CHAPTER 1

INTRODUCTION

The land warfare strategy of the US military has changed. The nation no longer relies on large, forward-deployed forces, supported by reinforcing forces from the continental United States (CONUS). The military forces have developed a strategy of rapidly projecting combat power from CONUS to protect national interests. The Army now focuses on deploying and fighting as part of contingency and reinforcing forces. Light armor gives the Army a versatile, deployable, and lethal force structure that can operate with light infantry-based contingency forces worldwide.

CONTENTS

Section I. The Role of Light Armor

GENERAL

Light armor will use its unique capabilities to conduct combat operations, often in support of contingency plans, across the operational continuum (peacetime, conflict, and war). It will be required to operate in a wide range of political, military, and geographical environments. Its tactical missions include providing security, reconnaissance, and antiarmor firepower to the light infantry division (LID) or airborne corps, as well as standard armor operations to engage and destroy enemy forces using mobility, firepower, and shock effect in coordination with other combat arms. These missions may require rapid strategic and tactical deployment worldwide.

M8 Light Tank. Currently, light armor units are equipped with the M551A1 (TTS) armored reconnaissance airborne assault vehicle. The M55lA1 will be replaced by the M8 light tank. The light tank will be an air-deliverable, all-weather, mobile, protected direct-fire platform. It will be able to engage enemy bunkers, buildings, armor systems, and personnel in close or built-up terrain. The light tank has a three-man crew and is armed with a 105-mm cannon with autoloader and caliber .50 and 7.62-mm machine guns.

The light tank will add a new dimension to the combined-arms capability of light forces, but it is not intended to replace the main battle tank. *The primary purpose of M8 light tank forces is to operate with light infantry during rapid-deployment contingency operations (CONOPS).* They immediately provide the rapid-deployment commander with an armored system that can counter a variety of threats until heavier forces arrive in theater. Initial light tank forces can be air-delivered using low velocity air drop (LVAD) procedures, followed closely by forces arriving by airlanding transportation assets (see Appendix A).

Missions. Light armor forces may be required to support the following missions:

- Operations other than war, such as—
  - Insurgency/counterinsurgency.
  - Combating terrorism.
  - Emergency relief operations.
  - Shows of force and demonstrations.
  - Noncombatant evacuation operations (NEO).
  - Strikes and raids.
  - Peacekeeping and peace enforcement.
  - Other operations as specified by higher commanders.
- Rapid reinforcement of forward-deployed forces.
- Wartime contingency operations.

These missions will require separately supportable light armor units to conduct a variety of tasks, including—

- Close assaults with light infantry.
- Reduction of strongpoints, bunkers, and roadblocks.
- Operations in built-up areas (BUA).
- Defense with light infantry.
- Force security.
- Flexible, mobile reserve operations for the light infantry task force (TF), brigade, division, and corps to provide rapid response to enemy mounted forces.
- Rear area operations.

Contingency Operations. Light armor is most likely to be employed as part of CONOPS, which dictate an increased role for armor operating with light forces. Light armor significantly reduces the risks light forces face during CONOPS. Its capabilities also enhance the combat capability and lethality of the light force.

As part of an airborne corps, the light armor unit may be required to execute opposed-entry operations and provide immediate direct-fire support for initial-entry light forces. Entry into contingency theaters may require opposed entry by air. As noted, elements of the light armor force will be capable of insertion by LVAD or airlanding, as required. Appendix A discusses these procedures in more detail.

Light armor increases the contingency force's mobile, protected lethality immediately upon deployment. It provides accurate, destructive fires that the operational commander can use to shape the battlefield, defeat the enemy, or fill the gap until other armored forces arrive.

Light armor forces support the contingency force commander's requirement to conduct operations in wartime as well as in operations other than war. They can execute peacetime CONOPS aimed at influencing enemy decisions through political and psychological shock effect, or they can engage and defeat the enemy in combat.

THE SCOPE OF OPERATIONS

The strategic environment within a theater comprises a variety of conditions (political, economic, military) and potential threats. The interaction of these factors can result in a wide range of operations for the light armor unit. These operations are conducted within a scope of operations consisting of three general environments: peacetime, conflict, and war. This discussion of the scope of operations focuses on the conditions that define each environment and the types of operations light armor may conduct.

Light armor can operate along the entire scope of operations. It may support a contingency that is the only ongoing operation in peace or conflict or be deployed in an environment of war in a separate, concurrent operation within the same theater or a different one. Although the discussion of the environments describes each separately, there are no precise distinctions as to where one environment ends and another begins.

