

Chapter 13

Reconnaissance Operations

You can never have too much reconnaissance.

General George S. Patton Jr., *War As I Knew It*, 1947

Reconnaissance operations are those operations undertaken to obtain, by visual observation or other detection methods, information about the activities and resources of an enemy or potential enemy, or to secure data concerning the meteorological, hydrographical or geographical characteristics and the indigenous population of a particular area. Reconnaissance primarily relies on the human dynamic rather than technical means. Reconnaissance is a focused collection effort. It is performed before, during, and after other operations to provide information used in the intelligence preparation of the battlefield (IPB) process, as well as by the commander in order to formulate, confirm, or modify his course of action (COA). The four forms of reconnaissance are route, zone, area, and reconnaissance in force.

13-1. Reconnaissance identifies terrain characteristics, enemy and friendly obstacles to movement, and the disposition of enemy forces and civilian population so the commander can maneuver his forces freely and rapidly. Reconnaissance prior to unit movements and occupation of assembly areas is critical to protecting the force and preserving combat power. It also keeps the force free from contact as long as possible so that it can concentrate on its decisive operation.

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RECONNAISSANCE OBJECTIVE

13-2. The commander orients his reconnaissance assets by identifying a reconnaissance objective within the area of operation (AO). **The reconnaissance objective is a terrain feature, geographic area, or an enemy force about which the commander wants to obtain additional information.** The reconnaissance objective clarifies the intent of the reconnaissance effort by specifying the most important result to obtain from the reconnaissance effort. Every reconnaissance mission must specify a reconnaissance objective. The commander assigns a reconnaissance objective based on his priority information requirements (PIR) resulting from the IPB process and the reconnaissance asset's capabilities and limitations. The reconnaissance objective can be information about a specific geographical location, such as the cross-country trafficability of a specific area, a specific enemy activity to be confirmed or denied, or a specific enemy unit to be located and tracked. When the reconnaissance unit does not have enough time to complete all the tasks associated with a specific form of reconnaissance, it uses the reconnaissance objective to guide it in setting priorities.

13-3. A commander may need to provide additional detailed instructions beyond the reconnaissance objective, such as the specific tasks he wants accomplished or the priority of tasks. He does this by issuing additional guidance to his reconnaissance unit or by specifying these instructions in his tasks to his subordinate units in the operation order. For example, if, based on all technical and human intelligence (HUMINT) sources, a division G2 concludes that the enemy is not in an area and the terrain appears to be trafficable without obstacles, the division commander may decide he does not need a detailed reconnaissance effort forward of his unit. He may direct his cavalry squadron to conduct a zone reconnaissance mission with guidance to move rapidly and report by exception terrain obstacles that will significantly slow the movement of his subordinate maneuver brigades. Alternatively, when the objective is to locate an enemy force, the reconnaissance objective would be that force, and additional guidance would be to conduct only that terrain reconnaissance necessary to find the enemy and develop the situation.

RECONNAISSANCE FUNDAMENTALS

13-4. The seven fundamentals of successful reconnaissance operations are as follows:

- Ensure continuous reconnaissance.
- Do not keep reconnaissance assets in reserve.
- Orient on the reconnaissance objective.
- Report information rapidly and accurately.
- Retain freedom of maneuver.
- Gain and maintain enemy contact.
- Develop the situation rapidly.

ENSURE CONTINUOUS RECONNAISSANCE

13-5. Effective reconnaissance is continuous. The commander conducts reconnaissance before, during, and after all operations. Before an operation,

reconnaissance focuses on filling gaps in information about the enemy and the terrain. During an operation, reconnaissance focuses on providing the commander with updated information that verifies the enemy's composition, dispositions, and intentions as the battle progresses. This allows the commander to verify which COA is actually being adopted by the enemy and determine if his plan is still valid based on actual events in the AO. After an operation, reconnaissance focuses on maintaining contact with the enemy to determine his next move and collecting information necessary for planning subsequent operations. When information regarding the current operation is adequate, reconnaissance focuses on gathering information for branches and sequels to current plans. As a minimum, reconnaissance is conducted continuously as an integral part of all security missions, including the conduct of local security for forces not in contact. (See [Chapter 12](#).)

13-6. Reconnaissance operations over extended distances and time may require pacing reconnaissance assets to maintain the effort, or rotating units to maintain continuous coverage. The human and technical assets used in the reconnaissance effort must be allowed time for rest, resupply, troop leading procedures, additional and refresher training, and preventative maintenance checks and services. The commander must determine not only where, but also when he will need his maximum reconnaissance effort and pace his reconnaissance assets to ensure that adequate assets are available at critical times and places.

DO NOT KEEP RECONNAISSANCE ASSETS IN RESERVE

13-7. Reconnaissance assets, like artillery assets, are never kept in reserve. When committed, reconnaissance assets use all of their resources to accomplish the mission. This does not mean that all assets are committed all the time. The commander uses his reconnaissance assets based on their capabilities and METT-TC to achieve the maximum coverage needed to answer the commander's critical information requirements (CCIR). At times, this requires the commander to withhold or position reconnaissance assets to ensure that they are available at critical times and places. The rest required by reconnaissance assets to sustain the reconnaissance effort is not to be obtained by placing them in reserve. However, all reconnaissance assets should be treated as committed assets with specific missions assigned at all times. Units with multiple roles, specifically armored and air cavalry, that can conduct reconnaissance, security, and other combat missions in an economy-of-force role may be kept as a reserve for security or combat missions.

ORIENT ON THE RECONNAISSANCE OBJECTIVE

13-8. The commander uses the reconnaissance objective to focus his unit's reconnaissance efforts. Commanders of subordinate reconnaissance elements remain focused on achieving this objective, regardless of what their forces encounter during the mission. When time, limitations of unit capabilities, or enemy action prevents a unit from accomplishing all the tasks normally associated with a particular form of reconnaissance, the unit uses the reconnaissance objective to focus the reconnaissance effort.

