and to act as guides. (Way stations are located about a half day's march apart to allow a porter to make a round trip in the same day to haul supplies to the next station.)

(3) Infiltrators, carrying their individual weapons and equipment, move on foot from way station to way station. Crew-served weapons usually come through the supply system.

2–4. Vulnerability of Infiltrators

Hazards and vulnerabilities are associated with infiltration into unfamiliar territory by relatively small groups with limited equipment. Personnel engaged in anti-infiltration activities must be thoroughly familiar with these weaknesses. Some of the areas of infiltrator vulnerability are discussed below.

a. Infiltrators may frequently be identified by their clothes, equipment, general appearance, and dialects. Aside from distinct differences in style and type of clothing and equipment, subtle difference may be detectable in the individual's complexion and his manner of dressing, eating, smoking, walking, etc.

b. Infiltrators are vulnerable to radio communication intercept and direction finding while transmitting; consequently, they must continually move.

c. Diversion from their original direction of travel may cause infiltrators to become disorganized as a group and confused as to their exact location.

d. Footprints or other indications of passage may reveal the presence and direction of travel by intruders. Sandy beaches and mudflat areas are difficult to traverse without leaving footprints.

e. Infiltrators may be detected if they build fires while bivouacking.

f. Infiltrators are vulnerable to anti-intrusion devices such as tripwires, boobytraps, or noisemakers. Buried and hidden unattended ground sensors warn of an infiltrator's presence. Minefields and other barriers cause casualties and delay the infiltrating personnel.

g. Infiltrators are susceptible to detection by night vision devices and radars.

h. The limited firepower of infiltrators may be incapable of effectively countering intercept forces unless supported by fire from the enemy side of the border.

i. Geographic and climatic conditions and inadequate food and medical supplies coupled with lengthy infiltration routes increase the infiltrators susceptibility to disease.

j. Infiltrators are not normally equipped from protection against chemical agents.

k. Infiltrators into unfriendly communities must avoid being seen. Their routes of travel and places of rest may be severely restricted. Food supplies must be replenished by theft or foraging, thus increasing infiltrator vulnerability.

l. In sparsely populated areas, infiltrators are susceptible to dog-tracking teams.

m. Infiltrators are vulnerable to air surveillance to include use of the airborne personnel detector.

n. Curfew laws, if enforced, make infiltrators vulnerable in populated areas.

o. Regardless of background, training, and morale, the infiltrator will be apprehensive because he knows that he is in or is about to enter unfriendly environment and he is aware of the clandestine nature of his activity. This psychological influence may be capitalized on through a psychological operations effort directed toward the infiltrator while he is training at his home base, staging, and moving toward and in his target area.

CHAPTER 3

CONCEPTS AND PLANNING

Section I. CONCEPTS

3-1. General

A border security system must prevent the infiltration of forces and supplies into a country and deny outside reinforcements to an indigenous insurgent movement. Planning at all levels must incorporate the host country's (HC) civilian organizations and military units into the border security operation.

3-2. Mission

The mission of a border security system is to prevent infiltration of men and supplies into an HC. It differs from peacetime customs and immigration control in that it contends with an organized ideological movement that employs any tactic to obtain its objectives. It differs from normal military operations in that normally the enemy operates from a sanctuary and political and military constraints may limit the role of the border security force.

3-3. Elements of the System

An effective border security system must accomplish three related functions: detection, delay, and neutralization.

a. Detection. Detection is accomplished by surveillance during all conditions of weather and light and on any terrain. Detection efforts include troop observation, night vision devices, communications intelligence, radars, and emplaced unattended ground sensors. Concurrent with detection is identification required to prevent reaction against false alarms and friendly persons such as defectors, refugees, or friendly agents. Desirable characteristics of detection devices are that they—

(1) Function effectively under all conditions of weather, terrain, and light.

(2) Require minimum maintenance, logistic support, or accessory equipment.

(3) Can be quickly and easily emplaced, deployed, or concealed by nonspecialist personnel.

(4) Pinpoint the intruder in space and time.

b. Delay. The system must provide sufficient hindrance to the infiltrator's progress after detection to provide adequate time for friendly forces to react. This function is accomplished by employing mines, boobytraps, wire, botanical, or chemical barriers. The distance between the elements of the system may additionally hinder the infiltration effort. The ease and rapidity of emplacing the scatterable mines make them an effective agent in establishing a temporary barrier prior to completion of the permanent system. In addition, after detecting infiltration attempts along a permanent barrier, scatterable mines offer the commander the capability of placing a barrier to block withdrawal from friendly forces, to strengthen the existing barriers, and to restrict lateral movement. The self-neutralization feature of scatterable mines allows their use over intended maneuver areas, roadways, and farmlands that previously prohibited the use of mines. A delay element can contribute to the effectiveness of a border security system as follows:

(1) It provides time for firepower to be brought to bear or for intercept elements to move to intercept the infiltrators and destroy them.

(2) It can cause the infiltrator to commit acts that enhance the effectiveness of detection equipment.

(3) It can require infiltrators to leave evidence of their passage.

(4) It may canalize infiltrators into ambush points.

c. Neutralization. The system must have the capability, after detection and delay, to neutralize the infiltration attempt. This is accomplished by killing, capturing, repelling, or monitoring the infiltrators with reactive firepower, maneuver

forces, or surveillance elements. The intercept element can be composed of a mix of land, air, or sea forces in varying numbers and using a variety of weapons. It can be fired from indirect fire weapons, from aircraft, by airmobile forces, or by in-place forces deployed on the border.

3–4. Troop Requirements

Border security/anti-infiltration operations follow all the normal doctrinal principles found in the traditional concepts of defense. The nature of the threat, extensive use of obstacles, friendly fire-power superiority, mobility of intercept forces, and developments in sensors and munitions allow larger frontages per unit than the normal area defense. Troops committed to the primary mission of border security are not generally available for other combat missions. Mutual support is provided by aggressive patrolling, flexibility in the employment of fire support, and mobility of intercept forces. However, in developed areas and other areas of higher population density, the infiltrators must be canalized into precleared specified strike zones before full firepower can be employed. During the initial phases of the occupation, selecting and locating the probable infiltration routes and relocating the civilian populace for the establishment of specified strike zones on or along these routes are primary planning factors for unit placement and systems trace construction along the border.

3–5. Command and Control

Existing command and control organizations within the field army and its subordinate elements are adequate to plan and conduct border security operations. However, an area commander will usually be appointed under provisions of a US/HC agreement. To enable the commander to obtain the desired coordinated effort between US/HC military and civilian agencies, an area coordination center should be established. When a US division commander is appointed as the area commander, the existing command and control facilities are adequate to assume the additional responsibilities with minor modifications. These include the requirement for additional liaison personnel, communications equipment, and additional translation/interpretation capabilities. The efficiency of a border security operation depends on the complete integration and use of all existing agencies. FM 31–23 describes the operational details of the area coordination center.

3–6. Intelligence Operations

Border security operations hinge on an effective, coordinated intelligence effort. To provide adequate planning to counter and to insure a responsive reaction against infiltrators, the flow of intelligence information on hostile capabilities, enemy infiltration tactics, and patterns between all echelons participating in border security operations are prime requisites. To achieve the necessary degree of integration of the intelligence-gathering assets, battlefield information and control centers (BICC) should be established at each command echelon from battalion through corps to include separate brigades. The intelligence coordination center must focus its collection activities on filling the gaps in the intelligence picture. As an example, by knowing where the enemy is staging across the border and by knowing where he is establishing an operating base within the HC, it is possible to determine what his route from one to the other is, where his intermediate stops are, when he travels, and when he rests. Having learned how and when he communicates, meaningful essential elements of information (EEI) can be provided to supporting signal intelligence elements. Having determined from prisoners of war (PW) that the infiltrators carry only 2 days' rations for a 5-day trip, personnel involved in resources control can assist in determining where the infiltrators are obtaining supplies. Similarly, the integration of air and ground surveillance means with the information from other sources will provide valuable information about where and when the enemy attempts to cross the border. FM 31–100 (Test) contains a detailed discusson of the intelligence coordination function performed by the BICC. Intelligence planning must also provide for the issuance of intelligence spot reports and frequent summaries that are distributed to all participating units and staffs and the publication of a counterintelligence estimate by the senior headquarters involved. This free and rapid exchange of information cannot be overemphasized because this facet of intelligence operations is the key to successful operations. Also, intelligence pertaining to the population within the infiltrator's area of operation is of importance to the development of psychological appeals to deny popular support. FM 30–5, FM 30–17, FM 30–17A, FM 30–31, and FM 30–31A provide additional guidance on intelligence.

3–7. Service Roles

Army, Navy, Marine Corps, Coast Guard, and Air

Force units all have some capability for supporting land border security systems. Joint operations are required under certain geographic conditions.

a. Army.

(1) Infantry (airborne, airmobile, and mechanized) and armored cavalry units are well suited to border security operations. Normally, the basic operational unit is the division, augmented with combat support and combat service support units. Where possible, armored or mechanized units are utilized as intercept forces to make maximum utilization of organic mobility. However, any combat unit when properly trained and equipped is effective in such operations.

(2) The field artillery's role in support of border security operations is the same as its role in conventional operations. Fire planning must be extensive with targets on call to engage and defeat infiltrators. Survey is particularly important because maps and airphotography usually are inadequate or, in the early stages, may be nonexistent. Registrations are conducted as required to insure rapid and accurate engagement of targets. Air observers are used in addition to ground observers. The requirement for fire support coordination is increased by the need to cover the entire border area with preplanned targets and the use of field artillery, mortars, direct aerial fires, and tactical fighter air support in the same relative area. Planning and coordination must also consider the political implication encountered if the border is violated by supporting fire.

(3) In border security operations armor is employed as a rapid intercept force. It may be used as a blocking element or in support of foot troops. Normally, armor is not committed to static border surveillance missions. Tanks and armored personnel carriers may be used as mobile observation posts at various places along the trace.

(4) The air cavalry troop is an ideal reconnaissance force. Its aeroscout platoon in combination with its aeroweapons platoon is extremely well suited to conduct detailed reconnaissance and to provide air interdiction over relatively wide areas. With its organic aerorifle platoon, this troop can provide rapid ground reaction to small-scale infiltration. In combination with mechanized ground forces, the air cavalry troop can react to an infiltration. Once ground forces have control of a contact, the reconnaissance elements should be released to insure that other infiltrations are not proceeding simultaneously.

(5) Military intelligence units, detachments, and special augmentation teams and personnel play a vital role in border security operations. They provide important assistance in the detection of actual and intended infiltration and in the neutralization of the enemy's intelligence efforts. Intelligence specialists assist in the detection of actual or intended infiltration through border areas and air and ground surveillance of adjacent areas.

(6) Communications intelligence (COMINT) and electronic warfare support measures (ESM) resources provide important information on actual and intended infiltration through the detection and analysis of communications-electronics (C–E) activity associated with the infiltrators.

(7) The division combat engineer battalion and other engineer units will participate in border security operations to augment capabilities. Surveying and mapping, land clearing, barrier construction, and force position construction will normally require additional equipment and personnel. Survey and mapping assistance can be obtained from corps and army topographic units. Advanced preparation of alternate fire support bases, pickup and landing zones for airmobile intercept forces, and ground routes for mobile reserves should be considered in plans and may require additional engineer support from corps combat and construction battalions, as well as equipment support companies and cellular 5–500 series teams.

(8) Wire will be the primary communication means, but radio and wire will be employed to supplement each other, where practicable, to provide alternate communication means. The installation of sensors and associated communication equipment requires assistance from electronic technicians.

(9) Army aviation supports border security operations by providing fire support, personnel and cargo transportation, medical evacuation, intelligence collection, and support for command and control. Airborne and infantry division aviation units supplemented by corps or army aviation units, when required, are adequate to support border security operations. The overall situation, terrain, and climate may require modifications in equipment and personnel requirements. Army aviation can be utilized beneficially to disseminate psychological appeals, through leaflets or loudspeakers, to known or suspected infiltrator areas or routes and to the friendly population in remote areas.

(10) Special forces operational detachment may organize, train, advise, and assist in the control of indigenous forces to perform border surveillance, reconnaissance, target acquisition, and search and apprehension missions. Indigenous forces may be either regular military or paramilitary organizations. The special forces detachment is the link between these indigenous forces and the US military commander. For further details, see FM 31–21 and FM 31–21A.

(11) Military police units operate checkpoints, PW/internee confinement facilities, and conduct populace and resources controls, patrols, and police intelligence operations in rural and urban areas. Normally, combined US military police and HC civil-paramilitary police units are employed in anti-infiltration operations.

(12) The civil affairs units are responsible for planning, coordinating, and supervising the advice and assistance to HC officials in populace and resources control, prevention of civilian interference with border security operations, and for gaining support of local population in supporting operations against the infiltrators.

(13) Psychological operations units provide support in planning and conducting psychological operations targeted toward the infiltrators and the local population. Psychological objectives are to cause surrender or abandonment of the infiltrators' mission through retention of the population's loyalty to the government and denial of popular support of and cooperation with the infiltrators.

b. *Marines.*

(1) Marine ground units perform the same roles as Army units.

(2) Marine units are particularly effective in coastal security operations because of their normal association with Navy elements.

(3) Marine air units provide air surveillance, airmobility, and close air support (CAS) to neutralize large infiltration groups.

c. *Navy.*

(1) Navy elements can establish sea barriers and blockades and provide naval gunfire support in areas adjacent to the coast. Coastal radar stations are employed as a part of the sea surveillance system. Naval equipment and small units are also used in riverine border patrolling. Inshore undersea warfare units have the capability of identifying, locating, and attacking inshore sea infiltration vessels.

(2) Exchange of liaison personnel is essential to combat sea infiltration. Close coordination and liaison with coastal units permit an interchange of useful intelligence information. Zones of responsibility are established to define where naval responsibility ends and coastal surveillance force responsibility begins.

d. *Coast Guard.* Coast Guard units are trained and equipped to conduct riverine and coastal surveillance and control missions.

e. *Air Force.*

(1) The Air Force performs its conventional missions of reconnaissance and surveillance, resupply, troop lift, and air interdiction in support of border security operations.

(2) Air Force elements provide close air support (CAS) to neutralize large infiltration groups.

(3) The CAS system provides adequate coordination between air and ground forces. When air support is denied, air liaison personnel with border security units may be reassigned to other units.

(4) Air Force units perform airphotography and provide illumination support.

Section II. PRELIMINARY PLANNING REQUIREMENTS

3–8. General

Commanders and units given the mission of establishing a border security system must perform detailed planning. The following paragraphs describe some aspects of preliminary investigation and planning required in establishing a border security system.

3–9. Threat

The nature of the threat must be investigated in terms of the current situation and also in terms of the potential, or incipient, threat. The size of the threat and the degree of sophistication of infiltrators determine the extent of the border security system required. Consideration of the threat includes a survey of the attitudes of the indigenous population at or near the border. The degree of sympathy or hostility toward infiltrators determines to a great extent the magnitude of the threat.

3–10. Security

To establish an effective border security system, control of the border trace is necessary. An estimate of forces required to accomplish this task must be made. Adequate military control of the border area is necessary so that the barrier system can be emplaced without unacceptable interference by hostile forces during the construction phase.

3–11. Terrain Analysis

A comprehensive terrain analysis of the border area is necessary early in the planning stage. Accurate mapping and surveying of the area are essential. The international boundary trace should be clearly defined; if this is not possible, a trace somewhat in rear thereof must be established. This trace is treated as if it were the actual border. Also an analysis of the soil, vegetation, and climatic conditions of the border area is necessary. These factors determine the extent and frequency of land clearing required as well as the most desirable components of the border security system.

3–12. Border Security System Installation

a. Installation of a border security system may require extensive construction. In addition to installation of the physical barrier, the observation towers, hardened outposts, unattended ground sensor monitoring stations, and base areas require construction effort. Adequate lines of communications to include both surface and air must exist to support the border security system. Plans must

include the repair and maintenance requirements to provide sustained support to the system.

b. Actual location of the border security system requires the selection of the most favorable terrain in the immediate vicinity of the selected border trace. In some cases, the preferred site might be some distance from the international border, while in other cases, it might coincide, e.g., where a waterway serves as the border. This kind of site selection depends substantially on the tradeoffs of "real estate" value versus the difficulty presented by the terrain between the border security system and the border.

3–13. Phasing

In planning a border security system, sequential courses of action to be followed are established. The initial stage may consist of a hasty, simplified barrier system with a near-conventional defensive disposition of troops to augment the physical barriers. Later, as the physical barrier system becomes more sophisticated with mechanical detection and delay devices, the number of troops required may be reduced. Proper balance of components and the tradeoff between men and materiel must be planned. Particularly dangerous avenues of approach must be identified and given priority in the sequence of installation.

3–14. Coordination

Planning a border security system requires close coordination and mutual cooperation between the adjacent units and the internal defense system to the rear of the border area. Coordination and cooperation must be established with HC's military, other US military, and civilian officials.

Section III. MATERIEL PLANNING

3–15. General

This section contains a general discussion of the detection and destruction materials and the neutralization elements that can be employed once an infiltration is detected. The discussion is limited to general characteristics and methods of employment of the materiel. Consideration of the characteristics and results desired will assist the individual in selecting the type and mix of materiel for the particular border system.

3–16. Detection Materiel (Sensors)

a. *Unattended Ground Sensors.* To obtain the

most effective information from unattended ground sensors, accurate position locations must be known and recorded. If practicable, survey of the unattended ground sensor positions should be accomplished.

(1) *Line sensors.*

(a) *Seismic devices.*

1. Seismic devices can be either line or radio frequency (RF) type of sensors.

2. Seismic sensing detects vibrations of the earth caused by objects traversing terrain. While the vibrations can travel extended distances, their range is limited by the ability of the

soil to transmit them. Limitations in range can be overcome by detailed planning or by emplacing large numbers of the sensors.

3. Many seismic sensors are unable to distinguish vibrations originated by extraneous sources from those caused by infiltrators. High false alarm rates caused by extraneous seismic vibrations may prevent their effective use. Common causes of false alarms are aircraft overflight, trees blown by the wind, heavy rain or hail, rapidly flowing water, artillery impacting or being fired in the area. However, the frequency of such false alarms may be reduced by sensitivity adjustments. Seismic sensors are useful for detecting intruder tunneling activities and walking personnel.

(b) *Pressure devices.*

1. Pressure devices are effective, reliable devices most commonly employed in a linear arrangement, and they require entensive installation effort.

2. Pressure devices are effectively employed across roads, paths, trails, and other likely routes of infiltration.

3. Pressure devices are not suitable for use in rocky areas, areas with pronounced slopes, or cold climates. Employment in these situations is slow and not adaptable to fast-moving conditions. Because of the limitations discussed above, these devices are effectively employed in base camps, along borders, and generally in fixed installations.

(c) *Magnetic devices.*

1. These devices are classified both as a line and an RF type of sensor and detect movement of ferrous metal at very limited distances (less than 5 meters).

2. Since the range of the device is limited, linear-sensing devices which increase the area in which detection is possible are available.

3. Because of their characteristics, these devices tend to encounter high false alarm rates during electrical storms.

4. These devices are effectively employed against vehicles, and they serve as confirmatory devices to other unattended ground sensors.

(d) *Infrared devices.*

1. These devices may be classified as either line or RF type of sensors. The active infrared device, employing the principle of line of site to detect an interrupted beam of light, requires an unobstructed optical path.

2. Infrared devices are employed along roads, paths, trails, other intruder avenues of approach into secure areas, and waterways or areas that are periodically inundated.

3. Fog, rain, or dust seriously limits the source-to-receiver distance for active infrared devices. Further, false alarms will result from brush, trees, or other foliage that blows across the beam path.

(2) *RF sensors.*

(a) *Seismic devices.*

1. These sensors use the same techniques as discussed for line sensors.

2. When the line of site between the seismic RF sensor and the monitoring set is masked, line sensors are used to fill in the gaps.

3. These sensors are generally employed around observation posts, strongpoints, and base camps.

(b) *Magnetic devices.* These sensors use the same technique as discussed for line sensors. They are used greatly to complement other sensors, specifically the seismic and acoustic types.

(c) *Electromagnetic devices.*

1. These devices are classified solely as an RF type of unattended ground sensor and are used to detect a moving intruder. Electromagnetic devices are identified by their smallness and their ease of concealment. This is possible because of the requirement for only the antenna to be exposed.

2. These devices are most effectively located in open areas. Movement of tall grass or other objects within the RF field can cause the unattended ground sensor to be falsely activated. The sensitivity of the device can be decreased by adjustment; however, the range of the sensors is correspondingly reduced.

