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DEPARTMENT OF THE ARMY FIELD MANUAL

Reference

BORDER SECURITY/ ANTI-INFILTRATION OPERATIONS

HEADQUARTERS, DEPARTMENT OF THE ARMY
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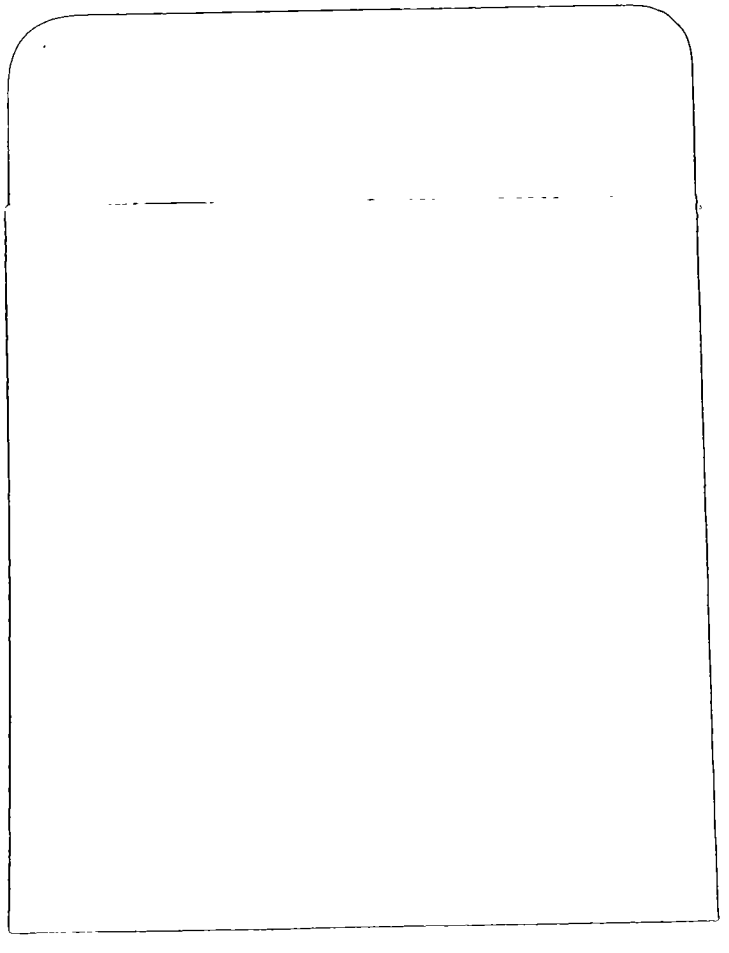


FIELD MANUAL
No. 31–55 (TEST)

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., *20 June 1968*

BORDER SECURITY/ANTI-INFILTRATION OPERATIONS

CHAPTER 1

INTRODUCTION

Section I. GENERAL

1–1. Purpose

This manual provides interim 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. The planning and 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 in this manual 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 U.S. Army Materiel Command.

1–3. Application

This doctrine is applicable to Army forces involved in border security operations in limited and cold war, to include stability operations. The doctrine presented is 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 its clarity or accuracy. Comments should be keyed to the specific page, paragraph, and line of the text in which the change is recommended. Reasons should be provided for each comment to insure understanding and permit complete evaluation. Comments should be forwarded direct to Commanding General, USACDC Institute of Combined Arms and Support, Fort Leavenworth, Kansas 66027. Originators of proposed changes which 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 upon those defined in AR 320–5 and related publications. Terms applicable specifically to border security are discussed below.

a. Area sensor. A sensor whose area of influence is generally circular.

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

c. Detection. Detection is the function of determining that an infiltration attempt has, will, or is taking place. It can be accomplished by a variety of devices, such as acoustic, seismic, pressure, infrared, radar, or light intensification devices. It includes the function of identification.

d. Host country. The country whose border is being protected against infiltration.

e. Infiltration attempt. Efforts of varying size infiltrating forces to cross the international border.

f. Influence sensor. A device which detects an individual through some physical interaction which registers on the device.

g. Intercept forces. Combat arms units with

varying degrees of mobility which seek to engage infiltrators to destroy, capture, or neutralize them.

h. Line sensor. A sensor whose area of influence is generally linear.

i. Neutralization. To render enemy personnel or materiel incapable of interfering with a particular operation.

j. Systems trace. An outline of a reasonably well-defined line of positions where physical obstacles, detection devices, or forces are emplaced in the vicinity of a border.

k. Viewer. A device which enhances the visual capability of man.

Section II. CONCEPT OF OPERATIONS

1–6. Border Security Role

Border security operations are normally the responsibility of civil police, quasimilitary border security forces, or customs police. Such forces exercise law enforcement, intelligence, and countersubversive duties as directed by appropriate local national authority. Should infiltration and insurgent activities increase, the capabilities of local forces may not be adequate to the task. In such a situation, the local armed forces assume the duties of law enforcement and border security. U.S. military forces may be requested to supplement or replace indigenous military forces by mutual agreement with the host country.

a. The growth and continuation of insurgent forces and their eventual success is largely dependent upon the degree of support from external powers. It is essential that during the formative stage of insurgent forces, frontiers with countries lending support to these forces be guarded to prevent infiltration of men and materiel.

b. Border security operations are politically sensitive. The missions assigned tactical units are tempered by political considerations to a greater extent than are normal military operations. The mere presence of an outside military force, such as the United States, operating along national borders will be attacked and exploited by 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. Although this is not the military commander's problem, he must be aware of the implications and exercise judgment to avoid unnecessary criticism.

1–7. Authority

In situations where army units are operating to support a host government, the authority of the U.S. commander is defined by agreements between the governments concerned. The Chief of the U.S. diplomatic mission, as the representative of the President, is the senior coordinator of all U.S. agencies and services in such a country. It is his responsibility to negotiate and define the relationship between U.S. and host country military forces.

1–8. The Threat

The infiltrator's mission is to traverse the border, preferably in stealth, and perform intelligence, sabotage, assassination, or insurgent missions in the host country. 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. Once detected, he will normally fight vigorously.

1–9. Political Factors

While the border security commander is not directly involved with host nation politics, it is essential that he have a knowledge of the national political structure. The political environment influences the operation of local society and, as such, is of direct concern to the commander. Of particular importance is the relationship with local village and district political leaders. Border security demands a high degree of influence over the population in the immediate border area. Cooperation with local political chiefs and police, where possible,

is essential to minimize troop requirements to perform civil tasks normally done by local civil government. Civil affairs units or personnel serve as a link between the commander and the local populace.

1–10. Enemy Tactics

a. Infiltration. Infiltration units vary in size from individuals to infiltration battalions of up to 300 personnel. Larger units are considered a conventional threat. Infiltrators utilize rugged terrain and vegetation concealment, avoiding natural approaches when possible.

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

1–11. Operations

The concept of border security operations encompasses physical organization of the border into areas in which surveillance, security, and maneuver forces equipped with modern surveillance equipment to detect infiltrators as they cross the border are supported by firepower and mobility to intercept them before they disperse, and destroy or otherwise neutralize them. Surveillance forces are supported by responsive intercept forces, firepower, air support, and naval gunfire to assist in destruction or neutralization of the enemy. If practical, tactical areas of responsibility correspond to political subdivisions. In most countries borders are divided into border 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. In an area where a border is relatively short, well-defined, and strategically important, and when manpower resources are available, a manned border security system employing modern detection devices and obstacles probably will be the most effective.

b. However, there are many border areas in the world where it is infeasible or impractical to establish a manned systems trace. An example would be a sparsely populated, ill-defined, mountainous, jungle border. The costs of constructing and manning a system trace in this type terrain is exorbitant when evaluated against the results achieved. Border security operations in isolated border areas can be made effective by using remotely emplaced sensors along known or suspected infiltration routes and in traditional insurgent staging areas.

c. Aerial surveillance of the border area is essential to complement the detection system. Intelligence networks provide information concerning potential as well as successful infiltrators. Detected infiltrators are engaged by intercept forces, artillery, attack helicopter, and close air support.

d. Because of the limited nature of the threat, border security systems are optimally organized to cover the maximum frontage. Consequently, units deployed for border security are vulnerable to overt attack and detailed plans are required to readjust forces to counter such an attack.

1–12. Special 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 and coastal regions. Each has special characteristics which require modifications of generalized doctrine.

1–13. Training Requirements

Specialized training is required for border security operations in addition to normal ad-

vanced individual and unit training. Individual training for this mission should stress night operations, night firing, observer training, and patrolling, as well as surveillance techniques. Technically trained personnel are required to install, operate, and maintain sensory equipment. Chapter 8 contains a detailed discussion of training requirements.

CHAPTER 2

OPERATIONAL ENVIRONMENT

Section I. INTRODUCTION

2–1. General

Newly emerging and underdeveloped nations are 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. Psychological operations/civil affairs staffs and units should be utilized to assist the commander to exploit the economic, political, and sociological aspects of his operational area. The border regions of nations that are experiencing the infiltration of personnel and supplies to support and wage "wars of national liberation" are generally ill-defined and relatively isolated.

2–2. Political Background

In many of the areas subject to enemy infiltration tactics, national boundaries are established by purely political considerations. Little consideration is given to geographical aspects or the locations of indigenous inhabitants of the areas being partitioned. Remoteness of the border areas generally causes a lack of communication between the central government and border populations, often resulting in the absence of a countrywide sense of national pride or loyalty to the government. Infiltrating forces exploit this vulnerability.

2–3. Terrain

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 effectively 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. Terrain characteristics which must be considered in planning for border security operations include—

(1) *Jungle areas.* Dense undergrowth and canopy overgrowth reduce ground mobility, seriously limiting ground and aerial reconnaissance and surveillance activities and providing concealment for infiltrating personnel from ground and aerial observation and cover from intercept force firepower.

(2) *Riverine areas.* Swamplands, valleys, and river deltas which are flooded during the rainy or monsoon season, and lowland areas that are perennially inundated complicate border security operations. Relatively flat marshlands, crisscrossed by drainage ditches and canals with supplementary tributaries, are often used as "road networks" for infiltrators operating in this type area.

(3) *Mountainous areas.* Rugged mountain ranges present trafficability problems for border security forces and seriously limit cross-country movement. Such terrain, together with atmospheric conditions, also limits radio transmission and effectiveness of observation devices, particularly those relying on line-of-site.

2–4. Geographic Setting

a. The extent of the enemy infiltration success greatly depends upon the attitude of the

neighboring nations that border on the nation experiencing the infiltration. Normally, any vulnerable nation is little, if any, better off than surrounding neighbors. Like the target country, the neighbors are also undergoing political, social, and economic 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 target country 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.

Section II. EFFECTS OF THE CHARACTERISTICS OF THE AREA

2–5. Terrain, Climate, and Vegetation

Tropical climate favors infiltrating forces who must depend on the land for subsistence. This climate insures year-round vegetation for subsistence and foliage for cover and concealment. Cold climates hamper infiltration since increased logistical support is required for the infiltrating force. Rugged terrain provides cover and concealment to the infiltrating forces, and presents mobility obstacles to the border security force.

2–6. Economic Considerations

a. A commander engaged in border security operations must have a general knowledge of the economic conditions in the host country. The type economy, industrial or agricultural, living conditions, transportation, communication, food supply, and standard of living all 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 host country. These crossing points are manned by indigenous police when possible.

2–7. Sociological Consideration

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 are encouraged to respect the local customs. Border security operations should minimize disruption of the customs, social activities, and the physical well-being of the population.

CHAPTER 3

INFILTRATION TACTICS AND VULNERABILITIES

3-1. General

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

3-2. Infiltrator Objectives

Infiltrators cross national boundaries into another country for the following purposes:

a. To establish underground insurgency organizations.

b. To provide reinforcements, replacements, and logistical 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 kidnapping.

i. To harass border security personnel.

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

3-3. Infiltration Tactics

a. General.

(1) Infiltrators are thoroughly trained and briefed regarding their mission, enemy location, movements, and methods of operation. They have been known to spend one or more days at or near the border area making visual reconnaissance prior to the actual infiltration attempt.

(2) Routes are selected upon consideration of border security troop emplacements. The infiltration routes generally avoid known barbed wire obstacles, observation posts, guard posts, ridge tops, 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 often disguise themselves in the uniform of the target country military 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, movement is for short distances and pauses are made for as long as 30 minutes, or more to observe in all directions. Movement is generally in single file 2 to 5 meters between men with the lead man doing the mine probing and observing.

(5) When infiltrators are detected and fired upon, they usually disperse. 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 utilize tactics to confuse and mislead the pursuers. They are trained to step on rocks and

grass in order not to leave footprints. They often intentionally discard items and make footprints in one direction while escaping in a different direction.

(7) When operating near populated areas, the infiltrator will attempt to merge into the population, especially if he is carrying a forged ID card. 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 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 uncontested routes whenever 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 haul supplies to the next station and to return to his home station during the same day.

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

3–4. 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. A description of some of the areas of infiltrator vulnerability as discussed in *a* through *o* below.

a. Infiltrators may frequently be identified by their clothes, equipment, general appearance, and difference in language dialects. Aside from distinct differences in style and type of clothing and equipment, subtle difference may be detectable in complexion of the individual, and the manner in which clothing is worn.

b. Infiltrators are vulnerable to radio communication intercept and direction finding while transmitting.

c. When diverted from their original direction of travel, infiltrators may 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 are detectable if they build fires while bivouacking.

f. Infiltrators are vulnerable to anti-intrusion devices such as tripwires, boobytraps, or noisemakers. Buried and hidden sensors warn of an infiltrator's presence. Minefields and

other barriers exact casualties, as well as delay the infiltrating personnel.

g. Night observation devices and radars detect unsuspecting infiltrators.

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

i. Long-distance infiltration increases the infiltrator's susceptibility to disease.

j. Infiltrators are not normally equipped for protection against riot control agents.

k. Infiltrators into unfriendly communities must avoid being seen. This severely restricts routes of travel and places of rest. Food supplies must be replenished by theft or foraging which increases infiltrator vulnerability.

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

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

n. Curfew laws, if enforced, make infiltrators vulnerable.

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

CHAPTER 4

CONCEPTS AND PLANNING

Section I. CONCEPTS

4-1. General

In many cases where subversive insurgency has been successful in overthrowing an established government, support to the insurgents from sources outside the country has been a key factor to success. A border security system should minimize the infiltration of forces and supplies into a country and deny outside reinforcements to an indigenous insurgent movement. Indigenous civil and military units are encouraged to conduct border security operations.

4-2. Mission

The mission of a border security system is to minimize infiltration of men and supplies into a host nation. It differs from peacetime customs and immigration control in that it contends with an organized ideological movement which employs any tactic to obtain its objectives. It differs from Communist border control measures in that it contends with armed and aggressive professionals fully trained and equipped. It differs from normal military operations in that the enemy operates from a sanctuary, and political as well as military constraints apply to the border security force.

4-3. Elements of the System

An effective border security system must accomplish three related functions. These functions are detection, delay and destruction.

a. Detection. Detection is the function of determining that an infiltration attempt has, will, or is taking place. This is accomplished by surveillance during all conditions of weather and light and on any terrian. Detection efforts include troop observation, viewers, radars, and emplaced sensors. Concurrent with detection is identification. Identification is required to preclude reaction against false alarms and friendly persons such as defectors, refugees, or friendly agents. Desirable characteristics of detection components are that they—

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

(2) Require minimum maintenance, logistical 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, and wire, botanical, or chemical barriers. A delay element can contribute to the effectiveness of a border security system in the following ways:

(1) It provides an obstacle which delays the transit of infiltrators across an area under surveillance, and thus 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 make the infiltrator commit acts which 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 neu-

tralize 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 artillery fire, fire from attack helicopters, helicopter-borne forces, or emplaced forces based and deployed on the border.

4–4. Troop Requirements

In many respects, border security operations are similar to conventional defensive operations. The nature of the threat, extensive use of obstacles, friendly firepower superiority, mobility of intercept forces, and new developments in sensors and munitions allow larger frontages per unit. 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.

4–5. Command and Control

a. Existing command and control organizations within the field army and its subordinate elements are adequate to plan and conduct border security operations. When U.S. and indigenous forces are committed in the same area, some modifications are required in the form of additional liaison personnel, communications equipment, procedures for information exchange, and additional translation capabilities. However, existing command and control facilities are adequate at the tactical level. At the theater or national level special command and control facilities may be required if two or more border/seacoast type security systems are to be monitored and coordinated. This is particularly true if the functions of planning and operations are to be performed by the theater headquarters or if national authorities desire to exercise close supervision over day-to-day operations.

b. At the operating level the infantry brigade-armored cavalry regiment is the most effective echelon for exercising command and control of border security operations. This organization possesses sufficient flexibility and reserve strength to conduct border security operations efficiently and at the same time can handle and disseminate intelligence information needed for quick reaction.

4–6. Intelligence Operations

Intelligence requirements are both immediate and long range in nature for border security operations. To provide for adequate prior planning to counter these operations and insure a responsive reaction against infiltrators, the flow of intelligence information on hostile intelligence, enemy infiltration tactics, and patterns between all echelons participating in border security operations is a prime requisite. Intelligence planning must provide for the issuance of intelligence spot reports and frequent summaries which receive distribution to all interested units and staffs and the publication of a counterintelligence estimate by the senior headquarters involved as soon as possible. This free and rapid exchange of information cannot be overemphasized, as this facet of intelligence operations is the key to successful counteroperations. The goal of the intelligence operation is to provide information for friendly forces to take the initiative when possible. An important key in this operation is the exploitation of captured enemy infiltrators through early and thorough interrogations. Intelligence planning and operations must insure that intelligence elements of friendly forces participate in the overall force intelligence plans and operations as required. 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.