REPORT INFORMATION RAPIDLY AND ACCURATELY

13-9. Reconnaissance assets must acquire and report accurate and timely information on the enemy, civil considerations, and the terrain over which operations are to be conducted. Information may quickly lose its value. Reconnaissance units report exactly what they see and, if appropriate, what they do not see. Seemingly unimportant information may be extremely important when combined with other information. Negative reports are as important as reports of enemy activity. Failure to report tells the commander nothing. The unit information management plan ensures that unit reconnaissance assets have the proper communication equipment to support the integrated intelligence, surveillance, and reconnaissance (ISR) plan.

RETAIN FREEDOM OF MANEUVER

13-10. Reconnaissance assets must retain battlefield mobility to successfully complete their missions. If these assets are decisively engaged, reconnaissance stops and a battle for survival begins. Reconnaissance assets must have clear engagement criteria that support the maneuver commander's intent. They must employ proper movement and reconnaissance techniques, use overwatching fires, and standing operating procedures (SOP). Initiative and knowledge of both the terrain and the enemy reduce the likelihood of decisive engagement and help maintain freedom of movement. Prior to initial contact, the reconnaissance unit adopts a combat formation designed to gain contact with the smallest possible friendly element. This provides the unit with the maximum opportunity for maneuver and enables it to avoid having the entire unit become decisively engaged. The IPB process can identify anticipated areas of likely contact to the commander. Using indirect fires to provide suppression and obscuration as well as destroy point targets is a method reconnaissance assets use to retain their freedom of maneuver.

GAIN AND MAINTAIN ENEMY CONTACT

13-11. Once a unit conducting reconnaissance gains contact with the enemy, it maintains that contact unless the commander directing the reconnaissance orders otherwise or the survival of the unit is at risk. This does not mean that individual scout and reconnaissance teams cannot break contact with the enemy. The commander of the unit conducting reconnaissance is responsible for maintaining contact using all available resources. That contact can range from surveillance to close combat. Surveillance, combined with stealth, is often sufficient to maintain contact and is the preferred method. Units conducting reconnaissance avoid combat unless it is necessary to gain essential information, in which case the units use maneuver (fire and movement) to maintain contact while avoiding decisive engagement.

DEVELOP THE SITUATION RAPIDLY

13-12. When a reconnaissance asset encounters an enemy force or an obstacle, it must quickly determine the threat it faces. For an enemy force, it must determine the enemy's composition, dispositions, activities, and movements and assess the implications of that information. For an obstacle, it must determine the type and extent of the obstacle and whether it is covered by fire. Obstacles can provide the attacker with information concerning the location

of enemy forces, weapon capabilities, and organization of fires. In most cases, the reconnaissance unit developing the situation uses actions on contact. (See [Chapter 4](#) for a discussion of actions on contact.)

HISTORICAL EXAMPLE

13-13. Military history contains numerous examples of the importance of reconnaissance operations. The following historical example illustrates the major role of reconnaissance operations in ensuring the success of an operation. This non-US, medieval example illustrates that the study of other armies and other times has a great deal to contribute in helping the tactician understand the art and science of tactics.

The Battle of the Sajo River

Reconnaissance was critical in determining enemy dispositions and taking advantage of the terrain in this and many other Mongol battles. The Mongol army conducted continuous reconnaissance with a definite reconnaissance objective, and a significant part of their success resulted from their reconnaissance operations. During operations, light cavalry preceded each of their army's main columns performing reconnaissance. They reported on terrain and weather conditions as well as the enemy's size, location, and movements. If a Mongol column met an enemy force that it could defeat, it did so. If it could not, its light cavalry maintained contact with the enemy, developed the situation to its advantage, and maintained freedom of movement. The Mongol light cavalry inflicted casualties and disrupted the enemy's movements while the main Mongol army deployed for action.

In March 1241, a Mongol army of some 70,000 crossed the Carpathian Mountains from Russia into the Hungarian Plain. By mid-April, its light cavalry located the 100,000-man Hungarian army near the cities of Buda and Pest on the Danube River. In response, the Mongol army concentrated its previously dispersed columns as it approached the Danube. Once that the Mongols knew that they had been detected by the Hungarians, they deliberately withdrew about 100 miles northeast and led the Hungarians to a previously selected spot, Mohi Heath, on the Sajo River. The Mongols crossed the Sajo using an existing stone bridge and camped east of the river. The Hungarians followed and halted on the west bank, built a camp, took the stone bridge, and left a bridgehead on the east bank. Mongol reconnaissance discovered the location and dispositions within the Hungarian camp as well as a river-crossing site north of the camp. After dark, the main body of the Mongol army moved to cross the river at the crossing site. In addition to using the ford, the Mongols constructed a bridge to aid their crossing.

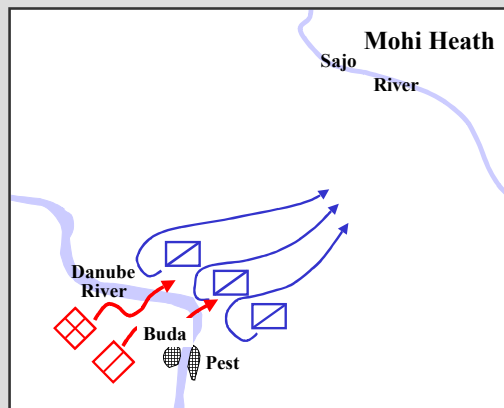


Figure 13-1. Mongol Army Route

The next morning, the remainder of the Mongol army conducted a supporting attack on the Hungarian force at the stone bridge, drawing the Hungarian army out of its camp to fight. While the supporting Mongol forces succeeded in recrossing the Sajo via the stone bridge, the fighting was hard and they nearly lost their battle while waiting for the main body to come to their support. After 2 hours, the Mongol main body fell on the Hungarian rear and flank, driving the Hungarians back into their camp. As was Mongol practice, they deliberately left an escape route from the enemy camp open. The ensuing Mongol pursuit destroyed the Hungarian army when they tried to withdraw from their camp.