3. Because of their electrical characteristics, these devices are susceptible to electrical interference, jamming, or deception.

(d) *Acoustic devices.*

1. These sensors are fequently employed as an area device because of their omnidirectional characteristics.

2. Because of their sensitivity, they frequently transmit extraneous noises. They are most effectively employed in a commandable mode and used to identify the intruder after he has been detected by another type of unattended ground sensors.

3. Acoustic devices may be emplaced either by air or by hand, the latter method increasing the probability of detection of quiet infiltrators. Hand-emplaced devices have the advantage of being more efficiently emplaced and their capa-

bilities may not be attenuated by the surrounding vegetations as do air-emplaced devices.

(e) *Infrared devices.* These sensors use the same techniques as discussed for line sensors; however, during night operations the detection capability may be increased by employing passive infrared devices.

(f) *Disturbance devices.*

1. Disturbance devices require a physical interaction or contact with the target. Generally, the target is an intruder; consequently, to increase the probability of detection, the area must be densely seeded. These devices are ideally disguised as a twig, rock, or other object natural to the land.

2. Employment of these devices should be along paths, roads, or other intruder avenues of approach. They can be used for locating targets for indirect fires. These devices are used effectively with other sensory devices.

3. False alarm level is high because of inclement weather, animals, or other similar disturbances.

b. *Attended Ground Sensors.*

(1) *Radars.*

(a) General operational degradation due to inclement weather averages about 25 percent in range.

(b) Siting on elevated platforms or terrain features will increase line of site.

(c) Rough terrain and forest growth increase radar masking. Radar is most effective in open, smooth terrain.

(d) Normally extensive site construction is not required for ground-mounted radars.

(2) *Night vision devices.*

(a) Night vision devices may be either active or passive and may be of the infrared or light intensification type. The former detects radiation given off by a heat source while the latter requires a light source. They are generally degraded operationally by inclement weather or by visual countermeasures such as smoke.

(b) All night vision devices require unobstructed line of site.

(c) Night vision devices are made temporarily inoperable by direct bright light sources.

(d) Fog, rain, or dust seriously limits (90 percent in some cases) source-to-receiver distance for active infrared devices. During night operations, the detection capability employing passive infrared devices may be increased.

c. *Integration of Sensor Systems.*

(1) To achieve effective surveillance, those sensor systems available must be completely integrated. Surveillance planning is based on duplication and overlap of equipment to increase reliability and to verify acquired targets by using more than one type of sensing technique. As an example, radar is used to cover an avenue of approach, augmented by hand-emplaced unattended ground sensors, to insure both complete coverage and verification.

(2) In the emplacement of unattended ground sensors, it is desirable to mix them by type to achieve the necessary redundancy, reduce the likelihood of false activations, to confirm the type of potential target, to alleviate the reduced effectiveness of one type of device caused by certain terrain features or other limiting factors. Integration is the key to proper utilization of unattended ground sensors. They are emplaced in strings of at least four to determine size, direction of movement, and speed of the potential target. When isolated, unattended ground sensors are only a limited means of target acquisition. They indicate the presence of some kind of activity at a particular place and time. By comparing sensor activation information with other intelligence holdings (e.g., interrogation prisoner of war reports, airphotographs, radar sightings, known trail networks, signal intelligence) the intelligence analyst may be able to determine the exact nature of the activity being sensed. As a tool of the commander, unattended ground sensors, in conjunction with other sensor systems, permit an economy of force by relieving troops and allowing the commander to respond with the right amount of combat power to the detected infiltration force.

(3) A primary consideration in the integration of sensors is to oppose the enemy's measures to defeat the sensor logic; e.g., the enemy can reduce his rate of movement to that degree where doppler radars fail to detect him. The slower the intruder moves, however, the greater the time he is vulnerable to detections by airborne personnel detectors, night vision devices, and observation aircraft. Radar operators must be alert to electronic intrusion or deception attempts. Any irregularity in equipment functions must be reported to supervisory personnel. Similarly, the operator must be prepared to continue operation through interference. Standing operating procedure (SOP) must be adhered to and security practices must be followed at all times.

(4) Unattended sensor systems, primarily

unattended ground sensors, may be profitably emplaced forward of the area under friendly control, even if this area is out of line of site. Remote monitoring can be accomplished by the use of orbiting aircraft or by the use of relay equipment presently available for use with most systems. In this way, early warning of an attempted infiltration is obtained and more specific surveillance can then be directed to the area in question.

d. *Fences.* Exclusion fences with signs will warn indigenous personnel and help to suppress the false alarms created by animals. Electric fences may serve as warning devices or may be constructed to electrically shock infiltrators. Fences may be equipped with alarms to detect physical disturbance of the exclusion fence, such as the act of cutting the wire or climbing the fence. Near areas of dense population, illumination may be used to simulate daylight conditions for visual surveillance observation or target acquisition and to act as a psychological deterrent. Fences may be continuously lighted or lighted by sections randomly to gain surprise, detection, deterrence, and economy.

e. *Clearance of the Border Security System.* In a border security system, implantation enhance-ment is mandatory and is generally concerned with clearing, defoliating, or reseeding operations. These are activities associated with providing a border security system with the appropriate working area for installation and with the desired fields of view and fire zones. Other enhancement techniques include maintenance operations, such as grass cutting or continuing defoliating efforts, plus use of specific devices or techniques that will improve performance of a sensor and will afford little or no protective cover for intruding personnel.

3-17. Delay Materiel

a. *Mines Conventional/Scatterable (Antipersonnel, Antivehicular).*

(1) Antipersonnel (AP) and antivehicular (AV) mines are used in their normal role of denying infiltrators access to selected areas. Self-neutralization and self-destruction mines are useful in varied situations, but require reseeding at periodic intervals.

(2) Use of AP mines along the border trace delays intrusion and reduces enemy countermeasures to emplaced sensor devices.
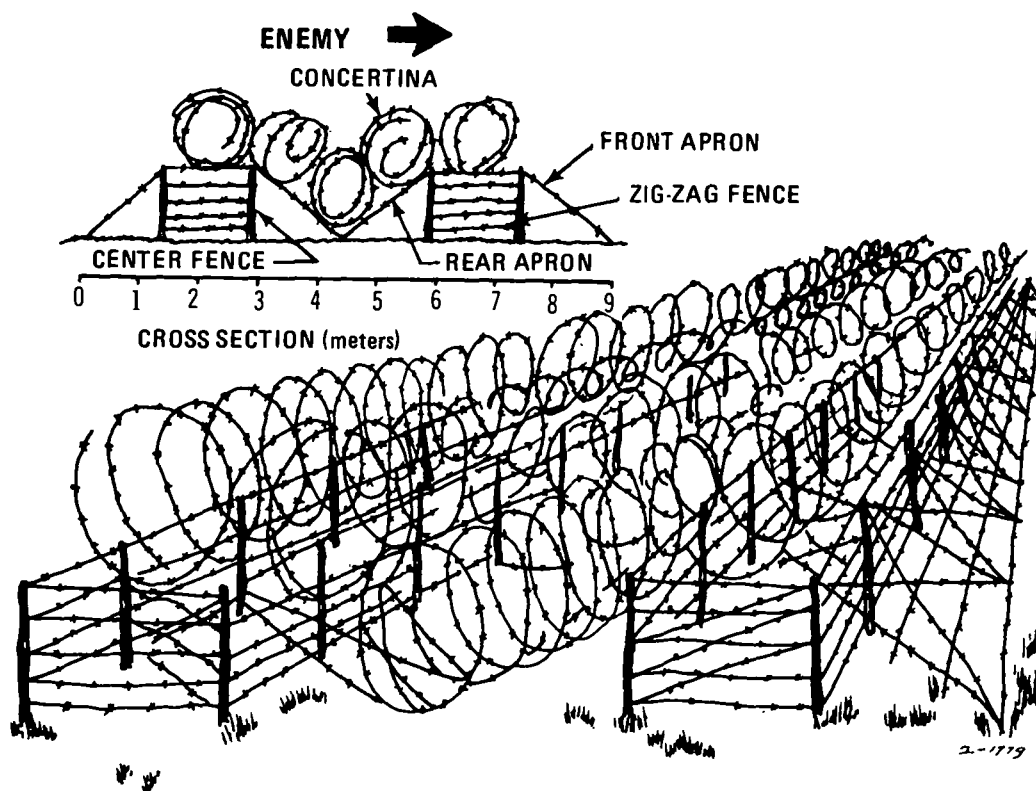
(3) Mines should not be located close to de-
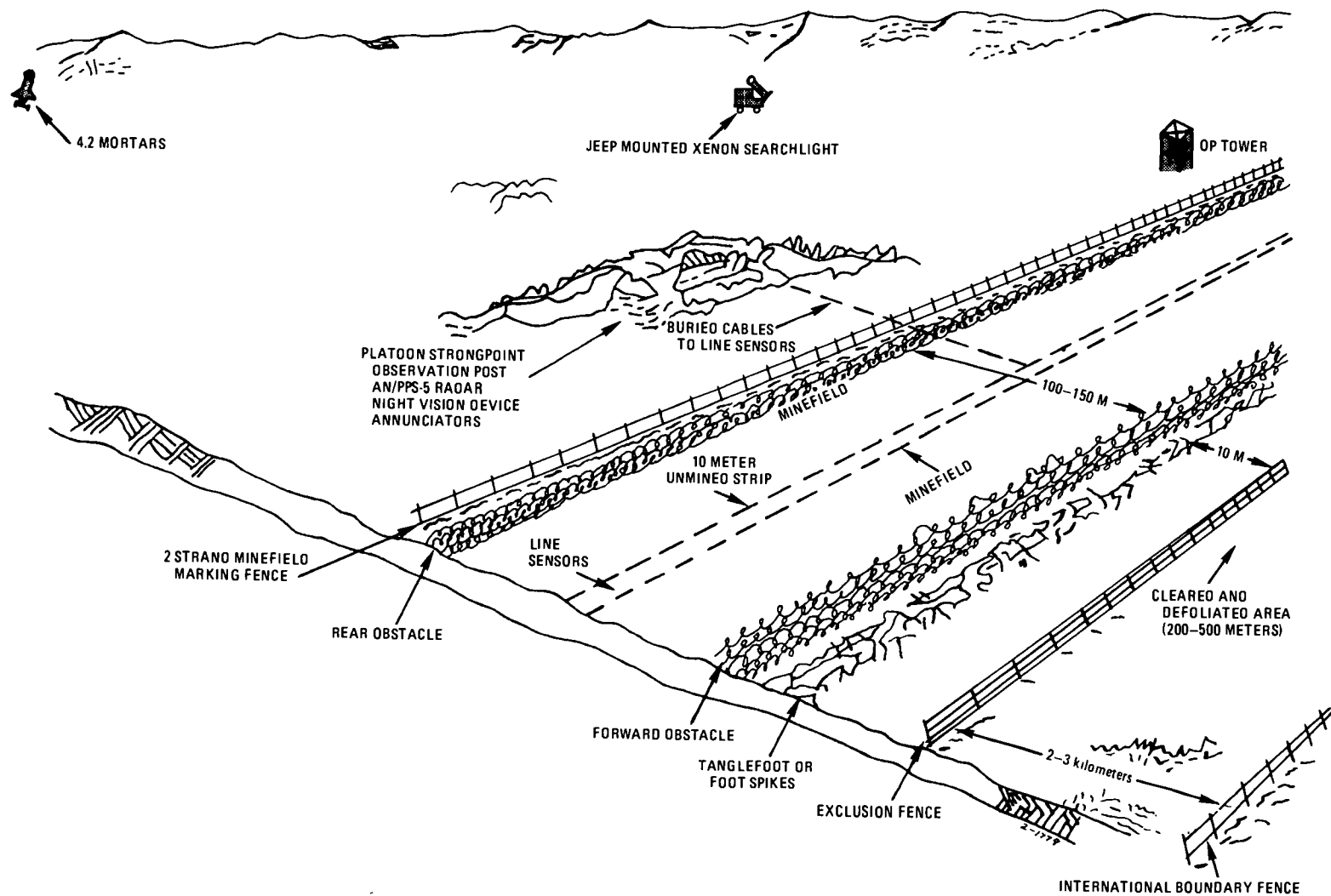

Figure 3-1. Wire barrier.

Figure 3-2. Strengthened barrier system.

4.2 MORTARS

JEEP MOUNTED XENON SEARCHLIGHT

OP TOWER

PLATOON STRONGPOINT
OBSERVATION POST
AN/PPS-5 RADAR
NIGHT VISION DEVICE
ANNUNCIATORS

BURIED CABLES
TO LINE SENSORS

MINEFIELD

100–150 M

MINEFIELD

10 METER
UNMINED STRIP

10 M

2 STRAND MINEFIELD
MARKING FENCE

LINE
SENSORS

REAR OBSTACLE

CLEARED AND
DEFOLIATED AREA
(200–500 METERS)

FORWARD OBSTACLE

TANGLEFOOT OR
FOOT SPIKES

2–3 kilometers

EXCLUSION FENCE

INTERNATIONAL BOUNDARY FENCE

tection sensors or their associated cables. However, properly emplaced, and under certain circumstances, scatterable mines can be used to extend the detection range of certain types of sensors.

(4) Conventional mines may be initiated by various actions from the common pressure or tension release to remotely detonated minefields that are initiated by coded RF signals.

(5) While the situation and type of mine employed may reduce the effectiveness of recording their locations, generally, minefields are recorded and reported. Additional details concerning the marking, recording, and reporting of minefields are contained in FM 20-32.

b. *Wire/Tape.* Wire/tape obstacles are used in conjunction with minefields to increase delay of infiltrators. Barbed tape and wire are made more effective by seeding with footspikes.

c. *Botanicals.*

(1) The use of vegetation as a delay device depends on adaptability to local climate. Vegetation elements may not become effective for several years.

(2) Bamboo, weed rose, or poisonous plants delay the infiltrators' movement when used alone or in conjunction with other delay elements.

d. *Chemicals and Atomic Demolitions Munitions.*

(1) Riot-control agents are effective in temporarily confusing and delaying hostile forces.

(2) Use of lethal or incapacitating chemicals and atomic demolitions munitions (ADM) is considered in planning; but to expect to receive authority to use them in a limited war situation may be unrealistic.

e. *Integrated Barrier System.*

(1) The mission of a border security system is to prevent infiltration of forces and supplies into a country and thereby to cut off outside reinforcement to an insurgent movement. The system must have the capability of defeating harrassment attempts, discerning spoofing attempts, and defending against both infiltration and exfiltration. Visual surveillance and fire support coverage are required. Figure 3-1 depicts a wire barrier.

(2) Various developments in surveillance and sensory equipment have resulted in a concept of a more effective barrier system. Figure 3-2 shows a strengthened system that utilizes the wire barrier in duplicate and is reinforced by minefields and a line sensor system. The utilization of personnel detection radar and night vision devices greatly improves surveillance of the system. Searchlights give the capability for night illumination.

(3) Obstacles are an integral part of the border security system. Obstacles can range from distance itself to complex artificial structures. They may be permanently emplaced, such as wire or mines, or they may be temporary in nature, such as scatterable mines or chemicals. Obstacles also have the secondary function of inflicting casualties on the enemy.

3-18. Neutralization Elements

a. *Intercept Forces.* Infantry force elements are positioned to intercept infiltrators within the sector of responsibility. Intercept is a function of time and distance. Ground mobility and airmobility increase the intercept forces' effective border coverage.

b. *Indirect Firepower.* Field artillery and mortars are the fastest means to engage infiltrators in the absence of trace-emplaced forces of infiltrator-initiated destruction devices. A specified strike zone between the trace and the barrier is required for best employment. A standoff distance (2,000 to 3,000 meters) from the border is required to avoid firing across the international boundary and to provide a killing zone in which to engage infiltrators. To reduce damage to the emplaced unattended ground sensors, fuzing of field artillery and mortars with time fuzes or VT is necessary where fires are directed into or near the systems trace.

c. *Close Air Support.* Airstrikes are effective if the response can be made at or near the time the target is detected. Because the infiltrator will usually attempt to penetrate under conditions of poor visibility, weather limitations, as well as response times, will generally restrict the effectiveness of CAS. Direct aerial fire strikes are effective if they are immediately responsive and the target can be located on the ground. Targets may be identified by use of coordinates, verbal description, or direction and distance from a known reference point. At night, references to fluorescent panels or balloons and luminescent paints or sprays may be used.

Section IV. SYSTEM INSTALLATION PLAN

3–19. General

The installation of a border security system is a sequential operation. The phasing for the installation of the system must be predicated on orderly growth of the system to be established. Initially, a commander develops a system within the constraints of his tactical mission and time available. His plan also is predicated on the anticipated avenues of approach, suitability of observation post and strongpoint locations, and the requirements for local security. The compatibility of the initial system with the ultimate system is the primary objective. Since the forces located within the area near the border may be armed forces of regional commands, paramilitary, border guards or police, an area coordination center must be established to coordinate the various security, intelligence, and operational activities in the area. This section discusses the installation of the system in relation to the three phases and related activities and functions that are performed within each phase.

3–20. Phase 1

Figure 3–3 shows a generalized border security system during the initial stage of operations. The system is based on the means that are immediately available to the battalion commander plus support by divisional engineers and signal elements. In this phase, a battalion commander may have the mission of securing the operational area plus establishing a border security system. The execution is similar to the deployment of a battalion in defense. The basic differences are the prime necessity for survey, marking and mapping of the border, the use of special materiel items, and the planning for future emplacement and employment of sophisticated sensor components.

a. *Infantry Elements.* The border trace is first brought under tactical control. The frontage occupied is significantly greater than that normally assigned to infantry units in an area defense posture. During the initial phase of occupation, the platoon defensive positions are planned 2,000 meters from the border to protect the personnel working on the barriers and to permit utilization of field artillery and the conduct of other tactical operations. Placement of reserve intercept elements should provide for rapid reinforcement to the forward companies. Patrols, warning devices, and observation posts are used to provide early warning to the border security forces. Controlled

passages across the border are designated to canalize legitimate traffic as necessary.

b. *Materiel.* The materiel used for the border security system during phase 1 is limited to easy-to-install items. Table of organization and equipment (TOE) items of equipment may be redistributed to meet mission requirement and to attain maximum effectiveness of organic equipment. The following items are suitable for employment during this period:

(1) Detection materiel:
Radars
Night vision devices
Searchlights
Unattended ground sensors
Patrol aircraft with personnel detectors and other sensors
Optics
(2) Delay materiel:
Mines
Barbed wire or tape
Footspikes
Fences
(3) Neutralization:
Infantry, armor
Field artillery and mortar fire
Attack helicopters/aerial field artillery
Tactical air support
Naval gunfire

c. *Additional Activities.*

(1) *Survey and mapping.* Engineer or artillery assistance is required for a survey and marking of the international boundary. The unit commander insures that the border trace is compatible with his efficient use of the terrain and that the surveyed area is accurately recorded on maps, preferably 1:50,000 scale. Field artillery, in support of the battalion, establishes preplanned targets along and forward of the border security trace. Registration points must be numerous enough to permit accurate shifting of and use of fires with and without the aid of observation. Detailed diagrams accurately pinpointing each neutralization, delay, and destruction element are drawn to scale. Concurrent with the survey and mapping of terrain, the weather and climatic conditions are studied to determine their impact on the border security mission. Consideration of defoliation, soil sterilization, and botanical items is made as early as possible.
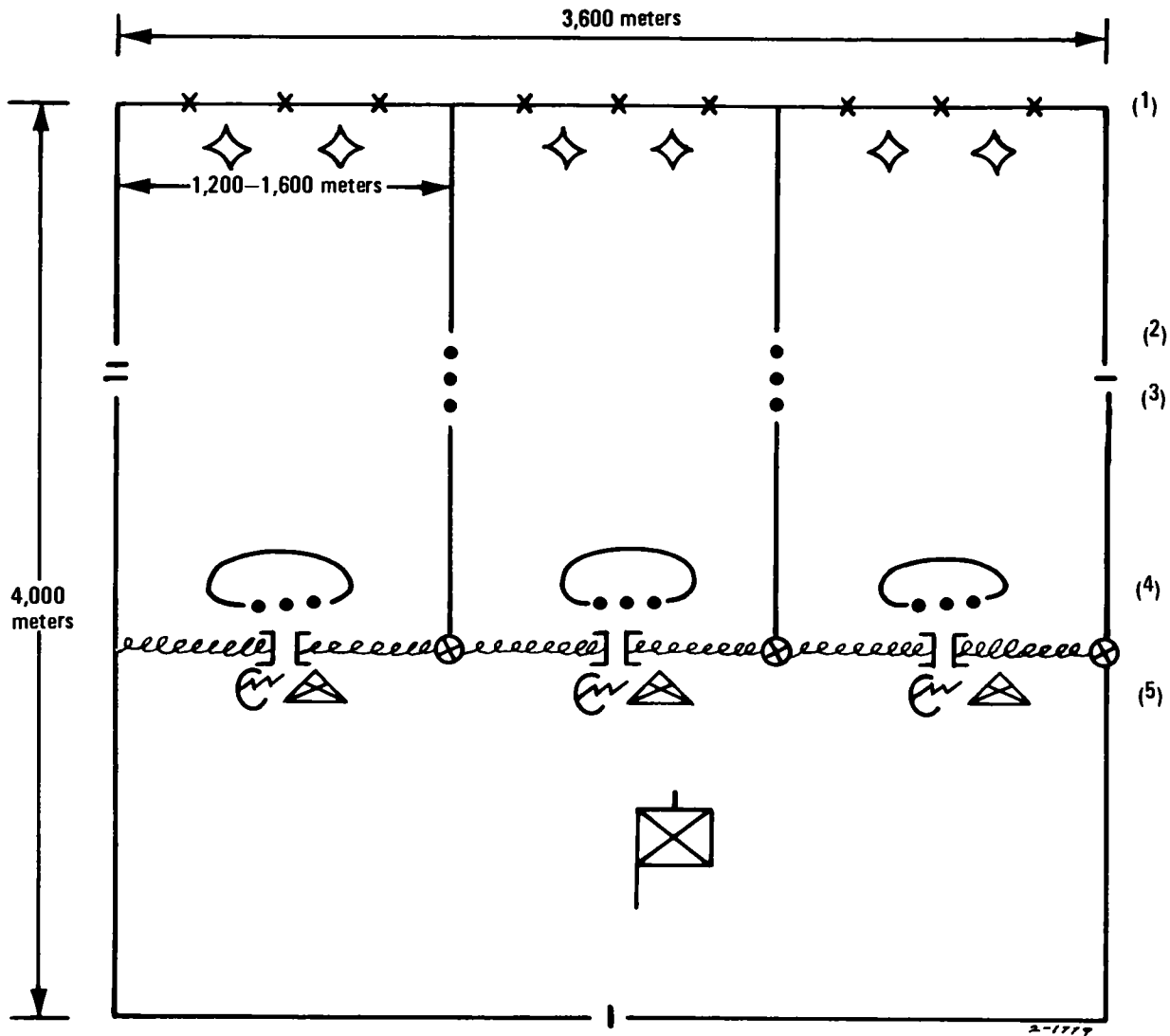
¹Construct a simple fence along the border trace with UGS's along fence.

