SUMMARY

In order to fight, it is necessary to prepare. These preparations include:

- Reviewing and analyzing missions and tasks.
- Preparing and issuing the necessary plans and orders.
- Organizing for combat.
- Executing and supervising execution of whatever orders are issued.

Troop leading steps are the process by which a commander issues the necessary instructions to his subordinates so that the commander can accomplish his mission. The commander must:

- Receive the mission.
- Issue a warning order.
- Make a tenative plan.
- Initiate the necessary movement sequence.
- Reconnoiter.
- Complete the plan.
- Issue orders.
- Supervise and refine.

These steps are not rigid and can be modified to fit mission and situation.
The first and most important requirement in cavalry combat is for the cavalry unit to SEE the enemy; SEE him first and SEE him farther away than the friendly unit can be seen. In order to do this, it is necessary to MOVE on the battlefield. Once the enemy is SEEN or contacted, then it is necessary to MOVE forces into position to accomplish whatever the cavalry task may be—reconnaissance or security. And so the ability to MOVE, essential to all combat operations with all combined arms formations, is even more essential to cavalry, for not only does it enable the cavalry to fight, but permits SEEING the enemy early—a must in cavalry combat.
Since the ability to MOVE is an essential characteristic of both primary tasks of cavalry, MOVEMENT is described in this separate chapter. In later chapters, principles of reconnaissance and security operations are described in detail, but remember that the movement techniques described in the following paragraphs are common in both.

In battle, all movement is governed by two basic principles: TERRAIN and OVERWATCH.

Most combat operations begin with a movement to contact. This is true of cavalry operations. In a march to contact, three techniques of moving along the terrain are used: traveling, traveling overwatch, and bounding overwatch. The likelihood of enemy contact determines which technique is used.

**Why.** A moving unit usually makes contact with the enemy at the time and place of the enemy's choosing. This is especially true of cavalry. To offset the enemy advantage, the cavalry leader must use traveling, traveling overwatch, or bounding overwatch. Each technique is based on the concept of a lead element and an overwatch element. Contact is made by the smallest possible cavalry element, and the unit is in the best possible posture to react to the enemy presence. The proper movement technique uses terrain and facilitates control by the leader. When contact is made, fire and maneuver begin, facilitated by correct dispositions of the moving force.

**When.** Cavalry uses these movement techniques in all operations. Once contact is gained, the leader applies the actions on contact described in chapter 5, "Reconnaissance" and chapter 6, "Security."

<table>
<thead>
<tr>
<th>MOVEMENT TECHNIQUE</th>
<th>CONTACT</th>
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<tr>
<td>TRAVELING</td>
<td>NOT LIKELY</td>
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<tr>
<td>TRAVELING OVERWATCH</td>
<td>POSSIBLE</td>
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<tr>
<td>BOUNDING OVERWATCH</td>
<td>EXPECTED</td>
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OTHER CONSIDERATIONS

With the introduction of the improved TOW vehicle (ITV), Dragon, and the main battle tank (MBT) into the platoon, questions about how these weapons systems affect cavalry missions are bound to arise.

To answer these questions, it is necessary to examine what a tactical unit is expected to do and the weapons/equipment that are provided. A cavalry unit or any tactical unit, from squad to squadron, has been formed to accomplish a specific set of tasks. Regardless of how that tactical unit is equipped, *these tasks must be performed*. As an example, a scout squad’s job is to gather information about the enemy and area of operation. This job is critical to the successful completion of the larger unit's mission. It must be performed regardless of what vehicle, weapon, and equipment the scout squad has or does not have. Whether mounted on a 1/4-ton vehicle, M113, CFV or ITV, whether armed with a caliber .50 machinegun, automatic cannon, or TOW, the scout squad’s basic task remains information acquisition.

In looking at how the TOW and main battle tank affect an armored cavalry platoon’s battlefield movement techniques, we should first examine how terrain limits that movement. The platoon provides for its own battlefield security by using the techniques of overwatch and suppression. The length of a bound is determined by the terrain and the range of the overwatch vehicles’ weapons, with terrain being the greater limiter.

In discussing battlefield movement techniques, you must consider what it is you want your suppressive fires to do for you and the capabilities/limitations of the available weapons to do it.

When an overwatch element places suppressive fires on an enemy, it does so to allow the exposed bounding element a brief time to maneuver and deploy. Suppression may vary from reducing visibility, which limits the enemy’s ability to acquire targets, to destroying the enemy. The degree of suppression required is whatever causes the enemy gunner to cease effective fire long enough to allow the bounding element time to gain cover. If the overwatch element is slow to respond, the enemy gunner may have time to accurately guide his missile or fire a second round, which could be fatal to the bounding element.
The chart below gives a quick analysis of the platoon's major weapon systems' suppressive fire capability.