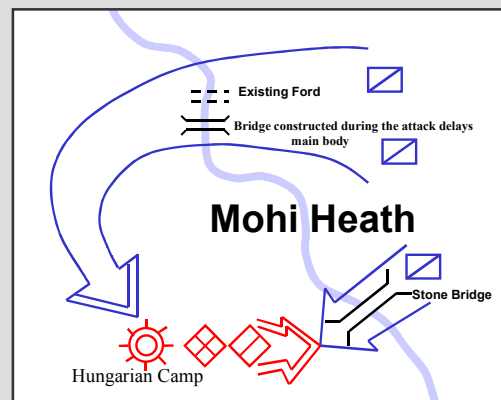


Figure 13-2. Mongol Army Pursuit

CHARACTERISTICS OF RECONNAISSANCE ASSETS

13-14. The responsibility for conducting reconnaissance does not reside solely with specifically organized units. Every unit has an implied mission to report information about the terrain, civilian activities, and friendly and enemy dispositions, regardless of its battlefield location and primary function. Frontline troops and reconnaissance patrols of maneuver units at all echelons collect information on enemy units with which they are in contact. In rear areas, reserve maneuver forces, fire support assets, air defense, military police, host nation agencies, combat support, and combat service support elements observe and report civilian and enemy activity. Although all units conduct reconnaissance, those specifically trained in reconnaissance tasks are ground and air cavalry, scouts, long-range reconnaissance units, and Special Forces. Some branches, such as the Corps of Engineers and the Chemical Corps, have specific reconnaissance tasks to perform that complement the force's overall reconnaissance effort. However, the corps and division commanders will primarily use their organic cavalry and intelligence elements to conduct reconnaissance operations.

13-15. At battalion level and above, the commander assigns missions to his ISR assets based on their organization, equipment, and training. The commander must know the capabilities and limitations of his available reconnaissance assets to ensure the employment of these assets within their capabilities and on missions for which they have been trained and equipped. [Table 13-1](#) on page 13-6 shows the typical nesting of ISR assets available at different tactical echelons.

Table 13-1. Typical ISR Assets Available

	Platoon	Co/Tm	BN/TF	Brigade	Division	Corps	EAC
Observation Post	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Reconnaissance Patrol	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Combat Outpost	AAA	AAA	XXX	XXX	XXX	XXX	XXX
Scout Platoon	AAA	AAA	XXX	XXX			
Brigade Recon Troop		AAA	AAA	XXX	XXX		
Cavalry Troop (Sep Bde)		AAA	AAA	XXX	XXX	XXX	XXX
Chemical Reconnaissance		AAA	XXX	XXX	XXX	XXX	XXX
FA COLT Team	AAA	AAA	XXX	XXX			
FA Target Acq Systems			AAA	AAA	XXX	XXX	
ADA Target Acq Systems			AAA	AAA	XXX	XXX	XXX
Grd Surveillance Radars		AAA	XXX	XXX			
Other MI Collection Sys			AAA	XXX	XXX	XXX	XXX
Division Cavalry Squadron				AAA	XXX	XXX	
Air Cavalry				AAA	XXX	XXX	XXX
Unmanned Aerial Vehicles			AAA*	XXX*	XXX	XXX	XXX
Cavalry Regiment					AAA	XXX	XXX
Long-Range Surveillance Unit					AAA*	XXX	XXX
SOF (SF/RGR)					AAA	AAA	XXX
Technical Surveillance Platforms			AAA	AAA	AAA	AAA	XXX
XXX = Echelon controls or routinely tasks the asset.							
AAA = Echelon can routinely expect the information from that source to be made available to it.							
* Can be found in some divisions.							

13-16. A commander primarily conducts reconnaissance with a combination of manned ground and air assets supported by technical systems. Acting in concert, these assets create a synergy, using the strengths of one system to overcome the weaknesses of another. To produce this synergy, the commander must delineate reporting procedures for all units to pass on information gathered during reconnaissance operations. This facilitates rapid mission execution.

13-17. Dedicated reconnaissance assets are easily overtasked and overextended. The commander uses all available resources, not just reconnaissance units, to satisfy his information requirements. Ground reconnaissance can involve assets not specifically tailored for the mission. Engineer reconnaissance units collect information on how the terrain affects the movement of enemy and friendly forces. Nuclear, biological, and chemical (NBC) reconnaissance teams can determine the presence or absence of NBC contamination and the extent of that contamination. Artillery forward observers, fire support teams, and combat observation and lasing teams (COLTs) report combat information as they observe the battlefield. Air defense units observe and report enemy aircraft and air corridors in use.

13-18. Ground reconnaissance elements are generally limited in the depth to which they can conduct reconnaissance. However, they can operate under weather conditions that prohibit air reconnaissance operations.

13-19. Reconnaissance conducted by manned Army aviation platforms complements ground reconnaissance by greatly increasing the speed and depth with which reconnaissance operations can be conducted over a given area. Air reconnaissance can operate easily over terrain that hinders ground operations, such as swamps, extremely rugged terrain, or deep snow. Aviation assets can operate at a considerable depth, far in advance of the normal capability of dedicated ground reconnaissance elements normally focused on the close fight. Thus, they provide the commander with additional time to attack or otherwise react to the enemy's presence. Scout and attack helicopters use their optics, video, thermal imaging, and communications capabilities to detect and report the enemy. All types of aviation units generate pilot reports in the course of conducting their primary missions. These reports are often a source of valuable combat information.