Operations Other than War. Operations other than war entail political-military confrontations between contending states or groups, frequently involving protracted struggles of competing principles and ideologies. In the scope of operations, it includes the peacetime and conflict environments. Ranging from subversion to use of armed force, it is waged by a combination of political, economic, informational, and military elements. Operations other than war occur most often in the third world, but it can have regional and global security implications.

Peace. Political, economic, informational, and military measures, short of combat operations or active support of warring parties, are employed to achieve national objectives. Within this environment, US forces may conduct training exercises to demonstrate resolve; conduct peacekeeping operations; participate in nation-building activities; conduct disaster relief and humanitarian assistance; provide security assistance to friends and allies; or execute shows of force. During peace, confrontations and tensions may involve the clear threat or the actual use of armed force; such a situation may reach a point of transition to a state of conflict.

Conflict. Conflict is an armed struggle or clash between organized parties within a nation or between nations to achieve limited political or military objectives. While regular forces are often involved, irregular forces frequently predominate. Conflict is often protracted, confined to a restricted geographic area, and constrained in weaponry and level of violence. In this state, military power in response to threats may be exercised in an indirect manner whale supporting other elements of national power. Limited objectives may be achieved by the short, focused, and direct application of force.

Conflict also describes situations in which continuing clashes or crises occur over boundary disputes and land and water territorial claims. Conflict also includes situations in which

opposing political factions engage in military actions to gain control of political leadership within a nation. Conflict approaches the threshold of a state of war as the number of troops, frequency of battles, number of nations, and level of violence increase over an extended period of time. Conflict also can evolve into a state of war anytime the sovereignty of a nation is threatened.

Military operations involving light armor occur most often in this state. Operations may include offensive, defensive, retrograde, security, and reconnaissance missions.

War. War is the sustained use of armed force between nations or organized groups within a nation; it involves regular and irregular forces in a series of connected battles and campaigns to achieve vital national objectives. War may be limited, with some self-imposed restraints on resources or objectives. Conversely, it may be general, with the total resources of a nation or nations employed and national survival of one or more combatants at stake. Total war between superpowers is the most catastrophic, though least likely, form of warfare. It could engulf countries, alliances, or entire continents and become true global warfare, with battles raging in a number of theaters.

In the state of war, light armor would most likely be involved in an operation on the periphery of the main effort, such as an economy of force or security role. Light armor would also be useful as part of a CONOPS in a part of the theater away from the main effort. The deployability of light armor would allow it to move rapidly to another area or theater in the event other crises arose.

LIGHT ARMOR IN OPERATIONS OTHER THAN WAR

The Army's mission in operations other than war are divided into activities. See FM 100-5 for additional information on these activities. These are all neatly defined, distinct categories, yet they often overlap. Peacekeeping forces, for example, must protect against terrorism; on the other hand, a terrorist incident may result in a peacetime enforcement operation.

All such missions require continuous emphasis on intelligence. Before the force is committed, intelligence must be collected, processed, and focused to support all planning, training, and operational requirements. Intelligence is crucial during execution of operations other than war. The threats faced by military forces in these operations are more ambiguous than those in other situations because guerrillas and terrorists can blend with the civilian population. (See FM 100-20 for additional information on operations other than war.)

Armor Employment Considerations. The following paragraphs discuss the roles of light armor, airborne armor, and fully armored forces (tank and mechanized infantry units) as they relate to operations other than war.

Light. Normally, light armor is the most appropriate armor force to conduct a rapid crisis response. Two major considerations when employing light armor are suitability and availability. All factors of mission, enemy, terrain, troops and time available (METT-T) must be weighed carefully in selecting the most suitable force to support accomplishment of the host nation's overall objective.

Airborne. The major difference between airborne armor forces and other light armor forces is the capability of parachuting into an area. An airborne light armor unit conducts ground tactical operations in the same manner as other light armor units. The primary advantage of using this type of force is that it enables the airborne commander to position an armor force in a short time. In most cases, airborne operations will insert forces into suitable areas in all phases of operations other than war. In addition, this method provides a relatively clandestine means of inserting elements into a controlled or contested area. Airborne operations are dependent on several factors, including aircraft availability, terrain, and weather.