For more information see respective field and technical manuals.

When deciding which element overwatches during battlefield movement, consider your cavalry unit mission, terrain, requirement for overwatch, and necessity for rapid and effective suppression, and the capabilities and limitations of your weapon systems. Obviously, the tank is the most effective overwatch system, capable of placing high velocity, rapid fire on both point and area targets. The tank is your primary overwatch vehicle. For overwatch within the scout squad, the relatively short moves of the bounding element, the minimum range factors and slow employment speed of the TOW and Dragon missiles, and the need to quickly suppress an enemy gunner, the caliber .50 and 7.62-mm machineguns may be best. There may be times when terrain allows you the range to use TOW in the overwatch, but remember, those five troopers in the ITV are scouts, and if you leave them behind as overwatch, you've just cut your information gathering power in half.

<table>
<thead>
<tr>
<th>WEAPON</th>
<th>RANGE</th>
<th>VELOCITY</th>
<th>TARGET COVERAGE</th>
<th>LETHALITY</th>
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<td>MAX</td>
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<td>65m</td>
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<tr>
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<tr>
<td>Cal .50 MG</td>
<td>1,500m</td>
<td>X</td>
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</table>
ENEMY

Due to the lethality of modern weapons, cavalry must make every effort to operate without being seen. Exposure to enemy observation and fires must be minimized. Of primary importance is the active use of terrain, especially when moving against a hidden enemy. Cavalry's best protection against enemy weapons is the terrain. Hills, depressions, woods, brush, and a wide variety of other natural features can provide protection to both mounted and dismounted elements. Each movement technique uses terrain to gain protection from enemy weapons and maximize cavalry firepower and mobility.

USE OF TERRAIN

Cavalry units must make maximum use of the natural cover and concealment in order to survive and accomplish their missions. Cover is protection from fire; concealment is protection from enemy observation. Cover should be used whenever possible. If there is no cover, the concealment offered by trees, shadows, brush, and houses should be used. Camouflage is also an active measure. It is blended with natural cover and concealment.

Conspicuous Landmarks. Conspicuous landmarks should be avoided, because they attract enemy attention. His artillery and antitank weapons will probably have been registered on them.

Movement From Cover, Concealment, or Defile. Lead vehicles of a unit or team emerging from a ravine, woods, or other defile should be overwatched by other vehicles, halted in concealed and/or covered positions and ready to provide suppressive fire.

Dusty Terrain. Dusty terrain betrays the movement of cavalry units. Dust can be minimized by slow movement and dispersion. Vehicle tracking should be avoided.
Vehicle Positions. Positions behind cover are known as either down positions or hide positions, depending on how much of the vehicle is protected from enemy fire.

An armored vehicle is in turret-down position when the entire vehicle is behind cover, but the commander can still observe to the front from the turret. Use turret-down for protection while observing. When ready to engage the target, move into hull-down.

An armored vehicle is in hull-down position when the muzzle of the gun/launcher is the lowest part of the vehicle exposed to the front. Use hull-down for maximum protection when engaging targets with direct fire.

An armored vehicle is in hide position when no part of the vehicle or commander is exposed to the front. This is often used in ambush positions in conjunction with dismounted observers. The vehicle would move forward into hull-down on the signal of the observer for target engagement.
TRAVELING

In this technique, the lead and trail elements of a unit move together as a unit. It is the fastest but least secure movement technique, and is used when speed is important and enemy contact is not likely. Movement is continuous, and interval and dispersion are maintained between vehicles as terrain and administrative restrictions permit.

TRAVELING OVERWATCH

In this technique, the lead and trail elements of a unit again move together, but distance separates the lead and trail elements to improve security. Traveling overwatch is used when contact is possible, but speed is desirable. The lead element moves continually along the most covered and concealed routes for protection from possible enemy observation and direct fire. The trail element moves at variable speeds, continuously overwatching. The trail element must maintain visual contact with the lead element, staying close enough to provide suppressive fire and to maneuver for support, yet far enough to the rear that enemy direct fire engagement of the lead element does not prevent its delivery of suppressive fires or interfere with its maneuverability.
BOUNDING OVERWATCH

The unit moves by bounds in this technique, with a trailing element always in a position to overwatch the advance of the leading element. It is the slowest, but most secure movement technique, providing the capability for immediate, direct suppressive fire on an enemy force that engages the bounding element with direct fire. This technique is used when enemy contact is expected.

In bounding overwatch, the lead element of the unit advances to a point (first move) where it can support the advance of the rear element. On signal, the rear element moves rapidly forward to a position abreast of the leading element (second move) and halts to overwatch the next advance of the lead element (third move). Maximum use is made of folds of the earth and concealment to mask movement from likely enemy positions.