13-20. While several technical systems can perform reconnaissance, the majority of these types of systems can be more accurately described as surveillance platforms. Surveillance complements reconnaissance by cueing the commitment of reconnaissance assets against specific locations or specially targeted enemy units. Surveillance provides information while reconnaissance answers the commander's specific questions.

13-21. Military intelligence (MI) assets conduct both surveillance and reconnaissance missions. They provide intelligence and electronic warfare (IEW) support, such as electronic intercept, ground surveillance radars, unmanned aerial vehicles (UAVs), and remotely emplaced sensors. Theater and national reconnaissance and surveillance systems provide broadcast dissemination of information and intelligence to the commander and can provide near real-time imagery as a part of an integrated ISR effort. Artillery and air defense target acquisition radars can complement MI surveillance systems as a part

of the ISR effort. HUMINT collection occurs through face-to-face interrogation of captured enemy soldiers, screening of the civilian population, and debriefing of friendly soldiers, such as scouts and SOF.

FORMS OF RECONNAISSANCE

13-22. The four forms of reconnaissance operations are—

- Route reconnaissance.
- Zone reconnaissance.
- Area reconnaissance.
- Reconnaissance in force (RIF).

Table 13-2 shows what types of dedicated reconnaissance units are typically assigned the missions of conducting the four forms of reconnaissance operations.

Table 13-2. Dedicated Reconnaissance Units and Forms of Reconnaissance Operations

	SCOUT PLATOON	TROOP/CO TEAM	AIR CAV TROOP	AR CAV SQD/ BN	AR CAV REGT/ BDE	DIV
Route	X	X	X			
Zone	X	X	X	X	X	
Area	X	X	X	X	X	
Recon in Force				X	X	X

ROUTE RECONNAISSANCE

13-23. **Route reconnaissance** is a form of reconnaissance that focuses along a specific line of communication, such as a road, railway, or cross-country mobility corridor. It provides new or updated information on route conditions, such as obstacles and bridge classifications, and enemy and civilian activity along the route. A route reconnaissance includes not only the route itself, but also all terrain along the route from which the enemy could influence the friendly force's movement. The commander normally assigns this mission when he wants to use a specific route for friendly movement.

Organization of Forces

13-24. The commander may assign a route reconnaissance as a separate mission or as a specified task for a unit conducting a zone or area reconnaissance. A scout platoon can conduct a route reconnaissance over only one route at a time. For larger organizations, the number of scout platoons available directly influences the number of routes that can be covered at one time. Integrating ground, air, and technical assets assures a faster and more complete route reconnaissance.

13-25. A ground reconnaissance effort is essential if the mission is to conduct detailed reconnaissance of the route or the mission requires clearing the enemy from an AO that includes the route and the terrain around the route. The

forces assigned to conduct this ground reconnaissance must be robust enough to handle expected enemy forces in the AO. If the commander expects them to make contact with enemy forces possessing more combat power than that typically found in enemy reconnaissance elements, he ensures that his forces conducting ground reconnaissance have access to readily available fire support. If the commander requires detailed information on the route, engineer reconnaissance assets can determine the classification of critical points along the route more quickly and accurately than scouts can. If the commander anticipates significant obstacles, combat engineers should be included as part of the force. If NBC contamination is expected, NBC reconnaissance assets should accompany the force conducting ground reconnaissance because they can detect and determine the extent of contamination more accurately and quickly than scouts can. Air reconnaissance can be used if the reconnaissance mission must be completed quickly. However, aerial reconnaissance can rarely clear an enemy force from a location where it can affect movement on the route and aircraft cannot breach obstacles. When time is limited, air reconnaissance is essential to determine which areas are clear of enemy forces and obstacles, and to cue ground reconnaissance regarding where to focus its efforts.

Control Measures

13-26. Control measures for a route reconnaissance create an AO for the unit conducting the reconnaissance. (See Figure 13-3.) The commander places lateral boundaries on both sides of the route, far enough out to allow reconnaissance of all terrain from which the enemy could dominate the route. He places a line of departure (LD) perpendicular to the route short of the start point (SP), allowing adequate space for the unit conducting the reconnaissance to deploy into formation. The LD creates the rear boundary of the AO. A limit of advance (LOA) is placed far enough beyond the route's release point (RP) to include any terrain from which the enemy could dominate the route. A SP and a RP define that section of the route where the unit collects detailed information.

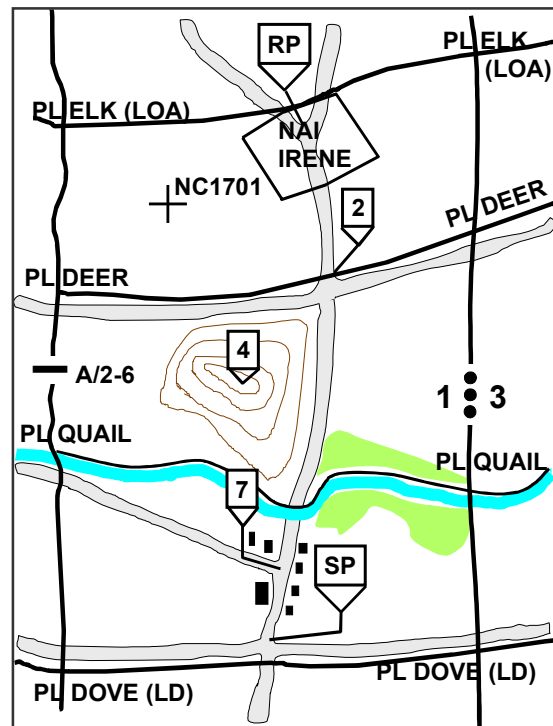


Figure 13-3. Route Reconnaissance Control Measures

He may add phase lines (PLs) and checkpoints to maintain coordinated reconnaissance, control movement, or designate critical points. He places additional control measures to coordinate indirect and direct fire as necessary. He

places these control measures on terrain features that are identifiable from both the ground and the air to assist in air-to-ground coordination.