Armored. Armored forces are usually employed with accompanying infantry. As with mechanized infantry forces, however, armored forces may have difficulty maneuvering in restrictive terrain. Major advantages are their armor protection, highly lethal firepower, speed, and shock effect; these advantages are maximized in open terrain. Their capabilities are hindered and their vulnerabilities increased in restricted terrain. (See FM 71-2 for further information on armored and mechanized employment).

The light armor commander must adapt the doctrine presented in this manual to each specific situation within a particular environment. For example, each country presents unique challenges for commanders in dealing with insurgency and terrorism. Principles, policies, and programs applied successfully in one situation may be unsuitable if applied in the same manner in another situation.

Duration of light armor employment varies by situation. Insurgency or counterinsurgency may require long-term commitment of light armor elements in combat operations of short or long duration or, sometimes, in advisory or supporting roles. Capabilities of the supported force and the strength of its opposition are factors influencing involvement of combat forces and length of their stay. Some peacetime CONOPS may require a lengthy commitment, while others, such as demonstrations and raids, may be finished quickly. Antiterrorism (a defensive operation) is a continuous requirement, whereas counterterrorism (offensive) is usually of short duration. The extent of light armor commitment may range from providing mobile training teams to conducting operations by the whole battalion as part of a division, corps, or joint task force (JTF).

Specific Roles in Operations Other Than War. The following paragraphs discuss the role of light armor throughout the activities in operations other than war.

Insurgency/Counterinsurgency. These operations cover assistance the US may provide to a friendly nation or group in combating or prosecuting an insurgency. Initially, US forces assess the threat to the host government and to US interests. The US supports selected resistance movements opposing oppressive regimes working against US interests. Such support is coordinated with friends and allies.

Insurgences rely on mobilization of people and resources from within the country to be successful. Because they must build legitimacy, their efforts include political, social, and (when possible) economic development. They are successful if they gain more legitimacy than the government. Basic principles of internal defense and development (IDAD) apply, especially in areas under insurgent control. Because support for insurgency is often covert, many of the operations connected with it are special activities and do not involve light armor. Light armor units are called on only when a situation requires their specific capabilities, including direct-fire support, security to indigenous resistance forces, or training, advice, and development if the insurgent force has an armor specific need. Command and control (C2) relationships are normally situation specific.

US support for counterinsurgency rests on the IDAD concept (see FM 100-20 for more details). This entails use of all the leadership, organizational, and materiel resources available to the host government. It is designed to mobilize support for the host government and preempt insurgent mobilization efforts. Security forces (military, paramilitary, and police) should defeat the insurgents' combat elements and neutralize their leadership to establish an environment of security in which development can occur.

If the host nation requests support and US interests are involved, the US National Command Authority (NCA) may direct the US Army to provide economic, political, and military assistance. Divisional operations may require civil affairs; population and resources control; psychological operations (PSYOP); intelligence; tactical operations; and training assistance. Light armor involvement, however, will normally only be in tactical operations.

One potential combat role for light armor is in counterguerrilla missions. Light armor will usually operate as platoons and companies task organized to a larger TF, brigade, or

JTF. In other scenarios, the light armor battalion will deploy as a unit or will be task organized with a division or corps. See FM 90-8 for further information on counterguerrilla operations.

Combating Terrorism. This role has two components: counterterrorism and antiterrorism. Counterterrorism, offensive measures taken by specially trained forces, is not discussed in this manual. In special situations, light armor could be used in offensive operations in a counterterrorism role. It would probably perform a demonstration or diversion or provide increased firepower. Antiterrorism includes all defensive actions that each soldier must practice.

Peacekeeping Operations. These are military operations conducted with the consent of the belligerent parties to maintain a negotiated truce and to facilitate diplomatic resolution. The US may participate in peacekeeping operations as a member of an international organization, in cooperation with other countries, or unilaterally.

A peacekeeping mission may require forces to deal with extreme tension, sabotage, and minor military conflicts from known or unknown belligerents. Common missions in peacekeeping operations include cease-fire supervision, police actions, prisoner-of-war exchanges, demilitarization, and demobilization. Armor units, including light armor, do not normally participate in United Nations peacekeeping operations; however, peacekeeping as part of a cease-fire, demilitarization, or demobilization may require light armor support.