²Observation and firing lanes cleared by hand.

³Active patrolling during daylight and ambush positions at night.

⁴Platoons provide security for parties working on border trace.

⁵Radars and/or night vision devices placed in OP's.

Figure 3-3.   Generalized phase 1 border security system (left flank company of a battalion manning the border).

(2) *Trace clearance.* Clearance of the border security trace is started as soon as practicable. A depth of approximately 100 to 200 meters will accommodate installations. Areas forward of the barrier are cleared in sufficient depth to provide maximum effectiveness of line-of-site night vision devices and radars and to permit maximum use of direct fire weapons. Corps of Engineer and Chemical Corps personnel provide advice and assistance. Reserve troops and indigenous labor are used to expedite progress, environment permitting.

(3) *Communications.* The organic radio communications net is used during phase 1 operations. As soon as possible, wire is buried to provide a more secure and reliable primary communications system plus redundancy of communication means.

(4) *Intelligence.* Intelligence is an important aspect of the border security operations during this period. Answers to who, what, why, when, where, and how are vital in establishing strongpoints, defensive positions, and neutralization procedures. Location of infiltrators' base camps or
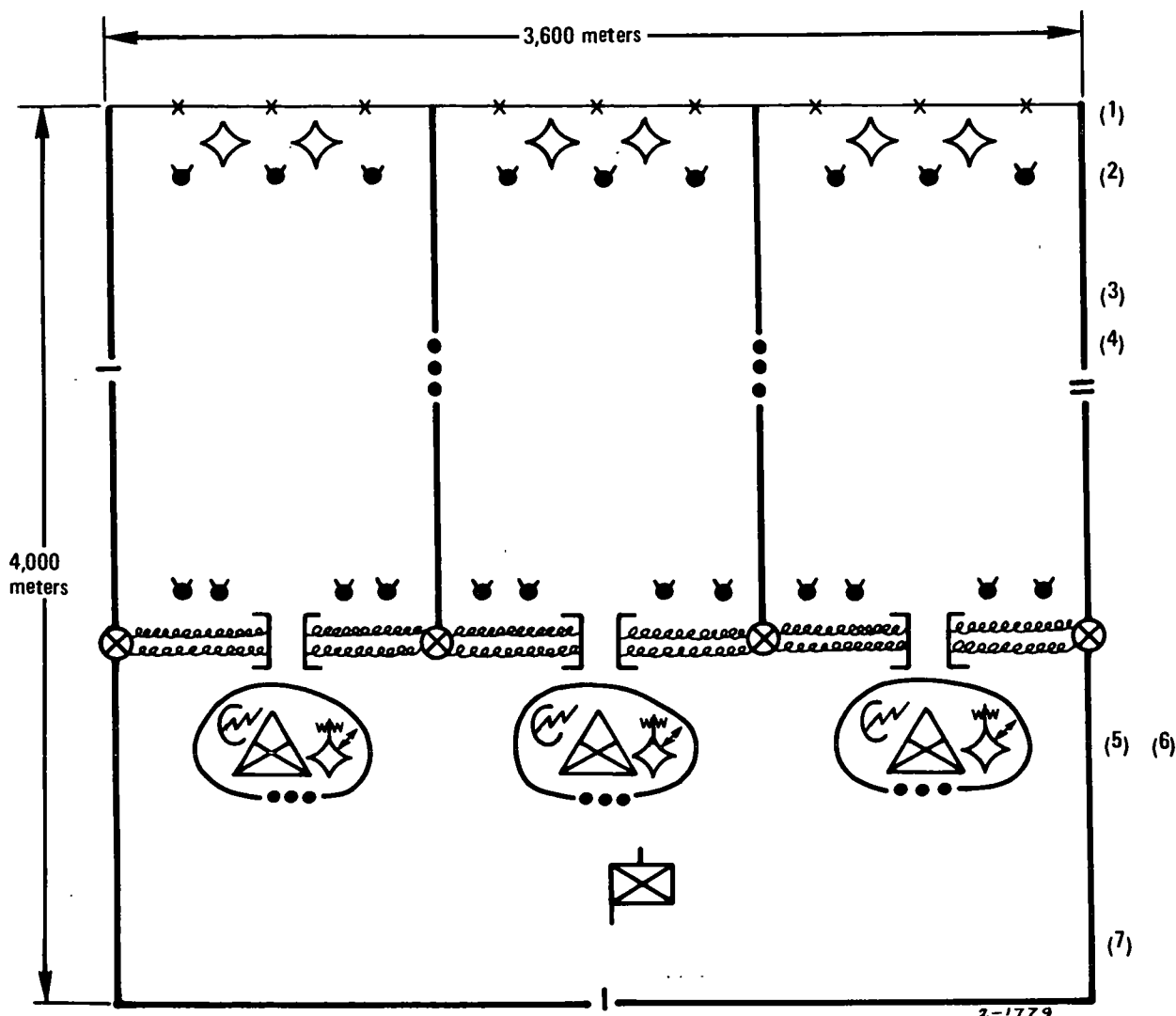
[1] Marked fence along border trace.

[2] Mine strip 50 meters wide on friendly side of the border.

[3] Active patrolling during daylight ambush positions occupied at night.

[4] Defoliation initiated.

[5] Work continued to improve all positions and barriers.

[6] Strongpoints/observation points with radars and other verification devices.

[7] Increased use of patrol aircraft and helicopters.

Figure 3–4.   Generalized phase 2 border security system (right flank company
of a battalion manning the border).

way stations across the border and actual or likely avenues of approach is vital information in establishing strongpoints and defensive positions along the border. When politically acceptable, long-range patrols can provide this information. Intelligence collection is closely coordinated with the civil affairs activities in order to gain valuable and timely intelligence through their affiliation with the local populace.

3–21. Phase 2

Figure 3–4 shows an improved phase 2 border security system. Phase 2 is the midrange application of the border security system to achieve the degree of sophistication that can be accomplished in from 30 to 60 days. This phase is characterized by the installation of improved detection and delay components, hardening of observation posts and intercept force strongpoints, the furtherance
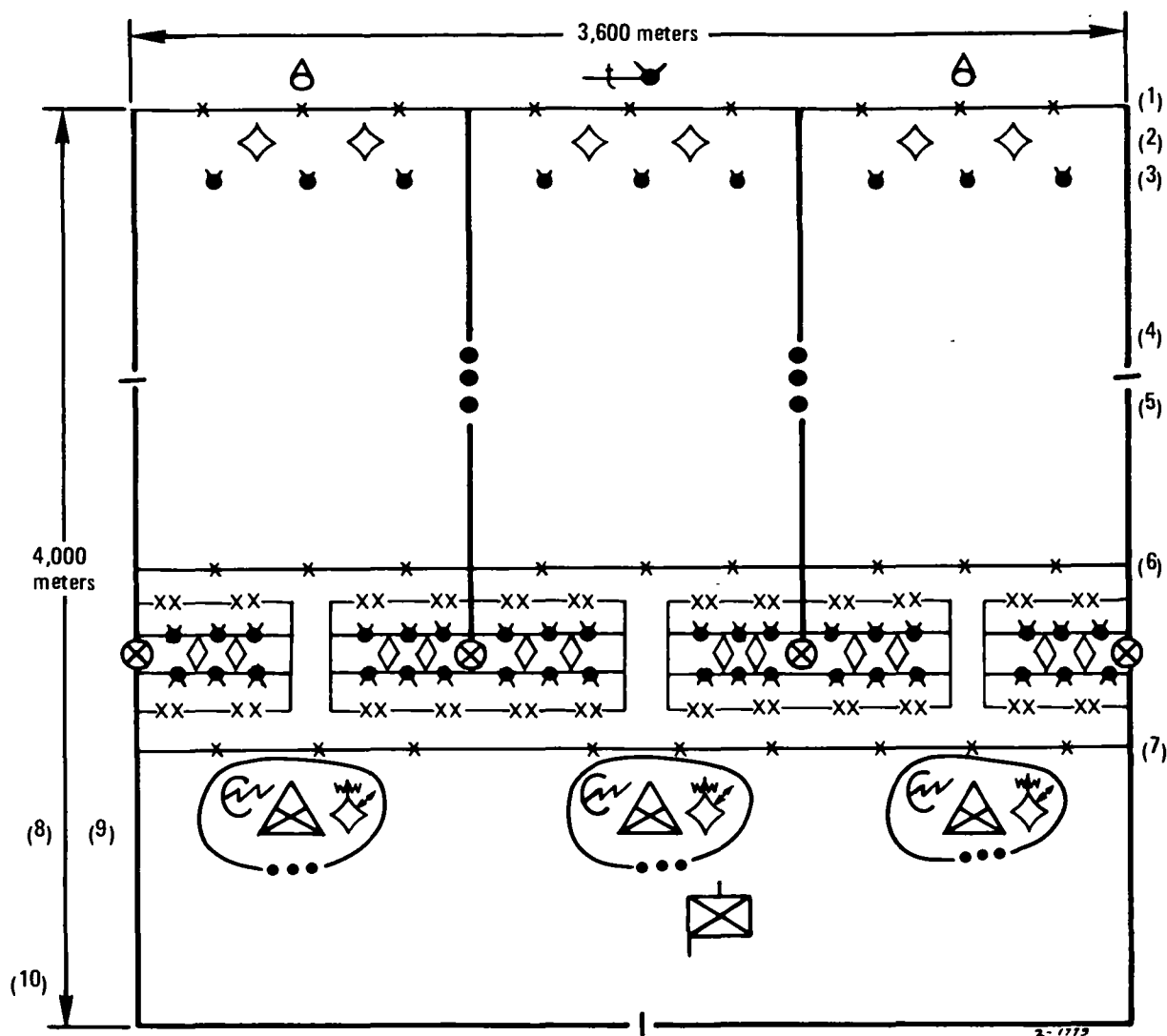
¹Marked fence along border trace impregnated with sensors and boobytraps.

²Line sensors.

³Mine strip 50 meters wide on friendly side of the border.

⁴Infiltrators engaged by field artillery in specified strike zone.

⁵Defoliation continues in area between border and barrier.

⁶Exclusion fence erected on each side of barrier to eliminate false alarms.

⁷Ambush sites hardened and randomly occupied behind the barrier.

⁸Additional surveillance radars and image intensification devices in OP's.

⁹All positions hardened; additional communication equipment installed.

¹⁰Continued use of patrol aircraft.

Figure 3–5. Generalized phase 3 border security system (center company of a battalion manning the border).

of construction, and improved communication efforts.

a. *Infantry Elements.* In this phase, the intercept forces still consist primarily of infantry, backed up by mechanized infantry, tanks, or armored cavalry. During this period, extensive reconnaissance is made and plans are rehearsed to permit the intercept forces to move expeditiously from their initial location to the location of most likely intercept. Unit strongpoints are dug in,

sandbagged, and provided the protection feasible under the circumstances. Ambush patrols occupy positions on a random basis employing hand-emplaced sensing and surveillance devices. With the improved methods of detection and delay, the need for stationary infantry intercept forces is lessened. Increased use of indirect fires is emphasized.

b. Personnel. A rotation policy is established for personnel engaged in border security missions. Tour of duty, particularly of personnel manning observation posts and monitoring unattended ground sensors or other devices, should be fixed so that efficiency will not be reduced by fatigue, stress, or boredom. However, the tour should be long enough to provide personnel an opportunity to become familiar with operational procedures and the area of operations.

c. Materiel. Phase 2 materiel grows in sophistication and degree of permanence. Temporary acoustic and seismic devices are replaced by permanent devices. Line sensors are installed. Delay devices such as barbed wire and tape are reinforced by double apron wire with additional layers of concertina. Conventional AP mines are laid at selected locations. Increased use of patrol aircraft and helicopters with effective air-to-ground communication to monitor the border area reduces the requirement for footmobile patrols and static dug-in positions near the border trace.

d. Trace Clearance. Continuous effort is made to extend the cleared area in front of the barrier. The ultimate objective is to maximize line of site for radars, observation, and surveillance and to provide effective fields of fire for crew-served weapons.

e. Construction. In addition to hardening the strongpoints and base areas, elevated observation towers are constructed to enhance the surveillance capabilities.

f. Communications. Wire nets supplement radio nets to the extent possible. Air and field artillery support communications are improved.

3-22. Phase 3

Continued effort is made to improve the system in terms of forces and materiel as depicted in figure 3-5. As commanders become familiar with the terrain, weather, and other environmental conditions, they seek imaginative means to enhance the border security system by use of available materiel. Good relations with the local inhabitants, normally initiated in phase 1, are cultivated to the extent that mission limitations permit. Indigenous forces are trained to use new materiel.

a. Force Elements. Mechanical detection and delay devices and more effective field artillery and mortar fires as a result of accurate survey and effective target acquisition enable the battalion to cover a much wider front than under other tactical conditions.

b. Construction. In or near outpost towers, dug-in bunkers or protective positions for off-duty personnel are constructed. Temporary or expedient bunkers may ultimately be replaced by concrete bunkers or other suitable structures. Units conduct continued training to increase the proficiency of newly arriving personnel. Company-size units are rotated to provide for rest and relaxation of personnel.

c. Trace Improvement. Defoliation operations initiated in the first phase take effect in this stage. Wire and mine emplacements are employed in greater depth and density to improve the physical barrier.

d. Communications. Installation of additional equipment further improves communications capabilities.

CHAPTER 4

OPERATIONS

Section I. INTRODUCTION

4-1. General

a. This chapter provides guidance to divisions and lower commands on the mission, concepts, and organization for conducting border security and related operations when US forces are responsible for the conduct of operations of all three areas: surveillance, security, and maneuver.

b. FM 7-20, FM 31-16, FC 31-22, and FM 31-73 provide further guidance on related operations.

4-2. Mission

The border security commander's mission is to prevent or minimize the infiltration of men and supplies. The division conducts border security operations in sector in coordination with host country (HC), allied, and other US military and civilian agencies.

4-3. Concept

Border security operations include manning the systems trace, surveillance, extensive patrolling, night ambushes, target acquisition, and intercept operations. Border security units conduct these related operations: intelligence operations, psychological operations, populace and resources control, defoliation operations, and base area security.

4-4. Division Role

a. Operations. The division's role in border security operations is similar to its role in stability operations. The division controls from three to five brigades plus organic and attached artillery and other supporting forces. The bulk of the available combat forces are attached to brigades with the division retaining control over small, highly mobile reserve forces. Based on consideration of the threat, terrain, mobility, and the mission, the division structures brigades and assigns mission and frontages. The reserve usually con-

sists of two or more highly mobile reaction forces that may be committed independently. Normally the reserve will be committed to neutralize infiltrating forces that have been detected and delayed in the security zone or that have been canalized into the maneuver zone.

b. Combat Support and Combat Service Support. The division's full combat support and combat service support means are allocated to brigades on a priority basis to expedite installation of the border system in critical areas and to insure attainment of the desired posture on a sequential basis.

c. Frontages. The border security frontage that a division can cover varies with its organization, the threat, the terrain, mobility, and climatic conditions. Under ideal conditions, a division, with the bulk of its combat power committed, can cover about 100 kilometers of front. On terrain where sensors and other devices are less effective, frontages are narrowed, or commanders accept a greater risk of successful infiltration. When the political situation precludes the use of field artillery fire as a response to attempted infiltration or precludes establishment of a specified strike zone, division capabilities may be significantly reduced. Figure 4-1 depicts a typical infantry division covering a 100-kilometer frontage.