Tasks

13-27. Unless the commander orders otherwise, the unit conducting a route reconnaissance performs specific tasks within the limits of its capabilities. If a unit does not have the time or resources to complete all of these tasks, it must inform the commander assigning the mission. He must then issue further guidance on which tasks the unit must complete or the priority of each task, which is usually clear from the reconnaissance objective. If, after starting the reconnaissance, the unit determines that it cannot complete an assigned task, such as clearing the enemy or reducing obstacles to create lanes as required to support the maneuver of the main body along the route, it must report and await further instructions.

13-28. Route reconnaissance tasks are as follows:

- Find, report, and clear within capabilities all enemy forces that can influence movement along the route.
- Determine the trafficability of the route; can it support the friendly force?
- Reconnoiter all terrain that the enemy can use to dominate movement along the route, such as choke points, ambush sites, and pickup zones, landing zones, and drop zones.
- Reconnoiter all built-up areas, contaminated areas, and lateral routes along the route.
- Evaluate and classify all bridges, defiles, overpasses and underpasses, and culverts along the route.
- Locate any fords, crossing sites, or bypasses for existing and reinforcing obstacles (including built-up areas) along the route.
- Locate all obstacles and create lanes as specified in execution orders.
- Report the above route information to the headquarters initiating the route reconnaissance mission, to include providing a sketch map or a route overlay.

(See FM 3-34.212 and FM 3-20.95 for additional information concerning route reconnaissance.)

ZONE RECONNAISSANCE

13-29. ***Zone reconnaissance is a form of reconnaissance that involves a directed effort to obtain detailed information on all routes, obstacles, terrain, and enemy forces within a zone defined by boundaries.*** Obstacles include both existing and reinforcing, as well as areas with NBC contamination. The commander assigns a zone reconnaissance mission when he needs additional information on a zone before committing other forces in the zone. It is appropriate when the enemy situation is vague, existing knowledge of the terrain is limited, or combat operations have altered the terrain. A zone reconnaissance may include several route or area reconnaissance missions assigned to subordinate units.

13-30. A zone reconnaissance is normally a deliberate, time-consuming process. It takes more time than any other reconnaissance mission, so the commander must allow adequate time to conduct it. A zone reconnaissance is normally conducted over an extended distance. It requires all ground elements executing the zone reconnaissance to be employed abreast of each other. However, when the reconnaissance objective is the enemy force, a commander may forgo a detailed reconnaissance of the zone and focus his assets on those named areas of interest (NAI) that would reveal enemy dispositions and intentions. A reconnaissance unit can never disregard terrain when focusing on the enemy. However, it minimizes its terrain reconnaissance to that which may influence an NAI.

Organization of Forces

13-31. Considerations for organizing a zone reconnaissance are the same as for organizing a route reconnaissance except that several subordinate units, rather than just one unit, operate abreast during the zone reconnaissance. If the commander expects significant enemy forces to be found within the zone, he should provide the force conducting the zone reconnaissance with a reserve. This reserve should have adequate combat power to extract elements of the reconnaissance force from decisive engagement. In an armored cavalry squadron of an armored cavalry regiment, the tank company normally performs this task. If a unit conducts a zone reconnaissance out of supporting range of the main body, the commander ordering the zone reconnaissance provides the reconnaissance unit with adequate fire support assets that can move with the reconnaissance unit.

Control Measures

13-32. The commander controls a zone reconnaissance by assigning an AO to the unit conducting the reconnaissance. (See Figure 13-4.) The lateral boundaries, a LD, and a LOA define this AO. Within the AO, the force conducting the zone reconnaissance further divides the AO with additional lateral boundaries to define subordinate unit AOs. Subordinate AOs are not necessarily the same size. Phase lines and contact points, located where the commander determines that it is necessary for adjacent units to make physical contact, are used to coordinate the movement of elements operating abreast. He may further designate the time that this physical contact takes place. He uses

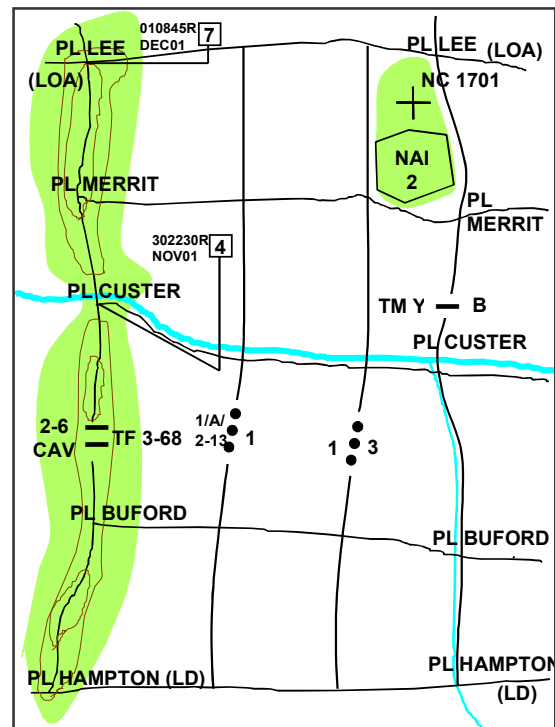


Figure 13-4. Zone Reconnaissance Control Measures

checkpoints to indicate critical terrain features and to coordinate air and ground teamwork. He may use fire support coordinating measures to control direct and indirect fires. He uses additional control measures as necessary. In addition, the commander assigning the zone reconnaissance mission must specify the route the reconnaissance unit must use to enter the AO. All control measures should be on recognizable terrain when possible.