Peace Enforcement Operations. Some situations may require deployment of US military forces to impose peace. These operations are often labeled peacekeeping, but are better described as peace enforcement. They differ greatly in execution from peacekeeping missions. While the ultimate objective may be to maintain peace, the initial phase in peace enforcement is to achieve it. Peace enforcement is often unilateral, possibly with some consent from the beneficiary, and it is imposed by the peace enforcement unit. Light armor forces may be needed as a security force or in a limited role to conduct a show of force or demonstration to discourage the belligerents from inciting conflict.

Other Operations. In certain environments, military operations become necessary when diplomatic initiatives have been, or are expected to be, ineffective in achieving extremely time-sensitive, high-value objectives. Failure to influence a belligerent nation or activity through diplomatic means may necessitate the use of military forces to protect US national interests, rescue US citizens, provide emergency relief, or defend US assets. Operations involving light armor may include strike operations, rescue and recovery, demonstrations or shows of force, NEOs, and security for relief forces (see Chapter 3).

Section II. The Threat

Geopolitical factors continue to affect US military strategy. The Army must continue to deter aggression worldwide. If deterrence fails, it must be prepared to defeat enemies across the full spectrum of conflict: from all-out war against a superpower, to a conflict against a hostile regional power, to operations other than war against less sophisticated, but no less determined, insurgent forces.

Light armor must prepare to fight a variety of threat forces. These may range from crudely equipped insurgents to a technologically advanced conventional force. Regular forces can be expected to conduct standard offensive, defensive, and reconnaissance missions. Irregular forces use stealth, surprise, covert and guerrilla actions, and hit-and-run tactics.

THE POTENTIAL THREAT ARRAY

Because of its versatility, light armor can expect to conduct combat operations across the spectrum of contingencies against determined enemies equipped with modern weapon systems. These may include nuclear, biological, or chemical (NBC) weapons, forcing light armor to conduct operations in contaminated environments. In restrictive terrain mine warfare becomes a likely threat, especially with the wide variety of antitank mines on the world market today. Additionally, an enemy's use of scatterable mines may constitute a significant advantage. Most engagements will be at closer range (300 to 800 meters) than in typical armored operations because of the types of restrictive terrain in which light armor will operate. The following is a list of potential threat targets that light armor forces must be prepared to engage:

- Nonarmored targets:
  - Bunkers.
  - Automatic weapons positions.
  - Antitank guided missiles (ATGM).
  - Troops.
  - Artillery.
  - Air defense weapon systems.
  - Motor vehicles.
  - Helicopters.
- Lightly armored vehicles.
- Tanks.

THE OPERATIONAL ENVIRONMENT

The operational environment is a composite of the conditions, circumstances, and influences that affect employment of military forces and decisions of the unit commander. Light armor units may participate in contingency missions that cover the range of combat operations. The light armor force can expect to be employed in any environment and terrain, including tropical, mountainous, urban, and desert areas. It should train to operate in theaters that have an austere support base and poor infrastructure. Operating with light infantry, light armor must be ready to maneuver over restrictive terrain. The following paragraphs discuss the classifications of the operational environment.

Permissive. Host-nation military and law enforcement agencies have control of the area of operations (AO) and have the intent and capability to assist operations that a unit intends to conduct.

Semipermissive. The host-nation forces, whether opposed or receptive to operations that a unit intends to conduct, do not have total effective control of the territory and population in the intended AO.

Nonpermissive. The AO is under control of hostile forces that have the intent and capability to effectively oppose or react to the operations a unit intends to conduct. (See Joint Publication 1-02 for more information.)

Section III. Light Armor Capabilities and Limitations

CAPABILITIES

Light armor units have the capability to—

- Support the close fight as part of a combined arms team using accurate antiarmor fires and direct fire.
- Operate on a conventional or NBC battlefield.
- Use thermal sights to greatly enhance the night fighting capabilities of the combined arms team.
- Operate in an opposed entry role.
- Use strategic and tactical mobility to advantage.
- Provide armor protection against small arms, machine gun, and overhead artillery fire.
- Detach quickly from their parent unit and be employed during initial stages of contingency or reinforcing operations.
- Accept routine attachment of operational control (OPCON) of engineer assets and light infantry or antiarmor companies.
- Deploy tailored armor and/or reconnaissance packages with inherent C2 and logistical support. This includes requirements to pre-position units in contingency areas of operations.
- Accomplish rapid movement and limited penetrations.
- Exploit success and pursue defeated enemy elements as part of a larger force.