4–7. Special Situations

Border security operations may be conducted in riverine or coastal areas and in jungles, deserts, or mountains. Organization, equipment, and troop requirements are modified as necessary to satisfy the requirements of each special situation. Modifications to the border security system required by environmental conditions are discussed in chapter 7.

4–8. Service Roles

Navy, Marines, 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) TOE infantry (airborne, airmobile, mechanized, and footmobile) as well as armored cavalry units are well suited to border security operations. Normally, the basic operational unit is the infantry brigade/armored cavalry regiment, augmented with combat support and 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 role of artillery in support of border security operations is the same as its conventional role. Fire planning must be extensive in order to have preplanned concentrations on call to engage and defeat infiltrators. Survey is of particular importance since maps and air photography usually will be inadequate or, in the early stages, may be nonexistent. Registration is fired throughout the area to guarantee rapid and accurate engagement of targets. Aerial observers are used in addition to ground observers. The total coverage of the border area with preplanned concentrations and the political implications if the border is violated by supporting fires, increases the requirement for fire support coordination by any element firing into the border area to include mortars and armed helicopters.

(3) The role of armor in border security operations is 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 organic to the Armored Cavalry Squadron of an Infantry Division is an ideal intercept force. By using its organic lift and attack helicopters, it can react rapidly to enemy infiltration attempts across a wide area. Because of its valuable capabilities, the Cavalry troop normally will be retained in reserve at either the brigade or division echelon until a significant infiltration attempt has been detected. Once employed, the Air Cavalry troop can be reinforced with mobile infantry and artillery.

(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 provide the means for detection of actual or intended infiltration through border areas as well as aerial and ground surveillance of adjacent areas.

(6) In addition to the Division Engineer combat battalion, 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. Corps combat and construction battalions, as well as equipment support companies and cellular 500-series teams, can provide additional support.

(7) Wire will be the primary communication means, but radio and wire will be employed to supplement each other, where practical, in order to provide alternate communications means. The hookup of electronic elements in emplacing sensors and associated communications equipment requires assistance from electronic technicians.

(8) Army aviation supports border security operations by coordinated employment of aerial fire support, artillery, and intelligence collection requirements. Airborne and infantry division aviation units supplemented from 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 in the dissemination of psy-

chological appeals, through leaflets or loudspeakers, to known or suspected infiltrator areas or routes, as well as to the friendly population in remote areas.

(9) Special forces detachments play an important role in border security operations. "A" detachments are used to train indigenous forces to perform border surveillance, reconnaissance, target-acquisition, and search and apprehension missions.

(10) Military police units are employed for patrolling in urban and rural areas, population control, and operating checkpoints in cooperation with civil police.

(11) The civil affairs staff sections and units in border security operations are responsible for planning, coordinating, and supervising the advice and assistance to host country officials in populace and resources control, prevention of civilian interference with border security operations, and consolidation of psychological operations to gain support of local populace in supporting operations against the infiltrators.

(12) Psychological Operations staff sections and 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, 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 are employed in 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 aerial surveillance, airmobility, and close air support to defeat large infiltration groups.

c. Navy.

(1) Navy elements are capable of establishing sea barriers and blockades, and providing 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 permits 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 have the necessary training and equipment 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 aerial interdiction in support of border security operations.

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

(3) The close air support 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 aerial photography and provide spot illumination.

Section II. PRELIMINARY PLANNING REQUIREMENTS

4–9. General

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

4–10. Threat

Understanding and assessment of the threat is important. The nature of the threat must

be investigated not only in terms of the current situation but also in terms of the potential, or incipient, threat. The magnitude of the threat and the sophistication of infiltrators determine the extensiveness 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.

4–11. Security
To establish an effective border security system it is necessary to control the border trace. 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.

4–12. Terrain Analysis
A comprehensive terrain analysis of the border area is necessary early in the planning stage. Accurate mapping and surveying of the area is essential. The international boundary trace must be clearly defined. In conjunction with the terrain analysis is the need to survey the soil, vegetation, and climatic conditions of the border area. These factors determine the extent and frequency of land clearing required as well as the most desirable components of the border security system.

4–13. Installation
Installation of a border security system may require extensive construction. In addition to installation of the physical barrier, the observation towers, hardened outposts, 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.

4–14. Phasing
Planning a border security system establishes a course of action to be followed in sequence. 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. Avenues of approach which are particularly vulnerable must be identified and those areas given priority in the sequence of installation.

4–15. Coordination
Planning a border security system requires close coordination and mutual cooperation between the adjacent units as well as with the internal defense system to the rear of the border area. Coordination must be made with civilian officials as well as military.

Section III. MATERIEL PLANNING FACTORS

4–16. General
The materiel considered in this paragraph is discussed in generic terms. Specific equipment is in various states of development.

4–17. Detection Materiel
a. Radars.

(1) General operational degradation due to inclement weather amounts to about 25 percent in range.

(2) Siting on elevated platforms or terrain features will maximize line-of-site.

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

(4) No extensive site construction is required for ground mounted radars.

b. Viewers.

(1) Viewers in general require a light source. They are degraded operationally by inclement weather or by countermeasures such as smoke.

(2) All viewers require unobstructed line-of-site.

(3) Night vision aids are made temporarily inoperable by direct, bright light sources.

(4) No site preparation is required.

c. Acoustic Devices.

(1) Area type detection of noise is provided at limited ranges.

(2) Vegetation will vary attenuation of infiltrator noises.

(3) Increased probability of detection of quiet infiltrators is achieved through the use of hand emplaced noisemaking devices.

(4) No site preparation is required.

d. Pressure Devices.

(1) Line-type pressure devices are effective, reliable line sensor devices.

(2) Extensive installation effort is required.

(3) Pressure devices are employed across roads, paths, trails, and other likely routes of infiltration.

(4) Pressure devices are not suitable for use in rocky areas or areas with pronounced slope.

e. Seismic Devices.

(1) Seismic devices can be either area or line-type sensors.

(2) Line-type sensors are utilized to cover segments of the border trace or to fill in where line-of-site sensors are masked. Area type sensors can be used around observation posts, strongpoints, and base camps.

(3) Seismic sensors are useful for detecting intruder tunneling activities as well as walking personnel.

(4) Seismic devices cannot be efficiently employed in areas of high natural seismic activity.

f. Infrared Devices.

(1) Detection devices using infrared sources as the influence field are line-type sensors requiring an unobstructed optical path to detect intruder movement.

(2) Infrared devices are employed along roads, paths, and trails, other intruder avenues of approach, and waterways or areas which are periodically inundated.

(3) Fog, rain, or dust seriously limit (90 percent in some cases) source-to-receiver distance for infrared devices. During night operations the detection capability is increased by 20 to 30 percent.

g. Magnetic Devices.

(1) Detect the presence of ferrous material at very limited distances (less than 5 meters). Magnetic sensors are best used as line-type devices.

(2) False alarms increase during electrical storms.

(3) Serve as backup devices to other sensors.

h. Mechanical Devices.

(1) These are line-type sensors requiring physical interaction with a detection activation device. Employment should be along paths, roads, and other intruder avenues of approach.

(2) Units are temporarily inoperative when the wire or mechanical device is broken but are easily reactivated.

(3) Inclement weather does not degrade operation.

i. Interface Between Detection Devices.

(1) Radars and viewers are used as a primary surveillance means of the border trace and as a backup to line-type sensors.

(2) Seismic, pressure, infrared, magnetic, acoustic, and mechanical sensor devices are used in conjunction with each other for necessary redundancy, reduction of false-alarm rates, or to alleviate the reduced effectiveness of one type device caused by certain terrain features.

(3) A primary consideration in the mixing of sensors is to oppose the enemy's measures to defeat the sensor logic. As an example, 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 are his chances of being detected by pressure sensors. 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. SOP must be adhered to and security practices followed at all times.

(4) Isolated detection devices are placed at or near forward elements or areas masked

from line-of-site for early detection of intruders as they cross the border.

j. 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.

k. Trace and Field-of-Fire Clearance. Vegetation clearing and suppression can be accomplished with dozers, by hand, or by use of chemicals and conventional demolitions. Dozers with associated attachments provide rapid and effective clearance of vegetation when they are available. Handtools and chain saws can be used in areas where dozers cannot operate. Chemical defoliants increase visibility through trees by suppressing dense foliage. They are most effective when applied during the growth cycle. Soil sterilants are used to prevent regrowth in cleared areas.

4–18. Delay Materiel

a. Mines (Antipersonnel (AP), Antivehicular (AV)).

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

(2) Use of AP mines, such as gravel, along the border trace delays intrusion and reduces enemy countermeasures to emplaced sensor devices.

(3) Mines should not be located close to detection sensors or their associated cables.

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. CBR.

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

(2) Use of lethal chemicals and lethal or incapacitating biologicals are considered in planning, but it is unrealistic to expect to receive authority to use them in a limited war situation.

e. Integrated Barrier System.

(1) Figure 4–1 depicts a conventional wire barrier which may be supported by mines and boobytraps. Visual surveillance and fire support coverage is required.

(2) Various developments in surveillance and sensory equipment have resulted in a concept of a more effective barrier system. Figure 4–2 shows a strengthened system utilizing the conventional barrier in duplicate and reinforced by minefields and a line sensor system. Surveillance of the system is greatly improved by utilization of personnel detection radar and night observation devices. Searchlights give the capability for night illumination. Infiltrators can be taken under fire by mobile intercept forces supported by artillery, close air support, attack helicopter support, or naval gunfire when within range.

4–19. Destruction 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 and air-mobility increases the intercept forces' effective border coverage.

b. Indirect Firepower. Artillery and mortars are the fastest means to engage infiltrators in the absence of trace-emplaced forces of infiltrator-initiated destruction devices. A free-fire zone between the trace and the barrier is required for optimum 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 minimize damage to the emplaced sensors, fuzing of artillery and mortars with MTSQ or VT is necessary where fires are directed into or near the system trace.

c. Air and Helicopter Strikes. Airstrikes are effective, if the response can be made at or

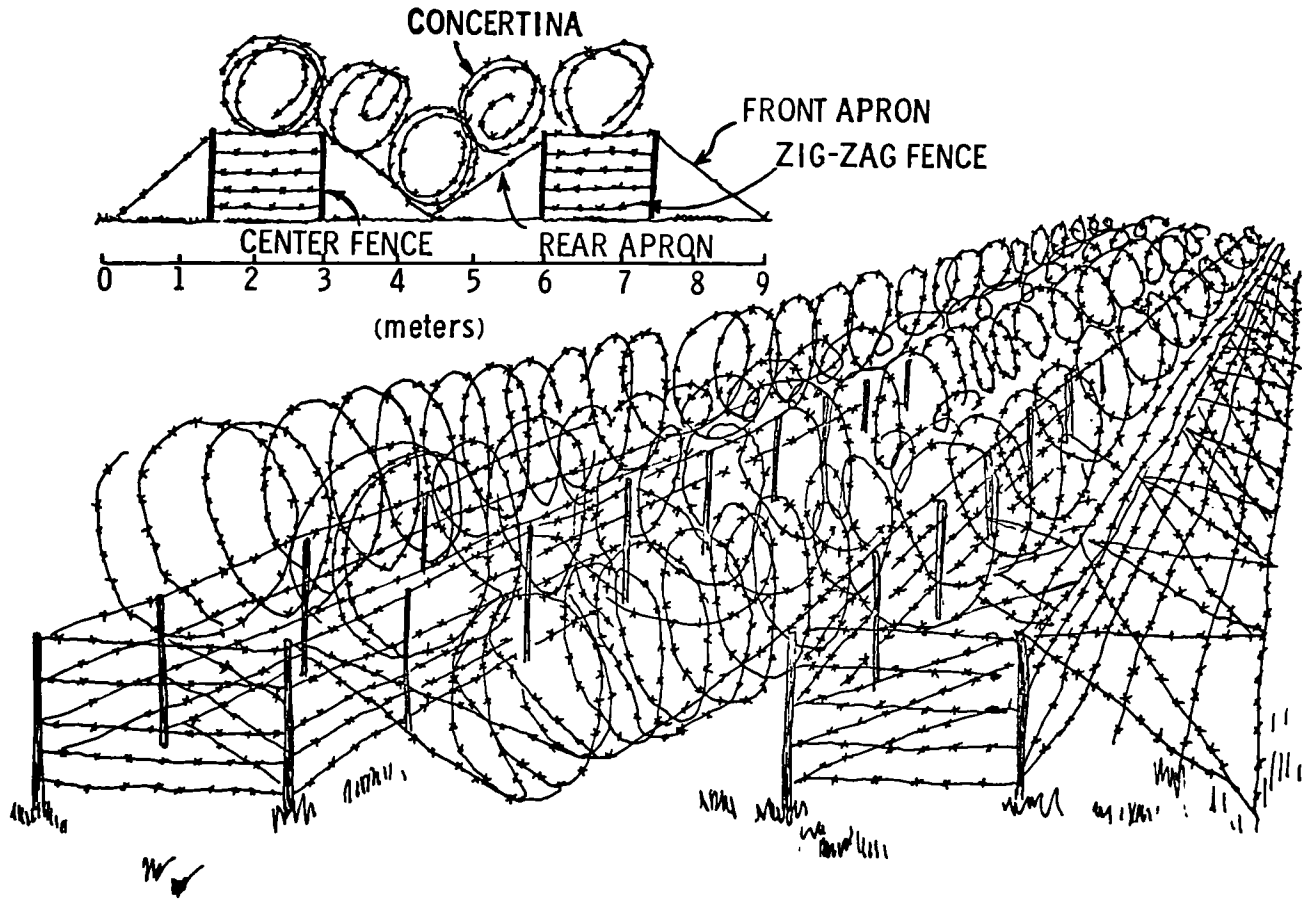


Figure 4–1. Conventional wire barrier.

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 close air support. Armed helicopter strikes are also 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

4–20. General

Initially a commander must do what he can within the constraints of time, the tactical mission, and the attendant factors of terrain, anticipated avenues of approach, suitable observation posts and strongpoint locations, and requirements for local security. In effect, installation of a border security system is a sequential operation. The phasing must be predicated on orderly growth of the system to be established. Compatibility of the initial system with the ultimate system is the primary objective.