USE BOUNDING OVERWATCH WHEN CONTACT IS EXPECTED. WHILE ONE ELEMENT MOVES, ANOTHER IS ALWAYS STOPPED AND IN POSITION.
Variation. A variation of this technique may be used. The lead element moves to the next vantage point (first move), overwatched by the trail element. After the lead element has taken a position, the trail element advances past the lead element to a new vantage point (second move). The initial lead element then advances past the initial trail element to a new position (third move). Movement is continued until contact is made.
Orders. Before moving his unit, the leader selects the initial position for the overwatch element, the next vantage point, and the best covered and concealed route that will permit accomplishment of the mission. He issues orders to the leaders of the overwatch and bounding elements. There is always a danger that orders will be misunderstood; therefore, orders must be clear and complete.

THE LEADER OF THE OVERWATCH ELEMENT MUST KNOW:
- The direction of the Threat elements.
- The location of his overwatch position.
- The route and destination of the bounding element.
- The location of his leader.
- What he can expect to do next.
- How he will receive his orders.

THE LEADER OF THE BOUNDING ELEMENT MUST KNOW:
- The direction of the Threat elements.
- Where he is to move and by which route.
- Which movement technique to use.
- The location of the overwatch element.
- The location of his leader.
- What he can expect to do next.
- How he will receive his orders.

Overwatch Position. The overwatch position is a key to the bounding overwatch technique, offering the advantages usually associated with the defense, including:
- Good observation and fields of fire.
- Protection offered by covered and concealed positions.

- Immediate and controlled reaction to any threat.
- Stationary weapons platform.

Overwatch Element Leader. The leader of the overwatch element moves his vehicles over covered and concealed routes to hulldown positions and:
- Checks the overall security of the position.
- Assigns areas of responsibility for observation and fire.
- Reports occupation of the position.
- Searches for and engages known or likely targets that could endanger the moving element.
- Selects route(s) to his next position.

NIGHT MOVEMENT

Movement techniques at night, or during periods of poor visibility, are the same for those used during periods of good visibility, but it is harder to navigate and maintain control. Movement under conditions of poor visibility is facilitated by detailed coordination, careful selection of routes, and the use of night vision equipment and battlefield illumination. When illuminating the battlefield, the locations of friendly units must not be illuminated or silhouetted. Maximum use should be made of passive devices, and the use of active devices must be controlled to maintain surprise and hide friendly locations. Movement should be keyed to easily recognizable terrain features, such as roads, fences, tree and pole lines, edges of woods, and streams. Luminous markers should be placed on the rear of vehicles and personnel.
A cavalry platoon leader organizes his platoon to accomplish the mission based on his assessment of the enemy in his area, the terrain he must operate over, the men and equipment he has available, and the mission he must perform (chapter 3).

**Traveling.** The platoon leader designates the lead and trail teams and the route(s) that the platoon will use to accomplish the mission. The platoon is usually organized into two teams. For ease of control, the platoon leader moves in the lead vehicle of the lead team, while the platoon sergeant moves with the trail element.

The traveling technique is often used within a team. The team leader divides his team into a lead section and a trail section and designates the routes. The team moves as a unit, and the leader moves with the lead section.

The same techniques are used within a section.
Traveling Overwatch. The platoon leader designates lead and trail teams and the route(s) that the platoon will follow to accomplish the mission. The lead team moves rapidly and continually, taking full advantage of cover and concealment. The trail team follows at a distance where it can provide suppressive fire or maneuver to support the lead in the event of contact with the enemy. Usually the platoon leader moves with the lead elements and the platoon sergeant moves with and controls the trail elements. Long range, direct-fire weapons are in the trail team.
Bounding Overwatch. A platoon may use bounding overwatch. One team takes an overwatch position while another bounds. Because of the wide frontages normal to cavalry operations, bounding overwatch is more often used within team and section. Regardless of the level, the leader designates the bounding and overwatch elements, the location of the overwatch position, and the route to and location of the next vantage point. For cavalry, this technique not only furnishes fire to cover the movement of lead vehicles, but helps locate enemy positions and ensures rapid transmission of information. A cardinal rule is to make contact with the smallest possible element. For example, it is usually preferable to lead with one vehicle instead of two or three. The following considerations apply to this movement technique:

- Vehicles in overwatch should occupy hull-down positions and make maximum use of cover and concealment.
- The overwatch element must look for likely enemy positions, so it can readily detect and engage enemy forces.
- Overwatch element observes likely enemy positions at the ends of roads, along woodlines and where woods go over crest, in built-up areas.
The length of each bound is determined by terrain, visibility, and the range from which the overwatching element can effectively support the moving element. Bounds must be as rapid as security, efficiency of operation, and coordination between elements allow. All elements must avoid skylining, and must cross open areas rapidly. Crews must be alert for the enemy and prepared to implement actions on contact.