Tasks

13-33. Unless the commander orders otherwise, a unit conducting a zone reconnaissance performs the following tasks within the limits of its capabilities. If a unit does not have the time or resources to complete all of these tasks, it must inform the commander assigning the mission. He must then issue further guidance on which tasks the unit must complete or the priority of tasks, which is usually clear from the reconnaissance objective. After starting the reconnaissance, if the unit determines that it cannot complete an assigned task, such as clear enemy or reduce obstacles in zone to create lanes as required to support the main body's maneuver, it must report and await further instructions.

13-34. Zone reconnaissance tasks are as follows:

- Find and report all enemy forces within the zone.
- Clear all enemy forces in the designated AO within the capability of the unit conducting reconnaissance.
- Determine the trafficability of all terrain within the zone, including built-up areas.
- Locate and determine the extent of all contaminated areas in the zone.
- Evaluate and classify all bridges, defiles, overpasses, underpasses, and culverts in the zone.
- Locate any fords, crossing sites, or bypasses for existing and reinforcing obstacles (including built-up areas) in the zone.
- Locate all obstacles and create lanes as specified in execution orders.
- Report the above information to the commander directing the zone reconnaissance, to include providing a sketch map or overlay.

AREA RECONNAISSANCE

13-35. **Area reconnaissance is a form of reconnaissance that focuses on obtaining detailed information about the terrain or enemy activity within a prescribed area.** This area may include a town, a ridgeline, woods, an airhead, or any other feature critical to operations. The area may consist of a single point, such as a bridge or an installation. Areas are normally smaller than zones and are not usually contiguous to other friendly areas targeted for reconnaissance. Because the area is smaller, an area reconnaissance moves faster than a zone reconnaissance.

Organization of Forces

13-36. Considerations for the organization of forces for an area reconnaissance are the same as for organizing a zone reconnaissance. (See paragraphs 13-31 to 13-33.)

Control Measures

13-37. The commander assigning an area reconnaissance specifies the area for reconnaissance with a single continuous line to enclose the area to reconnoiter. Alternatively, he may designate the area by marking lateral boundaries, a LD, and a LOA. An area reconnaissance mission always specifies the route to take in moving to the area. The commander of the unit conducting the area reconnaissance mission can use control measures for a zone reconnaissance within the AO to control the operation of his subordinate elements. (See Figure 13-5.)

Tasks

13-38. The tasks for an area reconnaissance are also the same as for a zone reconnaissance. (See paragraph 13-34.)

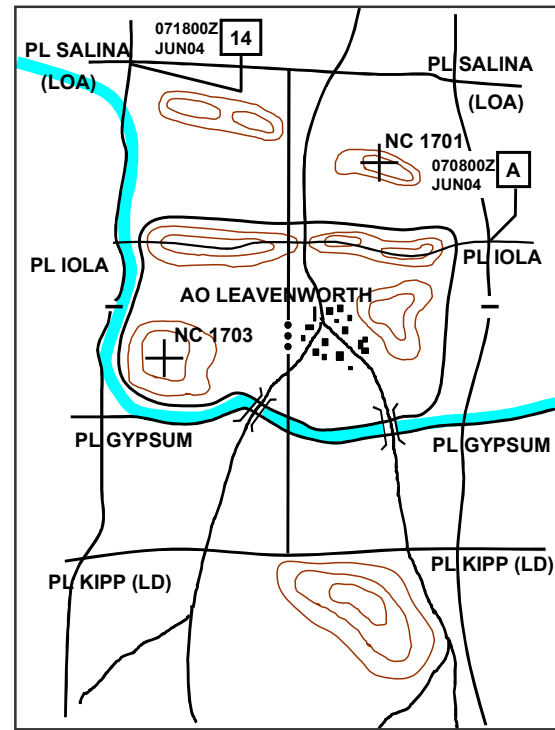


Figure 13-5. Area Reconnaissance Control Measures

RECONNAISSANCE IN FORCE

13-39. A *reconnaissance in force* is a deliberate combat operation designed to discover or test the enemy's strength, dispositions, and reactions or to obtain other information. Battalion-size task forces or larger organizations usually conduct a reconnaissance in force (RIF) mission. A commander assigns a RIF mission when the enemy is known to be operating within an area and the commander cannot obtain adequate intelligence by any other means. A unit may also conduct a RIF in restrictive-type terrain where the enemy is likely to ambush smaller reconnaissance forces. A RIF is an aggressive reconnaissance, conducted as an offensive operation with clearly stated reconnaissance objectives. The overall goal of a RIF is to determine enemy weaknesses that can be exploited. It differs from other reconnaissance operations because it is normally conducted only to gain information about the enemy and not the terrain.

Organization of Forces

13-40. While specifically trained and equipped units usually conduct the other forms of reconnaissance operations, any maneuver force can conduct a RIF. The force conducting a RIF is organized as if it is conducting offensive operations. However, the lack of enemy information dictates that the force be large and strong enough to develop the situation, protect the force, cause the enemy to react, and put the enemy at some risk. The less known about the

enemy, the stronger the force conducting the RIF must be. Because of the lack of information about the enemy, a commander normally conducts a RIF as a movement to contact or a series of frontal attacks across a broad frontage.

Control Measures

13-41. The control measures for a RIF are the same as for offensive operations. The operation is conducted as a movement to contact with limited objectives. (Chapter 4 discusses the conduct of a movement to contact.)