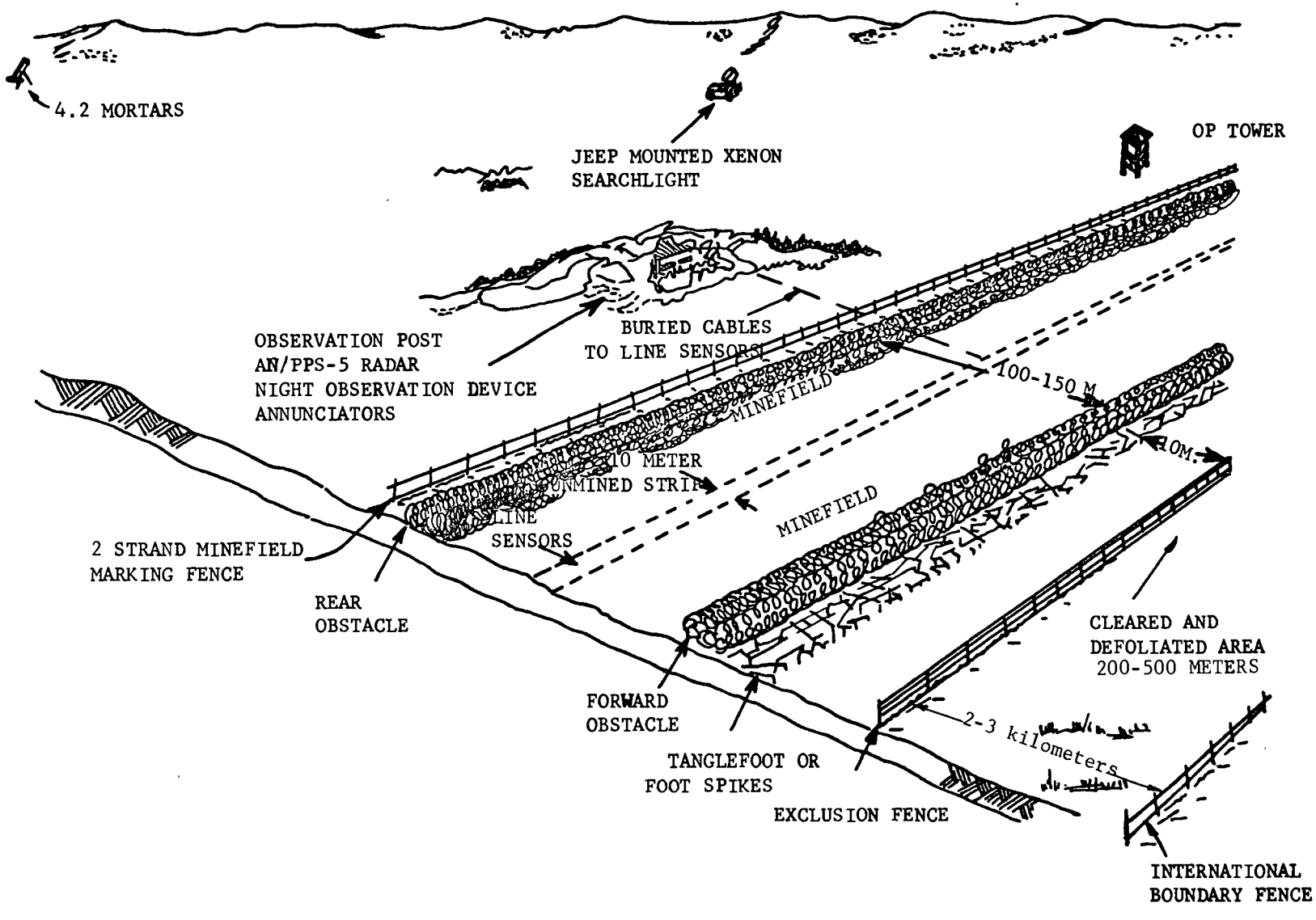


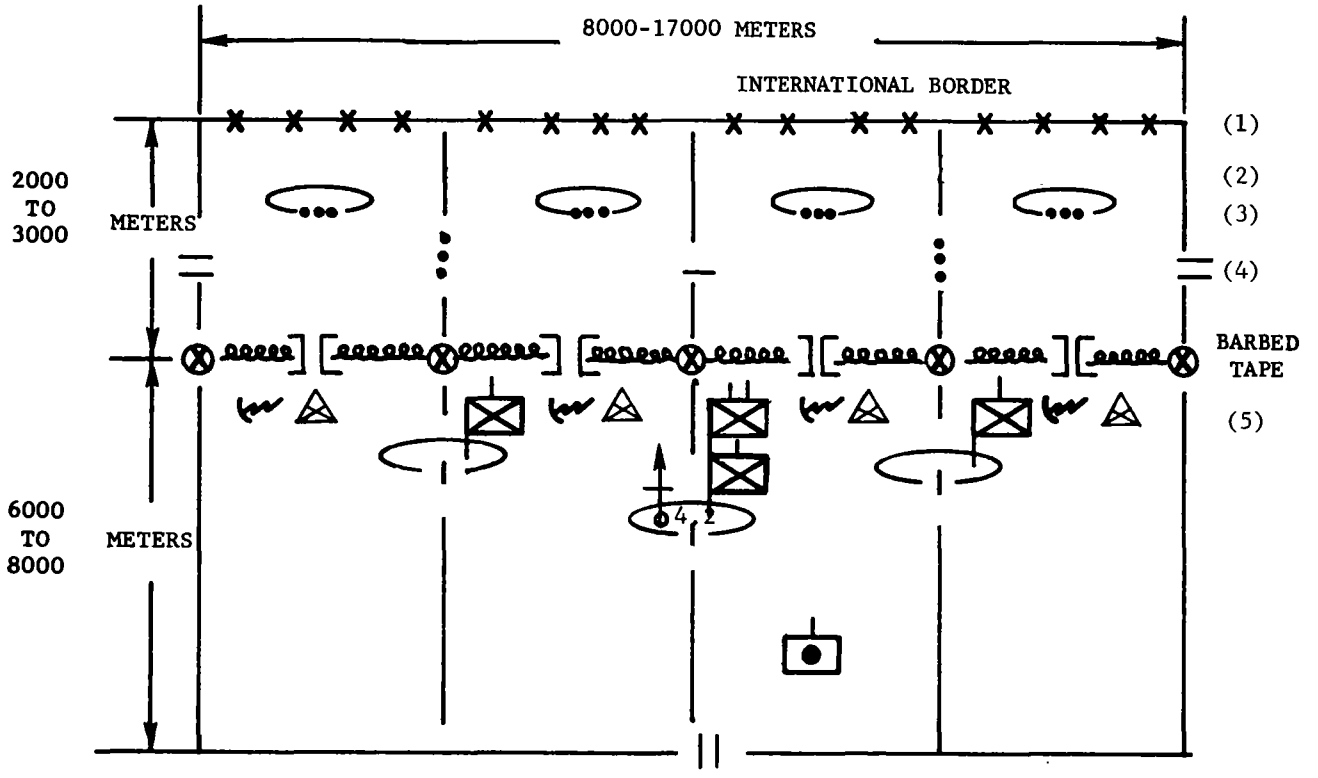
Figure 4–2. Strengthened barrier system.

4–21. Phase 1

Figure 4–3 shows a generalized border security system during the initial stage of operations. It is based upon the means which 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. A standoff distance of 2,000 to 3,000 meters from the border should be planned to permit utilization of artillery and 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 bor-



1 Construct a simple fence along the border trace
2 Observation and firing lanes cleared by hand
3 Forward platoons provide security for parties working on barrier trace
4 Active patrolling during daylight and ambush positions at night
5 Radars or NODS placed in OP's

Figure 4–3. Generalized Phase 1 border security system.

der security system during Phase 1 is limited to easy-to-install items. 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 Observation Devices
- Searchlights
- Seismic devices
- Patrol aircraft with Personnel Detectors and other sensors
- Optics

(2) Delay Materiel
- Gravel mines
- Mines
- Barbed wire or tape
- Footspikes
- Fences

(3) Destruction
- Infantry, armor
- Artillery and mortar fire
- Helicopter gunships
- Tactical air support
- Naval gunfire

c. Additional Activities.

(1) *Survey and Mapping.* Engineer 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 1:25,000 scale. Artillery, in direct support of the battalion, establishes registration points along and forward of the border security trace. Registration points must be numerous enough to permit accurate shifting and use of fires with and without the aid of observation. Detailed diagrams accurately pinpointing each detection, delay, and destruction element are drawn to scale. Concurrent with the survey and mapping of terrain, weather and climatic conditions are studied to ascertain the impact that they have on the border security mission. Consideration of defoliation, soil sterilization, and botanical items is made as early as possible.

(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 viewers and radars and to permit maximum use of direct fire weapons. Engineer and Chemical Corps personnel provide advice and assistance. Reserve troops and indigenous labor are used to expedite progress where the operational environment permits.

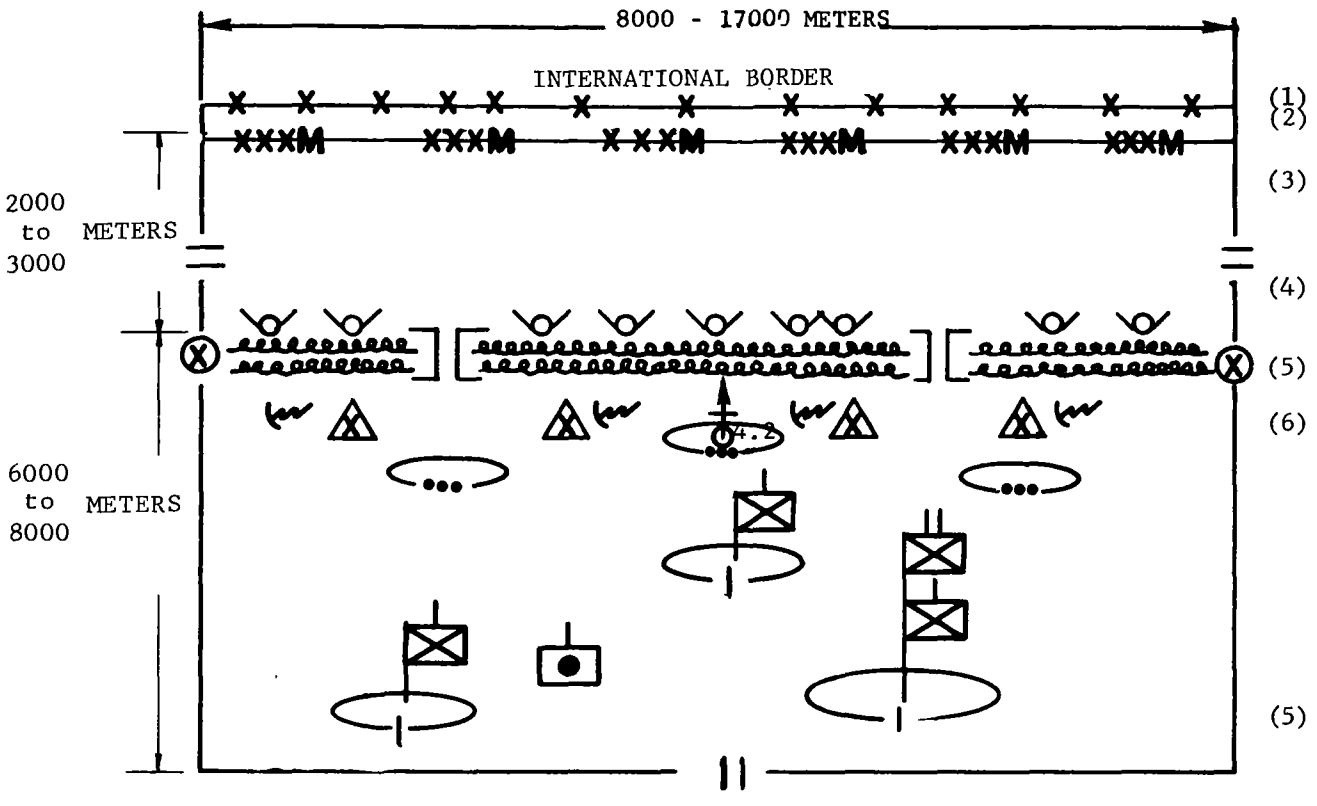
(3) *Communications.* The organic radio communications net is used during Phase I operations. As soon as possible, wire is buried to provide a more secure and reliable primary communications system plus redundancy of communication means.

(4) *Intelligence.* Intelligence is an important aspect of the border security operations during this period. Answers to the basic interrogatives, who, what, why, when, where and how are vital in establishing strongpoints, defensive positions, and neutralization procedures. Location of infiltrators' base camps or way stations across the border and actual or likely avenues of approach are vital information in establishing strongpoints and defensive positions along the border. Long Range Patrols are capable of getting this information. Intelligence collection is closely associated with civil affairs effort in order to gain valuable and timely intelligence from that source.

4–22. Phase 2

Figure 4–4 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 which can be accomplished in a matter of 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 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 expedi-



1 Marked fence along border trace
2 Gravel mine strip 50 meters wide on friendly side of the border
3 Active patrolling during daylight ambush positions randomly occupied at night
4 Defoliation initiated
5 Work continued to improve all positions and barrier
6 OP's with radars at 3–5 km intervals. Other OP's to fill gaps as required
7 Increased use of patrol aircraft and helicopters

Figure 4–4. Generalized phase 2 border security system.

tiously from their initial location to the location of most likely intercept. Unit strongpoints are dug in, sandbagged, and provided the degree of protection which is feasible under the circumstances. Ambush patrols occupy positions during limited visibility on a random basis and hand-emplaced sensing and surveillance devices are employed. With the improved methods of detection and delay, the need for stationary infantry intercept forces is lessened. Increased use of mortar and artillery fire is emphasized.

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

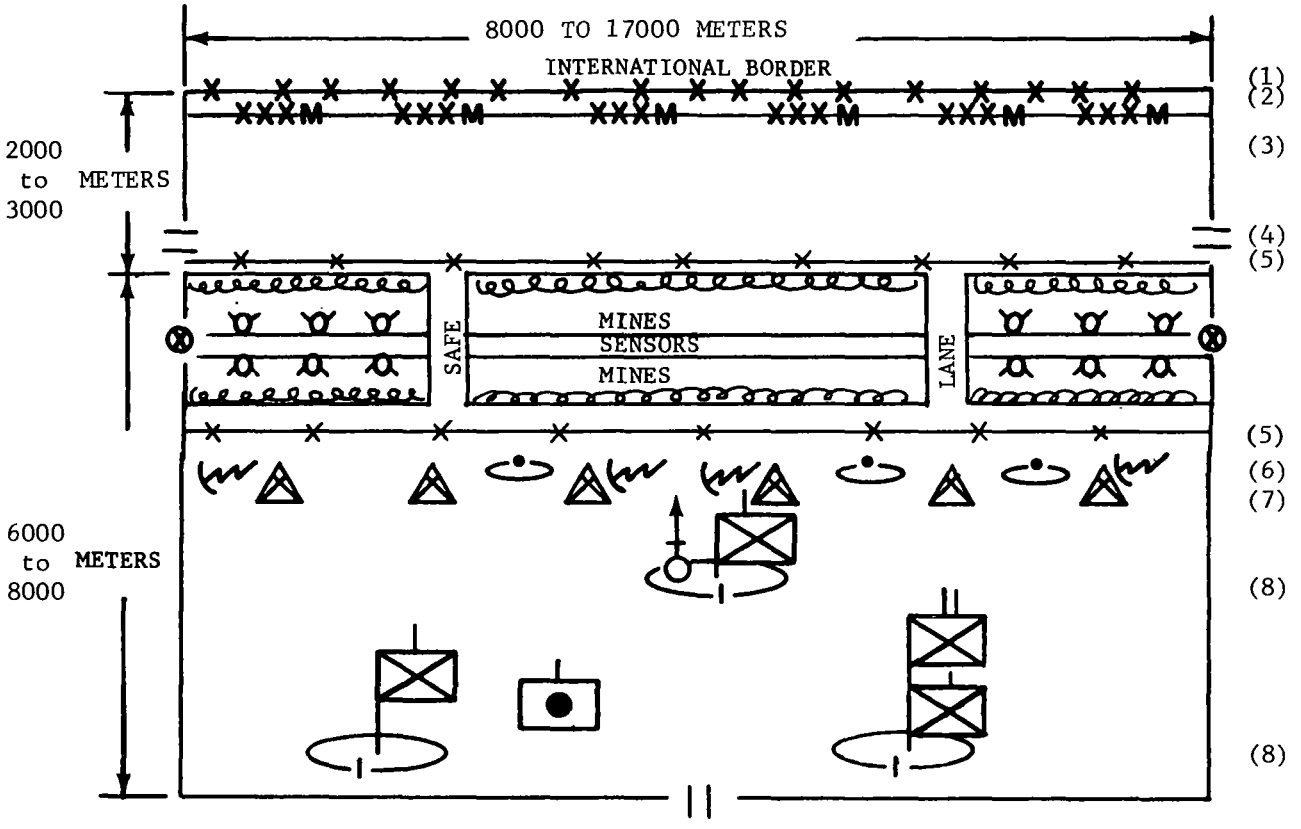
c. Materiel. Phase 2 materiel grows in sophistication and degree of permanence. Temporary acoustic and seismic devices are replaced by more permanent devices. Line sensors are installed. Delay devices such as wire and tape are reinforced by double apron wire

with additional layers of concertina. Conventional antipersonnel 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 and night vision devices 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. Radio nets are supple-



1 Marked fence along border trace
2 Gravel mine strip 50 meters wide on friendly side of the border
3 Infiltrators engaged by artillery in free fire zone
4 Defoliation continues in area between border and barrier
5 Exclusion fence erected on each side of barrier to eliminate false alarms
6 Ambush sites hardened and randomly occupied behind the barrier
7 Additional surveillance radars and image intensification devices in OP's
8 All positions hardened: additional communication equipment installed
9 Continued use of patrol aircraft
10 Companies rotate periodically
11 Forward company mans OP's and ambush sites

Figure 4-5. Generalized Phase 3 border security system.

mented by wire nets to the extent possible. Air and artillery support communications are improved.

4-23. Phase 3

Continued effort is made to improve the system in terms of forces and materiel as depicted in figure 4-5. With increasing familiarity with the terrain, weather, and other environmental conditions, commanders seek imaginative means to enhance the border security system by use of available materiel. Good relations with the local inhabitants, normally initiated in Phase I, are cultivated to the extent possible within mission limitations. Indigenous forces are trained in utilization of new materiel items.

a. Force Elements. Mechanical detection and delay devices and more effective artillery and mortar fires as a result of accurate survey and effective target acquisition enable the battalion to cover adequately a much wider front than under other tactical conditions. Figure 4-6 indicates the artillery support available to a battalion deployed on a 17-kilometer front.

b. Construction. In or near outpost towers, dug-in bunkers or protective positions for off-duty personnel are constructed. Sandbagged bunkers may ultimately be replaced by concrete bunkers. 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 and soil sterilization initiated in the first phase take effect in this stage. Wire and mine emplacements are thickened to improve the physical barrier.