4-5. Brigade Role

a. Operations. The brigade is the basic operational unit for border security operations in the surveillance and security zone. The brigade is composed of from three to five maneuver battalions and field artillery support either attached or in direct support. The brigade will normally have all battalions committed to operations covering the surveillance zone. Normally the brigade will retain one mobile reaction force as the brigade reserve. The reserve, usually company size, will be used to delay or canalize any large infiltrating
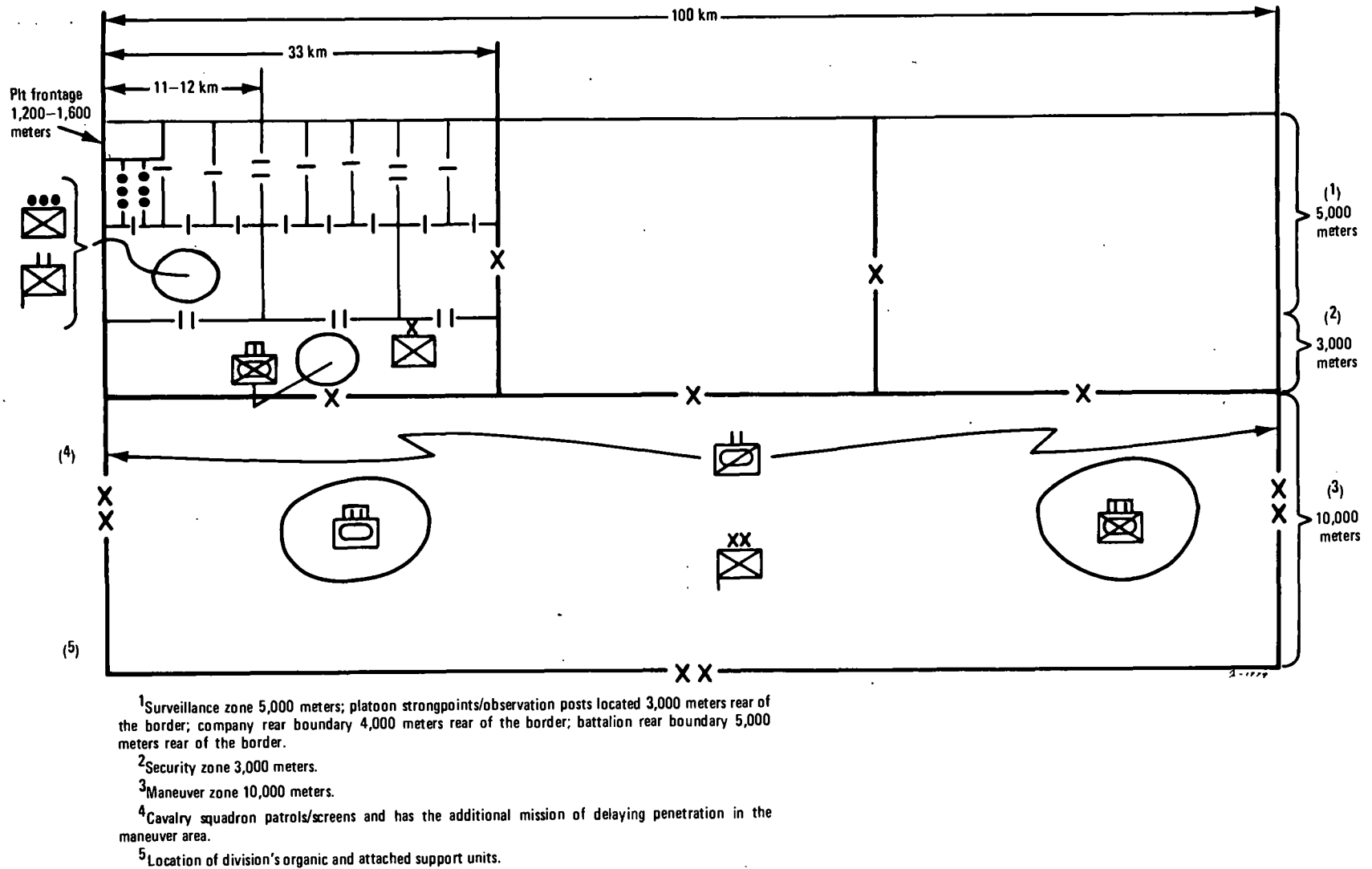
Figure 4-1. Terrain organization utilized by a typical infantry division
in border security/anti-infiltration role.

force that has penetrated the surveillance zone. When combating an enemy unit the size of up to 300 men, the brigade will commit the reserve to delay or canalize the enemy until the force has been neutralized by firepower or by the commitment of the division reserve.

b. Frontages. In terrain where maximum effectiveness can be achieved from sensory devices, a brigade can man up to 30 to 40 kilometers along the border. Various environmental degradations decrease brigade frontages.

4–6. Infantry Battalion Role

a. Operations. The battalion supported by field artillery ordinarily mans an assigned sector of the border trace in the surveillance zone. In the organization of the trace, the battalion assigns companies frontages that will allow platoon strongpoints to be mutually supporting with organic or attached weapons. The battalion organizes a reaction force to assist outposts under attack and to

delay infiltrating attempts within their capability until neutralization. (The mission is well suited to the capabilities of the scout platoon of the infantry battalion.)

b. Frontages. A battalion frontage of 10 to 12 kilometers is possible in border security operations in terrain that gives maximum effectiveness from sensory devices. Battalion frontages may increase or decrease depending on environmental and mission factors.

4–7. Remote Area Systems

Many remote, relatively uninhabited border areas exist where the establishment of a linear system trace would be too costly in men and materiel. In these areas, border security operations are conducted by extensive ground and air patrolling, by emplacing remote unattended ground sensor fields on known or suspected approaches and in previously used base or staging areas, and by using scatterable mines. This represents an economy of
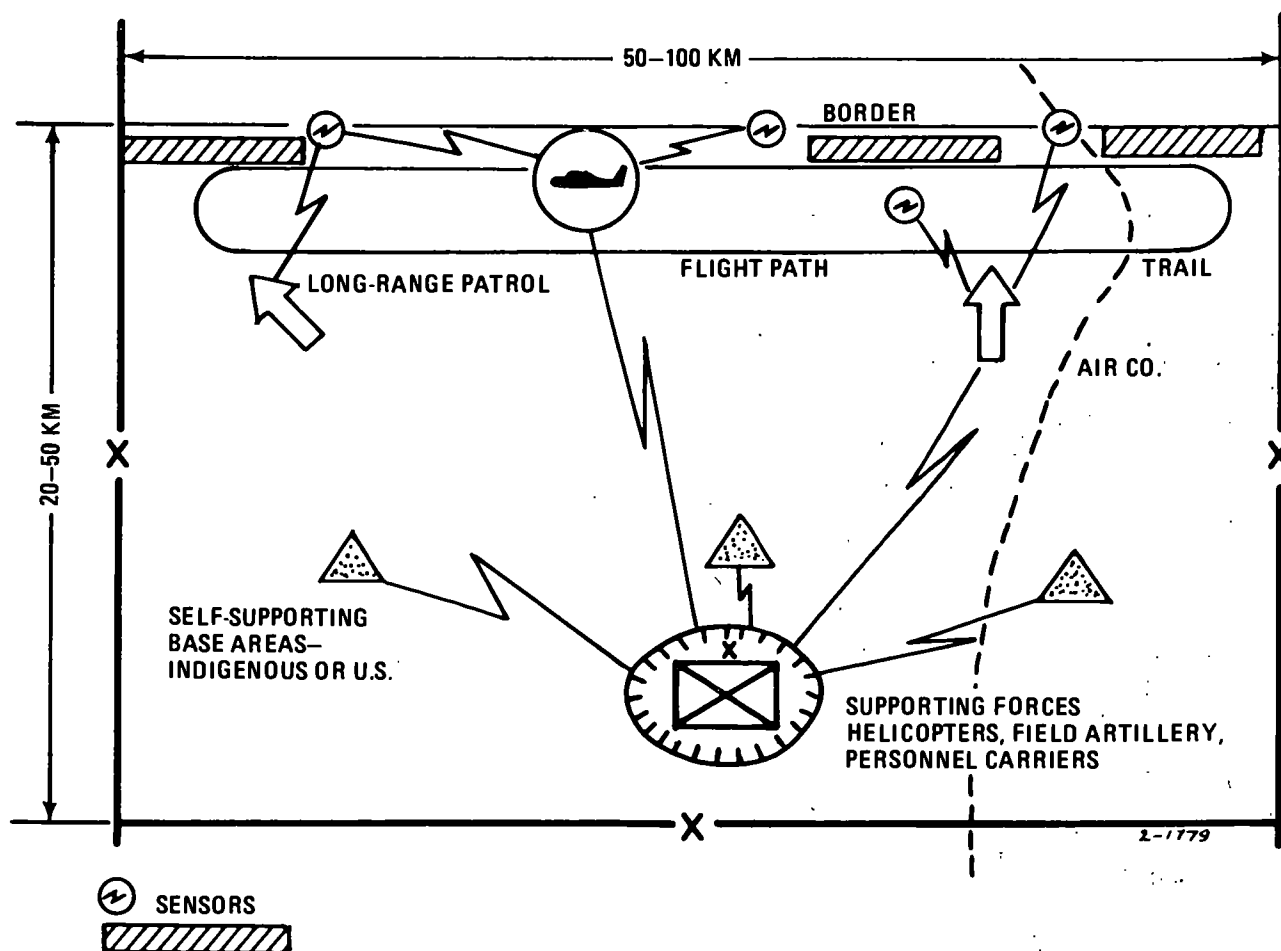
Figure 4-2. Remote area system.

force mission utilized in areas with low infiltration probability to allow additional manpower to be utilized in other areas of the border. Normally this method will be used in segments of the border farthest from the insurgent homeland. Figure 4-2 depicts a remote area system.

a. Mobile intercept forces are on alert at secure base areas to be employed against infiltrators detected by sensors or patrols. Supporting aircraft may be the immediate primary fire support means. When an intercept force is deployed, indirect fire weapons are moved by surface or by air

to supporting positions. Airdropped mines or field artillery delivered mines are used to block the withdrawal route of the infiltrating force or to canalize its direction of movement.

b. Organic reconnaissance patrols maintain random ground surveillance of the border area at known or likely crossing areas. Local intelligence sources are utilized extensively to obtain information concerning infiltrators in the area. Air reconnaissance elements monitor unattended ground sensor output and conduct active surveillance of the border area.

Section II. TACTICAL OPERATIONS

4-8. General

Tactical operations include manning the border security system, patrolling, intercept, and target acquisition operations. Border security operations are highly dependent on surveillance capabilities and are characterized by the use of all available surveillance and target acquisition means. This section discusses the general concept, organization, and command and control measures for tactical operations and patrolling and intercept operations.

4-9. Concept

The division commander is assigned a specific sector or border and is given responsibility for border security operations conducted in his area. He has operational control of sufficient forces to counter infiltration attempts by enemy forces of battalion strength. The commander coordinates closely with civil police and military units having responsibility within the maneuver area and to the rear of his zone to insure close coordination of the border security system.

4-10. Organization

a. The border area is organized to provide coordinated action of the military forces, civil forces, and the population. The area of operations is subdivided into geographic sectors coinciding with internal political subdivisions when possible to facilitate coordination. Specific sector responsibility for local military operations is delegated to a single commander. The relationships between military commanders and HC civil and military authorities are established by specific directives and standing operating procedure (SOP) from higher headquarters.

b. The division organization is the basic operational unit for border security operations. The force is structured to meet the needs of specific border security requirements. The brigade is organized to permit effective utilization of intercept forces and other fire support means.

c. The division tactical operations center (DTOC) is adequate for managing the information-gathering and reaction missions required in border security operations. Special operations may require augmentation by specially trained intelligence personnel. During periods of high infiltration activity or increased intelligence information, the DTOC may require augmentation. Interpreter personnel from indigenous police and intelligence agencies should be assigned on a permanent or semipermanent basis to assist in interrogation, document translation, and liaison.

d. For a special operation or for remote areas, brigade composed of from three to five maneuver battalions may be employed. Supporting field artillery will be in direct support of the brigade or attached to the brigade. When environmental factors permit, mechanized or airmobile infantry is utilized as the brigade reserve/intercept force.

e. Reaction forces at division and brigade will normally be organized and equipped to attain maximum mobility. Where trafficability is satisfactory or road nets are available, tank units are cross-attached with mechanized infantry to give intercept forces added firepower and decisiveness. Helicopters for intercept force mobility are made available in areas where terrain, vegetation, or climatic conditions reduce ground mobility. In the more developed countries where the road networks are adequate, additional wheeled vehicles

may be used for transporting the intercept force and conducting mobile patrols. When road coverage is available, vehicular mobility may be adequate for short distances. The trucks may be parked within the cantonment area with necessary equipment loaded, eliminating the time needed to move helicopters and troops to the pickup zone and to load the helicopters after the arrival. Additional time is gained by eliminating the coordination and briefings that are necessary when helicopters are used.

4-11. Command and Control

a. The division commander is assigned a specific sector of border and is given complete responsibility for border security operations conducted in his area. He has operational control of sufficient forces to counter infiltration attempts by battalion size groups. The forces deployed for border security probably will be inadequate to repel attacks by enemy forces the size of an insurgent type of battalion without additional assistance.

b. Control measures in border security operations are more stringent than in most other military operations. Operational plans are published in detail by higher headquarters to give specific guidance in coping with foreseeable situations.

c. Adequate communications are required to insure quick reporting and adequate command and control. Buried wire systems are preferred to minimize compromise. However, radio and wire are employed to supplement each other, where practicable, to provide duplication of communication means. Both systems must be tested periodically for performance.

4-12. Restrictions

Higher headquarters will publish rules of engagement and restrictions on the use of force, equipment, and firepower for the guidance of commanders charged with border security missions. Because of the international implications implicit in border security missions, control measures are more detailed than in other operations. Decisions on matters having international significance are published to give commanders at all levels a basis of reference for their actions.

4-13. Patrolling

Border security operations to counter small infiltration groups include patrolling by squad- and platoon-size forces to detect, locate, and capture or destroy small bands of infiltrators. In effect, patrols are hunter-killer groups with the added advantage of improved communications, detection means, and firepower. Scout dogs add security and additional detection ability to patrol operations.

a. Unit Patrols. Small, highly mobile units moving on foot, animal, or by land, water, or air vehicles patrol during daylight. Populated areas contiguous to the border are searched, and mobile checkpoints are established along known or suspected routes of communications.

(1) Dug-in or concealed ambush sites are manned near the barrier system trace on a random basis. Known friendly indigenous personnel should accompany short-range ambushes near populated areas. Their knowledge of local population and terrain assists in the ambush mission. Targets for indirect fire weapons are plotted and registered to provide rapid on-call fire support. When a specified strike zone is established forward of the sytems trace, ambush sites in the zone are seldom occupied. Detectors and unattended ground sensors are emplaced to warn of intruder approach. When local restrictions preclude establishment of a specified strike zone, ambush sites are manned forward of the barrier trace and intercept forces assist them on call.

(2) When political considerations permit, organic reconnaissance patrols obtain target acquisition data. They may penetrate enemy territory to install unattended ground sensors that report the enemy's presence along infiltration routes. In addition, such patrols observe known infiltration routes and report enemy activities along these routes. They provide early warning of probable infiltration attempts to border security forces. In addition to the acquisition of specific targets, organic reconnaissance patrols may be used to verify or indicate suspected areas so that other types of surveillance or acquisition systems may be employed to obtain information. Missions assigned such patrols are usually confined to specific areas or infiltration routes to provide early warning to a particular area of the border security system.

(3) Indigenous personnel and units are well suited to assist in border security reconnaissance patrols. The local national's knowledge of the terrain, his inherent ability to operate effectively in the remote environment and to speak the language, and his familiarity with the local customs are attributes that assist in performing the mission. When operating in US operational areas, indigenous reconnaissance units should be accompa-

nied by US personnel to provide a link to US command and fire support elements.

b. Extended Combat Patrols. Extended combat patrols are employed in difficult terrain some distance from combat bases but within range of supporting field artillery. Extended combat patrols employ ranger type of tactics and remain committed for extended periods. They may be supplied by air and be equipped to communicate with their combat base and supporting aircraft. The size of such patrols may vary from squad to platoon. They have the mission of making planned searches to locate areas in which infiltrators can rest or regroup. Small infiltrating groups are engaged and destroyed. Large groups are reported to the parent unit and are kept under surveillance; when feasible, they are attacked by field artillery or airpower. The effectiveness of extended combat patrols is increased significantly by augmentation in the form of local civilian or paramilitary guides or trackers.

c. Airborne Infantry Ranger Company.

(1) An airborne infantry ranger (AIR) company is a specially trained military unit organized and equipped for the specific purpose of functioning as an information-gathering agency responsive to the intelligence requirements of the tactical commander. These units consist of specially trained personnel capable of performing reconnaissance, surveillance, and target acquisition within the dispatching unit's area of interest. Normally, a patrol from the AIR company is positioned to maintain surveillance over routes, areas, or specific locations for extended periods, reporting all sightings of enemy activity within the area of observation. AIR companies are organized, equipped, and trained for employment in all types of geographical environments. AIR companies may be employed—

(*a*) To perform reconnaissance and surveillance of specific routes or areas.

(*b*) (To serve as a behind-enemy-lines ground component of target acquisition systems.

(*c*) To perform other appropriate ground information collection functions.

(*d*) To execute combat raids on a limited basis, as required.

(2) Normally AIR companies are assigned to each corps and field army in a theater of operations. Units may be apportioned to division or separate brigade, as required. If the tables of organization and equipment (TOE) companies are not available, provisional AIR company-type units

may be formed within the TOE of the division, armored cavalry regiment, or brigade to provide this capability, when required. The number of provisional patrol units organized in each division or smaller unit is the prerogative of the commander. A patrol should consist of at least one patrol leader, two radio operators, and two observers.

d. Scout Dogs. Scout dogs are normally employed with infantry troops in patrolling and ambush operations. Scout dogs can be useful in detecting and warning the presence of infiltrators. While scout dogs are primarily used at night to offset the effects of darkness on human abilities, they are also used during daylight when terrain and weather conditions limit human visibility.

(1) Scout dogs are best used in sparsely inhabited areas that present few distractions. A scout dog cannot distinguish between friend or foe. If taken off alert through repeated contact with indigenous personnel, the dog soon loses interest in its task. When used at an outpost or listening post, scout dogs are positioned far enough forward of the main outpost line to reduce distractions to the dog, yet close enough to maintain constant contact. Scout dogs have considerably less stamina than soldiers. The dogs can "work" for only a few hours a day and a few days a week.

(2) Combat tracker teams (CTT) can be employed to pursue and find infiltrators who have breached the barrier system. Dogs for this purpose are difficult to procure and train.

(3) Dogs are trained in th same environment as where they are employed. Dogs are trained for specific missions and are utilized only for those missions. If practicable, dogs are procured locally to take advantage of natural acclimatization and immunity inherent in local species. If dogs must be transported into the country, time is allowed for the dogs to adjust to local conditions. Dogs become fatigued and their efficiency becomes degraded after a 6-hour period. Special logistic provisions are necessary to support military dogs. Special food, quarters, and veterinary support are required to insure effective results.

4-14. Intercept Operations

Intercept forces of platoon size are maintained by battalion. A mobile intercept force of company size, capable of rapidly engaging infiltrators or reinforcing friendly forces, is retained at brigade level. Division normally retains mobile forces in

reserve for reaction against large-scale infiltrations. Aggressive action should be taken by intercept forces to establish and maintain contact with infiltrators.

a. The fleeting nature of hostile targets in border security operations demands rapid response by intercept forces. Intercept operations require careful planning, coordination, and reliable communicatons between all elements. When border security outposts locate or detect a force attempting to infiltrate, an intercept force is deployed to find, fix, and destroy the infiltrator. In the ensuing firefight all normal combat means are used to destroy or capture the infiltrators. Intercept forces are equipped with night vision devices; however, they may call for searchlight or flare illumination and they also may call for field artillery and direct aerial fire support. Through planning, rehearsals, and prepositioning they further increase their capability to engage the infiltrating force without endangering friendly forces.

b. Mobility for intercept forces varies in different types of terrain, e.g., in rugged, wooded, mountainous terrain. Intercept time can be reduced by prepositioning forces in areas of likely employment and making advanced preparation of airmobile landing zones, combat roads, and trails. Limiting factors include the means of transportation available and the time and distance involved. Trafficable terrain or good road nets permit the use of tracked and wheeled vehicles in intercept operations. Airmobile forces are effective intercept forces. FM 57–35 provides the staff the additional planning steps necessary for conducting airmobile operations.

c. Air reconnaissance and air surveillance extend the capability of border security units by providing the tracking information to aid in the intercept of infiltrators. Tactical air reconnaissance units can perform all-day and all-night missions of reconnaissance in most weather conditions if the mission warrants their employment.

Section III. RELATED OPERATIONS

4–15. Intelligence Operations

Accurate, detailed, and timely intelligence concerning infiltrator intentions is mandatory for the successful development and execution of plans, policies, and operations for border security. Intelligence doctrine as currently prescribed in appropriate DOD and DA publications and FM 30–31 is adaptable to border security operations. Intelligence must be disseminated expeditiously to those personnel who need it.

a. Collection Requirements. Collection requirements are directly related to the commander's area of interest at each echelon of the border security organization. If time and equipment are available, each commander can obtain the information he needs from within his area of influence. However, he must rely on higher and adjacent commands to conduct intelligence operations in the area of interest outside his influence. Requirements will be correlated at brigade level.

b. Collection Means. After determining the information required, agencies are selected to obtain the information. Requests for information and responses to these requests must be reported with sufficient timeliness to permit maneuver and fire support elements to engage infiltrating targets.

(1) *Target acquisition and surveillance.*

(*a*) In border security operations, enemy infiltrators must be detected and identified in time to stop them from completing their mission. Ground and air surveillance devices are employed to take full advantage of their capabilities. Observation and illumination devices are utilized along the border area to complement the detection capability of unit personnel.

(*b*) Ground reconnaissance, ground surveillance, and target acquisition means are integrated with the use of observation and listening posts and patrols to achieve the best possible coverage of the border area. Observation devices are line of site and their efficiency decreases as density of foliage increases. Weather extremes degrade many sensor devices.

(2) *Special collection activities.* Special collection activities are considered in planning and selecting the resources that can accomplish intelligence collection requirements in border security operations.

(*a*) Local inhabitants are an effective source of information. Current doctrine contained in FM 30–17, FM 30–17A, FM 30–18, FM 30–31, FM 30–31A, and Defense Intelligence Agency Manual (DIAM) 58–11 is valid for border security operations.