LIMITATIONS

The limitations of light armor units include the following:

- The M8 light tank does not possess the level of protection of a main battle tank.
- The lightly armored M8 is vulnerable to enemy infantry with antiarmor weapons and may not withstand the impact of enemy tank fires, missiles, or antitank mines.
- Light armor is dependent on Air Force assets for deployment to the combat theater of operations. Its heavy equipment requires a large number of aircraft during the strategic deployment of an entire battalion.
- Currently, light armor requires support from the forward support battalion (FSB) and division or corps combat service support (CSS) elements to sustain operations.
- Consumption of supply items is moderate to high, especially in Classes III, V, and IX.
- Light infantry units do not have the organic transportation assets to support the light armor's CSS needs, especially in Classes III, V, and IX.
- Mobility and firepower are restricted in extremely close terrain.
- Some support equipment, such as recovery and fuel vehicles, can deploy only by airlanding assets.
- Airborne and light divisions can often provide only limited air defense and engineer support to the light armor force.

Section IV. Fundamentals of Light Armor Employment

Light armor forces will provide combat capability throughout the battlefield and will be an integral part of the joint combined-arms contingency force. Light armor platoons and companies may be employed in conjunction with nonmounted forces of squad through brigade size as mission requirements dictate. Light armor battalions may also be employed as a division or corps maneuver force and receive support from combat, combat support (CS), and CSS units on the battlefield.

Light infantry can employ light armor units as part of its security operations. Armor and infantry can work together to conduct effective screening force operations, both offensive and defensive, to slow and direct the flow of enemy forces. Light armor, even when outnumbered, can be used to shape the battlefield, causing the enemy to deploy its armored forces into engagement areas (EA) that can be targeted with Air Force or Army aviation attack helicopters.

Light armor forces are also appropriate as reserves. Their mobility and firepower allow them to be used to strike the enemy at the critical time and place to seize or regain the initiative and ensure the destruction of the enemy force.

Light armor may also be required to perform standard security and reconnaissance missions. These may be conducted with divisional ground or air cavalry elements or alone when cavalry is not available or is not in sufficient quantities. These missions include—

- Guard (with reinforcement).
- Screen.
- Zone or area reconnaissance.
- Reconnaissance in force.
- Route reconnaissance and security.

Light armor can also perform standard armor missions that require massed, direct, heavy-caliber firepower, mobility, and shock effect. Enemy antitank capability must be carefully analyzed before light armor undertakes the following missions:

- Movement to contact.
- Hasty attack.
- Deliberate attack.
- Exploitation.
- Pursuit.

OFFENSIVE OPERATIONS

In the offense, light armor forces should be assigned missions that capitalize on their maneuver and firepower capabilities. These include missions to destroy enemy forces, develop intelligence about the enemy, seize or control terrain, deceive and divert the enemy, deprive the enemy of resources to demoralize him, hold the enemy in position, and destroy and disrupt enemy command, control, and logistics facilities.

Light armor is used to defeat a defending enemy force by seeking decisive results in the enemy's rear and flank areas. Close combat and assaults against enemy armored forces fail to exploit light armor's strengths of speed, mobility, and agility. This does not mean light armor cannot be used during assaults. In some situations. there may be no alternative Commanders should carefully weigh the factors of METT-T when making these decisions.

Light armor is employed using two distinct methods: as the direct- or semi-indirect fire support element or as the maneuver element. Thing, protection, mobility, and speed are the key elements that must be synchronized between the mounted element and the dismounted element.

Light armor leaders must understand and employ the following fundamentals of offensive operations:

- Fight as a combined arms team. Light armor always fights as part of a combined arms team. Capabilities and limitations of light armor and infantry make them complementary when employed as a team.
- Know the enemy. The light armor leader must know and understand the capabilities of the enemy's weapon systems and defensive doctrine, including the enemy's capability to conduct ambushes.
- See the battlefield. The leader must know and be able to identify key terrain. He should also learn to identify covered and concealed routes during movement. The light armor leader must anticipate how the enemy will use the terrain and then determine how to counter it.
- Use weapon systems to best advantage. The light armor leader must know the capabilities and limitations of his own weapon systems. Knowing the best kill probability ranges of all weapons (main gun, machine guns, light infantry weapons) is a key. Leaders can improve kill probabilities by engaging enemy vehicle flanks.
- Concentrate combat power. The light armor leader must be able to control and concentrate weapon systems. To do this, he uses proper C2 techniques and trains his unit to shoot, move, and communicate effectively under all conditions. The leader also makes maximum use of available indirect fires.
- Use maneuver to best advantage. Light armor must move rapidly, strike first, and maintain the momentum until the enemy has been killed or captured.
- Coordinate continuous support. Light armor leaders must always be aware of their logistical status. Logistics support is extremely difficult in the austere environment of light forces. Leaders must understand the procedures for critical support, such as evacuation of personnel and equipment or resupply of ammunition and fuel. This is important because task organization changes are more frequent when light armor operates with a contingency JTF.
- Be flexible. Light armor leaders achieve flexibility by ensuring units are properly trained, by adhering to standing operating procedures (SOP) and battle drills, and by becoming tactically proficient. They must understand the commander's intent and anticipate changes in the situation that will help complete the mission.