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

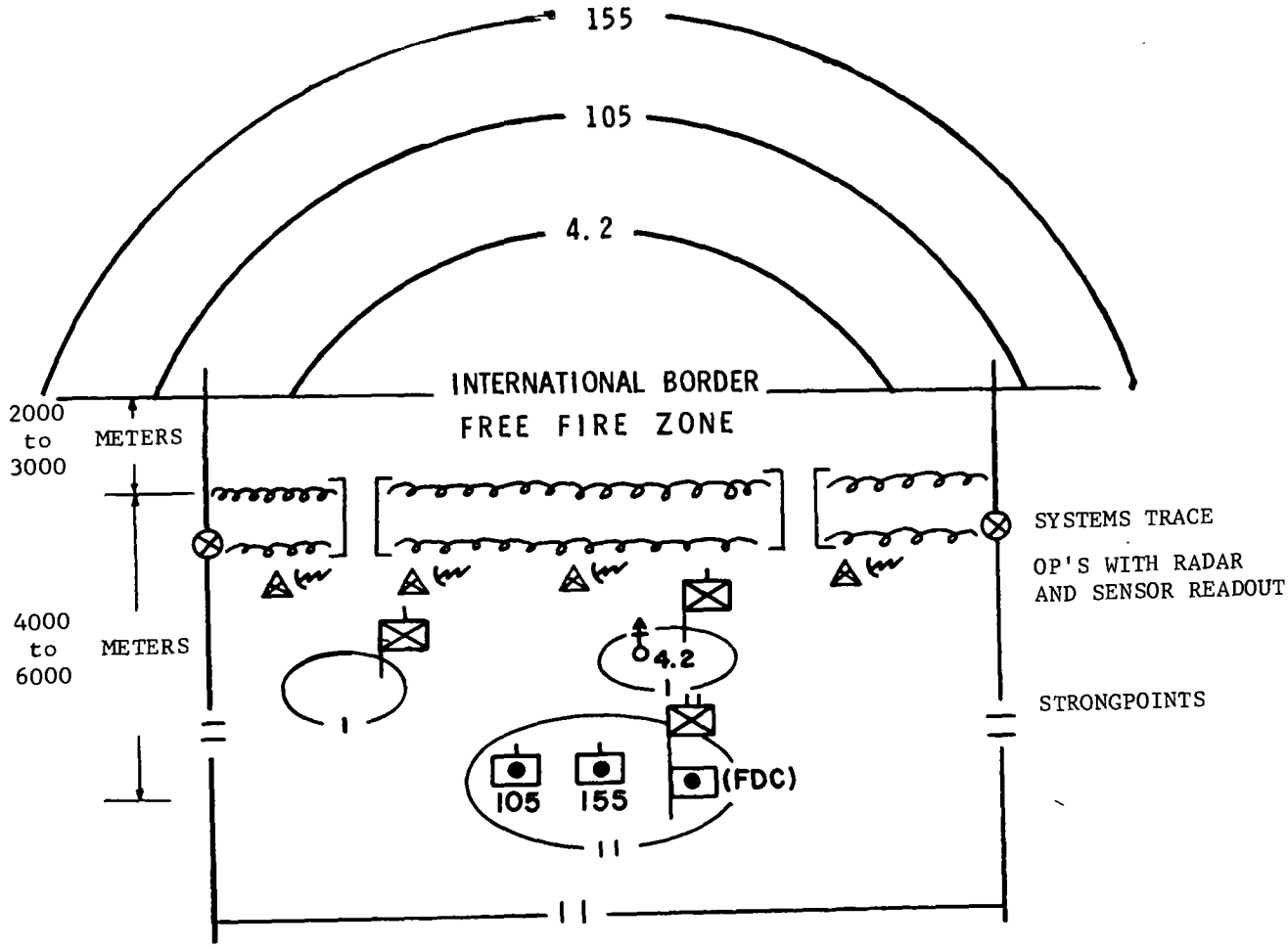


Figure 4-6. Diagram of a battalion employed on a 17-kilometer front under ideal terrain conditions.

CHAPTER 5

OPERATIONS

Section I. INTRODUCTION

5–1. General

a. This chapter provides guidance to brigade and lower commands on the mission, concepts and organization for conducting border security and related operations.

b. References which provide further guidance on related operations include FM 7–20, FM 31–15, FM 31–16, FM 31–21, FM 31–22, and FM 31–73.

5–2. Mission

The mission of the border security commander is to minimize infiltration of intelligence or insurgent agents and supplies to support insurgency. The infantry brigade conducts border security operations in sector in coordination with host country, allied, and other U.S. military and civilian agencies.

5–3. Concept

Border security operations include manning the systems trace, surveillance, extensive patrolling, night ambushes, target acquisition, and intercept operations. Related operations which will be conducted by border security units are intelligence operations, psychological operations, populace and resources control, special forces missions, defoliation and soil sterilization, and base area security. Joint operations are considered since border security will, in many cases involve two or more services.

5–4. Division Role

a. Operations. The role of the division in border security operations is similar to that in conduct of stability operations. The division controls three to five brigades plus organic and attached artillery and other supporting forces. The bulk of the available combat forces are attached to brigades and division retains control over small, highly mobile reserve forces. Based upon consideration of the threat, terrain, mobility and the mission, the division tailors brigades and assigns mission and frontages. The reserve may consist of two or more forces which may be committed independently because of differing mobility.

b. Combat Support and Combat Service Support. The full combat support and combat service support means of the division 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. Planning. The most important function of the division is to plan the sequence of system installation, allocate resources in priority to support the plan, and make adjustments in force allocations in light of existing tactical conditions.

d. Frontages. The border security frontage that can be covered by a division varies with its organization, the threat, the terrain, mobility, and climatic conditions. Under ideal conditions a division can cover about 100 kilometers of front. This approaches the maximum and is predicated on terrain where sensors and other devices achieve best results. In situations where sensors and other devices are less effective, frontages are narrowed or commanders accept a greater risk of successful infiltration. If the political situation precludes the use of artillery fire as a response to attempted infiltration or precludes establishment of a free-fire zone, division capabilities may be significantly reduced. Frontages are dependent upon the mobility means available to intercept forces.

5–5. Brigade Role

a. Operations. The brigade organization is the basic operational unit for border security operations. The brigade is composed of from three to five maneuver battalions and artillery support either attached or in direct support. Where trafficability is satisfactory and/or road nets are available, armor or mechanized units are utilized as mobile intercept forces to provide added firepower and decisiveness. Helicopters further increase mobility of intercept forces in areas where terrain, vegetation, or climatic conditions permit their use. The brigade commander maintains a reserve of sufficient strength to counter or intercept any size infiltration attempt up to a small battalion.

b. Planning. The brigade coordinates battalion planning for installation of the border security system and assigns brigade priorities when the consolidated plan is forwarded to division. Resources available in brigade and supplied by division are further allocated to battalions on a priority basis.

c. Frontages. In terrain where maximum effectiveness can be achieved from sensory devices, a brigade is capable of manning up to 40 to 50 kilometers along the border. Various environmental degradations will decrease brigade frontages. However, when a systems trace does not require personnel manning, brigade frontages can be expanded.

5–6. Infantry Battalion Role

a. Operations. The battalion ordinarily mans an assigned border sector with available operational resources with at least one artillery battery in direct support. Strong intercept forces are held in reserve by the battalion commander.

b. Planning. The battalion commander makes detailed plans for installation of the border security system. Planning is phased to obtain maximum effectiveness of available resources during the construction effort. The battalion installation plan is forwarded to brigade for consolidation and allocation of combat support and combat service support elements on a priority basis.

c. Frontages. A battalion frontage of 15 to 17 kilometers is possible in border security operations in terrain which gives maximum effectiveness from sensory devices. Various environmental and mission factors can increase or decrease battalion frontages.

5–7. Remote Area Systems

Many remote, relatively uninhabited border areas exist where it would be too costly in men and materiel to establish a linear systems trace. In these areas border security operations are conducted by extensive patrolling, both ground and aerial, emplacing remote sensor fields on known or suspected approaches and in previously used base or staging areas, and by the use of self-sterilizing mines. This represents an economy-of-force mission in that brigades assigned to border security in this manner may also be given other concurrent missions. Figure 5–1 depicts a system of this type.

a. Mobile intercept forces are on alert at secure base areas to be employed against infiltrators when they are detected by sensors or patrols. Armed helicopters and close air support are the primary fire support means. When an intercept force is deployed, artillery is moved overland or by air to supporting positions. Air-dropped mines are used to block the withdrawal route of the infiltrating force or to canalize their 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. Aerial reconnaissance elements monitor sensor output and conduct active surveillance of the border area.

Section II. TACTICAL OPERATIONS

5–8. 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 target acquisition means.

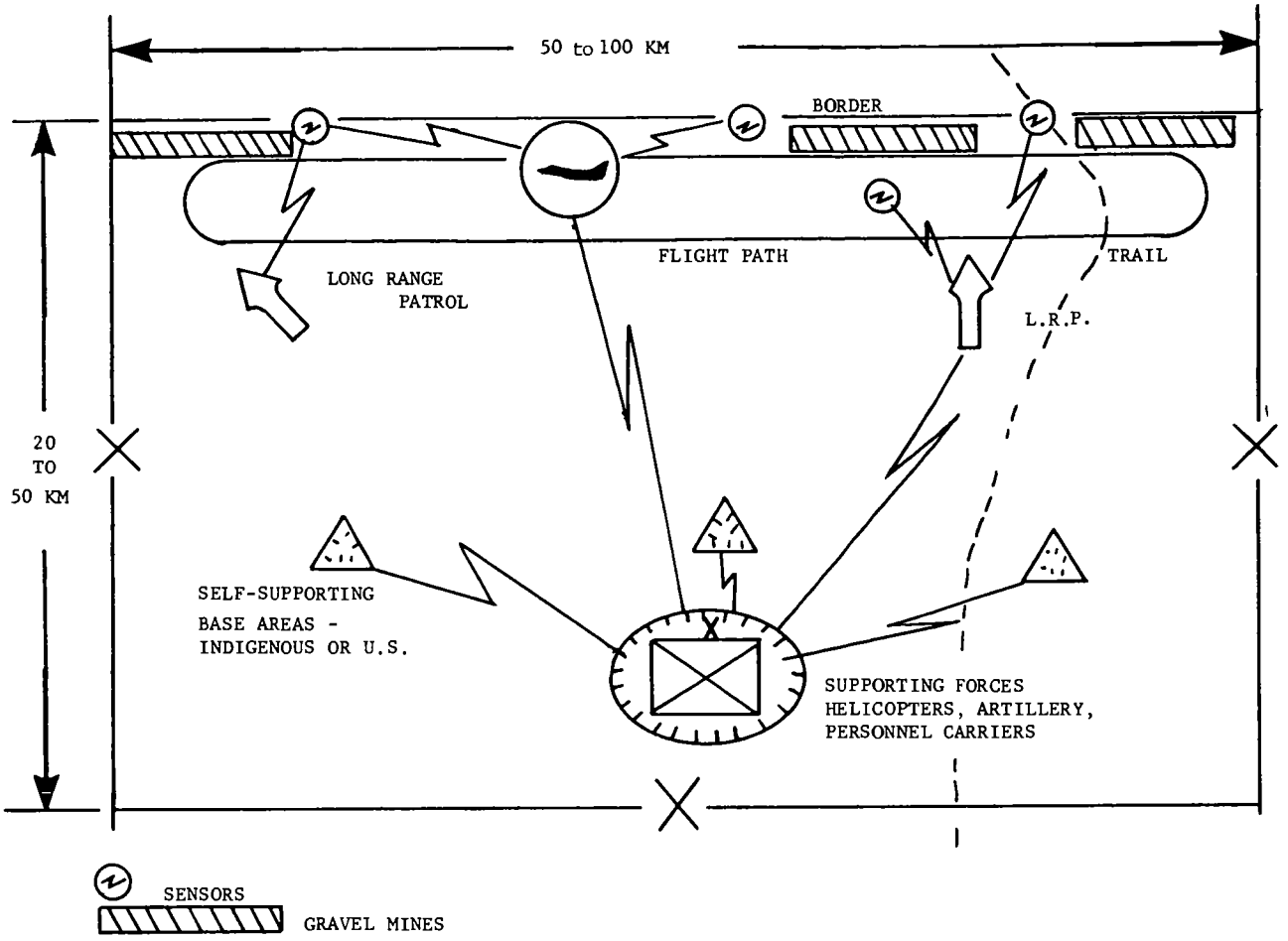


Figure 5-1. Remote area system.

5-9. Concept

The brigade commander is assigned a specific sector of border and is given responsibility for border security operations conducted in his area. Sufficient forces are placed under his operational control to counter infiltration attempts by enemy forces of less than battalion strength. The commander coordinates closely with civil police and military units having responsibility to the rear of his zone to insure close coordination for interzonal search and intercept missions.

5-10. Organization

a. The border area is organized to provide for coordinated action of the military forces, civil forces, and the population. The area of operations is subdivided into geographic sectors or sectors coinciding with internal political subdivisions. Specific sector responsibility for local military operations is delegated to a single commander. The relationships between military commanders and host country civil and military authorities are established by specific directives and SOP from higher headquarters.

b. The brigade task force organization is the basic operational unit for border security operations. The force is tailored 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 brigade tactical operations center (TOC) is adequate for managing the information gathering and reaction missions required in border security operations. Special situations such as independent brigade operations may require augmentation by specially trained intelligence personnel. During periods of high infiltration activity or increased in-

telligence information yield it may be necessary to augment the TOC with additional operations personnel. 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. A brigade task force will be composed of from three to five maneuver battalions. Supporting artillery will be in direct support of the brigade or attached to the brigade. When environmental factors permit, mechanized or helicopter-borne infantry is utilized as the brigade reserve/interrupt force. Where trafficability is satisfactory and/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 permit.

5–11. Command and Control

a. A brigade commander is assigned a specific sector of border and is given complete responsibility for border security operations conducted in his area. Sufficient forces are placed under his operational control to counter infiltration attempts by small or medium size groups. It is not expected that the forces deployed for border security will be adequate to repel attacks by enemy forces larger than an insurgent type 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 assure quick reporting and adequate command and control. Buried wire systems are preferred to minimize jamming and compromise. However, radio and wire are employed to supplement each other, where practical, in order to provide duplication of communication means. Both systems must be tested periodically for adequacy of performance.

5–12. Restrictions

Rules of engagement and restrictions on the use of force, equipment, and firepower will be published by higher headquarters for the guidance of commanders charged with border security missions. Due to 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 the commander a basis of reference on which to base his actions.

5–13. 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. Patrolling is conducted by small, highly mobile units moving on foot, or by land, water, or air vehicles during daylight hours. Populated areas contiguous to the border are searched and surprise checkpoints are established along known or suspected routes of communication.

(1) Dug-in or concealed night 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 populace and terrain will assist the ambush mission. Artillery and mortar concentrations are registered and plotted to provide rapid on-call support. When a free-fire zone is established forward of the system trace it is seldom necessary to occupy ambush sites in the zone. Detectors and sensors are emplaced to provide warning of intruder approach. If local restrictions preclude establishment of a free-fire zone, ambush sites are manned forward of the barrier trace and intercept forces are prepared to assist them on call.

(2) When not precluded by political considerations, organic reconnaissance patrols are employed to obtain target acquisition data. They may penetrate enemy territory to install

sensors which will 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 are well suited to assist in the conduct of border security reconnaissance patrols. The local national's knowledge of the terrain, inherent ability to operate effectively in the remote environment and speak the language, plus his familiarity with the local customs, are favorable attributes.

b. Extended Combat Patrols. Extended combat patrols are employed in difficult terrain some distance from combat bases but within range of supporting artillery. Extended combat patrols employ ranger type tactics and remain committed for extended periods. They may be supplied by air and equipped to communicate with their combat bast and supporting aircraft. Such patrols may vary from squad to platoon in size. 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 kept under surveillance; when feasible they are attacked by 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. Long Range Patrols.

(1) An infantry Long Range Patrol (LRP) 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 patrols consist of specially trained personnel capable of performing reconnaissance, surveillance, and target acquisition within the dispatching unit's area of interest. The LRP should not be confused with the reconnaissance patrol which normally proceeds to an objective area to acquire certain information and then returns upon the accomplishment of the specific mission. Normally, the LRP is placed in a position to maintain surveillance over routes, areas, or specific locations for extended periods, reporting all sightings of enemy activity within the area of observation. LRP companies are organized, equipped, and trained for employment in all types of geographical environments. LRP may be employed to—

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

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

(*c*) Perform other appropriate ground information collection functions.

(*d*) Execute combat raids on a limited basis as required.

(2) Provisional LRP units may be formed within the TOE of the division, armored cavalry regiment, or brigade to provide a LRP capability when required. The number of provisional LRP 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 usefully employed for 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) The best conditions for using scout dogs are in sparsely inhabited areas which present few distractions. A scout dog is unable to distinguish between friend or foe, and if taken off alert through repeated contact with indigenous personnel, the dog soon loses interest in its task. When employed in support of an outpost or listening post, scout dogs are

placed in front of the main outpost line far enough forward to reduce distractions to the dog, yet close enough so that contact can be maintained at all times. Their individual stamina is considerably less than that of a soldier. They can "work" for only a few hours a day and a few days a week.

(2) Combat tracker teams (CTT) can be employed for pursuing and finding infiltrators who have succeeded in breaching the barrier system. Dogs for this purpose are difficult to procure and train.

(3) Dog training is conducted in the same environment as expected employment. Dogs are trained for specific missions and utilized only for those missions. If practicable, dogs are procured in the country of use. This takes advantage of natural acclimatization and immunity inherent in local species. If it is necessary to transport dogs into the country, sufficient time is allowed for the dogs to adjust to local conditions. Dogs become fatigued and their efficiency degraded after a 6-hour period. Special logistic provisions are necessary to support military dogs. To assure effective results, special food, quarters, and veterinary support are required.

5–14. Intercept Operations

Intercept forces of platoon to company size are maintained at company strongpoints. Mobile intercept forces are retained at battalion and brigade level, which are capable of rapidly engaging infiltrators or reinforcing friendly forces. 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 makes rapid response by intercept forces essential. Intercept operations require careful planning, coordination, and reliable communications 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 observation devices, they may call for searchlight or flare illumination and may call for artillery and attack helicopters. Through planning, rehearsals, and prepositioning they further increase their capability to engage the infiltrating force without endangering friendly forces.

b. Mobility means for intercept forces vary in different terrain. In rugged, wooded, mountainous terrain intercept forces will probably be footmobile. Intercept time can be reduced by prepositioning forces in areas of likely employment. Limiting factors include the means of transportation available as well as time and distance involved. Trafficable terrain or good road nets permit the use of tracked and wheeled vehicles in intercept operations. Heliborne forces are effective intercept forces in most environments if weather and light conditions permit their use.

c. Aerial reconnaissance and surveillance extends the capability of border security units. Tactical air reconnaissance units are capable of performing all missions of air reconnaissance, both day and night, in most weather conditions if the mission warrants their employment.

d. When Navy or Marine Corps air units provide the preponderance of air support to Army operations, operational procedures will be established by the joint force commander. Generally, these procedures are the same as for Air Force close air support and reconnaissance operations. Navy and Marine Corps air reconnaissance units possess the necessary aircraft and imagery-producing sensors to accomplish the same types of missions as is provided by the Tactical Air Force.

e. Army aircraft perform visual aerial surveillance, aerial photography, infrared reconnaissance, radar surveillance, and limited electronic reconnaissance. The advantage of using organic army aircraft is quick responsiveness to the local commander.