(b) The United States Army Security Agency (USASA) may provide unique information in border security operations: USASA support must be considered during the planning stages of intelligence operations and during the selection and tasking of resources available to the collection efforts. USASA missions and functions are contained in AR 10-122; basic doctrine to include types of support, organizations, concept of employment and capabilities and limitations are contained in the FM 32-series.

c. Processing and Dissemination. In border security operations, timeliness of available and requested information is necessary for intercept forces to counter enemy infiltration activities.

d. Coordination. In border security operations, coordination and control of the overall intelligence efforts are accomplished through the S2 element of the brigade TOC assisted by attached military intelligence personnel. Border security operations can be expected to generate sizable numbers of apprehended personnel. Identification and classification of these personnel should be done in coordination with civilian authorities. Political prisoners, especially cadre, are of particular value and, therefore, should not be permitted to avoid detection under the guise of captured or detained military personnel. However, the system for apprehension and evacuation of border crossers should distinguish legitimate refugees or defectors from enemy agents. Provisions will be necessary for identification and preferential treatment of friendly agents.

4-16. Psychological Operations

Psychological operations (PSYOP) are employed in support of border security operations to influence the will of the infiltrator and to retain or win the support of the local people on both sides of the border.

a. PSYOP are employed as an integral part of the overall country plan. The various psychological activities must be in consonance with national political and psychological objectives. Whatever form of PSYOP support is employed, its effects may reach beyond the immediate commander's area of interest, or even beyond the military interest. Coordination is required with higher, lower, and lateral headquarters, as well as with other governmental agencies, to insure that the results of one commander's PSYOP effort neither undo those of others nor contradict other govern-

mental efforts. As in any other military operation, the principles of unity and coordination of effort apply.

b. The means used to accomplish these tasks are discussed in detail in FM 33-1 and FM 33-5.

c. When applied to border security situations, PSYOP have two main targets: the infiltrators and the local populace.

(1) Through PSYOP, the infiltrators must be convinced that the penetration of the border involves a greater risk than they are willing to take and that even if successful in getting through the initial border security system, they will be opposed not only by military forces but also by the local population. Apprehension and fear on the part of infiltrators can be induced early, by addressing PSYOP to the infiltrators while they are in training or en route. Citing the fate of earlier infiltrators is an effective means of reducing morale. When discovered or encircled, the infiltrators should be subjected to psychological appeals seeking to cause surrender, defection, or abandonment of mission. Such appeals, which provide an alternative to death and disgrace, can often contribute toward economizing combat effort and saving lives of friendly forces and local population.

(2) Through consolidation PSYOP, the friendly population might be convinced that it is to their advantage to assist the military forces in stopping the infiltration and in detecting and reporting any infiltrators who happen to breach the system. In the operational area, the psychological objective with regard to the population is the retention of their loyalty to the national and local governments, cooperation with friendly forces, and complete denial of any public support to the infiltrators. Contact and communication between government agencies and the population on a frequent and continuing basis and demonstrating sincere concern for the welfare of the population are essential to the operation. The key to survival of infiltrators is the local population. Without their support, the infiltrators have difficulty in accomplishing their mission. All efforts should be concentrated on denying the infiltrators contact with the population which could be expanded into a safe haven, operating base, or pretense of popular support.

4-17. Populace and Resources Control

a. Members of underground and guerrilla organizations and other disaffected elements cannot exist without support, voluntary or forced, from

the local population. Commanders charged with border security missions must take every practicable action to prevent or minimize support from the population and to prevent supplies from reaching subversives, insurgents, and their sympathizers. Counterintelligence units, through the G2, advise the commander on intelligence assets available to assist him in planning for populace and resources control. FM 30–17 and FM 31–23 contain additional information on populace control.

b. Documentation is one of the most widespread and effective measures for population control. In effect, this means that all the friendly population must have identification cards readily available to show on demand. Documents for identification, control of people, equipment and food items are effective and appear to be in common use in most areas of the world. A thorough documentation system based on the system in being, with appropriate modifications, is an effective populace control measure. However, since documentation is easily reproduced, care must be exercised to insure authenticity.

c. Coupled with documentation controls is the use of search and clear operations in the form of raids, roadblocks, border and port checkpoints, and other similar activities.

d. Indigenous police and military personnel or local individuals in positions of influence should perform the police and detention function to the maximum.

e. Civil affairs units maintain close and continuing liaison with civil authorities, supervise execution of the commander's portion of the population and resources plan, and coordinate with military police and PSYOP elements to insure adequate support of this program.

f. Coordination of the populace and resources control operations with the PSYOP effort must be effected to achieve the desired results.

g. Military police, civil affairs, PSYOP, and counterintelligence units are the key support elements in populace and resources control. Those unit commanders affected should submit plans to the G3, through their respective staff supervisor, for integration into the overall plan.

4–18. United States Advised Indigenous Force Missions

a. Indigenous forces that may be organized,

trained, assisted, and advised by US Army personnel can conduct border security operations. These forces are suited for operations in remote areas. They may be particularly effective in performing surveillance missions in rugged jungle and mountainous terrain and in establishing local strongpoints. Such forces should have an intimate knowledge of the area of operations and people, which makes it difficult for an outsider to infiltrate and merge into the population.

b. Trained indigenous forces can operate an extensive network of surveillance posts and trail watches. They can also conduct intensive patrolling activities to detect, ambush, capture, and destroy small groups of infiltrators. Agents and informers are employed to detect infiltrators who have successfully penetrated the border security system and have merged with the population. Substantial rewards are established for either identifying an infiltrator or providing information leading to his capture. Rewards are also established to induce the infiltrator to turn himself in. The local commander must know the procedures for providing the reward payments on a timely basis.

c. Special operations personnel of the US Air Force and Navy sea-air-land teams (SEAL) also train indigenous forces to participate in border control operations. These indigenous forces conduct operations similar to their US Air Force and US Navy counterpart organizations, which normally advise them.

4–19. Base Area Security

Intercept forces, fire support elements, and off-duty personnel are housed in strongpoint compounds within fire support range of the border. These compounds are company-size or larger. Their proximity to the border makes them vulnerable to hit-and-run type of attack by infiltrators and incountry insurgent forces. Current doctrine for rear area protection and base defense can be found in FM 31–85 and FM 31–81 (Test).

a. In addition to attempting to destroy the base area, enemy attacks may harass or divert attention from a covert infiltration attempt.

b. To reduce or alleviate the vulnerability of base camps, many of the same detection, delay, and destruction items are employed that are used on the systems trace. Early warning is essential and all means, including guards, and counterintelligence measures are employed. Intercept forces are capable of engaging this type of infiltrator.

CHAPTER 5

COMBAT SUPPORT

Section I. INTRODUCTION

Although support requirements for border security operations are generally less than those for sustained combat, rapid response is essential. Units are widely dispersed and environmental restrictions often preclude mutual reinforcement. This chapter provides a discussion of the fire support and the combat support units and functions that can be used to support a border security system.

5–1. Fire Support

Field artillery and mortar fire support provides responsive reaction to the infiltration threat in minimum time. As probes by infiltrators show a need for reinforcement of the barrier system, antipersonnel mines may be rapidly emplaced by field artillery. Organic attack helicopters provide direct aerial fires for engaging infiltrators or in support of intercept forces. Tactical fighter air support, because of its slower reaction time, is more effective in support of intercept forces engaging large-size infiltration units. When permissible, close air support (CAS) is effective in neutralizing enemy efforts to harass forces engaged in installing the border system.

5–2. Combat Support

Army aviaton, engineer, signal, chemical, intelligence, military police, and civil affairs units are essential for support of border security operations.

a. Army aviation provides direct aerial fire support, mobility for airmobile operations, field artillery positioning capability for remote untrafficable areas, and resupply capability for inaccessible

positions in addition to providing aerial platforms for visual observation and sensory devices.

b. Engineer units provide support in areas such as survey and mapping, border marking, unattended ground sensor emplacement, assistance in clearing, mines and boobytraps, land clearing, and construction. Priorities of effort must be established initially because engineer support may be inadequate to meet all requirements.

c. Signal support is required to establish a communications system and to supervise installation and maintenance of electronic sensory and monitoring equipment. Dependable communications are essential for border security operations.

d. Chemical support in the form of herbicides, riot control agents, smoke, and flame improves the overall effectiveness of the border security system.

e. Army intelligence support provides information on the enemy, targeting, and local environment including weather, terrain, and population. Air and ground reconnaissance and surveillance are coordinated by the unit intelligence officer at each echelon. Counterintelligence and security operations are a continuing requirement.

f. Military police units support border security operations by performing conventional police functions in cooperation with counterpart host military, paramilitary, and civilian police units.

g. Civil affairs units support border security operations by coordinating civil affairs activities and providing other support for internal defense and development. The G5/S5 plans, coordinates, and supervises consolidated psychological operations in support of the border security mission.

Section II. FIRE SUPPORT

5–3. General

Responsive rapid fire support is required for bor-

der security operations. A possible hindrance is the limited ability to mass fires when direct sup-

port fire units are widely dispersed and control may be decentralized. Although normal fire support procedures will be followed when feasible, the requirements to cover comparatively wide frontages makes massing of fires difficult under most circumstances. However, CAS aircraft and general support field artillery units can augment the fires of direct support field artillery units enabling both massing and mutual support.

5–4. Rules of Engagement

The requirement to defeat infiltration forces with minimum risk to lives and property of friendly personnel necessitates a thorough understanding of the rules of engagement established by higher headquarters. Different types of fire support must be available. Fire support in populated areas is applied only when the infiltrator's position has been positively located and the risk to civilians is minimal. A specified strike zone between the border and the systems trace represents an ideal situation. Acquired targets of detected infiltrators should be attacked as rapidly as possible by a large volume of surprise fire to increase effective-

ness and by means designed to minimize damage (e.g., airbursts) to the detection and delay system.

5–5. Field Artillery Support

To permit units to cover wide border frontages, field artillery may be dispersed by batteries. Figure 5–1 shows a disposition of a field artillery battalion (105-mm) with augmenting fires from two batteries of 155-mm howitzer in support of an infantry brigade across a 34-kilometer border segment. To support an infantry division deployed along a 100-kilometer border segment, the division field artillery's 105-mm resources would be employed for all three brigades in a similar manner. The division artillery's 155-mm/8-inch battalion (three 155-mm batteries and one 8-inch battery) would be used in support of the three brigades. This represents an upper limit of a division's capability and would be feasible only in favorable terrain with the best achievable target acquisition means. Although figure 5–1 depicts coverage across an international border, national policy will be the deciding factor in regard to employment of firepower and units into other than the domestic or host country (HC).
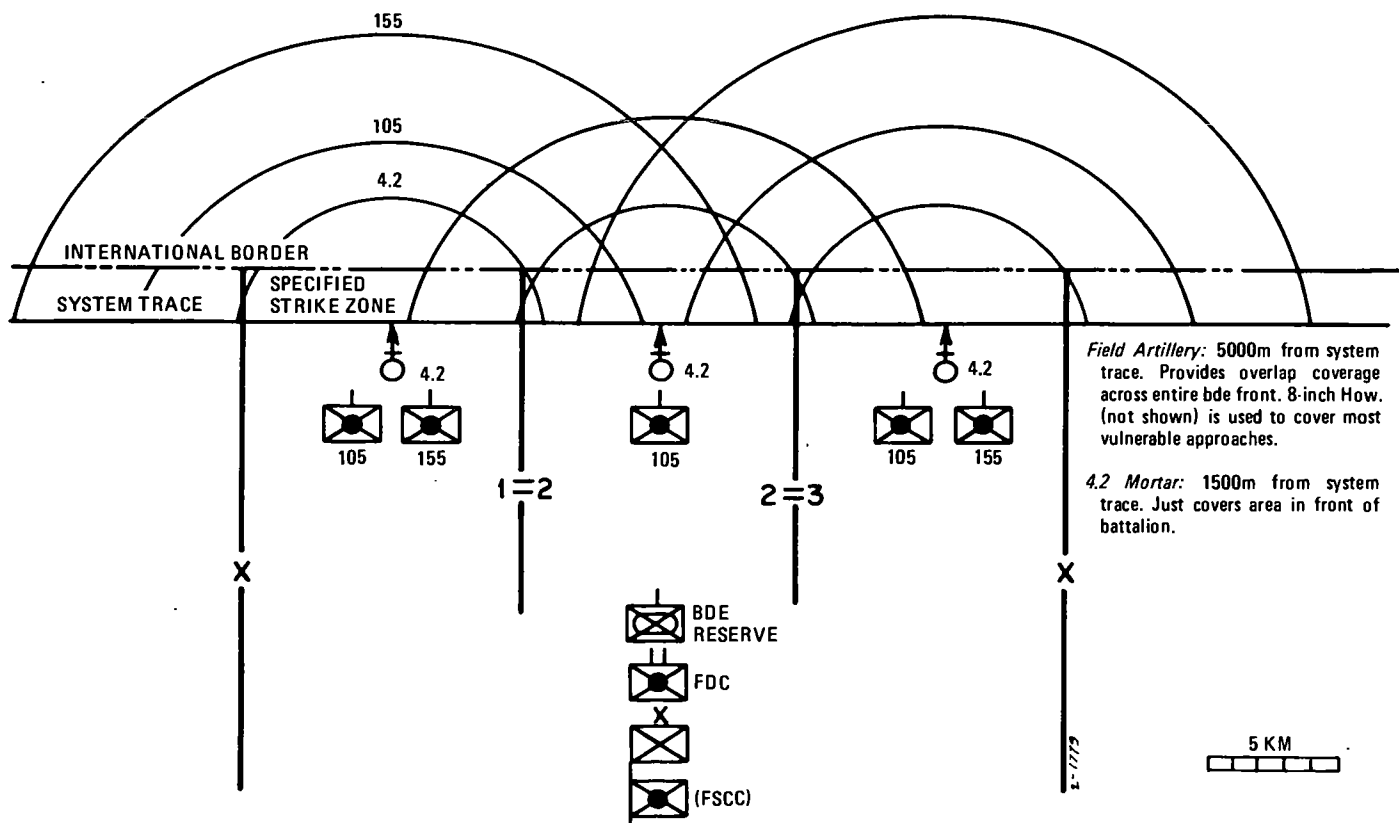
Figure 5–1. Coverage of indirect fire weapons for a brigade employed on a 34-kilometer frontage under medium terrain conditions.

a. Fire missions are normally called to the field artillery battalion fire direction center (FDC). Should separation by terrain, communications, or other considerations demand, batteries can operate and conduct fires using their own FDC. However, separate battery operations may require augmentation personnel from battalion or other field artillery units of the division not involved in the direct support role.

b. Despite the obvious advantages of continually occupying the same firing position, field artillery positions probably should be varied. The use of alternate firing positions and the temporary splitting of batteries extend coverage and reduce the probability of attack on artillery positions. In most cases, however, it is better to harden the position and remain in place.

c. To cover the most likely avenues of infiltration, field artillery batteries may reinforce batteries from nearby positions and permit not only massing of fires but reduction of communications and construction requirements. Field artillery batteries may collocate with other tactical units to reduce overall physical security requirements.

d. Improved target acquisition and surveillance capabilities increase the effectiveness of field artillery fires. Once a target is acquired, a relatively large volume of surprise fire is delivered to achieve high casualties. The rounds expended in large volumes of fire against acquired targets are compensated by a reduced requirement for planned harassment and interdiction (H&I) fires. However, H&I fires employed intermittently in specified strike zones complement the security measures employed during all phases of the border security system installation. Fire missions normally will be conducted only against detected and identified infiltrators.

e. Initially, field artillery is highly dependent on radio communications. As early as possible, a buried wire communication system is established to provide redundancy of communication means and to provide an additional degree of communications security.

f. Close liaison and maximum cooperation are required between field artillery battery supporting an infantry battalion, the 4.2-inch mortar platoon organic to the infantry battalion, and attack helicopters. All indirect fire and Army direct aerial fires in support of the infantry battalion fire plan will be under centralized control of a designated agency fire support coordination centers (FDC or

(FSCC)). The infantry battalion commander may find that placing the mortar platoon under operational control of its supporting field artillery battery is desirable.

g. Observation posts equipped with radars or night vision devices are habitually manned by an observer who can call for fire. Other observation posts containing unattended ground sensor readout equipment will be manned with forward observers or with personnel trained and equipped to call for fires. Observers must be able to evaluate intelligently the meaning of detection indications of sensor readouts. A combination of air and ground observers is used when possible. Some personnel augmentation or additional training may be required to provide the quantity and quality of observers needed.

h. In the initial phase, accurate survey is of primary importance to tie in the sensor locations with the indirect fire weapon positions. The distance between fire units increases the survey load, and division field artillery may have to pool all its survey resources and establish priority tasks.

i. Border illumination with either white light or infrared light is available for use in border security systems. The use of illumination in any given situation requires close control and coordination. Before deciding on its use, the commander must carefully evaluate the advantages and disadvantages. Commanders retain the authority to initiate the use of white light but they may delegate it directly to field artillery/mortar forward observers who normally will be able to direct and control illumination. Requests from other sources are referred to the unit commander for decision. A scheduled but random use of illumination capabilities along an entire sector may prove a beneficial means of surprising and observing infiltrators.

j. Medium and heavy field artillery assigned to higher headquarters may be allocated to division elements based on priorities and need. The utilization of force field artillery in the border security role will be determined by the division commander. In some cases, the heavier calibers of field artillery will be deployed in a manner to provide maximum cover of conventional avenues of approach. This normally will be the case when the enemy has a known capability of launching a sizable attack. In other cases, force field artillery may be deployed to cover potential access routes of infiltrators. Historically, these access routes are considerably different from normal avenues of ap-

proach in that the infiltrator purposely uses difficult routes across steep escarpments, jungles, and even previously mined areas. When elements of force field artillery are allocated, they are organized for combat in the same manner as division field artillery elements; 8-inch howitzer battalions and 175-mm gun battalions may be dispersed by battery-size units; and fires will be controlled by a specified FDC.

5–6. Naval Gunfire Support

a. General. Naval gunfire supporting border security operations has limited range inland. Destroyers or smaller inshore fire support ships may provide support from the principal rivers when navigational conditions permit. Border security operations do not alter naval gunfire procedures and operations, but they do require maximum liaison and control measures.

b. Organization. The duties of naval gunfire personnel are essentially the same at all levels but vary in extent and complexity. These duties include planning, providing information regarding gunfire support limitations and capabilities, coordinating with other supporting arms, and supervising naval gunfire support. A naval gunfire officer serves as a member of the fire support element at the division level and FSCC at brigade level when naval gunfire is used in direct support of border security operations.

c. Observation and Communications. Naval gunfire can be observed by shore fire control parties (SFCP) provided to each battalion within range or by artillery observers. The direct support ship may have a radio set capable of entering the field artillery fire direction net. If not, the fire request is transmitted to the direct support ship via the naval gunfire liaison officer (NGLO) at the brigade headquarters. When aircraft are not available to the naval spotting team, arrangements are made so that the artillery observer can adjust naval gunfire.

d. Coordination. FSCC (fire support element (FSE)) coordinate fire support activities at each level, as appropriate, and in accordance with current doctrine.

5–7. Close Air Support

a. General. CAS coordination for units conducting border security operations is in accordance with current doctrine. It may be provided by Army, Air Force, Navy, or Marine Corps air

units, and does include direct aerial fires that are delivered by Army aircraft close to friendly forces by attack helicopters, light observation helicopters, and door gunners on troop-carrying helicopters.

b. Types of Missions. Initially, CAS other than provided by direct aerial fire is utilized to support outpost security elements who have the mission of neutralizing enemy efforts to attack or harass forces engaged in installing the border security system. As large targets are detected, CAS provided by tactical fighter aircraft in support of infantry intercept operations is effective. Tactical fighter aircraft are not profitably employed against small fleeting groups of infiltrators. Where target acquisition is possible, direct aerial fires can effectively support border security operations. Attack helicopters are ideally suited for destroy missions. Their effectiveness is good if the attack is accomplished immediately after detection without loss of contact. When used in conjunction with reaction forces, direct aerial fire support must be immediately responsive or the target must be easily identifiable on the ground to achieve maximum effectiveness. Direct aerial fire is most effective against small area or point targets and in proximity to friendly troops.

c. Limitations. The major limitation to tactical fighter air support is the response time necessary for reaction. Normal reaction times are of the order of 30 minutes. Generally, their effectiveness is low following 10 minutes after detection of the target. The infrequency of acts of infiltration precludes employing airborne alert. Even strip alert reaction times are too long unless the infiltrating force is initially fixed by an infantry intercept force. Additionally, infiltration attempts are more likely during periods of darkness and inclement weather. These are periods when CAS is least effective. In areas of rugged terrain and dense foliage direct aerial fire support capabilities may be limited.