Scouts must not become vehicle-bound. When the lead vehicle nears a position with new areas of observation (the edge of a wooded area or a rise in the ground), it should be stopped in a covered and concealed position while a dismounted check is made for enemy elements. The fundamentals of individual movement discussed in FM 21-75 apply. If the commander and observer move forward dismounted, the driver mans the cupola mounted weapon, monitors the radio, and covers their advance.

When the lead vehicle arrives at the selected stopping point, a dismounted reconnaissance is made of the area to the front. The lead commander keeps his vehicle concealed until he has signaled the rear vehicle forward and the next bound has been determined.
When used with the platoon, the mortar squad follows the trail team. It locates far enough to the rear that the weapon can be fired at minimum range to support the lead teams. Positions should permit use of the line-of-sight fire technique to eliminate the need for a complete fire mission request and permit rapid delivery of suppressive fires. The squad leader monitors the platoon net to keep up with the situation. He gives his status and location to the platoon leader so that the platoon leader can move him forward as required.
**Control of Movement.** As much as possible, movement is controlled by SOP, visual signals (arm, hand, or flag), or messenger. The platoon leader uses the radio as little as possible to control the movement of his platoon.

**Other Types of Platoon Organizations.** As outlined in chapter 3, there are variations in cavalry platoons. The above movement techniques apply no matter how the platoon is organized and equipped.
**MOVEMENT TECHNIQUES ABOVE PLATOON LEVEL**

*Troop.* During reconnaissance and most security operations, the troop usually moves on multiple axes with each platoon assigned its own route or zone of advance. Unless specified by the troop commander, each platoon leader selects the movement technique most appropriate for his situation and mission.

There will be times (an advance or flank guard operation) when the troop will have to move in a column of platoons. The lead platoon moves using the technique most appropriate for the situation. The troop (-) uses the traveling technique.
Regardless of the number of axes on which the troop is operating, mortars locate where they can best provide indirect fire to the lead platoon(s). They move by bounds to positions where they can quickly and effectively react to the anticipated enemy threat.

The troop commander locates well forward to best exercise command control. Orders are usually given over the radio and monitored by all platoons. But the troop must be prepared to operate without the radio by using messengers, face-to-face coordination, and visual signals. A well trained troop uses standard reporting procedures (appendix B) to reduce long radio transmissions.

**Squadron and Regiment.** When the squadron and regiment move to gain contact, normal deployment is over multiple axes. Traveling, traveling overwatch, or bounding overwatch are used at the platoon level, no matter how the parent squadron and regiment are deployed. Movement techniques for the tank company of the regimental squadron are covered in FM 71-1. The howitzer battery in the regimental squadron displaces to support ground maneuver elements, using the techniques outlined in FM 6-50.
AIR CAVALRY

Air cavalry moves to gain contact using terrain and the same movement techniques as ground cavalry. Air cavalry is organized for combat into teams consisting of varying mixes of aircraft, depending on the mission and situation (chapter 3). Two factors differentiate aircraft from ground vehicles: *speed of movement* must be recognized and controlled, and *travel in the vertical plane* allows the aircraft to be silhouetted much more often than ground vehicles. Air cavalry teams adjust their air speed and altitude to the likelihood of making contact with the enemy. The greater the enemy threat, the more need for security; thus, the flight is slower and lower. Security is achieved by using terrain flying and the same movement techniques as ground cavalry—traveling, traveling overwatch, and bounding overwatch.

★ Sophisticated air defense weapons enable enemy forces to detect, acquire, engage and destroy airborne targets in daytime, at night and under all conditions of visibility and weather.

★ The key to survivability of any tactical unit on the modern battlefield is the intelligent use of terrain. In helicopter tactics, survivability is achieved by terrain flight.

TERAIN FLIGHT

★ Terrain flight, as its name implies, is nothing more than *reading* and *utilizing* the terrain to counter the enemy’s attempt to defeat us.

★ Terrain flying is flight close to the earth’s surface, using natural features (terrain and vegetation) and man-made objects to degrade the enemy’s ability to acquire targets. Armor aviation units use a combination of three types of flight—low-level, contour, and nap-of-the-earth (NOE)—depending on terrain, mission, weather, and the enemy’s ability to acquire targets. Air crews must develop the ability to analyze the Threat, their mission, and situation, and maneuver using the mode of flight required to accomplish the mission. It is not uncommon for scout/attack helicopter teams to maneuver in and around trees and under wires or bridges. Operations will also include the use of built-up areas for cover and concealment.
Low-Level. Low-level flight is flight conducted at a selected altitude at which detection of an aircraft or of its departure and landing points is minimized or avoided. The route is preselected and generally conforms to a straight line, constant air speed, and indicated altitude.