Section III. RELATED OPERATIONS

5–15. 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 is considered generally adaptable to border security operations. It is essential that intelligence be expeditiously disseminated to those personnel having the most urgent need and in a position to take necessary and immediate action or counteraction.

a. Collection Requirements. Collection requirements are directly related to the area of interest of the commander at each echelon of the border security organization. Each command possesses the means for obtaining the information he needs from within his area of influence, but must rely on higher and adjacent commands to conduct intelligence operations in that portion of his 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 emphasis is placed on the detection and identification of enemy infiltrators in time to take action against them before they are able to complete their mission. Ground and aerial surveillance devices are employed to take full advantage of their capabilities. Radars, night vision, anti-intrusion, and illumination devices are utilized along the border area to complement the detection capability of unit personnel.

(*b*) Ground reconnaissance, 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 most sensor devices.

(2) *Special collection activities.* Special collection activities are considered in planning and selecting the resources capable of accomplishing intelligence collection requirements in border security operations.

(*a*) Covert collection means utilizing local inhabitants are an effective source of information. Current doctrine contained in FM 30–18, FM 30–31A, and Defense Intelligence Agency Manual 58–11 (DIAM) 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 as well as during the selection and tasking of resources available to the collection effort. 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 effort is accomplished through the S2 element of the brigade TOC. Border security operations can be expected to generate sizeable numbers of apprehended personnel. Identification and classification of these personnel should be done in coordination with civilian authorities. Political prisoners are of particular value and should not be permitted to avoid detection under the guise of military prisoners. At the same time the system for apprehension and evacuation of border crossers should distinguish legitimate refugees or defectors from enemy agents. Provisions will be necessary for preferential treatment of friendly agents.

5–16. Psychological Operations

Psychological Operations (PSYOP) are employed in support of border security operations to weaken the will of the infiltrator, and to retain or win the support of the local people on each side of the border.

a. PSYOP is 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 psychological operations 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 psychological operations' efforts do not undo those of others or do not contradict other governmental 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.

c. When applied to border security situations, PSYOP has two main targets, the infiltrators (and potential infiltrators) and the local populace.

(1) Through psychological operations 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 by not only military forces but by the local population as well. Apprehension and fear on the part of infiltrators can be induced early, by addressing psychological operations 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.

(2) Through consolidation PSYOP the friendly population can 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 government, 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, demonstrating sincere concern for the welfare of the population is essential to the operation. Close coordination between psychological operations and civic action efforts is required. The key to survival of infiltrators is the local population. Without their support the infiltrators will not be able to accomplish their mission, unless the population is terrorized into cooperation. Government efforts can prevent or minimize the effects of such terrorization. In any event, all efforts should be concentrated on denying the infiltrators any contact with the population which could be expanded into a safe haven, operating base or pretense of popular support.

5–17. Populace and Resources Control

a. Members of underground and guerrilla organizations and other disaffected elements cannot exist without support from the local population. This support may be voluntary or forced. Commanders charged with border security missions take every practicable action to prevent or minimize support from the populace and to prevent supplies from reaching subversives, insurgents, and their sympathizers.

b. Documentation is one of the most widespread and effective measures for populace control. In effect this means that all of the friendly populace must have an identification card readily available to show on demand. Documents for identification purposes are in common use in all areas of the world in one form or another. A thorough documentation system based upon the system in being, with appropriate modifications, is an effective populace control measure. At the same time it must be considered that documents, control cards, and money are easy to reproduce.

c. Coupled with documentation controls is the use of search and clear operations. These operations take 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 populace and resources plan, and coordinate with military police and psychological operations elements to insure adequate support of this program.

f. Coordination of the populace and resources control operations with the psychological operations effort must be effected to reduce the impact on the populace.

5–18. Special Forces Missions

a. Indigenous forces, assisted and advised by U.S. Army Special Forces personnel, can conduct border security operations. These forces are particularly effective in performing surveillance missions in rugged mountainous terrain and in establishing local strongpoints. Such forces have an intimate knowledge of the area of operations and are familiar with routes suitable for infiltration. In addition, the indigenous forces know the population in the area and can readily detect an outsider.

b. Indigenous forces trained by Special Forces operate an extensive network of surveillance posts and trail watches. Other indigenous military forces 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 which make it attractive for an infiltrator to turn himself in. The local commander must know the procedures for providing the reward payments on a timely basis.

c. Special warfare personnel of the U.S. Air Force and Navy SEAL teams also train indigenous forces to participate in border control operations. These indigenous forces conduct operations similar to the U.S. Army Special Forces trained indigenous personnel.

5–19. 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 attack by infiltrators and in-country insurgent forces. Current doctrine for rear area protection and local security generally is applicable.

a. In addition to attempting to destroy the base area, enemy attacks may be for either harassment or to 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 system trace. Early warning is essential and all means, including guards, are employed. Intercept forces are capable of engaging this type infiltrator.

CHAPTER 6
COMBAT SUPPORT

Section I. INTRODUCTION

6–1. General

Although support requirements for border security operations are generally less than for sustained combat, rapid response is essential. Units are widely dispersed and environmental restrictions often preclude mutual reinforcement.

a. Artillery and mortar fire support provide responsive reaction to the infiltration threat in minimum time. If in range, naval gunfire is used in the same manner as artillery. Organic armed helicopters provide additional firepower for engaging infiltrators or in support of intercept forces. Close air support, due to its slow reaction time, is effective only in support of intercept forces engaging large size infiltration units. When permissible, it is effective in neutralizing enemy efforts to harass forces engaged in installing the border system.

b. Army Aviation, Engineer, Signal, Chemical, Intelligence, Military Police, and Civil Affairs units are essential for support of border security operations.

(1) Army aviation provides attack helicopter support, mobility for airmobile operations, artillery positioning capability for remote untrafficable areas, and resupply capability for inaccessible positions in addition to providing platforms for visual observation and sensory devices.

(2) Engineer units provide survey and mapping, border marking, sensor emplacement, vegetation clearing, and construction support. Priorities of effort must be established initially as Engineer support may be inadequate to meet all of the requirements.

(3) 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.

(4) Chemical support in the form of defoliation, riot control agents, smoke, and flame improves the overall effectiveness of the border security system.

(5) Intelligence support provides information on local weather, terrain, and population. Reconnaissance and surveillance, both aerial and ground, are coordinated through the brigade S2. Counterintelligence and security operations are a continuing requirement.

(6) Military police units support border security operations by performing conventional police functions in cooperation with counterpart host military and civilian police units.

(7) Civil affairs units support border security operations by coordinating civil affairs activities, providing advice on military civic action projects, and other support of internal defense and development. They plan, coordinate, and supervise consolidated pyschological operations in support of the border security mission.

Section II. FIRE SUPPORT

6–2. General

Responsive rapid fire support is required for border security operations. A possible hindrance is the limited ability to mass fires when fire units are widely dispersed and control may be decentralized. Although normal fire support procedures will be followed when feasible, the requirement to cover comparatively wide frontages makes massing of fires difficult under most circumstances.

6–3. 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 free-fire zone between the border trace and the trace of line sensors 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 effectiveness, and by means designed to minimize damage (e.g., airbursts) to the detection and delay system.

6–4. Field Artillery Support

To permit units to cover wide border frontages, artillery may be dispersed by batteries. Figure 6–1 shows a type organization for combat of division artillery resources to support an infantry division deployed along a 100-KM border segment. 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. Figure 6–2 shows a disposition of an artillery battalion (105-mm) with two batteries of 155-mm howitzers in support of an infantry brigade across a 30-kilometer border segment in medium terrain.

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

b. Despite the obvious advantages of continually occupying the same firing position, it may be desirable that artillery positions be varied occasionally. The use of alternate firing positions and temporary splitting of batteries extends coverage and reduces 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, artillery batteries may reinforce batteries from nearby positions and permit not only massing of fires but reduction of communications and construction requirements. 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 artillery fires. Once a target is acquired, a relatively large volume of surprise fire is delivered at the maximum rate to achieve high casualties. The rounds expended in large volumes of fire against acquired targets is compensated by the reduced requirement for harassment and interdiction (H&I) fires. However H&I fires 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, artillery is highly dependent on radio communications. As early as possible a dug-in wire net is established and hardened to provide redundancy of communication means and reduce vulnerability to jamming and intercept of radio transmissions.

f. Indirect fire support is planned between artillery and 4.2 mortar locations because the 4.2 mortar position cannot direct fire missions effectively in support of their own perimeter.

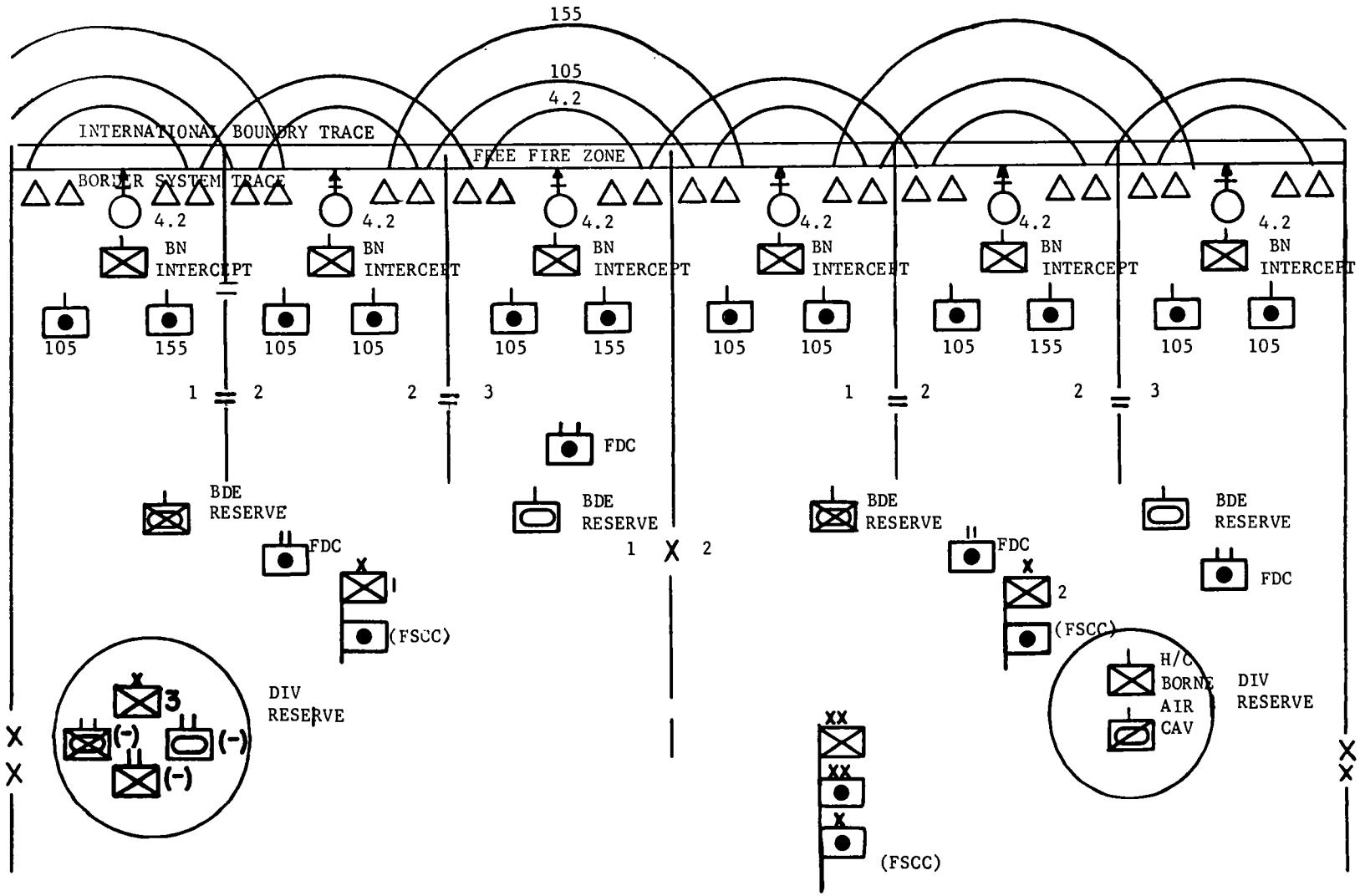


Figure 6–1. Artillery coverage for a division employed on a 100-kilometer frontage under ideal terrain conditions.

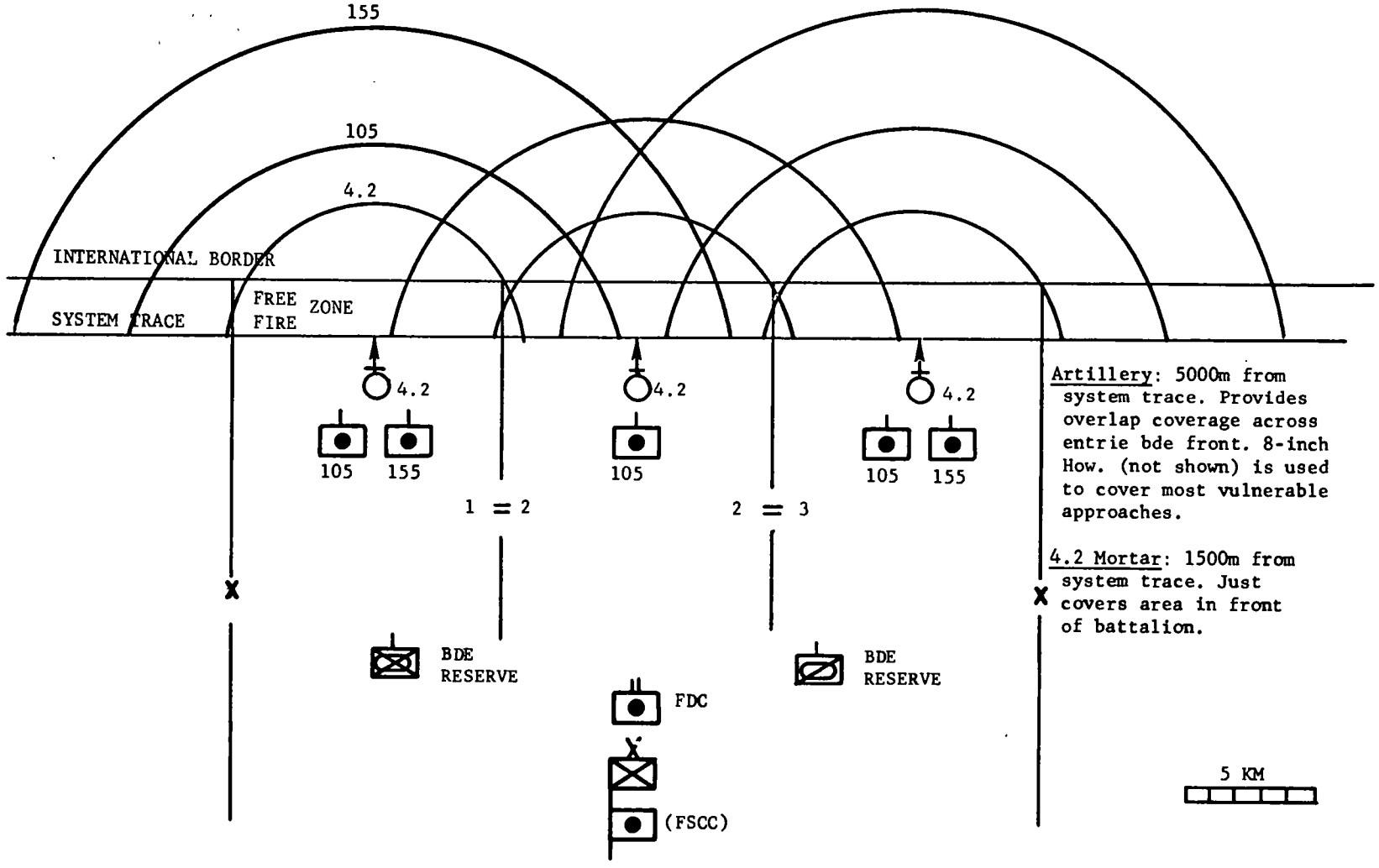


Figure 6-2. Artillery coverage for a brigade employed on a 30-kilometer frontage under medium terrain conditions.

g. Close liaison and maximum cooperation are required between an artillery battery supporting an infantry battalion, the 4.2 mortar platoon organic to the infantry battalion, and armed helicopters. All indirect fire and Army aerial delivered fires in support of the infantry battalion fire plan will be under centralized control of a designated fire direction center. Thus, the infantry battalion commander may find it desirable to place the mortar platoon under operational control of its direct support artillery battery.

h. Observation posts equipped with radars or night observation devices are habitually manned by a forward observer who can call for either mortar or artillery fire. Other observation posts containing sensor readout equipment will be manned with forward observers or with personnel trained and equipped to call for fires. Observers must be capable of intelligently evaluating 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.