5–8. Fire Support Coordination

a. Current doctrine covering techniques and procedures for planning and coordinating fire support (FM 6–20–2) is valid for border security operations. Additional coordination and planning are required when the forces of two or more countries are involved.

b. At company level, the company commander coordinates his own fire support and integrates

available fire support into his border security plan. In addition to organic weapons, the company commander may have support from the battalion heavy mortar platoon, field artillery, direct aerial fires, tactical fighter air, and naval gunfire. The company commander is assisted by forward observers from the direct support field artillery battalion and the battalion heavy mortar platoon. When tactical fighter air support or naval gunfire support is available, a forward air controller (FAC) and the naval gunfire spotter will assist the commander.

c. The field artillery battalion headquarters establishes an FDC in the normal manner. Each FDC can control the fires of three to five field artillery batteries. In the border security role, an FDC may control more than one caliber of weapons simultaneously.

d. At battalion level fire support is coordinated in the FSCC. Key personnel involved in operating

the FSCC are the assistant fire support coordinator (FSCOORD), who is the liaison officer from the field artillery battalion in direct support of the brigade, a representative of the battalion heavy mortar platoon, and the S3 air. A tactical air control party (TACP) with an air liaison officer and an FAC, an SFCP with an NGLO, and a naval gunfire spotter (if naval gunfire support is provided). Host country and third country liaison officers are also provided, when appropriate.

e. At brigade level, fire support is coordinated in th FSCC at or near the brigade command post. The field artillery battalion commander either attached to or in direct support of the brigade is the FSCOORD. Key personnel who normally operate the FSCC are the liaison officer from the direct support field artillery battalion, the brigade assistant S3 air, the brigade chemical officer, air liaison officer (ALO) from the TACP, NGLO from the SFCP, and HC and third country liaison officers.

Section III. ARMY AVIATION

5–9. Airmobile Operations

a. Airmobile operations conducted in support of border security operations generally follow the doctrine in FM 7–20 and FM 57–35. Airmobile operations are used to commit intercept or blocking forces and for reconnaissance and detection.

b. Planning for airmobile operations in support of border security operations follows the same general concepts and sequence as in other types of operations. Standing operating procedures (SOP) are prepared to provide for rapid execution of these plans.

c. Attack helicopters are employed to cover airmobile operations in hostile areas.

5–10. Field Artillery Positioning

Field artillery is frequently positioned or repositioned by helicopter. In many cases, this may be the only way to displace field artillery or provide logistic support.

5–11. Logistic Support

Border security troops may be in remote areas in which air delivery may be the only way to resupply them.

Section IV. ENGINEER

5–12. General

The engineer requirements in support of border security systems do not require any changes in principles, but do require additional effort. Engineer operations are coordinated by the respective force staff engineer officer. Elements of the divisional engineer battalion are placed in direct support or are attached to a brigade of the division. Division engineer elements are generally deployed in support of surveillance, security, and maneuver forces during and following development of border security positions. General engineer support missions can be found in FM 5–1; however, spe-

cific support for border security operations is discussed below.

5–13. Survey and Mapping

When maps are inadequate, photographic coverage of the border area is requested to provide immediate operational requirements. Mapping efforts will be initiated concurrently. Surveying will be needed as soon as general trace location is determined with the aid of air photographs. Surveys will be in four categories—

a. To establish the exact trace.

b. To locate obstacles.

c. To locate the exact positions of observation posts (OP) and emplaced unattended ground sensors.

d. To provide control for mapping.

Existence of adequate maps and/or control points near the border will reduce the effort in both surveying and mapping; however, large-scale plotting of obstacles, unattended ground sensors, and radar fans will still be required.

5–14. Land Clearing

Divisional engineer elements or specialized engineer land-clearing units may be employed during the initial move into the area to level dense vegetation which may serve as potential sanctuaries for infiltrators. Removal of selected vegetation within the surveillance zone will greatly assist the mutually supporting outpost of the HC's forces in their detection mission.

5–15. Construction

Temporary intercept force positions and OP's will require improvement to provide for extended operational requirements once the system reaches the initial configuration to provide a minimum degree of security. Further improvements will be made in the form of more extensive obstacles and towers to extend line of site and improve equipment effectiveness. OP with better environmental control such as lights and heating, strengthened cantonment areas, and hardened field artillery positions are also needed. As emplaced unattended ground sensors are added for improved detection, added construction support will be needed to bury sensors and wires. Roads and heliports, as well as base improvement, will be needed for long-duration operations. Defensive positions for support facilities will be required for security. Assistance for the various construction activities will be provided by the using unit and, in some cases, signal construction units.

Section V. COMMUNICATIONS

5–16. General

The communication requirements of a border security system do not require changes in principles of communication. The materiel on hand is adequate for the installation and maintenance of communications for all combat and combat service functions. Special equipment for installing the communications linkup with unattended ground sensors and other devices is included with the basic item; however, additional wire/cable may be necessary to support the permanent installation of line sensors.

a. Initially, the primary communication means is radio. As soon as possible, wire communications are installed to provide redundancy. At this time, wire becomes the primary communication means by decreasing the vunerability of the system to enemy electronics warfare (EW) efforts.

b. The requirement to disperse elements across greater frontages may necessitate more equipment, especially when rugged terrain makes installation of relay stations necessary.

c. Annuciators, monitoring sets for radio frequency (RF) sensors and other communications, and unattended ground sensors related electronic equipment must be specifically requested; they are generally not a basic issue item for an unattended ground sensor.

d. The added emphasis on intelligence activities may require additional wire lines to indigenous forces or local police forces to insure timeliness of reporting.

5–17. The Division

The division communications system described in FM 61–24 will be modified, as necessary, to support the deployment of units. Signal priorities of effort must be assigned to specific units to permit the concurrent accomplishment of both routine and specialized tasks. A high degree of coordination is required between the allocation of engineer and signal effort in support of border security infantry and field artillery battalions. For additional information on the infantry and field artillery battalions, see FM 7–20 and FM 6–10 respectively.

5–18. The Brigade

A typical radio net for an infantry brigade is shown in figure 5–2. Both immediate and long-term efforts are made to reduce the dependence of the brigade on radio by installing wire nets. Highest priority for wire nets, however, is accorded to battalions and companies assigned forward areas. Those tasks requiring specialized technical knowledge, such as connecting sensors with their associated readout devices, will require support from

especially qualified technical personnel. While the area signal center is responsible for laying wire and generally establishing communications to the brigade, the tasks are accomplished more efficiently through joint effort. For additional details, see FM 7–30.

5–19. Infantry Battalions

The infantry battalion establishes both wire and radio communication nets. This installation is within the capabilities of the battalion with organic resources.

5–20. Field Artillery Battalion

The field artillery battalion establishes both radio and wire communication nets. When possible, the wire communications should be buried to provide some degree of security and protection from phys-

ical damage. Digital computers or other computerized inputs are utilized when available. The dispersion of field artillery by battery-size units may require additional equipment and installation time.

5–21. Infantry Company

A typical infantry company wire communication net is shown in figure 5–3. The company installs this net but may require assistance to install and connect unattended ground sensors and their readout devices. Companies depend on radio initially, but place a primary effort on establishing buried wire communications as soon as feasible. See FM 7–10 for additional details.

5–22. Close Air Support

The normal CAS communication net is adequate. When the use of CAS is infeasible or unprofitable
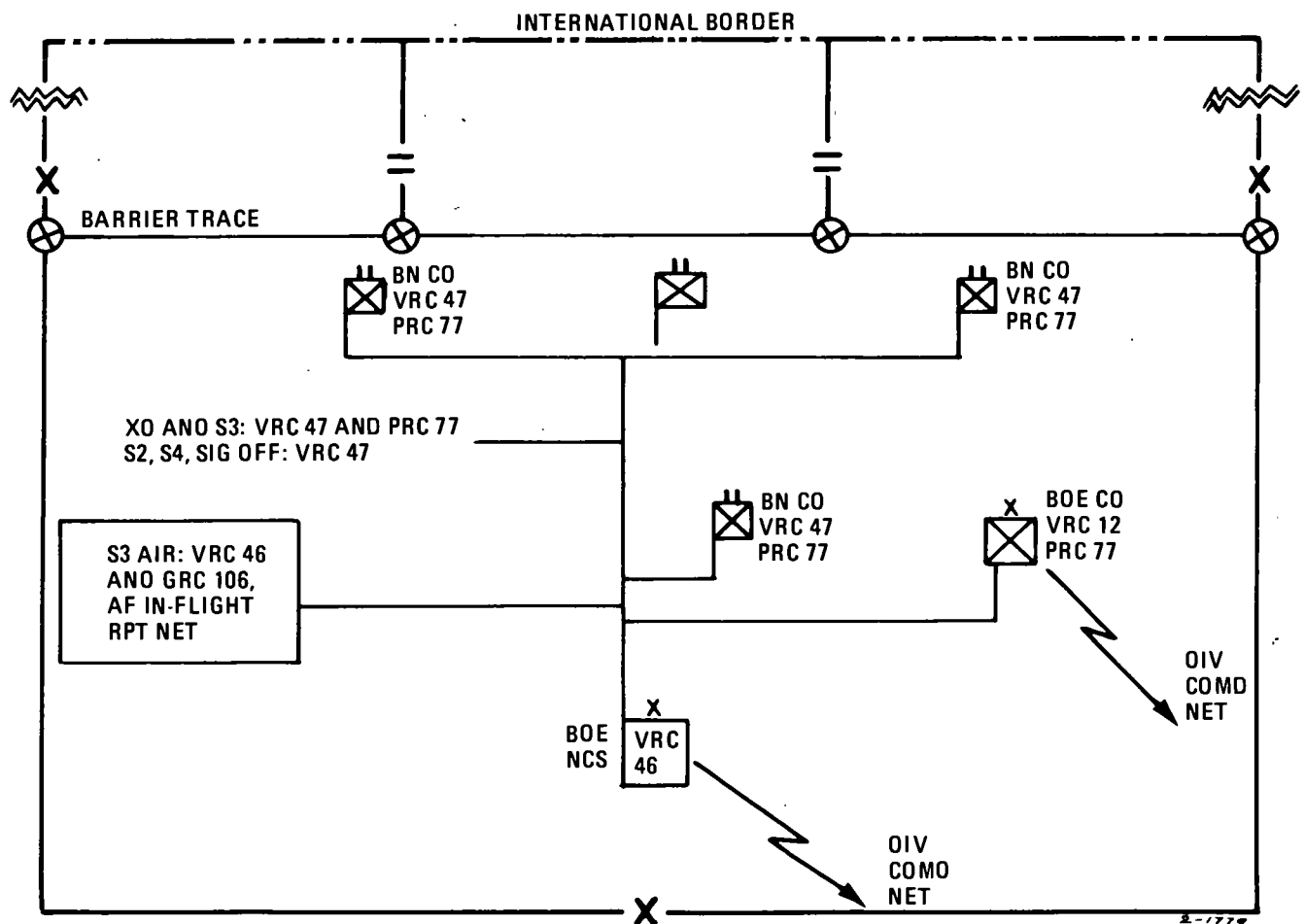
Figure 5–2. Type of radio command net for infantry brigade manning border system.

Figure 5-3. Type of wire system for rifle company manning border system.
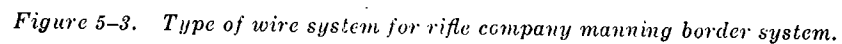
because of political or geographical constraints, FAC may be diverted to other units.

5–23. Indirect Fire Support

Normal indirect-fire support nets are adequate. When feasible, infantry 4.2-inch mortars are integrated into the net and used in the same manner as other fire support means.

5–24. Communications Security

Presumably the infiltrating enemy forces will attempt to intercept and analyze friendly communications associated with border security. Information derived from such intercept and analysis can enable the enemy to adapt his infiltration plan to take advantage of border security weaknesses. If the enemy is at all sophisticated, he can use the data base provided by intercepted communications to conduct jamming the deception in support of the infiltration attempt. Therefore, communications security (COMSEC) principles and procedures must be adhered to rigidly and operators must be trained thoroughly in electronic counter-countermeasures (ECCM). Details on COMSEC are contained in FM 32–5. FM 24–18 and FM 32–20 also contain ECCM information.

Section VI. CHEMICAL

5–25. General

Chemical support may be used very effectively in border security/anti-infiltration operations, but the rules of engagement should specify, in detail, the circumstances under which each type of chemical support is authorized. Especially important are statements as to the authority to use herbicides and flame weapons because the use of these items may have political significance.

5–26. Riot-Control Agents

a. Riot-control agents are used in various operations where the enemy lacks adequate eye and respiratory system protection. Riot-control munitions are a supplementary form of firepower and, to be effective, they require fire and maneuver support.

b. The protective mask protects the face, eyes, and respiratory tract of the wearer from field concentrations of riot-control agents. However, in a warm, humid atmosphere, riot-control agent CS collected on the skin and mixed with perspiration can become harassing.

c. Confusion and irritation of the respiratory tract, eyes and skin resulting from the use of riot-control agents against an unprotected enemy enhances the chance to neutralize and capture him.

d. Command responsive burning type of riot-control munitions offers an effective method for delaying infiltrators or exfiltrators. Such munitions are pre-emplaced and activated in segments as needed. Rules governing emplacement are determined by restrictions imposed by preventing the agent cloud from drifting across the border and fires caused by the burning-type munitions employed around flammable materials.

e. Riot-control grenades and man-pack munitions give close-in support to strongpoints and lend offensive support to intercept forces. The behavior of the agent cloud depends on the composition of the cloud, the method of release, and climatic conditions. These variables require friendly troops to have protective mask readily available.

f. CS–2 has persistency and extremely good secondary aerosolization characteristics, which make it suitable for use in barriers. When employed in parallel with a physical barrier, the effectiveness of both the CS–2 and the physical barrier is increased. The physical barrier delays the intruder long enough for the CS–2 to become effective. The CS–2, in turn, makes the physical barrier more difficult to breach, and thus extends the time for detection and neutralization of the infiltrator.

g. A CS–2 barrier will complement surveillance efforts. Depending on the concentration and extent of coverage, CS–2 will restrict the use of terrain or delay unprotected infiltrators through its irritating effect on the eyes, skin, and respiratory tract. All these enhance detection effects.

5–27. Smoke

a. Screening smoke can be used to mask enemy observation while key components of a border security system are being emplaced.

b. Smoke can give intercept forces valuable concealment in moving through potential ambush areas. When smoke is used, care must be taken not to mask friendly capabilities for observation.

c. Colored smoke grenades or combinations

thereof are used as signaling and marking devices.

d. Boobytrapped smoke grenades are used as field-expedient detection devices.

e. All plans for operational use of smoke must consider whether observation and surveillance capabilities will be degraded by their use.

5–28. Flame

Flame mines and field-expedient flame devices are integrated into a border security system. Flame weapons should not be used in forested or dry vegetation areas if fires would present a hazard to friendly forces.

5–29. Defoliation and Soil Sterilization Operations

a. Herbicides enhance border security observation by drying foliage, stimulating or inhibiting growth, or by damaging or killing plants and vegetation. Effects on plants can range from causing leaves to fall from some plants, to shrivel on some and, to remain on others. Herbicides offer the least costly means for broadleaf vegetation control. Defoliation effects are often delayed and leaf-fall may not occur for 4 to 6 weeks. If a barren zone is required, soil sterilants provide the most efficient method for long-term denial of growth. The use of soil sterilants is politically sensitive and requires special clearance.

b. USAF cargo aircraft with spray tanks give the capability for covering long narrow zones, which is desirable for border security operations. The air-delivery system disseminates the agent most efficiently, covers large areas in minimum time, and is the preferred method of application. For small-scale applications, such as clearing around installations field artillery positions, minefields, or clearing fields of fire, helicopter-mounted disseminators or manual applications are employed. Helicopters provide good maneuverability to cover small irregular areas. Local restrictions may prevent the use of aircraft in border security spray operations. Therefore, manual application is required with a longer period required for application.

c. When considering effectiveness of defoliation operations, the planner must consider such factors as growth stages of vegetation, type of vegetation in the target area, herbicide selected for use, and the rate of application. Other factors that may impact on the use of the herbicides are the meteorological conditions, and proximity to cultivated areas. He also considers the conventional factors of availability of manpower and equipment. The execution of the mission must follow the plan guidelines.

d. Soil sterilants may be applied to cleared areas for vegetation control and at an increased application rate to areas where plants are growing. Best results are obtained when areas are cleared of undergrowth before the application. Soil sterilization operations require large quantities of chemicals, and costs are high. Water is required to carry the active ingredient to the plant root zone. Unless water is supplied artificially, the use of soil sterilants is restricted to periods when rains occur frequently. Heavy rains, on the other hand, degrade the effects by washing the chemical out of the area or concentrating it in depressions inside the area. Use of soil sterilants is not covered by the same political arrangements supporting defoliation operations. Separate political agreements must be negotiated for soil sterilant operations.

e. Crop plants are extremely sensitive to small quantities of defoliant or soil sterilant chemicals. Kill or reduction in productivity can result from spray drift, leaking equipment, or runoff with surface water. Consequently, a rapid system for damage payments must be established if the support of the local populace is to be maintained.

f. The enemy can be expected to exploit the use of defoliation and soil sterilization operations by charging use of gas warfare, thus seeking to discredit friendly forces in the eyes of the local population and the world. Any defoliation and soil sterilization operation must be accompanied by a psychological and informational effort to explain the reason for the operations and the immediate and long-term effects on human, animal, and plant life.

Section VII. INTELLIGENCE

5–30. General

a. Accurate, detailed, and timely intelligence is required for the successful development and execution of plans, policies, and operations for border security. Since intelligence operations are conducted to produce that intelligence necessary to

insure the accomplishment of the mission, requirements should be mission-oriented, and the information should be obtained, analyzed, and interpreted for its significance in relation to border security. In border security operations, intelligence planning and operations not only must be concerned with gathering information, but, of greater importance, must be concerned with insuring that intelligence derived from this information is expeditiously disseminated to those having the most urgent need and in a position to take necessary and immediate action or counteraction.

b. The general doctrine, methods, and procedures for collecting, processing, and disseminating intelligence are covered in FM 30–5 and other specialized field manuals in the 30- and 32-series. The procedures discussed in these manuals may be applied to border security operations.

5–31. Intelligence Planning

A requisite for intelligence planning in border security operations is a determination of the activities that the insurgent has the capability of conducting concurrently. While intelligence efforts are directed primarily toward direct infiltration activity, efforts should also be directed at insurgent actions that may appear indirectly such as economic interference, civil disturbance, or outright violence along border regions. This information may be obtained through effective counterintelligence measures.

5–32. Collection Requirements

Collection requirements are directly related to the area of interest of the commander at each echelon of the border security organization. The commander must rely on higher and adjacent commands to conduct intelligence operations in that portion of his area of interest that is outside his area of influence. In border security operations, it is the ability to detect or acquire infiltrating groups that largely determines the area of influence. Since border security operations are conducted on or near national or political boundaries, the existence of the border itself may limit the forward area of operations. This is influenced by the existing political relations and attitudes between the HC and neighboring nations.

5–33. Collection Means

a. General. The collection effort must insure that the commander is provided with sufficient

timely and usable information to permit the appropriate response to enemy infiltration activities. To assist in achieving the required timeliness, provisions must be made to integrate information from all available sources at the lowest echelon possible. At the same time, care must be exercised to prevent false confirmation of intelligence by having it input at two different levels.

b. Reconnaissance and Surveillance.

(1) Combat surveillance is a principal means by which enemy infiltration activities are detected. It encompasses all ground and air techniques of accomplishing a continuous (all-weather, day and night) systematic watch over the border area to provide timely information on which the commander may base decisions.

(2) In border security operations, reconnaissance is a mission undertaken to obtain information by visual observation or other detection methods concerning enemy infiltration activities; or to secure data concerning the meteorological, hydrographic, or geographic characteristics of a particular border area. All border units have reconnaissance capabilities and responsibilities. During border security operations in which the border cannot be violated, two air reconnaissance sensors have particular application. Side looking airborne radar (SLAR) can be flown contiguous to the border and observe up to 90 kilometers across the border. This reconnaissance system will detect most moving targets unless the radar beam is masked by hills or heavy foliage. It is an excellent method for relatively open terrain, roads, or waterways. A near realtime readout of the imagery can be obtained by positioning a ground sensor terminal with the ground forces. By multiple flights along the border, infiltration vehicles can be tracked and early warning can be obtained. Another air surveillance sensor that can be used for cross border operations is oblique photography. Again, the opposite side of the border actually could be photographed without actually violating another country's airspace. From these photographs, qualified imagery interpreters can determine routes leading to the border, any transshipment points along the border, changes in routes being used, and actual crossing points.

c. Target Acquisition.