Contour. Contour flight is flight at an altitude which generally conforms to the contours of the earth. This type of flight takes advantage of available cover to avoid detection of the aircraft and/or its points of departure and landing. It is characterized by constant air speed and an altitude varying with vegetation and obstacles.

Nap-of-the-Earth (NOE). NOE flight is flight as close to the earth’s surface as vegetation or obstacles permit, generally following the contours of the earth. Air speed and altitude vary according to terrain, weather, and enemy situation. Based on known terrain features, the pilot plans a broad corridor of operation, with a longitudinal axis pointing toward his objective. In flight, the pilot uses a weaving, devious route within his planned corridor, remaining oriented along his general axis of movement to take full advantage of the cover of terrain, vegetation, and man-made features.

★ Failure to make full protective use of terrain can prove fatal.

★ Besides the use of terrain, the installation of Aircraft Survivability Equipment (ASE) enhances the success of our air cavalry and attack helicopter units against the enemy’s modern air defense systems. When possible, Threat radar simulation should be played against the units during their gunnery training.
MOVEMENT TECHNIQUES

Traveling. The team moves at a constant speed, using low-level or contour flight. Within the team, aircraft are as dispersed as visual contact and terrain permit. This technique is used for rapid movement when enemy contact is not likely. An air cavalry team applies this technique using the principles outlined on page 4-5.
Traveling Overwatch. This is used when enemy contact is possible. Lead and trail aircraft are designated, and they move using the technique as described on page 4-5. The lead aircraft in the team moves continually. Trail aircraft move as necessary to overwatch the lead aircraft. Trail aircraft prepare to maneuver or provide suppressive fire to support the lead aircraft if it makes contact.
**Bounding Overwatch.** This is used when enemy contact is expected. The principles covered on pages 4-6 through 4-8 apply. Overwatch aircraft cover the progress of the bounding aircraft from a covered and concealed overwatch position. Overwatch aircraft are in position to support the bounding aircraft with immediate direct suppressive fire. The length of each bound is closely tied to terrain, visibility, and the range of the overwatch aircraft's weapon.
SUMMARY

Cavalry must MOVE on the battlefield in order to SEE the enemy first. Once the enemy is SEEN, cavalry must MOVE into position to accomplish its mission.

Cavalry selects the traveling, traveling overwatch, or bounding overwatch movement technique based on the likelihood of enemy contact. In the traveling technique, the lead and trail elements of a unit move together as a unit. In the traveling overwatch technique, the lead and trail elements of a unit again move together, but distance separates them to improve security. The unit moves by bounds in the bounding overwatch technique, with a trailing element always in position to overwatch the advance of the leading element.

Air cavalry uses the same movement techniques as ground cavalry to gain contact.
The purpose of reconnaissance is to gather information upon which commanders may base plans, decisions, and orders. Reconnaissance includes surveillance; that is, systematic observation by any means.
Why. Cavalry conducts reconnaissance to see the battlefield and the enemy in order to reduce the uncertainties of the battlefield, such as terrain, effects of weather upon the terrain, and presence or absence of the enemy. The intent is to prevent the main body from entering battle unwarned, with an incomplete picture of the battlefield, or with tank and infantry striking power dissipated for reconnaissance or security tasks.

When. Cavalry conducts reconnaissance as part of all cavalry operations and to develop a situation for the main body. Reconnaissance is continuous on the battlefield.

How. There are three types of reconnaissance: route, zone, and area. It may be conducted as a distinct mission or as part of another operation. Cavalry reconnoiters at a distance that provides the main body adequate reaction time.

FUNDAMENTALS

Cavalry performs reconnaissance mounted, dismounted, or a combination of mounted and dismounted. The last is most frequent. When possible, air and ground cavalry are used together. This permits the strengths of one to compensate for the weaknesses of the other and increases the tempo of operations. Cavalry conducts reconnaissance according to five fundamentals:

- Orient on the location or movement of the reconnaissance objective.
- Report all information rapidly and accurately.
- Retain freedom to maneuver.
- Gain and maintain enemy contact.
- Develop the situation rapidly.

Orient on the Location or Movement of the Reconnaissance Objective. Reconnoitering cavalry maneuvers according to the location or movement of the reconnaissance objective which may be a terrain feature, a locality, or an enemy force. Thus, reconnoitering cavalry must have considerable freedom of action.