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

j. 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 must be closely controlled and coordinated. Before deciding on its use, the advantages and disadvantages must be carefully evaluated. Authority to initiate the use of white light is retained by commanders but may be delegated directly to 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.

k. Medium and heavy artillery assigned to Corps or Army Headquarters is allocated to division elements based upon priorities and need. The utilization of Force Artillery in the border security role will be determined by the division commander. In some cases the heavier calibers of Artillery will be deployed in a manner to provide maximum cover of conventional avenues of approach. This normally will be the case when the potential enemy has a known capability of launching an attack of significant magnitude. In other cases Force Artillery may be deployed to cover potential access routes of infiltrators. Historically these access routes are considerably different from normal avenues of approach, in that the infiltrator purposely uses difficult routes across steep escarpments, jungles, and even previously mined areas. When elements of Force Artillery are allocated they are organized for combat in the same manner as Division Artillery elements; 8-inch Howitzer Battalions and 175-mm Gun Battalions may be dispersed by battery-sized units and fires will be controlled by a specified fire direction center. Because of their greater range they can be deployed in greater depth and still deliver fires throughout the border areas. Normally, the fires of medium and heavy Artillery are not placed on or near the border trace except with variable time fuze or timed fire.

6–5. 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 during seasonal floods or peak tidal stages. 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 Coordination 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 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's coordinate fire support activities at all levels, as required, and in accordance with current doctrine.

6–6. Close Air Support

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

b. Type Missions. Initially, close air support 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. Later close air support is used in support of infantry intercept operations to engage large targets. Close air support is normally not profitably employed against small fleeting groups of infiltrators.

c. Limitations. The major limitation to close air support is the response time necessary for reaction. Normal reaction times are of the order of 30 minutes. Figure 6–3 shows that 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 which are periods when close air support is least effective.

6–7. Armed Helicopters Fire Support

In open and flat terrain where target acquisition is possible, armed helicopters can support border security operations with a reasonable degree of effectiveness. In areas of rugged terrain, dense foliage, and during extensive periods of inclement weather, armed helicopter capabilities are severely limited. Figure 6–3 shows that armed helicopters are ideally suited to aerial search and destroy missions. Their effectiveness is quite good if the attack is accomplished immediately after detection without loss of contact. As a reaction force, armed helicopters must be immediately responsive or the target easily identifiable on the ground to achieve satisfactory effectiveness. Armed helicopters are most effective against small area or point targets.

6–8. 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 is 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, artillery, attack helicopters, tactical air, and naval gunfire. The company commander is assisted by forward observers from the direct support artillery battalion and the battalion heavy mortar platoon. When tactical air or naval gunfire support is available, a FAC and the naval gunfire spotter will assist the commander.

c. The Artillery Battalion Headquarters establishes a Fire Direction Center (FDC) in the normal manner. Each FDC can control the fires of three to five Artillery Batteries. In the border security role an FDC may control more than one caliber of artillery or mortars simultaneously. The use of the Field Artillery Digital Automatic Computer (FADAC) makes this mix of calibers feasible. The incorporation of the Tactical Fire Direction System (TACFIRE) will further enhance this capability.

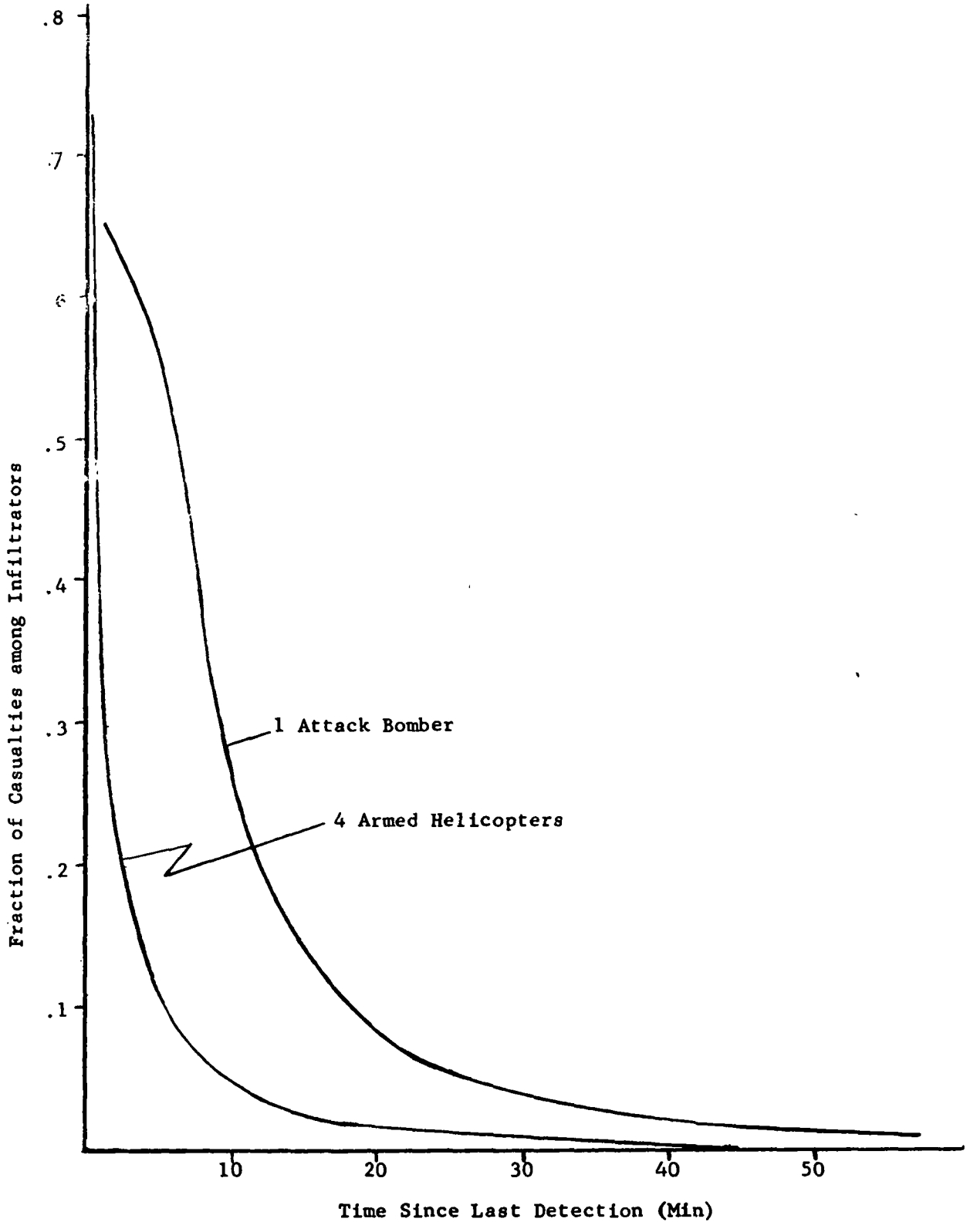


Figure 6-3. Generalized aircraft effectiveness.

d. Fire support is coordinated in the FSCC. Key personnel involved in operating the FSCC are the Fire Support Coordinator (FSCO ORD), who is the liaision officer from the artillery battalions in direct support of the brigade, the battalion heavy mortar platoon leader, and the S3 air, a tactical air control party with an air liaison officer and a FAC, a shore fire control party with a naval gunfire liaison officer, and a naval gunfire spotter when naval gunfire is provided. Host-country and third-country liaison officer are also provided when appropriate.

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

Section III. ARMY AVIATION

6–9. 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 reconnaisance 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. SOP are prepared to provide for rapid execution of these plans.

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

6–10. Artillery Positioning

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

6–11. 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

6–12. 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 aerial photos. Surveys will be in four categories—

a. To establish the exact trace.

b. To locate obstacles.

c. To locate positions such as artillery firing batteries and OP's.

d. To provide control for mapping.

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

6–13. 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's with better environmental control such as lights and heating, and strengthened cantonment areas and hardened artillery positions are also needed. As emplaced 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

6-14. General

The communications requirements of a border security system do not require changes in principles of communication. The materiel on hand within the brigade is adequate for the installation and maintenance of communications for all combat and combat service functions. Special equipment for installing the communications linkup with sensors and other devices is included with the basic item.

a. Initially, the primary communication means is radio. As soon as possible, wire is laid to all installations to provide redundancy and wire becomes the primary communication means to increase security of the system.

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

c. The additional annunciators, monitors, and other sensor-associated equipment will require augmentation of communication and electronic equipment.

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

6-15. The Division

The division communication system is tied in with the area system. The division signal battalion can perform this function but must concurrently provide maximum assistance in the installation of border-security-associated sensors and other electronic components. It will be necessary to assign signal priorities of effort to specific units to permit both routine and specialized tasks to be accomplished concurrently. A high degree of coordination is required between the allocation of engineer and signal effort in support of border security infantry and artillery battalions.

6-16. The Brigade

A typical radio net for an infantry brigade is shown at figure 6-4. 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 specially qualified technical personnel. The routine tasks of laying wire and establishing communication with area signal centers are accomplished by brigade personnel.

6-17. Infantry Battalions

A typical wire net for an infantry battalion is shown at figure 6-5. This installation is within the capabilities of the battalion with organic resources.

6-18. Artillery Battalion

The battalion establishes both radio and wire communications nets. When possible they take advantage of the communication trenches dug for sensor equipment to dig-in and harden wire communication links. Digital computers or other computerized inputs are utilized when they are available. The dispersion of artillery by battery-size units may require additional equipment and additional installation time.

6-19. Infantry Company

A typical infantry company wire communication net is shown at figure 6-6. This installation is made by the company but assistance is required to install and connect sensors and their readout devices. Companies depend on radio initially, but place a primary effort on establishing dug-in wire links as soon as feasible.

6-20. Close Air Support

The normal close air support communications net is adequate. When it is not feasible or profitable to use close air support because of political or geographical constraints, Air Force forward air controllers may be diverted to other units.

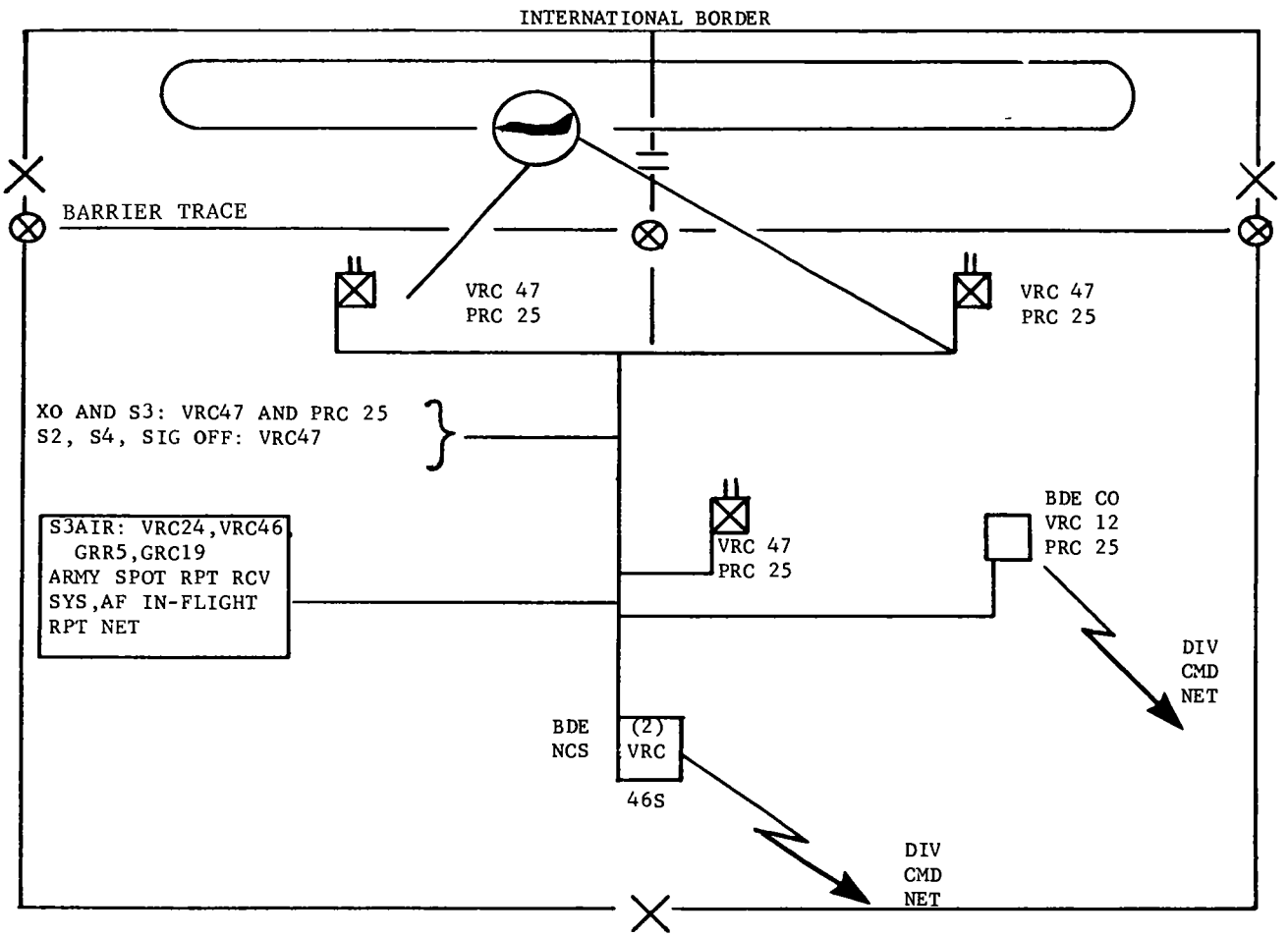


Figure 6–4. Type radio command net for infantry brigade manning border system.

6–21. 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.

Section VI. CHEMICAL

6–22. Riot-Control Agents

a. Riot-control agents are used in various operations in which hostiles lack adequate eye and respiratory protection. Riot-control munitions are a supplementary form of firepower, and, for optimum results, must be supported by fire and maneuver.

b. A protective mask gives virtually complete protection against the effects of riot-control agents, and commanders must consider these agents only as complementary to conventional firepower and maneuver.

c. Confusion and incapacitation resulting from the use of riot-control agents against an unprotected enemy greatly enhances the ability to neutralize and capture him.

d. Command responsive burning type riot-control munitions offer an effective method for delaying infiltrators or exfiltrators. Such munitions are preemplaced and activated in segments. Rules governing emplacement are determined by restrictions imposed by preventing the agent cloud from drifting across the border.

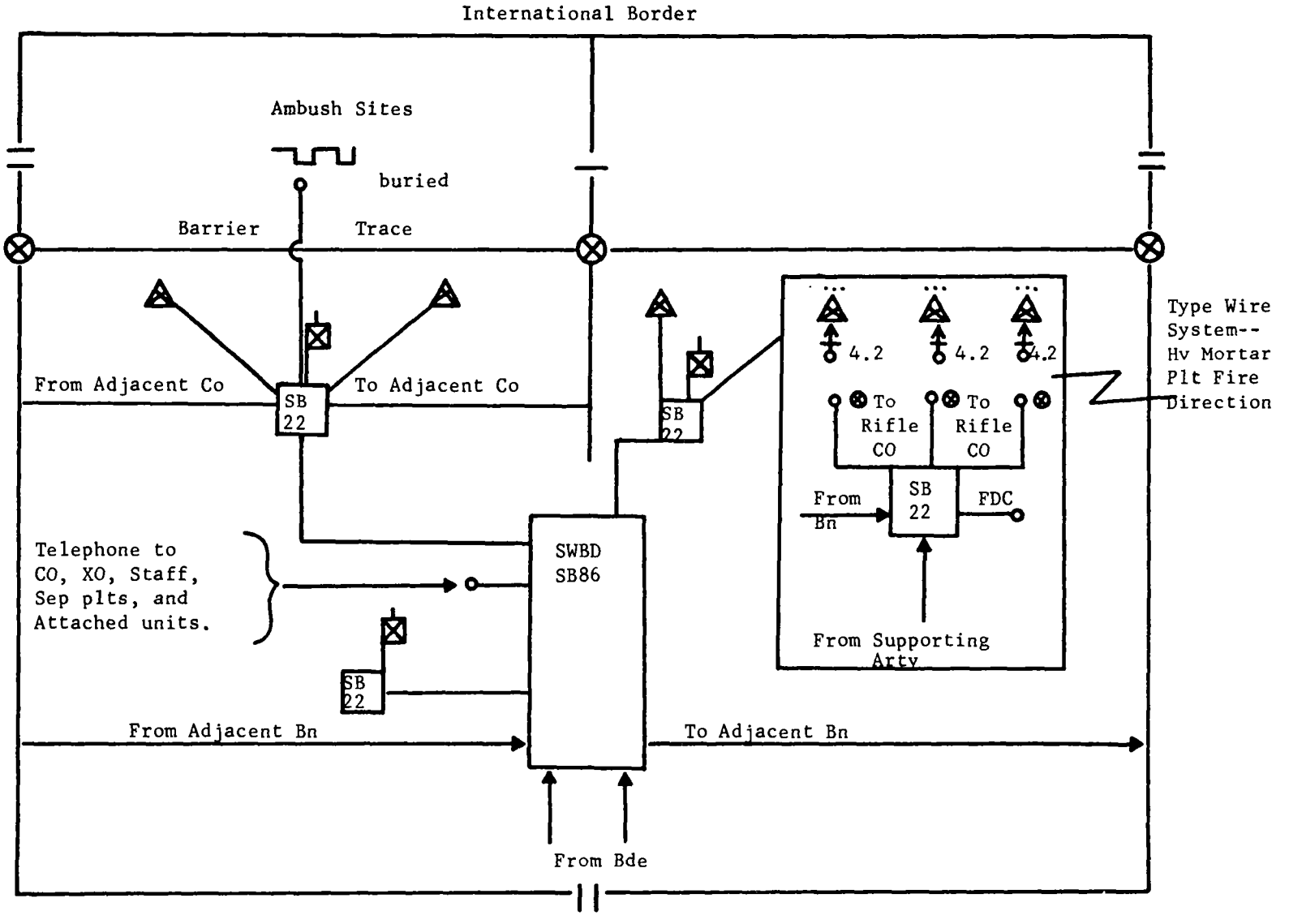


Figure 6–5. Type wire system for a rifle battalion manning border system.