(1) Target acquisition involves the detection, location, and identification of infiltrating ground targets in sufficient detail to permit timely and

effective engagement. In border security operations, target acquisition encompasses the frontier terrain of an entire country with attendant problems of seacoasts, illegal water traffic, and fixing ill-defined international boundaries. While all acquisition means are considered for the collection effort, better results are achieved by placing major reliance on those means that extend the acquisition capability beyond the normal line-of-site limitations.

(2) Centralized coordination and control of all collection means is required to insure effective and efficient employment, to permit flexibility, and to provide ready access to all knowledge that may exist in the intelligence network.

d. Special Collection Activities.

(1) In addition to the collection means previously discussed, special collection means are a necessary source of information in border security operations. Current doctrine contained in FM 30–17, FM 30–17A, FM 30–18, FM 30–31, FM 30–31A, and Defense Intelligence Agency Manual 58–11 is considered valid for border security operations.

(2) Counterintelligence special operations (FM 30–17A) aimed primarily at detecting, identifying, exposing, and eventually neutralizing or destroying the insurgent infrastructure—particularly those organizations engaged in intelligence collection and subversive activities—play a significant role in border security operations. Without this infrastructure, control and coordination necessary for guiding insurgent activities (to include infiltration of personnel and material) would be sorely lacking and eventually would result in defeat of the insurgent movement.

(3) The United States Army Security Agency (USASA) can provide support in border security mission. USASA capabilities must be considered when intelligence planning is initiated. All information available to the intelligence officer must be available to the supporting signal intelligence resources to assist them in satisfying tasking requirements. Signal intelligence essential elements of information (EEI) should be specific and oriented to fill gaps in the intelligence picture. Further details concerning basic doctrine, organization, employment, capabilities, and limitations are contained in AR 10–122 and the FM 32-series.

Section VIII. MILITARY POLICE

5–34. General

Military police support border security operations in two broad aspects:

a. Military police support HC civil, paramilitary, and military police through participation in security, and intelligence operations, populace and resources controls, and advisory assistance programs that organize, train, and equip HC police forces. Because of the sensitive nature associated with these functions, assistance is normally provided in an advisory role to the local civil, paramilitary, and military police authorities, particularly where civil and paramilitary authorities have primary responsibility for conducting border security operations.

b. Military police provide direct support for border security operations. Their specialized training and skills are utilized in the following functional areas:

(1) Route security, convoy escort, and traffic control on land and inland water routes.

(2) Physical security for key installations and selected personnel.

(3) Operation of civilian internee collecting points, captured and detained personnel collecting points, and prisoner of war collecting points and camps.

(4) Liaison with civil, paramilitary, and military police of the HC.

(5) Operation of police intelligence nets to include coordination with HC police.

(6) Enforcement of military law, orders and regulations, and criminal investigations.

(7) Rear area protection and base defense.

(8) Advising and training border security personnel in search procedures, techniques of establishing roadblocks and checkpoints, police patrols, and physical security operations.

(9) Combined HC-US police law enforcement and security operations.

5–35. Urban Operations

a. General. Urban areas located at or near national borders may be the hub for international and intracountry routes and transportation terminals. Insurgent forces may infiltrate personnel and equipment into urban areas to conduct urban or rural operations. Normal law enforcement

activities, custom controls, and police intelligence operations may be used to detect and apprehend insurgent infiltrators as well as smugglers and other criminal-type border crossers.

b. Police Operations.

(1) Military police units possess the flexibility, mobility, firepower, and communications for conducting anti-infiltration operations in urban and other developed areas. Military police support the overall border security and anti-infiltration operations by establishing checkpoints at major entry and exit routes from the city to include transportation terminals, subways, canals, and highways; enforcing curfews and other populace and resources controls; providing physical security for critical facilities and key personnel; and conducting police intelligence operations. Normally, combined HC-US police units are employed in urban police operations to avoid jurisdictional and operational problems.

(2) Military police are particularly effective in providing advice and training to HC police in operational techniques for the detection and apprehension of criminals and infiltrators. Training assistance programs should be emphasized over operational assistance when possible. FM 19–50 contains additional information.

c. Specialized Equipment. Surveillance, target acquisition, and night vision devices and other specialized surveillance and detection equipment are employed in urban areas to complement manned checkpoints, patrols, and urban perimeter defense systems. Metal detectors and voice polygraph instruments may be used at transportation terminals and other checkpoints to detect weapons and explosives and to identify infiltrators possessing false identification documents. Electronic and audio detection devices may be used in sewers and other subterranean systems to detect illegal entry and movement by infiltrators. FM 19–4 and FM 19–30 contain additional information.

d. Military Dogs. Military police dog teams may be employed on patrols and at checkpoints throughout the urban area.

(1) Patrol dogs may be employed with military police or other patrols on the perimeter of a city or developed area, at checkpoints, and in subterranean utility and transportation systems.

(2) Sentry dogs are used principally at fixed installations, at isolated sites, and other locations where the multiple skillls of the patrol dog are not required.

(3) Dogs may also be trained to detect explosives and other types of contraband. These dogs may be assigned to checkpoints, customs stations, and transportation terminals. FM 20–20 contains additional information on capabilities and limitations of dogs.

5–36. Rural Operations

a. General. Law enforcement and security missions assigned to military police units include checkpoints and patrols at designated locations along national borders. Normally, military police will be assigned to advise and assist HC police at customs checkpoints on highways and inland waterways and patrols for adjacent areas.

b. Police Operations.

(1) Police operate checkpoints where transportation routes cross the border and at other selected interior locations on the same routes as well as secondary water and land routes. Border checkpoints provide controls over customs violations, the illegal entry of personnel, and the smuggling of military and other contraband equipment. Additionally, checkpoints provide control over the HC population in support of civil affairs relocation programs.

(2) Police may provide patrols to support checkpoints and to enforce laws, regulations, and populace and resources control measures in restricted zones and other designated areas. Police patrols may accompany tactical units to provide circulation control for local nationals in the area and to assist in identifying and interrogating infiltrators.

c. Surveillance Equipment. Equipment that is organic or available to military police units assists HC and US combined police operations in detecting and apprehending infiltrators. Surveillance, target acquisition and night observation (STANO) equipment may be located at checkpoints for the detection of infiltrators and to pinpoint avenues of approach during periods or in areas of reduced visibility. Mobile patrols utilizing STANO equipment and aircraft, patrol boats, or armored cars react to checkpoint's report, isolate the area, and search out and apprehend or eliminate the infiltrators.

Section IX. CIVIL AFFAIRS

5–37. General

In the initial phases of establishing border security, civil affairs units and personnel offer significant assistance in relocating the civilian population. Following the establishment of a border security system, civil affairs units and personnel may assist in establishing and maintaining sound political, economic, and social conditions among the civilian population.

5–38. Control

a. *General.* Two operational concepts for control of extensive land borders are the restricted zone and the friendly population buffer.

(1) *Restricted zone.* Under this concept, an area contiguous to the border specified strike zones established in the maneuver area and areas adjacent to bases and supply depots are declared a restricted zone. In border security operations, this method would be used during initial occupation/construction of the barrier system when the relocation of the population is in process. This system would be the main population control system in border areas manned by the remote area system. Appropriate proclamations are issued to the population so that all personnel understand that any individual or group encountered in the zone will be considered and treated as infiltrators if not readily identifiable as members of an HC regular armed force, paramilitary force, or similar organization.

(2) *Friendly population buffer.* The civilian population in the area of operations is redistributed if necessary to insure that all civilian personnel residing near the border are loyal to the HC. This may entail screening all personnel settled along the border, relocation of those persons of doubtful loyalty, and supplementary resettlement of the border area with loyal elements of the civilian population. This concept provides a potential source of information along the border. Friendly local civilians are available for employment in self-defense units to control the border area, and potential civilian contacts and houses of refuge are denied the infiltrator.

b. *Discussion.*

(1) Extensive relocation of portions of the civilian population should, where possible, be avoided; where necessary, it should be accomplished by HC officials assisted by civilian agencies and civil affairs units and personnel. Relocation operations are preceded by detailed economic, social, psychological, and political planning and preparation. The governmental, sociological, and economic stability of the area should be preserved so far as possible. Unless population relocation is accomplished on a just and equitable basis, the relocated individuals may take sides with the infiltrators. In any event, they are susceptible to propaganda, enticements, and coercion.

(2) Unless relocation operations are properly planned and prepared, they can result in extensive political instability, unemployment, inequities in land distribution, inadequate housing, epidemics, intermingling of population with conflicting religious beliefs and social mores, food shortages, and lowering of morale.

(3) Civil affairs units and personnel, in coordination with HC government and civilian relief/welfare agencies, are organized and equipped to deal with such problems. Proper and timely use of civil affairs personnel will minimize civilian interference in tactical operations, gain popular acceptance of the demands of the situation, and insure political-social-economic stability within the friendly population buffer zone. Valuable side benefits such as raw information of intelligence value and self-defense organization will be realized.

CHAPTER 6

COMBAT SERVICE SUPPORT

6–1. General

Current doctrine pertaining to combat service support provides principles, concepts, and techniques designed to meet the needs of the operating forces in various operational environments. This chapter discusses operational factors incident to border security operations as they affect the logistic functions of supply, maintenance, transportation, construction, and labor. Planning for initial supply of equipment in support of a border security system requires all normal considerations, plus a phased plan for the introduction of specialized equipment and supplies applicable to border security operations. Additional consideration must be given to the support necessitated by the displacement and/or disruption of the sources of supply for the population.

6–2. Concepts

a. Combat service support units are located to meet requirements peculiar to their special functions, and, when feasible, to contribute to mutual defense. Normally such combat service support units provide for their own security but, when possible, are collocated with tactical units to minimize guard requirements.

b. In situations where guerrilla forces are active against lines of communications, combat units may be required to escort supply convoys.

c. Units engaged in border security operations may be required to provide essential items of supplies to civilian victims of insurgent operations and to support civic action programs.

6–3. Supply Support

a. Special equipment for land clearance and road-building must be planned for timely arrival. Requirement for heavy tonnage items such as barbed wire and tape and construction material must be planned both to insure their availability and the means of transport to the barrier site.

b. Following the initial issue of materiel in support of the border security system, provisions are made to support and sustain the system through continuous automatic issue. In particular, those items of known life expectancies must be replaced without disrupting the continuous operation of the barrier system. Batteries, mines, and expendable-type sensing devices should be readily available through supply channels rather than being stockpiled at the barrier site.

c. Resupply requirements must be determined as early as possible during the border security mission using experience data developed as the result of the operation.

d. Experience factors for standardizing resupply procedures must be computed and determined early in the border security mission. Accurate experience data must be compiled for those items not previously used in the area of operation. Consideration is given to procurement lead-time and the total time for these replacement items. Commanders should have knowledge of substitute items that can be used should standard items become out of stock or inoperable. Once experience factors have been determined, a standard basic load to cover a desired period can be established for each unit. These basic loads can be prepackaged and prepositioned at brigade and battalion combat bases ready for delivery on a scheduled or on-call basis. Consideration must also be given to the availability of appropriate materials handling equipment to aid in offloading the heavier materiel.

e. Unit distribution of all supplies to the lowest level possible is emphasized. For example, the issue of supplies to a company should be not only to the company base, but also directly to elements of the company in forward isolated areas.

f. When two or more Services are engaged in a border security operation, supply activities are coordinated and integrated to the extent possible to insure the most efficient use of the supplies available, limited transportation resources, supply personnel, and facilities.

6–4. Maintenance Support

a. Mission critical, sensitive, sophisticated surveillance and warning devices and the much greater than normal dispersion of all equipment increase the importance of adequate organizational maintenance (FM 29–2) and the responsive support maintenance. To provide responsive support, maintenance units must be augmented with both personnel and tools and must be provided additional transportation, either air or ground or a combination of both. Support maintenance units must provide the most responsive support possible by using operational readiness float stocks, direct exchange (DX) supply to include mobile DX stocks, and contact teams to the maximum.

b. In addition, to proper care, preservation, and use of equipment, commanders must immediately report deficiencies or weaknesses of operating characteristics or designs of any equipment. Standing operating procedures for operation, inspection, and maintenance for individuals, teams, and maintenance personnel are essential for critical items of equipment.

6–5. Transportation Support

a. Transportation and distribution of supplies are major problems in underdeveloped border areas where suitable routes of communications are lacking and construction of roads and trails is difficult.

b. Organic transportation means may require augmentation from both military and local sources. The operational conditions of the command determine whether transportation requirements should provide for recruiting indigenous bearer units for manpack operations, organizing animal pack units, and using available waterways and indigenous land transportation to include railway and highway equipment. These facilities may be required on a long-term or a short-term, as-required basis. Employment of these local resources has its limitations, e.g., their availability and the adverse effect their use has on the normal flow of civilian goods and local economic activity.

c. Armed logistic and military police personnel provide security for surface movements in areas of hostile guerrilla activities. Surface movement is the preferred method of transportation when safe passage can reasonably be expected.

d. Aircraft are an effective means of resupply because of their speed, relative security from

ground attack, and insensitivity to terrain conditions. The terrain, tactical situation, and landing area availability may dictate parachute delivery. Usually, the limited number of aircraft available for logistic movement will dictate that only high-priority critical items move by this mode.

e. In addition to transportation requirements for normal replenishment and logistic support, transportation support planning will include provisions for emergency support involving sporadic or unusual border actions. A rapid system must be in effect for replenishing ammunition of all types. Capabilities must exist for reinforcement of troops and airlift of field artillery pieces in the shortest time possible.

6–6. Construction and Labor Support

a. The initial construction effort for a border security system requires detailed planning. Installation of buried unattended ground sensors and warning devices requires considerable digging. Use of line-of-site detection equipment requires land clearing. Communication trenches need to be dug. Concertina and barbed tape require labor and time for emplacement. Defoliants and soil sterilants, if not air-deliverable, are laborious to apply. Roads, airstrips, base areas, observation towers, and strongpoints are essential construction tasks.

b. Construction of a border security system is conducted in sequential phases. Planning for the overall system is initiated by the major command headquarters responsible for the area. Actual construction of the system is initiated by the lowest command level and is coordinated through successive levels of command until a completely integrated system has been developed. While special engineer construction units may assist in many of these construction efforts, a great deal of construction must be performed by troop units committed to the border security mission.

c. Where conditions permit, civilian contractors, either US, indigenous, or third-country, are employed to conserve the resources of military construction units. When available, local labor and materiel resources are used to the maximum.

d. Where practicable, prefabricated facilities, which can be delivered to forward areas in sections or complete assemblies, are used to conserve time and to reduce troop exposure in forward positions.

CHAPTER 7

ENVIRONMENTAL CONSIDERATIONS

Section I. INTRODUCTION

7-1. General

A newly emerging and underdeveloped nation is particularly vulnerable to infiltration tactics. The discontent and lack of unity on the part of the often diversified population of such nations provide a potential source of internal support for infiltrating forces. The border regions of nations that are experiencing the infiltration of personnel and supplies are generally ill-defined and relatively isolated. However, the more developed nations are not immune to infiltration. Although the developed nation's improved lines of communications create a more uniform population, the possibility of creating discontent along border areas is always present. This section discusses the political, geographical, economic, and sociological considerations related to border security operations. The chapter is oriented to provide a general discussion of the typical operations and modifications to the border system for a particular border or geographical environment.

7-2. Political Background

In many of the world areas subject to enemy infiltration tactics, national boundaries are established by purely political considerations. The geographical aspects or the locatons of indigenous inhabitants of the areas being partitioned are minor considerations. In remote border areas, there may be a lack of communications between the population and the national government. Often the result is no countrywide sense of national pride or loyalty to the government. Infiltrating forces exploit this vulnerability.

7-3. Geographic Setting

a. The extent of the enemy infiltration success greatly depends on the attitude of the neighboring nations that border on the nation experiencing the infiltration. Like the target country, the neighbors may also be undergoing political, social, and eco-

nomic problems associated with the technological advancement required to keep pace and gain recognition and acceptance.

b. Border security operations are simplified when the hostile nation shares a border with the country being infiltrated and operations can be concentrated along that frontier. The problem of neutralizing infiltrating personnel is greatly magnified when the enemy conducts third-country operations, utilizing the border terrain of another neighboring country to infiltrate the target nation. The third country may willingly allow the passage of infiltrators or may claim a neutral position, disclaiming knowledge of the infiltrator's use of the country as an approach to the target nation. The professed neutrality of the third country makes political constraints even more critical.

7-4. Economic Considerations

a. A commander engaged in border security operations must have a general knowledge of the economic conditions in the host country (HC). The type of economy, industrial or agricultural; living conditions; transportation; communication; food supply; and standard of living have a distinct bearing on the problem.

b. Authorized border crossing points are maintained for the continuation of commerce. It may be essential for raw materials, agricultural products, or manufactured items to cross the border in either direction to maintain the economy of the HC. These crossing points are manned by indigenous police and customs officials, when possible. If indigenous police are not available, HC representation must be obtained to help the US troops man the border crossing points. In the early phases of involvement, HC soldiers or civilian officials may be the only representation available. In this situation, they should be used until police can be trained.

7–5. Sociological Considerations

Population size and density, religion, social structure, and ethnic minority groups are important considerations in border security operations. Local customs and traditions may vary greatly. Troops must be educated to respect the local customs. Border security operations should minimize disruption of the customs, social activities, and the physical well-being of the population.

7–6. Concept

The planning factors outlined in chapter 3 are valid for any terrain, weather, or vegetation conditions. However, various applications will be modified by these conditions, and the consideration of these modifications is a necessary element of the planning cycle.

7–7. Operations

a. The infiltrator can be expected to capitalize on the geographical advantage of the border environment. Often, the terrain is rugged and difficult to negotiate. Mountains, swamps, rain forests, or uncharted wastelands figure predominantly in the infiltrator's success. Conversely, the ability of border security forces to deny freedom of movement over and through such terrain reduces the enemy's effective continuation of infiltration tactics.

b. Border security personnel must be equipped and trained as dictated by operational conditions. These terrain characteristics and population densities must be considered in planning for border security operations.

c. In jungle and mountains, foot mobility must be emphasized; while in swamps and inundated areas, watercraft may be effectively employed. In trafficable terrain or desert, the use of wheel or tracked mobility may be suitable. However, based on an analysis of the actual terrain of the desert area to be controlled, it may be determined that wheeled vehicles are unsuitable for employment except on improved roads/trails. If the sole use of tracked vehicles is required, logistic planners must consider the requirement for additional petroleum, oil, and lubricants (POL). Also, the general lack of concealment in the desert terrain, as compared with other environment, will facilitate the use of aircraft for observation.

d. In the more developed areas, the restricted use of firepower must be replaced by additional manpower and a more complex systems trace.

e. The availability of Army aviation for troop lift, resupply, reconnaissance, and direct area fires improves border security operations in any environment.

Section II. JUNGLE AREAS

7–8. Threat

The threat in jungle operations is that both large- and small-scale infiltrations can take full advantage of the cover and concealment afforded by jungle vegetation.

7–9. Operations

a. A systems trace is difficult to establish and maintain in jungle areas. Therefore, along jungle borders where population is sparse, units can rely more effectively on intelligence and target acquisition for determining the presence of infiltrators. Increased reliance can also be placed on portable, remotely located, and/or expendable air and ground surveillance, target acquisition and night observation (STANO) devices. When infiltrators have been located, intercept forces or fire support means can be brought to bear.

b. When a systems trace is established in jungle areas, the assigned frontages are smaller because

of reduced mobility, observation, fields of fire, and communication and control. Units must then rely on airmobile intercept forces and all available fire support means.

c. Emphasis in jungle areas is on influence-type sensory equipment. The dense vegetation significantly degrades night vision and radars; therefore, greater numbers of them are required when they are used in these areas.

d. Jungle areas greatly degrade mobility. Roads and trails are few; therefore, airmobile intercept forces and fire support weapons are used to engage infiltrators. The placement of air- or field artillery-delivered scatterable mines on the routes of withdrawal is effective in detaining the detected infiltrators, therefore, giving the intercept forces time to deploy and engage.

e. Communications in jungle areas are degraded by vegetation and increased maintenance requirements. Visibility and mobility limitations make

radio the primary communications medium. Frequently an airborne relay station is required.

f. Command and control is more difficult in jungle operations. Explicit operating instructions and rules of engagement, plus delegation of authority, are required to allow action at the lowest command level.

g. Mutual support between strongpoints is essential. Field artillery should not be positioned so as to prevent effective mutual support from adjacent positions because of minimum range limitations. For additional details on jungle operations, see FM 31-35.