Tasks

13-42. A unit conducting a RIF performs the following tasks within the limits of its capabilities. If a unit does not have the time or resources to complete all of these tasks, it must inform the commander assigning the mission. He must then issue further guidance on which tasks the unit must complete or the priority of tasks, which is usually clear from the reconnaissance objective. After starting the RIF, if the unit determines that it cannot complete an assigned task, it must report and await further instructions. Reconnaissance in force tasks are—

- Penetrating the enemy's security area and determining its size and depth.
- Determining the location and disposition of enemy main positions.
- Attacking enemy main positions and attempting to cause the enemy to react by using local reserves or major counterattack forces, employing fire support assets, adjusting positions, and employing specific weapon systems.
- Determining weaknesses in the enemy's dispositions to exploit.

PLANNING A RECONNAISSANCE

13-43. Reconnaissance contributes significantly to a commander's battlefield visualization. It supports the overall integrated ISR plan, which in turn supports the commander's decision making process.

13-44. The commander must make judicious yet aggressive use of his reconnaissance assets. Reconnaissance planning ensures that available reconnaissance assets produce the greatest results. Because there are never enough assets to accomplish all tasks, the commander must set priorities. Generating many unfocused missions rapidly wears down assets, making them ineffective. Improperly using assets can also leave an enemy vulnerability undiscovered.

13-45. The commander ensures the coordination and synchronization of his reconnaissance effort at all echelons. Since the need for reconnaissance cuts across all parts of the operational framework and core functions, reconnaissance operations demand an integrated approach to planning, preparation, and execution. The two habitual participants in the reconnaissance planning process are the echelon operations and intelligence staff officers. The echelon operations staff officer (G3 or S3) has primary staff responsibility for reconnaissance planning, allocating, and tasking resources. Normally, he has staff

responsibility for ground and air reconnaissance assets, which includes engineers, NBC, and artillery. The echelon intelligence staff officer (G2 or S2) has primary responsibility for ground surveillance systems and special electronics mission aircraft. The commander ensures these two staff elements adopt an integrated combined arms approach to planning, preparing, executing, and assessing reconnaissance.

INTELLIGENCE, SURVEILLANCE, AND RECONNAISSANCE PLAN

13-46. The commander closely integrates reconnaissance missions with other intelligence-collection efforts to ensure that each ISR asset is used to its best advantage. The echelon staff, primarily the intelligence staff officer, identifies gaps in the intelligence available, based on the initial IPB and the situationally dependent CCIR. The IPB process helps determine factors that impact on the reconnaissance effort, such as—

- Avenues of approach that support friendly movement and exploit enemy weaknesses.
- Key terrain, choke points, obstacles, and danger areas.
- Enemy positions, especially flanks that can be exploited.
- Observation points.

The reconnaissance effort and the IPB process are interactive and iterative, each feeding the other. (See FM 2-0 for more information on the intelligence cycle. FM 2-01.3 addresses the IPB process.)

13-47. The intelligence staff officer develops an initial integrated ISR plan to acquire information to help answer those PIR based on available reconnaissance and surveillance assets. The ISR plan assigns specific intelligence acquisition tasks to specific units for action. It integrates surveillance and reconnaissance into the overall intelligence-collection plan.

13-48. The echelon operations staff officer uses the initial ISR plan as the base in preparing the ISR annex to the operation order. The ISR annex provides for the flexible execution of reconnaissance tasks, including providing for adequate command and control, indirect fires, and logistics when completed. (FM 5-0 discusses reconnaissance and the military decision making process.)

RECONNAISSANCE-PULL VERSUS RECONNAISSANCE-PUSH

13-49. In reconnaissance-pull, the commander uses the products of the IPB process in an interactive and iterative way. He obtains combat information from his reconnaissance assets to determine a preferred COA for the tactical situation presented by the factors of METT-TC. In reconnaissance-push, the commander uses the products of the IPB process in an interactive, but not iterative, way with combat information obtained from his reconnaissance assets in support of a previously determined COA. The time available to a commander is normally the chief reason for preferring one method over the other.

13-50. The time required to develop a preferred COA can give the enemy enough time to recover and prepare so that an objective which could be obtained with few casualties one day will cost far more to seize the next day.

There is no available model that a commander can use to determine how much is enough; that determination is part of the tactical art.

RECONNAISSANCE MANAGEMENT

13-51. No single reconnaissance asset can answer every intelligence requirement, and there are rarely enough reconnaissance assets to cover every requirement. The echelon staff uses a mix of reconnaissance management methods, such as cueing, mixing, redundancy, and task organizing, in an attempt to use limited assets most effectively and collect the most critical information with the fewest assets as quickly as possible.

13-52. **Cueing is the integration of one or more types of reconnaissance or surveillance systems to provide information that directs follow-on collecting of more detailed information by another system.** Cueing helps to focus limited reconnaissance assets, especially limited ground reconnaissance assets, which can rarely examine every part of a large area closely. Electronic, thermal, visual, audio, and other technical assets with wide-area surveillance capabilities, often working from aerial platforms, can quickly determine areas of enemy concentration or areas where there is no enemy presence. These assets may cue ground and air reconnaissance assets to investigate specific areas to confirm and amplify information developed by technical assets. For example, joint surveillance target attack radar system (JSTARS) and Guardrail-equipped aircraft can cover large areas and cue ground reconnaissance or UAVs once an enemy force is identified. The commander may dispatch ground reconnaissance or UAVs to verify the information and track the enemy for targeting purposes. Similarly, a ground reconnaissance asset could cue surveillance assets. The key point is to use reconnaissance assets based on their capabilities and use the complementary capabilities of other assets to verify and expand information available.