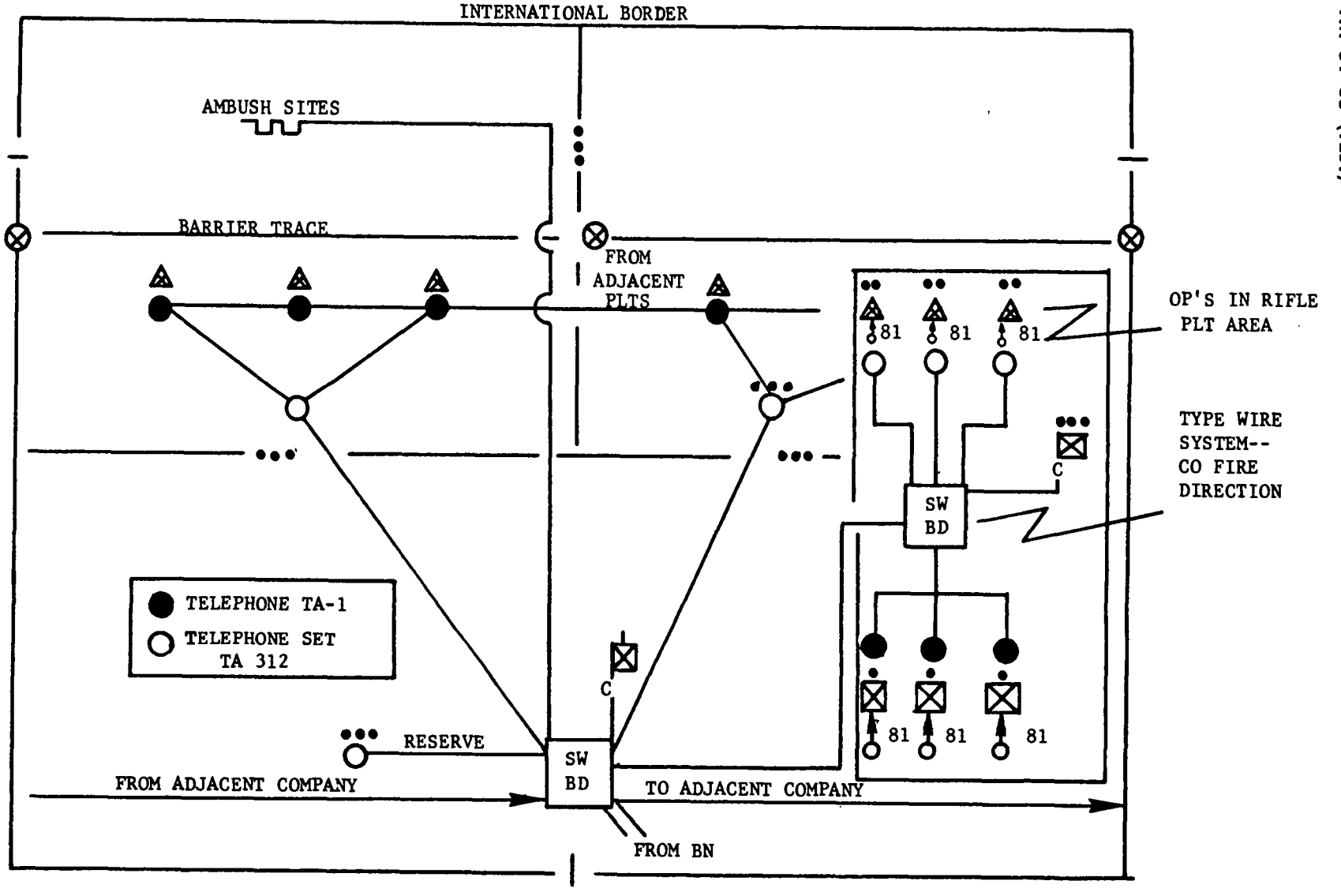


Figure 6-6. Type wire system for rifle company manning border system.

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 is wind dependent and friendly troops must have protective masks readily available.

f. CS–2 has persistency and extremely good secondary aerosolization characteristics which makes 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 so that the CS–2 has added time to become effective. The CS–2 in turn makes the physical barrier more difficult to breach, 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 deny entry or delay unprotected infiltrators through its irritating effect on the eyes, skin, and respiratory system, all of which enhance detection effects.

6–23. Smoke

a. Screening smoke can be used to screen 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 carefully consider whether observation and surveillance capabilities will be degraded by their use.

6–24. 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.

6–25. Defoliation and Soil Sterilization Operations

a. Defoliants enhance border security observation by killing vegetation or causing the leaves to fall. Agents Orange and Tordon offer the least costly means for broad-leaf 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 a method for long term denial of growth.

b. Aircraft such as the C–123 with spray tanks give the capability for covering long narrow zones which are desirable for border security operations. The C–123 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 or clearing fields of fire, helicopter mounted disseminators or manual application are employed. Helicopters provide good maneuverability to cover small irregular areas. Local restrictions may preclude the use of aircraft in border security spray operations. In such cases, manual application is required with a longer period required for application.

c. When considering defoliation the planner must consider such factors as plant growth cycles, meteorological conditions, and proximity to cultivated areas, as well as the conventional factors of availability of manpower and equipment. It is equally as important that execution of the mission follow the plan guidelines.

d. Soil sterilants may be applied to cleared areas for vegetation control and at an increased application rate to areas in which plants are growing. Best results are obtained if areas are cleared of undergrowth prior to 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.

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. Defoliation and soil sterilization operations are usually exploited by the enemy, charging use of gas warfare, thus seeking to discredit the 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 as well as the effects on human, animal and plant life.

Section VII. INTELLIGENCE

6–26. 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 obtained, analyzed, and interpreted for its significance in relation to border security. In border security operations it is emphasized that intelligence planning and operations not only be concerned with gathering information, but, of greater importance, with assuring 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.

6–27. Intelligence Planning

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

6–28. 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 which 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 host country and neighboring nations.

6–29. Collection Means

a. General. Requests for information and responses to these requests must be reported with sufficient timeliness to permit the maneuver and fire support elements to engage infiltrating targets.

b. Reconnaissance and Surveillance.

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

(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 units have reconnaissance capabilities and responsibilities.

(3) To assist in achieving the required timeliness provisions must be made to integrate information available from all sources in the intelligence network at lower echelons. Adequate screening, collation, and routine processing of information at the input echelon will prevent redundant and repetitive data from being reported.

c. Target Acquisition.

(1) Target acquisition involves the detection, location, and identification of infiltrating ground targets in sufficient detail to permit timely engagement. In border security operations this 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 which extend the acquisition capability behond 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 30–18, 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 result in defeat of the insurgent movement.

(3) The United States Army Security Agency (USASA) support must be considered during the planning stages of intelligence operations as well as during the selection and tasking of resources available to the collection effort. 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 FM 32-series.

Section VIII. MILITARY POLICE

6–30. Military Police Operations

Military police units offer significant contributions to border security operations in two broad aspects.

a. Military police personnel assist the local civil authorities in the conduct of normal police and law enforcement functions. Such functions include populace and resources control, intelligence collection, crime prevention, and apprehension of infiltrators. Due to the sensitive nature of these functions, assistance is normally provided in an advisory role to the local civil and military police authorities, particularly where border security functions are conducted primarily by civil and quasi-military authorities.

b. Military police offer a substantial contribution in direct support of border security operations. Their specialized training and skills are utilized in the following functional areas:

(1) Rear area protection, to include security guard duty on property, facilities, installations, and aerial shipments.

(2) Escort and security for ground movement of supplies and materiel.

(3) Traffic control.

(4) Operation of civilian internee collect-

ing points where local police and military authorities are not operating.

(5) Operation of captured infiltrator collecting points and evacuation to rear areas.

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

(7) Advising and training border security personnel in search procedures, techniques of establishing roadblocks and checkpoints, and operation of controlled passages located along the barrier system.

(8) Control of populace and resources on inland waterways, surface routes, and other designated areas.

(9) Liaison with civilian, paramilitary, and military police of the host-country.

(10) Operation of police intelligence nets to include input from host-country police.

(11) Criminal investigation.

6-31. Sentry Dogs

The sentry dog is used principally on guard duty with military police, as an extension of the senses of his handler, i.e., hearing and smell. This type of dog is trained to give warning to its handler by silent alert, either by freezing, in the manner of a pointer dog, by pulling at its leash in the direction of the alert, or by other indicators recognizable by its handler. Each dog is assigned to only one handler for care, training, and duty. Sentry dogs can be used at any point in a border security system where a military police security guard or patrol would be appropriate.

Section IX. CIVIL AFFAIRS

6-32. Civil Affairs

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 border security system, civil affairs units and personnel assist in establishing and maintaining sound political, economic, and social conditions among the civilian populace.

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 of predetermined width contiguous to the border is declared a restricted zone. Appropriate proclamations are issued to the population, so that all personnel understand that any individual or group encountered in the zone will be considered as infiltrators if not readily identifiable as members of a host-country 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 in the vicinity of the border are loyal to the host country. This may entail screening all personnel settled along the border, relocation of those persons of doubful 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 accomplished by host-country 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 populace 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) The conduct of relocation operations without proper planning and preparation can result in extensive political instability, unemployment, inequities in land distribution, in-

adequate 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 host-country 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, win the support of the population to the cause, and insure political-social-economic stability within the friendly population buffer zone. Valuable side benefits in the form of raw information of intelligence value and self-defense organization will be realized.

CHAPTER 7

ENVIRONMENTAL CONSIDERATIONS

Section I. INTRODUCTION

7-1. Concept

The planning factors as outlined in chapter 4 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.

7-2. Operations

Since infiltrators frequently use the most difficult terrain, the border security commander must modify the tactics and techniques discussed in this manual to fit the particular terrain. In jungle and mountains, emphasis must be placed on footmobility; in swamps and inundated areas, on the use of watercraft; and in trafficable terrain or desert, on the use of wheel or tracked mobility. The availability of army aviation for troop lift, resupply, reconnaissance, and fire support improves border security operations in any environment.

Section II. JUNGLE

7-3. Threat

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

7-4. Operations

a. It is difficult to establish and maintain a system trace in jungle areas. Along extensive jungle borders, which are sparsely populated, it may be more effective to rely on intelligence, target acquisition, and expendable sensory devices to determine the presence of infiltrating personnel. With the presence and location of the infiltrators established, intercept forces or fire support means can be brought to bear.

b. If a systems trace is established in jungle areas, the assigned frontages will be smaller due to reduced mobility, observation, fields of fire, and communication and control. Greater reliance must be placed on airmobile intercept forces and fire support means.

c. Emphasis in jungle areas is on influence-type sensory equipment. Viewers and radars are significantly degraded by the dense vegetation. If viewers and radars are utilized, larger numbers are required.

d. Mobility is greatly degraded by jungle areas. Roads and trails are few. Major reliance is placed on airmobile intercept forces and fire support weapons to engage infiltrators.

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. Artillery and mortars can seldom fire effectively in support of adjoining artillery units because of minimum ranges.

7–5. Modifications to the System

a. System trace manning may be infeasible or undesirable.

b. Influence sensory equipment will predominate over viewers and radars.

c. Airmobile intercept forces are required.

d. Artillery, attack helicopters, and tactical air support replace troop intercept forces whenever feasible.

Section III. MOUNTAIN

7–6. Threat

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

7–7. 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 viewers and radars are employed from commanding ground. Night ambush points are established along likely avenues of approach. They 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 is 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 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 will be all that is available.

d. Line-of-site radio communications systems are severely degraded in mountainous areas. Wire systems are preferred.

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

f. Artillery and tactical air support have an intensified role in mountain areas. They may be the only methods for real time engagement. An increased requirement exists for army aviation support for movement of intercept forces and resupply missions. Intelligence requirements in the form of aerial/ground reconnaissance and surveillance and counterintelligence personnel are increased substantially in this type environment.

7–8. Modifications to the System

a. Unit frontages are somewhat reduced.

b. Troop requirements are slightly increased.

c. Cold-weather personal equipment is required.

Section IV. DESERT

7–9. Threat

Due to 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.

7–10. 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 for observation and troop movement are essential.

b. The high degree of mobility inherent in desert operations permits fewer troops to cover larger areas. Armored units and helicopter-borne 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. Artillery and tactical air support are more effective in the desert because of better observation. Communications to support command and control are relatively good in desert areas. Environmental degradation of radio communications is minimized. The high mobility and fluidity of desert border security operations makes radio the preferred communication means.

7-11. Modifications to the System

a. Less sensory equipment required.

b. Fewer troops required.

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

d. Higher ratio of artillery and tactical air support is required to support greater dispersion of forces.

e. High degree of radio security and intercept required because of greater use of radio communications.

Section V. RIVERINE AREAS

7-12. Threat

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

7-13. Operations

System traces are established along the friendly shore of a river border to take full advantage of the natural observation and fields of fire afforded by the river and relatively flat, open terrain. Navigable waterways are used to advantage for patrolling and intercept activities. Checkpoints are set up along navigable watercourses crossing the system 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 are essential to success.

a. Inundated, 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 devices.

b. Viewers and radars are the primary detection means. The increased effectiveness of detection devices allows wider unit frontages but the prevalence of hiding places and opportunity to mix with legitimate civilian traffic reduce the effectiveness of the system. Attack helicopters can deliver fire much closer to friendly troops and are used to fix the enemy. Artillery is employed when feasible but frequently will be precluded by lack of ability to differentiate between infiltrators and the local populace.

7-14. 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. Operations in riverine areas are normally 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.

7-15. Mobility

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

7–16. Communications
Radio communications are adequate in riverine areas due to good line-of-site characteristics. Wire is less satisfactory. Radio is the preferred communication means with attendant emphasis on radio security and intercept. Joint operation with Navy forces requires thorough knowledge of Navy communications, organization, and network structure. Qualification of Army personnel is necessary to operate Navy-type radio equipment provided embarked Army units. The riverine environment places greater demand on maintenance and waterproofing for all communications equipment.

7–17. 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 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.

7–18. Combat Support
Heavy reliance is placed on tactical air and armed helicopter support in riverine areas. Boat-mounted automatic weapons, 40-mm guns, 20-mm cannons, and M79 grenade launchers are employed to support intercept forces. River assault squadrons can provide indirect fires using 81-mm mortars. Artillery is handicapped by lack of mobility and suitable firing positions. Batteries may be mounted on naval vessels. Naval gunfire offer supporting fire when operations are in range.

7–19. Modifications to the System
In addition to special operating conditions described above, border security operations in riverine areas require the following modifications.

a. Viewers and radars are preferred over influence sensors. Line sensors and obstacles which require burying or installation on the ground with some degree of permanence must be used on elevated ground to assure that they are not made ineffective by flooding.

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 upon the nature of the terrain. Command, control, and communication systems must be mutually supporting among all participating forces.

d. Artillery fire support must be adapted to the limitations of the terrain.

e. Reaction forces may be stationed on floating bases.

Section VI. ARCTIC

7–20. 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.

7–21. 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. Due to the unpopulated nature of the arctic environment it may be more effective to utilize gound and aerial patrols as a border security system rather than a system trace. Large uninhabited areas are available for detection and intercept operations.

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

c. Foot and wheeled mobility is limited. Skis and snowshoes increase individual mobility,

and special purpose tracked vehicles and helicopters increase group mobility. Airmobile intercept forces are highly effective.

d. Primary communication dependence is placed on radio. The fluid nature of the system does not permit the use of wire. Command and control is simplified by not manning a systems trace.

e. Close air support supplants artillery in arctic operations. Air Force photography, radar, and infrared surveillance flights are required.

7–22. Modifications to the System

a. Aerial observation preferred over a border security systems trace.

b. Troop requirements are minimal.

c. Special protective and transportation equipment necessary.

d. Reduced requirement for artillery fire support.

Section VII. COASTAL AREAS

7–23. 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 kilometers to 60 kilometers; and air patrols in the range of 60–100 kilometers. This system has good surveillance capability, but the ability to positively identify enemy craft is limited. The second system is that of customs to control legitimate traffic. This system consists of checkpoints located at natural points of entry into the country, and manned by indigenous personnel. If possible, operators of these checkpoints should be indigenous to the local area and not merely indigenous to the country. The land-based system is concerned with infiltrators who land at other than the authorized checkpoints.

7–24. 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 infiltrators identify themselves as hostile by their actions. A more reasonable tactic is that of transferring to fishing boats at sea. After the transfer, the Navy problem becomes magnified, and it becomes more likely that the infiltrators will reach shore successfully. If they try to get through the checkpoints, they are the responsibility of the customs system. If they avoid the checkpoints, they become the responsibility of the land-based system.

7–25. Operations

Coastal security operations are essential to deny infiltrators ingress into 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, discrimination and discrete identification are necessary. Curfew hours and restricted areas are established when possible, alleviating the requirement for discrete identification. Strangers can be assumed to be enemy.

7–26. Equipment Requirement

Detection and delay devices are used to good advantage, particularly where wide beach areas exist. Tide conditions, composition 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.

7–27. Communications, Command, and Control

Effective interface with naval coastal surveillance forces is dependent upon 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 naval forces is beneficial.

7–28. Combat Support

Due to the density of civilian population along coastlines in most countries, the use of 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 infiltrated inland.