7-10. Modification to the System

a. Systems trace manning may be infeasible or undesirable.

b. Influence sensory equipment will predominate over night vision devices and radars.

c. Airmobile intercept forces are required.

d. Fire support systems replace troop intercept forces when feasible.

e. Employment of conventional/scatterable landmines can fill voids in the systems trace.

Section III. MOUNTAINOUS AREAS

7-11. Threat

The threat in mountain areas is small infiltration attempts that take advantage of cover and poor observation caused by broken and rugged terrain.

7-12. Operations

a. Observation posts are established on high ground overlooking valleys and likely avenues of approach. Influence sensory equipment is used in valleys and on low slopes, and night vision devices and radars are employed from commanding ground. Night ambush points are established along likely avenues of approach and are occupied on a random periodic basis. Infiltrators are taken under fire, and illumination is applied as soon as possible. Unit frontages are reduced somewhat by limited observation and mobility.

b. Additional cold-weather personal equipment may be required to enable border security troops to withstand weather extremes characteristic of mountainous areas. Extremes of temperature can be expected to affect batteries, handsets, and recoil mechanisms on field artillery pieces.

c. Mobility in mountainous areas is severely restricted. Within altitude and weather limitations, helicopters are valuable for intercept and supply operations. In many instances, foot mobility exclusively will be available.

d. Line-of-site radio communications may be severely degraded in mountainous areas. This problem can be minimized by detailed system planning for the use of available equipment. During planning, consideration must be given to include the use of air or ground relays. Plans must also in-

clude the earliest practicable installation of wire communications.

e. Command and control is difficult in mountainous regions because communications and mobility are limited. Responsibilities are delegated to small-unit commanders with detailed written operating instructions and rules of engagement provided.

f. Field artillery and tactical air support have an intensified role in mountainous areas. They may be the only methods for real time engagement. An increased requirement may exist for Army aviation support for movement of intercept forces and resupply missions. Intelligence requirements in the form of air/ground reconnaissance and surveillance are increased substantially in this type of environment. The impact of weather in mountainous terrain may, however, impede the use of all aircraft. Rapidly changing weather conditions, specifically wind, can result in the aborting of operations involving the use of aircraft. Consequently, alternate plans must be available to insure continued operations. For additional details on mountain operations, see FM 31-72.

7-13. Modifications to the System

a. Unit frontages are somewhat reduced.

b. Troop requirements, to include specialized training for individuals and units and proper acclimatization for personnel, are increased.

c. Cold-weather personal equipment is required.

d. Barrier minefields are required to cover the multitude of possible infiltration routes.

e. The density of unattended ground sensors increases.

Section IV. DESERT AREAS

7–14. Threat

Because of the characteristic flat, or low, rolling terrain, desert infiltrations through a border security system can be expected to be overt. The infiltration attempt probably will be in the form of a highly mobile breaching attempt against a weakly manned sector. Fire support must be expected. A realistic diversionary action may be conducted nearby to enhance the chance of success.

7–15. Operations

a. Operations in desert areas are simplified by excellent observation, a high degree of mobility, and large uninhabited areas in which to conduct intercept operations. Unit frontages may be greatly expanded. A delay element achieves minimum effect in desert areas because a large operational area is available in which to engage the infiltrator. The delay mechanism, however, may also assist in the detection of the point of infiltration by wire gaps, footprints, or sounds. Helicopters are useful for observation and troop movement.

b. The high degree of mobility inherent in desert operations permits fewer troops to cover larger areas. Armored units and airmobile forces are particularly valuable as intercept forces.

c. Mobility in the desert is excellent even during night operations. The nature of the threat indicates that mechanized intercept forces are most effective. Airmobile armor, or mechanized elements are employed to fix and destroy infiltrators who cannot be destroyed by indirect fires.

d. Field artillery and close air support (CAS) are more effective in the desert because of better observation. Communications to support command and control are relatively good in desert areas. Environmetal degradation of radio communications is minimized. The high mobility and fluidity of desert border security operations make radio the preferred communication means. For additional details on desert operations, see FM 31–25.

7–16. Modifications to the System

a. Additional sensory equipment may be required.

b. Fewer troops than those needed for mountain areas are required.

c. Armored personnel carriers and helicopters are necessary to provide the required mobility.

d. A higher ratio of fire support as opposed to that in support of mountain areas is required to support greater dispersion of forces.

e. Communication security (COMSEC) and intercept capability must be emphasized because of the extensive use of radio communications.

Section V. RIVERINE AREAS

7–17. Threat

The threat in riverine areas with extensive networks of rivers, canals, and inundated areas is in the infiltration of small craft in the guise of legitimate border traffic.

7–18. Operations

Systems traces are established along the friendly shore of a river border to take full advantage of natural observation and fields of fire. Navigable waterways are used to advantage for patrolling and intercept activities. Checkpoints are set up along navigable watercourses crossing the systems trace. The primary problem is identification of infiltrators among the large volume of legal and necessary traffic. Establishment of curfews, restricted zones, custom points, and other controls is essential to success.

a. Inundated areas or areas subject to periodic flooding restrict the use of ground-emplaced detection and delay devices. Similarly, interruption of landmasses limits the use of continuous line type of devices.

b. Night vision devices and radars are the primary detection means. The increased effectiveness of detection devices allows wider unit frontages, but the prevalence of hiding places and the opportunity to mix with legitimate civilian traffic reduce the effectiveness of the system. Direct aerial fires can be delivered much closer to friendly troops and are used to fix the enemy. Indirect fire weapons are employed when feasible. However, their use frequently will be precluded because of the difficulty in differentiating infiltrators from the local populace. For additional details on riverine operations, see FM 31–75.

7-19. Troop and Equipment Requirements

Troop requirements are significantly higher than those of the generalized system in that both land- and river-based forces are necessary. Riverine operations may be conducted jointly by Army and Navy forces. Manpower savings in fuller utilization of detection device capabilities will be absorbed by greater requirements for manning checkpoints unless indigenous personnel can be trained and equipped to perform this function.

7-20. Mobility

Inland waterways are the principal lines of communications in riverine areas. Cross-country, foot, or vehicular mobility is extremely limited. With boats or watercraft and amphibious vehicles, mobility is greatly improved. Airmobile operations are effective in riverine environments.

7-21. Communications

Radio communications are adequate in riverine areas because of good line-of-site characteristics. Radio is the preferred communication means with emphasis on COMSEC. Other communications means used are visual, sound, and messenger. Joint operations with Navy forces require thorough knowledge of Navy communications, organization, and network structure. Qualification of Army personnel is necessary to operate Navy-type radio equipment provided to embarked Army units. The riverine environment places greater demand on maintenance and waterproofing for all communications equipment.

7-22. Command and Control

The joint task force nature of riverine operations requires special considerations of command and control aspects. Specific command and control functions are delineated between primarily Navy and primarily Army missions. The commander who assigns forces for riverine operations will specify the command structure above the Army division/Navy flotilla force level. At the operating level, a joint force under a single commander is the preferred arrangement.

7-23. Combat Support

Commanders rely on tactical fighter air support and direct aerial fire support in riverine areas. Boat-mounted automatic weapons, guns, cannons, and grenade launchers are employed to support intercept forces. River assault squadrons can provide fires using indirect fire weapons. Field artillery may be handicapped by the lack of mobility or suitable firing positions; however, air-delivered prefabricated platforms or Army barges can be used as an expedient. Batteries may be mounted on naval vessels. Naval gunfire offers supporting fires when operations are in range.

7-24. Modifications to the System

In addition to special operating conditions described above, border security operations in riverine areas require the following modifications.

a. There will be a greater dependence on attended sensors, particularly the ground surveillance radar and night vision devices in the riverine environment. When emplaced with care, some unattended ground sensors are suitable for use in areas subject to flooding (e.g., the electromagnetic intrusion detector). Air-delivered unattended ground sensors may only sink in mud and have their capabilities reduced or completely negated.

b. Population concentration along the waterways limits the use of firepower in this area. Relocation of civilians may be required, but large-scale evacuation may cause disaffection among the populace.

c. The primary border security mission may be vested with the Army, Navy, or joint forces, depending on the nature of the terrain. Command, control, and communication systems must be mutually supporting among all participating forces.

d. Fire support must be adapted to the limitations of the terrain.

e. Reaction forces may be stationed on floating bases.

Section VI. ARCTIC AREAS

7-25. Threat

The threat in arctic border areas is from individual or small-unit infiltrations. An infiltrator has the basic problem of survival and, therefore, the threat is minimal.

7–26. Operations

a. Arctic border security operations pose specialized problems. Special provisions are required for protecting personnel and equipment from the environment. Little is known concerning the operations of specialized border security equipment in arctic conditions. Because of the unpopulated nature of the arctic environment, the use of ground and air patrols as a border security system may be more effective than a systems trace. Large uninhabited areas are available for detection and intercept operations.

b. Protective personal equipment and specialized transport equipment are required for arctic operations. Base area construction and outfitting are more specialized for arctic areas than for other areas.

c. Foot mobility and wheeled mobility are limited. Skis and snowshoes increase individual mobility, and special-purpose tracked vehicles and helicopters increase ground mobility. Airmobile intercept forces are highly effective.

d. Radio, with emphasis on COMSEC, is the primary means for communication. The fluid nature of the system limits the use of wire communications. Command and control is simplified by not manning a systems trace.

e. CAS supplants field artillery in arctic operations. Air Force photography, radar, and infrared surveillance flights are required. For additional details on northern operations (arctic), see FM 31–71.

7–27. Modifications to the System

a. Air observation is preferred over a border security systems trace.

b. Troop requirements are minimal.

c. Special potective equipment and transportation equipment are necessary.

d. The environment reduces the use of fire support.

Section VII. COASTAL AREAS

7–28. General

In countering seaborne infiltration, the land-based system is envisioned as being only one of three complementary systems. The first system through which an infiltrator must pass is the sea barrier, operated by the Navy or the Coast Guard. This system consists of three levels of surveillance: coastal radars, which reach out to about 20 kilometers off shore; patrol boats, patrolling in the range of about 20 to 60 kilometers; and air patrols in the range of about 60 to 100 kilometers. This system has a good surveillance capability, but its capability to positively identify enemy craft is limited. The second system is that of customs to control legitimate traffic. This system consists of checkpoints at natural points of entry into the country which are manned by HC personnel. If possible, operators of these checkpoints should be indigenous to the local area, not merely the country. The land-based system is concerned with infiltrators who land at other than the authorized checkpoints.

7–29. Threat

The seaborne infiltration threat is basically of two types: attempts to come ashore in fast boats and move inland as quickly as possible and attempts to

land in the guise of innocent traffic, such as fishermen. The tactic of coming ashore in fast boats is countered by the sea barrier since the infiltrators' actions identify them as hostile. A more reasonable tactic is to transfer to fishing boats at sea. After the transfer, the Navy's problem increases and infiltrators' chance to reach shore increases. If infiltrators try to get through the checkpoints, they become the responsibility of the customs system. If they avoid the checkpoints, they become the responsibility of the land-based system.

7–30. Operations

Coastal security operations are essential to deny infiltrators ingress to the interior of the host country. Integration of Army/Navy shore-based detection capabilities is essential for effective security. Army land-based radar is the most effective detection device to supplement the Navy-operated coastal radars. However, in areas of significant civilian traffic, necessary discrimination and discrete identification are not often possible by radar. Curfew hours and restricted areas should be established, when possible to narrow surveillance, alleviating the requirement for discrete identification.

7–31. Equipment Requirement

Detection and delay devices are used to good advantage, particularly where wide beach areas exist. Tide conditions, compositon of the beach (rocky or sandy), and local use of the beach area are considerations in using ground-emplaced devices. Radars can be placed at wider intervals along the coast than in inland terrain because of the unobstructed line of site. Signal equipment capable of communicating with Navy coastal surveillance and patrol forces is required. Use of patrol aircraft increases surveillance capabilities.

7–32. Communications, Command, and Control

Effective interface with Navy coastal surveillance forces depends on good communication links and exchange of liaison personnel. Unless coastal infiltration activity is at a high rate, integration of Army and Navy forces ashore into a joint force is not necessary. The exchange of liaison personnel between division level and equivalent Navy forces is beneficial.

7–33. Combat Support

Because of the density of civilian population along coastlines in most countries, the use of field artillery is usually not feasible in the coastal security mission. Therefore, infantry forces are the primary means of intercepting seaborne infiltrators.

Transporting the infantry units by helicopter makes large front coverages possible, and attack helicopters are effective in seeking out and destroying infiltrators who have penetrated inland.

7–34. Modifications to the System

a. A border security system for coastal areas should consist primarily of radar, sensing devices, and mobile intercept forces.

b. A fixed physical system using wire and buried unattended ground sensors is not practicable along many coastal areas, particularly where local inhabitants rely heavily on the use of beaches for fishing and other livelihood.

c. In areas where probable routes of ingress are identifiable, seismic and acoustic sensors may be used to gather intelligence.

d. Identification and control of friendly boat traffic are necessary to discriminate seaborne infiltrators from legitimate users of the coastal area.

e. Patrols by ground vehicles and surveillance by air with communication with Navy coastal patrols will provide coverage of a wider frontage than is possible on a land border area.

f. Offshore islands must be under surveillance to deny the infiltrating forces safe havens and sanctuaries.

Section VIII. DEVELOPED COUNTRIES

7–35. Threat

a. In the more developed countries, the infiltration threat is usually from small-scale crossing attempted by individuals or small groups. Therefore, a crossing attempt by units of company size or larger in this environment would be considered as open warfare and would warrant the entry of tactical units using normal operations to counter such a threat.

b. To gain entry to the more developed countries, infiltrators most often choose normal border crossing points or predetermined weak areas in the systems trace.

(1) At normal crossing points, the infiltrations, often with forged identifications, assume the identity of the local populace and take advantage of periods of dense travel to cross mingling with the legitimate traffic.

(2) The infiltrators take advantage of periods of dense traffic along the border to make their reconnaissance. When they have selected a weak area in the systems trace, they attempt to cross at night or when visibility is poor. Usually they will preface an infiltration by staging a feint. For example, they may riot or demonstrate in the cities or they may make small-scale attacks or use snipers in rural areas to divert attention from actual point of intended crossing.

7–36. Operations

Border security/anti-infiltration operations conducted in developed countries require that the planner consider three distinct areas of operation predicated on population density. These areas are cities with a high population density, rural or developed agricultural land areas with a medium population density, and undeveloped agricultural land areas with a low population density. In areas

of high or medium population density, border security operations have limited opportunity of success unless Army units reinforce the HC's military or civilian law enforcement agencies. Where a local agency cannot be reconstituted and trained in a short time, the planner should consider cordoning off these areas.

a. Cities.

(1) Populace on the border must be relocated so that an area of 200 to 1,000 meters deep can be cleared and leveled for a trace.

(2) In construction of the border system, a stronger conventional wire barrier replaces the simple fence along the border. The systems trace will be constructed approximately 1,000 meters to the rear of the border.

(3) The border fence will be impregnated with unattended ground sensors, alarms, and boobytraps.

(4) The entire area between the border and the systems trace will contain a series of conventional minefields.

(5) Watchtowers built along the host country's side of the cleared area must allow guards to observe and control with small-arms fire in the immediate area plus areas that overlap other towers on either side.

(6) Construction of a road network on the HC's side of the trace is necessary to facilitate movement of reaction forces to any location.

(7) Illumination must be planned forward of the trace.

(8) Ground-mobile intercept forces must be available.

(9) Fire support will usually be limited to direct fire weapons.

(10) Sewers and all other underground means of access must be blocked.

(11) Public transportation terminals must have an effective immigration check system.

(12) Of prime importance to the whole border security system in cities is the control of the host country's populace behind the trace. This can only be accomplished by the effective local law enforcement agencies. If they are nonexistent, these agencies must be formed and trained or replaced by paramilitary units. In turn, this local unit must establish a system of agents in every block or section of the city to relay information regarding personnel movement in their area. Control, search, and seizure of infiltrators and equipment can only achieve partial success without a system of this sort.

b. Rural or Developed Agricultural Lands. In this environment, the border security system depicted in figure 3-5 and the organization utilized by a typical infantry division (fig. 4-1) is most effective.

c. Undeveloped Lands.
Along most countries' borders, sections of land that are undeveloped will be found. Usually the terrain is rendered less productive by actions of climate or topography. Therefore, planners may equate the terrain to one or more of the environmental considerations discussed in previous segments of this chapter.

7-37. Modification to the System

a. Smaller, but more reaction, forces are needed at brigade and division levels to compensate for the reduced use of indirect fire for neutralization.

b. Additional manpower is required to man the additional border crossing points necessary to maintain the flow of commerce.

c. Additional engineer support is required during construction of the systems trace.

d. Additional civil affairs units are required for populace control.

CHAPTER 8

MILITARY TRAINING REQUIREMENTS

8–1. General

Troops committed to border security operations require special training in potential infiltrator tactics and countermeasures.

8–2. Individual and Unit Training

Most of the training required in support of border security operations is currently a part of individual and unit training programs. Individuals designated to take part in border security operations require additional training in the following areas:

a. Techniques of ambushes, ruses, raids, and defensive measures against these types of operations.

b. Use of hearing, sight, and smell as detection means.

c. Police-type patrolling and the operation of roadblocks and checkpoints.

d. Meeting engagements, with emphasis on maintaining contact by aggressive pursuit.

e. Night operations to include use of night vision devices and sensors and special challenge, sign, and countersign techniques.

f. Cross-training on individual and crew-served weapons available within the type of unit.

g. Marksmanship, especially night firing.

h. Observation post operations, with emphasis on security, sound and light discipline, and reporting procedures.

i. Operation and operator maintenance on special devices used, such as radars, unattended ground sensors, and night vision devices.

j. Cross-training on all communications techniques and equipment available within the type of unit.

k. Barrier construction, mines, and boobytraps.

8–3. Area Training

Before entering an area of operations, troops must become oriented on the border enemy and his tactics, the nature of the terrain and climate, unusual health hazards, local customs, social values, mores, and the attitudes of the civil population. The capabilities and procedures of civil police and indigenous forces operating in their area should be explained.

8–4. Morale and Psychological Factors

a. Troops employed in border security operations are subjected to morale and psychological pressures different from those normally present in regular combat operations. Many of these pressures are human factor considerations that are caused by infrequent actual contact with the enemy and the requirement for constant vigilance. Some of the important considerations are summarized as follows:

(1) Boredom caused by recurring routine tasks, such as patching fences, tends to lead to laxity.

(2) Because little physical activity is required in operating or monitoring observation devices or annunciators, individuals tend to become inattentive and bored.

(3) Day and night operations disrupt normal sleep and eating routine.

(4) Primitive living and operating conditions in difficult terrain lead to morale problems unless troops are highly motivated.

(5) Long periods of inactivity may result when troops are assigned to static security duty.

b. Leaders at all echelons must carry out a continuing indoctrination, training, and motivation program to offset psychological pressures. This program is accomplished concurrently with the cross-training program.

8–5. Technical Training

a. Operator. Border security operations utilize special equipment that often requires special training for installation and operation. Therefore,

the commander insures that all operators are properly trained. Since specialized school trainees may not be available, unit training must be expanded in scope.

b. Maintenance. Specialized maintenance personnel are required in greater numbers to keep equipment operational and to advise and assist operators on their maintenance responsibilities. Maintenance training courses are instituted and refresher training is conducted on a cyclic basis.

APPENDIX A

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310-25	Dictionary of United States Army Terms (Short Title: AD).

A-2. Defense Intelligence Agency Manual (DIAM).

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A-3. Field Manuals (FM)

5-1	Engineer Troop Organizations and Operations.
6-10	Field Artillery Communications.
6-20-2	Field Artillery Techniques.
7-10	The Rifle Companies, Platoons, and Squads.
7-20	The Infantry Battalions.
7-30	The Infantry Brigades.
19-4	Military Police Support, Theater of Operations.
19-30	Physical Security.
19-50	Military Police in Stability Operations.
20-20	Military Dog Training and Employment.
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24-18	Field Radio Techniques.
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