DEFENSIVE OPERATIONS

The three purposes of defensive operations are to—

- Gain time while waiting for more favorable conditions to conduct offensive operations.
- Economize forces in one area so superior forces can concentrate for decisive offensive operations elsewhere.
- Maintain control or possession of an objective.

The light armor unit is not ideally suited for conducting independent defensive operations. It normally operates as part of a larger force and should be assigned missions that capitalize

on its capabilities. The light tank enhances the overall defense by providing the light infantry force with a high degree of mobility and firepower.

Light armor leaders and their troops must understand and employ the following fundamentals of defensive operations:

- Understand the enemy. The light armor leader must learn the following information about the enemy:
  - Reconnaissance capabilities.
  - Weapon systems available to the enemy. NBC, artillery, and ATGM capabilities are most critical.
  - The enemy's ability to conduct dismounted attacks and raids under limited visibility conditions.
- See the battlefield. The light armor leader must position himself forward where he can best control his forces. He must assertively use a variety of assets to understand as much as he can about the situation to his front, flank, and rear. Thermal sights will augment light armor's ability to see the battlefield under all visibility conditions. The leader must also attempt to prevent the enemy from seeing the battlefield by using concealment and operations security (OPSEC).
- Concentrate fires. Light armor leaders must plan to concentrate fires to achieve decisive results. Direct and indirect fires must be brought to bear on the enemy before it can bring effective fires on friendly positions. Fires must cover protective obstacles. Leaders must take the initiative by counterattacking by fire to exploit enemy weaknesses as they arise.
- Use the advantages of the defender. Maximize combat power by knowing the terrain better than the enemy. Make the best use of terrain by—
  - Using it as a shield against enemy observation and fires.
  - Fighting from covered and prepared positions when possible.
  - Using obstacles to maximize the effects of direct and indirect fire.
  - Engaging the enemy first at the most opportune time and place, using available weapon systems to best advantage.
  - Rehearsing the plan to ensure every man knows what to do.
  - Using mobility to best advantage.
- Fight as a combined arms team. Light armor will always fight as part of a combined arms team. As noted previously, the capabilities and limitations of light armor and infantry make them complementary when employed as a team.

RETROGRADE OPERATIONS

Retrograde operations are movements to the rear or away from the enemy. The movement may be forced or voluntary, but it must be with the higher commander's approval. Units conduct retrograde operations to gain time, preserve force strength, avoid combat under undesirable conditions, or draw the enemy into an unfavorable position. The three types of retrograde operations are delay, withdrawal, and retirement.

In a delay, units give ground to gain time. They inflict the greatest possible damage on the enemy while maintaining freedom of action. In a withdrawal, all or part of a committed force disengages from the enemy voluntarily to preserve the force or free it for a new mission. In a retirement, a force not in active combat with the enemy conducts a movement to the rear, normally as a tactical road march.

Delay is one of the most demanding missions any unit can undertake. It is also the most common retrograde mission for light armor, which uses it to trade space for time. The ability to delay is essential to success on the battlefield when an enemy force outnumbers the contingency force or has superior armored forces. Light armor is the only force in the light division structure that can conduct a high-risk delay operation against a mounted enemy. Success depends heavily upon firepower and mobility. The contingency force commander can use light armor to delay when the force's strength is insufficient to attack or defend. He may use artillery-delivered FASCAM, helicopter-delivered Volcano, and M8 direct fires to intentionally draw the enemy into an EA and expose it to attack helicopters, USAF CAS, additional M8 direct fires, and wide-area mines (WAM).