Report All Information Rapidly and Accurately. Information appearing unimportant may be very valuable in conjunction with other information. Knowing the enemy is not in one location is just as important as knowing he is in another. Reconnaissance reports must be timely and describe what (including how many), when, where, and doing what. A standard format facilitates rapid and accurate reporting (appendix B, Records and Reports).

Retain Freedom to Maneuver. Cavalry must move to live. Cavalry obtains information by stealth when possible, but fights as necessary to accomplish the mission. Overwatch, immediate suppressive fires, cunning, and maintaining an awareness of tactical situations to the flanks help prevent situations in which the ability to move is lost.
**Gain and Maintain Enemy Contact.** Contact reduces the enemy’s capability to achieve surprise. Using movement techniques discussed in chapter 4, cavalry must gain enemy contact quickly. Sometimes surveillance alone is sufficient; at other times, fire and maneuver are required. Contact is not voluntarily broken without orders.

**Develop the Situation Rapidly.** When contact is expected, reconnoitering cavalry deploys. They move by bounding overwatch, and are ready for battle. Immediately on gaining enemy contact, cavalry deploys to cover, maintains observation, and reports the situation.

If the enemy does not detect the initial contact, reconnoitering cavalry continues observation until:
- Detected.
- The mission is accomplished.
- Further development of the situation requires combat action.
- The need for speed dictates sacrificing stealth.

The enemy’s strength, composition, and disposition must be quickly determined with a special effort to find his flanks. This can be done by:

- Deploying unengaged elements forward to the flanks to extend the line of contact.
- Using patrols to reconnoiter to the flanks while the force in contact maintains a heavy volume of suppressive fire.

If first contact results in an exchange of fire, overwatch elements lay down a heavy volume of direct suppressive fire and indirect fires are requested, as necessary. The bounding elements (normally the first to be engaged) return fire while seeking cover. The situation is reported and developed by fire and maneuver.
After the situation is developed, the unit chooses a course of action and reports. This ensures the commander's approval and provides him information needed to develop his course of action. Possible courses of action are:

**ATTACK**, if sufficient combat power is available, and it will not detract from mission accomplishment. Adopting this course of action results in a hasty attack (chapter 6).

**BYPASS**, if sufficient combat power is not available, or if an attack will adversely affect mission accomplishment. Permission from the next higher echelon of command must be obtained before bypassing enemy units. A bypassing regiment or squadron must maintain enemy contact until relieved of responsibility.

**MAINTAIN ENEMY CONTACT**, if an attack will degrade mission accomplishment, or if there is not sufficient combat power to attack and bypassing is not feasible.

When an obstacle is encountered, the sequence of events is the same as on enemy contact. Obstacles may be man-made, such as a minefield; or a terrain feature, such as a marsh. Obstacles are frequently covered by fire. Immediately upon encountering an obstacle, the unit deploys to cover, reports, and develops the situation through observation and patrolling to determine:

- If the obstacle is defended.
- Extent of obstacle.
- Feasibility of bypassing or reducing the obstacle.
RECONNAISSANCE TECHNIQUES

Reconnaissance is accomplished by a combination of mounted and dismounted actions.

Cavalry may dismount to:

- Acquire more detail than can be obtained while mounted.
- Achieve greater stealth.
- Reconnoiter possible ambush sites, such as a town, bridge, defile, or bend in a road. Cavalry determines if the enemy is lying in wait. A minimum of two scouts with a light machinegun should be dismounted. This permits one scout to overwatch the other during movement to the point of interest. It also permits one scout to maintain surveillance while the other acts as a messenger. The machinegun provides a means of immediately covering the bounding scout with a high volume of suppressive fire in the event he is fired on. At such times, if possible, vehicles are left in overwatch positions with each driver manning his vehicle's weapon and monitoring the radio. Whenever possible, dismounted scouts are covered by overwatching fire and observation between themselves. A vehicle moving behind dismounted elements destroys stealth.

Reconnaissance can be best conducted by combining the efforts of both air and ground cavalry elements. Air cavalry can greatly reduce the time needed to reconnoiter. In a reconnaissance mission, an air cavalry troop may be placed to the front, the flanks, or between ground units. The air cavalry troop may have a route, zone, or area reconnaissance mission. Ground cavalry may reinforce the air cavalry if the terrain offers concealment from aerial observation. During route reconnaissance, air cavalry normally checks lateral routes and the terrain near the designated route(s). Ground cavalry in turn follows on the main route and reconnoiters those lateral routes or terrain features that can't be reconnoitered properly by air cavalry.

During a zone reconnaissance, air cavalry can increase the speed of operations by screening forward of the leading ground element until enemy contact is made. Air cavalry elements screening forward of ground cavalry must maintain communications with leading ground cavalry elements and give early warning of enemy positions and obstacles. Once enemy contact is made, air cavalry can reconnoiter and give security to the flanks, maintain contact between ground cavalry units, or develop the situation with long range, overwatching direct fires from attack helicopters.