7–29. 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 sensors is not practical 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, area 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 safe havens and sanctuaries to infiltrating forces.

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 observation devices and sensors and special challenge, sign, and countersign techniques.

f. Cross-training on individual and crew-served weapons available within the type 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, sensors, and night observation devices.

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

k. Barrier construction, mines, and booby-traps.

8-3. Area Training
Prior to entry into an area of operations, troops must receive an orientation 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 should be explained since the border security forces will operate in conjunction with them.

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 factors considerations. They are caused by infrequent actual contact with the enemy and the requirement for constant vigilance. Some of the important considerations are summarized in (1) through (5) below.

(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 as well as 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 is accomplished concurrently with the cross-training program.

8–5. Technical Training

a. Operator. Border security operations utilize special equipment which often requires special training to install and operate. The commander must insure 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.

CHAPTER 9
COMBAT SERVICE SUPPORT

9–1. General
Current doctrine pertaining to combat service support in the field army and combat service support under varied operational environments provides for principles, concepts, and techniques which are designed to meet the needs of the operating forces. Significant environmental and operational factors incident to border security operations as they affect the logistic functions of supply, maintenance, transportation, construction and labor are discussed in this chapter.

9–2. Concepts
a. Logistic support units are located to meet requirements peculiar to their special functions, and, when feasible, to contribute to mutual defense. Normally such logistic 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 are 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 counterguerrilla operations and to support civic action programs.

9–3. Environmental Modifications
a. Jungle Operations. The special conditions affecting logistic support for border security operations in jungle areas limit the extent of operations, rate of movement, and the strength of forces employed. The availability of trails, roads, and waterways; the density of natural growth; the season; and the general terrain and weather conditions have a direct influence on the type of transportation that can be used and, consequently, on the functioning of supply systems. Logistic requirements must be anticipated well in advance of actual needs—in some areas this amounts to a seasonal prediction to avoid effects of monsoon, floods, or other severe weather phenomena. Consumption and replacement factors experienced through actual operations in these environments are used to adjust planning factors.

b. Mountain Operations. Normal logistic support is difficult in mountain operations. Time and space factors are never fixed, but vary constantly with configuration of the terrain, the altitude, the availability of roads, and the season. In general, more time must be allowed for movement of troops and supplies. Details of mountain operations are described in FM 31–72.

c. Desert Operations. Desert operations are characterized by rapid movement and wide frontages. A unit's effectiveness in the desert is dependent to a large degree on the supplies and transport available. An important factor of logistic support in the desert is the reduction of supply and resupply requirements to essential mission items. Maintenance is vital in desert operations. The degree of mobility of a unit in desert operations is dependent upon how well maintenance of vehicles and aircraft is performed. Details of desert operations are described in FM 31–25.

d. Riverine Operations. Logistic support in a riverine environment is primarily support of land and afloat bases, and support of operations launched from these bases. In a typical riverine environment movement overland is severely restricted. Except for a few primary highways interconnected road nets are often nonexistent. This disadvantage can be partially overcome by using the waterways extensively to move supplies and personnel. Other factors requiring special consideration are—

absence of suitable land sites for large semi-fixed logistic installations; the requirement for support of watercraft and associated equipment; and maintenance problems associated with weather and terrain. Details of riverine operations are described in FM 31–75 (TEST).

9–4. Supply Support

a. 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. Special equipment for land clearance and road building equipment 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 assure 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 and on-call supply. Special sensing and detection devices, particularly 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 stockpiled at the barrier site.

c. Experience factors on which to standardize resupply procedures must be computed and determined early in the border security mission. It is essential that accurate experience data be compiled for those items which have not previously been used in the area of operation. Due consideration is given to procurement lead-time and the total pipeline time for these replacement items. Commanders should have knowledge of substitute items which can be used should standard items become out-of-stock or inoperable. Once experience factors have been determined, a standard basic load to cover the 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.

d. 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.

e. 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 limited transportation resources, supply personnel, and facilities.

9–5. Maintenance Support

a. Because of the sophisticated surveillance and warning devices employed, maintenance support to border security operations takes on a new dimension. Efficiency of a border security system is largely dependent upon its ability to provide continuous operation. Existing maintenance personnel may require augmentation both in strength and additional skills to provide this support. A responsive repair or replacement system must be in effect to include mobile on-site repair teams, direct exchange system on-site, operational readiness float, and repair part supply system.

b. In addition to proper care, preservation, and use of equipment, commanders 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.

9–6. Transportation Support

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

b. Organic transportation means may require augmentation from both military and local sources. Dependent upon the conditions under which the command is operating, transportation provisions require such measures as recruiting indigenous bearer units for man-pack operations, organizing animal pack units, and use of available waterways and indigenous land transportation to include railway and

highway equipment. Use of these facilities can be either on a long term contract basis or on short term, as-needed basis. Employment of local resources is limited not only by availability, but also to the extent that it will not have an adverse effect on the normal flow of civilian goods and local economic activity.

c. Security is provided for surface movements in areas of hostile guerrilla activities by armed logistic personnel and military police personnel. Surface movement is the preferred method of transportation provided that safe passage can reasonably be expected.

d. Aircraft are the most 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.

e. In addition to transportation requirements for normal replenishment and logistical 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 artillery pieces in the shortest time possible.

9–7. Construction and Labor Support

a. The initial construction effort for a border security system requires detailed planning. Installation of buried sensors and warning devices requires considerable digging. Use of line-of-site detection equipment requires land clearing. Communications 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 is initiated at the lowest command level and coordinated through successive levels of command. 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. Wherever conditions permit, civilian contractors, either U.S., indigenous, or third-country, are employed to conserve the resources of military construction units and manpower. Maximum use is made of local labor and materiel resources when available.

CHAPTER 10
JOINT BORDER SECURITY OPERATIONS

10–1. General
Border security operations require a joint effort to provide economy of force and to secure the maximum effectiveness from the resources available. The statements presented here do not represent the results of a coordinated joint doctrinal effort.

10–2. Scope
Based upon the allocation of forces, materiel, and assignment of missions by the Joint Chiefs of Staff, the Theater Commander who controls U.S. Forces, determines the types and extent of the border security system which is to be established. Military forces will be allocated to subordinate commands and priorities will be determined for establishing border control systems.

10–3. Organization
U.S. Forces allocated to the Theater Commander by the Joint Chiefs of Staff normally will be standard U.S. Army, Navy, or Air Force-type organizations. Flexibility of organization, however, permits tailoring such forces for the specific border security role. In regard to Army forces, those elements which cannot be gainfully employed in border security operations should be stripped away from the force in CONUS or returned to CONUS. This would apply to such units as the Honest John Battalion. Air Force and Navy forces are tailored in the same manner.

10–4. Command and Control
The command and control system to be utilized to control U.S. Forces is determined by the Theater Commander. Existing command and control structures are used if possible. A normal J3 Section and subordinate tactical operation centers should be capable of controlling this operation. If, however, it is necessary to establish a unified type headquarters with two or more nations taking part, a separate operations center may be required. If the function of the operations center is constrained to planning, and responsibility for operations is decentralized to lower echelons, normal procedures should be adequate. If, however, the theater headquarters desires to maintain day-to-day control over operational aspects of the system, it will be necessary to establish a joint or combined operational surveillance center.

10–5. Responsibilities
Employment of all resources within the border security area of operations is the responsibility of the unified commander or the joint task force commander. Based on his overall plan of action, the unified commander establishes mission priorities and assigns border security, seacoast security, and related tasks to the service component commanders. Component commanders provide resources for mutual support as directed by the unified commander. Each service is responsible for internal control of its own forces through organic control systems. Responsibility for coordination of joint border security operations is shared equally by each component commander. Centralized direction of the border security effort is required while permitting decentralized execution of specific tasks and operations.

10–6. Systems
In border security operations all services are capable of establishing independent but mutually supporting systems for border or seacoast security.

a. The land system is installed by Army or Marine Corps tactical units. This system is composed of detection elements, delay obstacles, such as mines and wire, and kill or de-

struction means. The system is supported by Air Force and Navy elements.

b. The Navy establishes a seacoast system to detect, identify, and destroy, or neutralize seaborne infiltrators. This system consists of patrol craft operating offshore forming an outer ring. An inshore patrol is established to supplement the outer patrol. The seacoast system is backed up by surveillance and attack aircraft.

c. The Air Force, in addition to providing the close air support and performing their normal missions, may establish an aerial delivered system by aerially emplacing mines. Such operations are closely coordinated with other services. Upon request, the Air Force can emplace an airdelivered system across infiltration routes. Such a system is designed to delay the infiltrators sufficiently to allow ground intercept forces or fire support means time to mount offensive action to intercept and destroy the enemy force.

d. These independent, but mutually supporting systems, are coordinated at the unified command level. At tactical unit level, systems are coordinated at the tactical operations center of the ground unit, coastal surveillance center for the offshore sea patrol, and at the Direct Air Support Center (DASC) for the aerially emplaced system.

10–7. Coastal Surveillance

Offshore sea patrols for coastal surveillance is the responsibility of the Navy. Coordination and control of offshore surveillance is accomplished through the organization of Coastal Surveillance Centers (CSC). To insure the coordination of operations of land force elements with offshore sea patrols, and to preclude interference with each other, liaison officers are exchanged between Coastal Surveillance Centers and local Army headquarters.

a. Instances may arise where a naval offshore sea patrol is pursuing an enemy craft and is being outdistanced, thus necessitating employment of naval gunfire on the fleeing enemy. In such circumstances, the Army liaison officer in the CSC and the naval liaison officer in the Army headquarters provide the safeguard against one friendly force being engaged by another. In addition, the liaison officers provide a means for the commanders of the land and sea forces to transfer responsibility for the pursuit, capture, or destruction of the enemy force.

b. It is impractical to foretell the precise spot for transferring responsibility for coastal security from the sea force to the land force. As a guide it may be designated as the point where the friendly offshore sea patrol can no longer continue to fire at the enemy without endangering friendly civilian and military personnel in the coastal area. The critical factors in transferring responsibility is the existence of mutual communication means.

c. Information concerning suspect craft which are headed for the shoreline can be initiated from any sea patrol echelon. It is passed to the appropriate Coastal Surveillance Center and then to the Army liaison officer in the CSC. The Army liaison officer keeps his headquarters informed and also advises the CSC of any actions that will be taken by the Army coastal surveillance unit. Both the land and sea force keep the other informed of actions being taken in proximity to the shore line. Close air support is used to attack targets when feasible.

10–8. Coordination of Close Support

To gain the maximum effect from naval gunfire and airstrikes in support of border security operations, the firepower delivered by aircraft, by organic surface weapons, and by naval gunfire must be closely coordinated. Ground force commanders requesting fire support are responsible for insuring that the coordination necessary to preclude interference and to gain maximum mutual support has been accomplished. Close coordination between the close air support element and the fire support coordinator at all echelons will permit airstrikes and surface fires to be placed on the infiltrating target almost continually if required.

10–9. Naval Gunfire Support

Naval gunfire is requested on ground targets when additional firepower is needed to achieve desired results. Navy ships may be

assigned support missions in much the same manner as artillery. Specific naval ships may be placed in direct support or general support of a troop unit. A ship in direct support of a specific troop unit (normally of battalion or comparable size) establishes liaison with the unit and delivers both prearranged and on-call fires. On-call fires are conducted and adjusted by a Shore Fire Control Party (SFCP) or by an air spotter. Although members of the SFCP are specifically trained in the conduct of naval gunfire, simplified and standardized procedures are such that any trained supporting arms observer can effectively adjust the fires of a ship. General support missions are assigned to ships supporting units of brigade or larger size. At brigade level, a naval gunfire liaison officer (a naval officer) controls naval gunfire. The naval gunfire liaison officer advises the supported unit commander on naval gunfire matters and coordinates naval gunfire with air and artillery support. This coordination is accomplished with the fire support coordinator in the unit tactical operations center. The shore fire control party is formed of two teams.

a. The naval gunfire liaison team consists of a naval gunfire liaison officer and necessary army communications personnel. The naval gunfire liaison officer advises the maneuver battalion commander on the use of naval gunfire. He supervises the spotters and coordinates naval gunfire with artillery and air support.

b. Naval gunfire spotting teams consist of a spotter, and assistant spotter, and necessary communications personnel. The spotter should be an artillery officer assigned by division artillery for the sole purpose of adjusting naval gunfire.

10–10. Close Air Support

Close air operations in support of border security operations follow established procedures. The established air ground system provides close coordination of air operation with ground operations. In most instances, border security operations will be conducted along or near an international boundary. A buffer zone or free-fire zone may be established. Such a buffer zone or free-fire zone may be established. Such a buffer zone necessitates close coordination to preclude friendly aircraft overflights. Caution is exercised in utilizing close air to assure that missions are flown parallel to the border, where possible, to minimize the possibility of overflights.

10–11. Riverine Operations

Border security operations conducted in a riverine environment are usually joint operations. The Army provides the ground tactical units and the Navy provides the rivercraft, plus command and control boats and crews. In such joint operations the ground force commander exercises overall command of tactical operations. Where feasible the Navy provides naval gunfire support to ground tactical action. In addition to joint tactical operations, the Navy will conduct patrol operations on the rivers and canals along the border. Such river patrol operations are coordinated with the Tactical Operations Center of the local army unit to insure troop safety and to prevent one force from interfering with the operations of another force.

APPENDIX A

REFERENCES

JCS Pub 1	Dictionary of United States Military Terms for Joint Usage.
JCS Pub 2	Unified Action Armed Forces (UNAAF).
AR 320–5	Dictionary of United States Army Terms.
AR 320–50	Authorized Abbreviations and Brevity Codes.
FM 1–5	Aviation Company.
FM 1–15	Divisional Aviation Battalion and Group.
FM 1–100	Army Aviation Utilization.
FM 1–105	Army Aviation Techniques and Procedures.
FM 1–110	Armed Helicopter Employment.
FM 3–8	Chemical Reference Handbook.
FM 3–10	Employment of Chemical and Biological Agents.
FM 5–1	Engineer Troop Organizations and Operations.
FM 5–13	The Engineer Soldier's Handbook.
FM 5–15	Field Fortification.
FM 5–25	Explosives and Demolitions.
FM 5–30	Engineer Intelligence.
FM 5–31	Boobytraps.
FM 5–34	Engineer Field Data.
FM 5–135	Engineer Battalion, Armored, Infantry, and Infantry (Mechanized) Divisions.
FM 5–136	Engineer Battalion, Airborne and Airmobile Divisions.
FM 6–20–1	Field Artillery Tactics.
FM 6–20–2	Field Artillery Techniques.
FM 6–40	Field Artillery Cannon Gunnery.
FM 6–140	Field Artillery Cannon Battalions and Batteries.
FM 7–11	Rifle Company, Infantry, Airborne, and Mechanized.
FM 7–15	Rifle Platoon and Squads, Infantry, Airborne, and Mechanized.
FM 7–20	Infantry, Airborne Infantry, and Mechanized Infantry Battalions.
FM 7–30	Infantry, Airborne, and Mechanized Division Brigades.
FM 8–15	Medical Service in Divisions, Separate Brigades, and the Armored Cavalry Regiment.
FM 8–35	Transportation of the Sick and Wounded.
FM 8–55	Army Medical Service Planning Guide.
FM 9–30	Maintenance Battalion, Division Support Command.
FM 10–8	Air Delivery of Supplies and Equipment in the Field Army.
FM 10–50	Supply and Transport Battalion, Division Support Command.
FM 11–50	Signal Battalion, Armored Infantry, and Infantry (Mechanized) Divisions.
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FM 19–15	Civil Disturbances and Disasters.
FM 19–40	Enemy Prisoners of War and Civilian Internees.
FM 20–20	Military Dog Training and Employment.
FM 20–32	Land Mine Warfare.
FM 20–33	Combat Flame Operations.
FM 20–60	Battlefield Illumination.
FM 21–10	Military Sanitation.
FM 21–11	First Aid for Soldiers.
FM 21–15	Care and Use of Individual Clothing and Equipment.
FM 21–20	Physical Training.
FM 21–26	Map Reading.
FM 21–30	Military Symbols.
FM 21–40	Chemical, Biological, and Nuclear Defense.
FM 21–50	Ranger Training and Ranger Operations.
FM 21–75	Combat Training of the Individual Soldier and Patrolling.
FM 21–76	Survival.
FM 21–77	Evasion and Escape.
FM 23–12	Technique of Fire of the Rifle Squad and Tactical Application.
FM 24–1	Tactical Communications Doctrine.
FM 24–18	Field Radio Techniques.
FM 24–20	Field Wire and Field Cable Techniques.
FM 30–5	Combat Intelligence.
FM 30–10	Terrain Intelligence.
FM 30–16	Technical Intelligence.
FM 31–10	Barriers and Denial Operations.
FM 31–11	Doctrine for Amphibious Operations.
FM 31–12	Army Forces in Amphibious Operations (The Army Landing Force).
FM 31–13	Battle Group Landing Team (Amphibians).
FM 31–16	Counterguerrilla Operations.
FM 31–18	Infantry Long Range Patrol Company.
FM 31–20	Special Forces Operational Techniques.
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FM 31–22	U.S. Army Counterinsurgency Forces.
FM 31–23	Stability Operations U.S. Army Doctrine.
FM 31–30	Jungle Training and Operations.
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FM 100–10	Field Service Regulations—Administration.
FM 100–15	Field Service Regulations—Larger Units.

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FM 101–5	Staff Officers' Field Manual—Staff Organization and Procedures.
FM 101–10	Staff Officers' Field Manual—Organization, Technical, and Logistical Data.

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