RECONNAISSANCE OPERATIONS

Reconnaissance operations provide the commander and staff with information about the terrain and enemy. Reconnaissance verifies or refutes analyzed intelligence information. As specified in FM 71-100, any element assigned to or operating with the LID may be tasked to perform reconnaissance operations. Light armor units conduct reconnaissance to obtain information by employing movement, observation and surveillance, fire and maneuver, and special equipment. They may be required to fight to gain intelligence through combined arms teamwork with ground or air cavalry or alone if cavalry is not present or available. Light armor performs three distinct types of reconnaissance: route, zone, and area. Depending on the level performed, reconnaissance may be a separate mission or part of another operation.

SECURITY OPERATIONS

Security operations provide information about the enemy and provide reaction time, maneuver space, and protection to the light infantry. When properly task organized, augmented, and supported, light armor units may be tasked to perform two primary types of security missions-screen and guard. The differences among these missions are the degree of security provided. The light division can employ light armor with cavalry units as part of a security operation to conduct an effective guard or screening force operation in both the offense and the defense. These operations slow and direct the flow of enemy forces into the division AO. In addition, as part of tactical operations, light armor may conduct other security missions to protect the force and its mission. These include, but are not limited to, counterreconnaissance, deception, main supply route (MSR) and convoy security, and OPSEC. The following paragraphs summarize the main types of security missions.

Screen. A screen provides early warning. The screening force gains and maintains enemy contact, reports enemy activity, destroys or repels enemy reconnaissance, and impedes and harasses the enemy with long-range fires. Commanders must realize that a screen can become a guard mission in a matter of minutes; therefore, they must organize the screening force to provide the flexibility required to react to the specific situation.

Guard. A guard mission is assigned with the intent of protecting the force. It accomplishes all tasks of a screening force, providing the division, whether it is moving or stationary, with early warning, reaction time, and maneuver space to the front, flanks, or rear. A guard force protects the main force from enemy direct fire, observation, and surprise attack. It reconnoiters, screens, attacks, defends, and delays as required. Guard missions in a combat environment require a survivable antitank capability. Light infantry

and cavalry units lack the firepower necessary to conduct a guard mission without augmentation. Light armor units can augment these forces or, if augmented with other combined arms assets, conduct a guard mission alone.

Cover. A cover mission provides the main body with early warning, reaction time, maneuver space, and information about the enemy while deceiving the enemy regarding the location, size, and strength of the main body. A covering force is tactically self-contained and operates at a considerable distance to the front, flanks, or rear of a moving or stationary force. It accomplishes all tasks of screen and guard forces. Its mission is to develop the situation early and defeat the enemy's lead forces. The cover mission for a division normally requires a brigade-size force to provide adequate C2, maneuver units, CS, and CSS to accomplish the mission. It should be heavily supported by field artillery (FA), engineers, air defense, intelligence resources, and CSS. Light infantry brigades do not have the mobility and firepower to conduct a cover mission *even with* augmentation by light armor.

Counterreconnaissance. Counterrecomaissance is an inherent task, either active or passive in nature, conducted to thwart enemy reconnaissance and surveillance (R&S) efforts. Its purpose is to deny the enemy commander his eyes and ears, impeding his ability to determine the disposition of friendly forces. It includes combat action to destroy or repel enemy reconnaissance elements. If successfully executed, counterrmonnaissance adds the element of surprise to offensive operations and prevents the rapid execution of the enemy's attack plan in the defense. Counterreconnaissance efforts are continuous and are conducted throughout the depth of the AO by all organic and supporting combat, CS, and CSS units. Light armor counterreconnaissance measures include, but are not limited to, fire and maneuver to destroy enemy forces, emplacement of obstacles to deny specific areas to the enemy, sustainment operations to maintain the counterreconnaissance effort, and effective C2 to integrate and synchronize all assets.

BATTLEFIELD OPERATING SYSTEMS

This section describes battlefield operating systems (BOS) that light infantry and light armor units must coordinate and synchronize in all types of combat operations. The systems, however, are a planning tool to organize battle tasks, not a framework for execution or issuing orders.

Intelligence. Light armor employs intelligence and electronic warfare (IEW) to provide critical intelligence and to facilitate effective electronic warfare (EW) against enemy C2 systems and tactical forces. Light armor intelligence assets include organic tactical reconnaissance and security capabilities, division intelligence unit support, and EW unit support. The organic scout platoon and other units in contact, as well as the division MI battalion, provide intelligence to light armor units.