During an area reconnaissance, the same considerations as for a zone reconnaissance apply. Due to air cavalry's mobility differential, it can react rapidly to a developing situation. Thus, during a reconnaissance mission conducted by the parent unit, the air cavalry mission may often change. The distance air cavalry operates from ground units normally depends on:

- Desire of the commander.
- Communications.
- Range fan of the supporting artillery.
Reconnoitering a Roadblock (The same general procedure is used for most obstacles encountered). Assume any roadblock/obstacle is observed and covered by fire. It will usually be positioned so the lead vehicle comes upon it suddenly. The platoon leader does not allow a team to develop the situation unsupported, but has them observe and reconnoiter further while the rest of the platoon is brought into the action.

Immediately upon observing the obstacle, the scouts deploy and report. If the enemy fires on the lead scout, the overwatch scout and the team’s tanks fire suppressive fires while the lead scout deploys. To ascertain the enemy situation, the platoon leader moves the platoon to a position covering the obstacle. The platoon observes and searches the obstacle for enemy dispositions, a route to bypass the obstacle, and if necessary, terrain over which to attack the enemy.

If no avenue of approach is available for bypass or enemy strength is too great for a platoon attack, the platoon leader sends a detailed report to the troop commander, keeps the roadblock under observation, determines the exact enemy location and size, and locates a bypass. If the obstacle is not under observation, or the patrols find the enemy has withdrawn, the platoon secures the area and the scouts determine if the roadblock can be effectively removed. Once the enemy situation has been developed, and a bypass found, the platoon leader informs the troop commander.
Conducting a Reconnaissance Over Semi-Open Rolling Terrain. The tanks are placed in an overwatch position where they can observe the terrain well forward and to the flanks of the scout squads. The scouts then move by bounding overwatch over the terrain. The bounding vehicle does a complete visual reconnaissance of the terrain and his route to the next position. Meanwhile, the overwatch scout observes the terrain forward and to the flanks of the bounding vehicle. The overwatch scout knows the bounding vehicle's tentative route and stop point. He is ready to provide rapid suppressive fire with his machinegun in support of the bounding scout.

The situation will dictate which scout vehicle will bound first. Because of the slow response and flight time of the TOW, the assistant squad leader overwatches within machinegun range. If the enemy is too strong to be suppressed by the ITV's machinegun (7.62-mm only), the tanks are brought into action.

The platoon leader must ensure his reconnaissance plan covers the entire zone, because very seldom will one team have visual contact with the other due to distance, vegetation, and terrain.
RECONNAISSANCE AT NIGHT AND DURING OTHER PERIODS OF REDUCED VISIBILITY

Air and ground cavalry reconnoiter at night the same as during the day. However, the rate of coverage decreases significantly. This is due to increased difficulty in navigation, reduced effectiveness of visual observation, and during sustained operations, the human endurance factor. As a general rule, routes can be reconnoitered at night as in the day, although not as quickly. In the case of zone reconnaissance, zones should be narrowed since command control can be more difficult at night. When it is necessary to perform area reconnaissance at night or during other periods of reduced visibility, more time should be allowed to accomplish the mission.

Illumination, passive night vision devices, surveillance radars, and other STANO devices will, to a large degree, offset the problems of darkness (FM 31-1 and FM 31-100). Since the enemy has a comparable capability and places great emphasis on operations during periods of limited visibility, moving cavalry must use the terrain at night as it does during daylight hours.

When illumination is used, it is placed behind the enemy to silhouette him. Cavalry does not locate near burning vehicles or houses.

When bad weather or heavy fog sets in, primary reliance must be placed on ground elements. These periods can be used to rest flight crews and for a surge in the aircraft maintenance effort.

At night or during other periods of reduced visibility, ground cavalry depends on dismounted scouting and patrolling to prevent unnecessary vehicle losses. The location of moving vehicles is particularly easy to pinpoint by sound at night and in fog.

Reconnaissance during periods of reduced visibility requires significantly higher levels of individual and unit proficiency. Since skill rapidly deteriorates without frequent practice, monthly operations are required. About half of all reconnaissance training should be at night. During combat, a completely committed cavalry unit may start losing efficiency after about 36 hours of continuous operation. One hour of night flying causes fatigue comparable to 5 or 6 hours of daylight flying.

STAY OFF THE SKYLINE, EVEN AT NIGHT.

By observing at night from a low area, you may be able to detect a target that is moving along the side of a hill by seeing it silhouetted against the sky.
THREAT ORGANIZATION FOR DEFENSE

Reconnoitering cavalry may find the enemy deployed for defense and conducting reconnaissance and security operations. Threat forces view defense as a temporary expedient emphasizing depth, strongpoints, and tank-led counterattacks. The following shows how a motorized rifle regiment organizes and defends its part of a battle area.

**Security Zone.** US cavalry units first encounter the security zone about 20-25km forward of the main defensive belt. It is occupied by Threat reconnaissance units.
Threat Weapons. Threat reconnaissance units are equipped with PT-76 tanks, BRDM scout and reconnaissance vehicles, motorcycles, and SA-7 shoulder-fired air defense missiles. They are supported by artillery, mortar, and close air support fires.

Threat Tactics. Threat reconnaissance units conduct mounted and dismounted squad- and platoon-size patrols throughout this zone. Their mission is to locate advancing US cavalry and main body forces.

These patrols attempt to:

- Provide early warning.
- Establish and maintain contact.
- Obtain information about the attacking forces.
- Prevent US cavalry from gaining information.
- Delay with long range direct and indirect fires.
- Deceive and harass.
- Avoid decisive combat.

Threat reconnaissance units may be reinforced with tank and motorized rifle platoons from units in the main defensive zone. These reinforcements normally occupy individual strong points positioned throughout the security zone to:

- Assist Threat reconnaissance units.
- Channel advancing US cavalry into killing zones.

US cavalry, after advancing about 15-20km, contacts main force platoon-size units reinforced with tanks and antitank weapons, forward of the main defensive belt. Each platoon is reinforced with one or two main battle tanks (MBT's). There are also ZSU-23-4's or SA-9's with these forces.

The purpose of these forces is to:

- Deceive our reconnaissance units as to the location of their main defensive belt.
- Collect more information.
- Force early deployment.
- Fight to keep reconnaissance and security units from breaking through.
Platoons occupy mutually supporting platoon-size strongpoints designed to force US cavalry to move into killing zones. Unoccupied dummy positions are constructed to give the appearance of additional strength and cause confusion. The enemy fights stubbornly, trying to force premature deployment of the US main body. A Threat unit withdraws on order to a successive strongpoint to avoid decisive engagement. Threat withdrawal is covered by massive indirect fires, and direct fire from other strongpoints.

**Main Defensive Belt.** US cavalry units next encounter the main defensive belt. This consists of a series of battalion-size interlocking positions.

The Threat force's mission in the main defensive belt is to:

- Destroy and repel the attacker. The Threat force is dug in well and protected by extensive minefields.
- Counterattack all penetrations. The Threat force uses tank-heavy elements in the counterattack.

Main defensive belt forces occupy prepared company-size positions. Dummy positions are also prepared to confuse the attacker.

BRDM's cover the most likely areas of armor attack.

Each battalion of a motorized rifle regiment equipped with BMP's may have over 30 Sagger-equipped vehicles.

Each battalion may be reinforced by a company of tanks.
**Threat Weapons.** Main defensive belt forces are strong in antitank weapons, dug in, and supported by all available men and weapons.

**Threat Tactics.** A Threat battalion organizes a strongpoint into two echelons: two companies in the first and one company in the second. A tank reserve is normally formed at regiment and used to counterattack and destroy penetrations of the main defensive belt. This belt has:

- Defense in depth. The two echelons and reserve provide a minimum of 10km of depth.
- Interlocking fire. All positions have interlocking fire. The second echelon provides long range, direct-fire support to the first echelon.
- Emphasis on antitank weapons. The basic defense is antitank.
- Coordination of all fires. Indirect, direct antitank, and tank fires are planned on all avenues of approach, flanks, and on top of and to the rear of all defensive positions.
- Cover, concealment, and obstacles. There is extensive engineer preparation of all positions, including minefields and camouflage.
A route reconnaissance mission is assigned to obtain detailed information of a specified route and all adjacent terrain from which the enemy could influence movement along that route. Route reconnaissance may be oriented on a road, on an axis, or on a general direction of advance. A route reconnaissance mission may also be assigned to obtain information of an enemy force moving generally along a specific route, or to locate sites for construction of hasty obstacles to impede enemy movement. Route reconnaissance can normally be performed much faster than zone reconnaissance because effort is concentrated along the route, and not widely dispersed. The following is an example of route reconnaissance.

Route Red provides orientation for the reconnaissance effort. In addition to route Red, bridge 1 must be checked. All terrain features and towns that dominate movement along the route must be reconnoitered. Dominating features that could conceal enemy forces are 2, 3, 5, 6, 7, and 8. The lateral route at 4 must be reconnoitered, as it is a high-speed avenue of enemy approach into the route Red area. The reconnaissance mission ends at the objective, which is merely a control measure. The objective may or may not be occupied by the enemy.