Maneuver. The LID uses light armor to seize and retain the initiative and to close with and destroy enemy forces in the close fight. The objective of maneuver for light armor is to place or move its combat elements into positions where they can bring direct fires to bear on the enemy. Light armor units can inflict the greatest damage on the enemy by avoiding head-on encounters and striking the vulnerable enemy flanks and rear where superior combat power can be achieved.

Maneuver also includes firepower. Light armor gives the infantry commander added firepower and lethality to integrate into all operations. It can be quickly massed for attacks and counterattacks by fire and/or maneuver.

Based on the light infantry mission, the commander allocates and positions light armor units where he can best employ their combat systems according to the terrain and expected enemy capabilities and actions. In some instances, divisions may employ light armor forces in conducting mobile combat against armored and mechanized threats. The commander must

identify the narrow windows of opportunity to maneuver light armor forces offensively and to force the enemy to halt its attack and/or change its plan.

Light armor forces may be appropriate as reserves. Their mobility and firepower allow them to strike the enemy at the critical time and place, seizing or regaining the initiative or destroying the enemy force. They can also stop sudden enemy penetrations or incursions into the rear. The division may commit light armor forces with elements of its aviation brigade in support of its deep operations. Depending on the mission, responsive artillery, engineer, intelligence, and CSS are necessary to support this operation.

Fire Support. FS assets are positioned to mass lethal fires throughout the depth of the battlefield. They are responsive to multiple targets and can rapidly shift priority of fires. FS is provided to light armor by its organic mortars, the division and corps FA, Army and USAF air support, and NGF. To properly execute their fire support requirements, light armor units must coordinate closely with the fire support element (FSE), the tactical air control party (TACP), and the air/naval gunfire liaison company (ANGLICO). The light armor FS plan is integrated into the scheme of maneuver consistent with the commander's intent.

Air Defense. Air defense assets prevent air attacks on friendly units, supplies, and facilities by identifying and destroying enemy aircraft. Light armor relies on the division's air defense weapon systems as well as on its own active and passive measures, which include camouflage, deception, and direct and indirect fire. Light division air defense systems are capable of limited protection of maneuver, CS, and CSS elements with Stinger and Avenger weapon systems.

Mobility and Survivability. Mobility, countermobility, and survivability operations enhance mobility for light armor units, degrade the enemy's ability to move on the battlefield, and provide protective emplacements to enhance personnel and equipment survivability. They are planned based on the commander's intent, mission, and concept of operation. The light division engineer battalion must be augmented with corps engineer assets to conduct extensive mobility, countermobility, and survivability missions.

Mobility operations include breaching friendly and enemy minefields and obstacles, crossing gaps and water obstacles, maintaining main supply route (MSR), and preparing combat trails between battle positions (BP).

Countermobility operations are combat multipliers that enhance the effects of friendly direct and indirect fires. They degrade the enemy's ability to execute its plan by disrupting combat formations, interfering with C2, and confusing enemy commanders. They provide friendly maneuver commanders with critical time and space (depth) that can be exploited by fire and maneuver. This is accomplished with an integrated system of obstacles and tires that disrupts, turns, blocks, or fixes enemy movement in support of close and rear operations. Countermobility operations create opportunities that light armor weapon systems can exploit. Commanders must ensure that obstacles support their intent, mission, and scheme of maneuver, but do not degrade their own mobility.

Survivability operations consist primarily of preparing fighting and protective positions that allow light armor to survive to fight again. Light division engineer units have limited capability to prepare armor survivability positions. NBC defensive measures also increase light armor's survivability. LID and corps chemical assets provide assistance. See Chapter 8 for information on chemical support.

Combat Service Support. CSS units are responsible for sustaining combat operations throughout the depth of the battlefield. They must provide supplies and other support in sufficient quantity and with enough flexibility to support the overall intent and concept of the commander. The inherent immaturity of the contingency theater makes CSS extremely difficult. In situations where strategic lift capability is insufficient to provide all the support needed, sustainment operations can succeed only through anticipation, continuity,

responsiveness, and improvisation. CSS for the light armor battalion comes from its organic support and maintenance platoons, division support units, and corps support units.

Command and Control. To be effective, C2 must be forward, redundant, flexible, and survivable. Command posts (CP) and communications systems are key components of C2 in light armor units. The commander uses them to obtain timely information, make responsive decisions, communicate orders, and ensure compliance with them. Effective C2 allows him to "sense" the total battlefield and adjust quickly to take advantage of enemy weakness. It also enhances the responsiveness of combat, CS, and CSS assets.