13-53. **Mixing is using two or more different assets to collect against the same intelligence requirement.** Employing a mix of systems not only increases the probability of collection, but also tends to provide more complete information. For example, a JSTARS aircraft may detect and locate a moving enemy tactical force, while the G-2 analysis and control element uses organic and supporting assets to determine its identity, organizational structure, and indications of future plans. Employing a mix of systems is always desirable if the situation and available resources permit. Mixing systems can also help uncover deception attempts by revealing discrepancies in information reported by different collectors.

13-54. **Redundancy is using two or more like assets to collect against the same intelligence requirement.** Based on the priority of the information requirement, the commander must decide which NAI justifies having more than one asset covering it. When more than one asset covers the same NAI, a backup is available in the event that one asset cannot reach the NAI in time, the first asset suffers mechanical failure, or the enemy detects and engages the first asset. Redundancy also improves the chances that the required information will be collected.

13-55. To increase the effectiveness and survivability of a reconnaissance asset, the commander may task organize it by placing additional assets under

the control of the unit. For example, to conduct an area reconnaissance of possible river crossing sites at extended distances from a division's current location, a ground reconnaissance troop of the division cavalry squadron could be task-organized with a COLT, a signal retransmission element, an engineer reconnaissance element, and a mechanized infantry platoon. The engineers would provide additional technical information on proposed crossing sites; the signal retransmission elements would allow the reconnaissance troop's combat net radios to reach the division tactical command post. The COLT provides additional observation, lazing, and fire coordination capabilities. Last, the infantry platoon would provide additional protection for the reconnaissance troop.

SUSTAINMENT

13-56. Sustaining reconnaissance assets before, during, and after their commitment is a vital part of maintaining the commander's capability to conduct reconnaissance. Because the way that a commander deploys his reconnaissance assets in a given situation depends on the factors of METT-TC, the methods he employs to sustain those assets are equally situationally dependent. He must address them as part of the planning process for each reconnaissance operation.

13-57. Reconnaissance elements frequently operate in locations distant from their organic sustaining base. In this event, reconnaissance elements must either carry a large enough basic load or be task organized with those assets necessary to ensure their sustainment until they can be relieved. With either COA, casualty evacuation remains a problem. An alternative solution would be to plan and coordinate their sustainment from units near their operating locations.

EXECUTING A RECONNAISSANCE

13-58. Reconnaissance can be characterized as either stealthy or aggressive. Depending on how they are employed, scout helicopters and other aerial platforms, as well as mounted and dismounted ground reconnaissance, can be characterized as either stealthy or aggressive.

13-59. A key factor in reconnaissance execution is the time available to conduct the reconnaissance mission. The commander must recognize that he accepts increased risk to both the reconnaissance element and the main body when he accelerates the pace of reconnaissance. This risk can be somewhat offset by employing air reconnaissance and technical means to cover open terrain or areas of lower threat.

13-60. Aggressive reconnaissance is characterized by the speed and manner in which the reconnaissance force develops the situation once it makes contact with an enemy force. A unit conducting aggressive reconnaissance uses both direct- and indirect-fire systems and movement to rapidly develop the situation. Firepower, aggressive exploitation of actions on contact, operations security, and training are required for the unit to survive and accomplish its mission when conducting aggressive reconnaissance. Mounted reconnaissance is normally characterized as aggressive.

13-61. Stealthy reconnaissance emphasizes avoiding detection and engagement by the enemy. It is more time consuming than aggressive reconnaissance. Stealthy reconnaissance takes maximum advantage of covered and concealed terrain and the reduced battlefield signatures associated with systems that typically conduct stealthy reconnaissance, such as dismounted scouts. However, stealth cannot be guaranteed. As a result, units attempting to conduct stealthy reconnaissance must also be drilled to react correctly once the enemy makes contact, and they must have immediate access to supporting fires.

13-62. The commander considers the factors of METT-TC to determine whether to conduct mounted or dismounted reconnaissance. Conditions that may result in a decision to conduct mounted or aerial reconnaissance include—

- Time is limited.
- Detailed reconnaissance is not required.
- Air units are available to perform coordinated reconnaissance with the ground assets.
- The IPB process has provided detailed information on the enemy.
- Terrain is relatively open.
- Environmental conditions permit this type of reconnaissance. Deep snow and muddy terrain greatly hinder mounted reconnaissance.
- Dismounted reconnaissance cannot complete the mission within existing time constraints, while mounted reconnaissance can.

13-63. The following conditions may result in the commander directing a dismounted reconnaissance effort:

- Time is available.
- Detailed reconnaissance is required.
- Stealth is required.
- The IPB process indicates close proximity to enemy positions.
- The reconnaissance force encounters danger areas.
- Restrictive terrain limits the effectiveness of mounted reconnaissance.

FM 3-21.92 describes dismounted patrolling in detail.

13-64. Typically, air reconnaissance operates in concert with ground reconnaissance units. (Friendly ground forces in an area offer additional security to aircrews.) Aviation units can insert surveillance teams at observation posts. Aircraft can observe and provide security on station for extended times using rotation techniques if they have detailed requirements in advance. Dismounting an aircrew member to evaluate bridges, fords, or crossing sights is a last alternative because of the danger to the aircrew and the aircraft. Before resorting to this, the aircrew uses the sophisticated systems on the aircraft to avoid risk and to avoid drawing attention to the area of interest.

13-65. Reconnaissance by fire is a technique in which a unit fires on a suspected enemy position to cause the enemy to disclose his presence by movement or return fire. This technique is appropriate when time is critical and

stealthy maneuver to further develop the situation is not possible. The fires may be either direct, indirect, or a combination. The advantage of indirect fire is that it does not give away friendly locations and usually causes the enemy to displace from the impact area. However, reconnaissance by fire may not cause a seasoned or prepared enemy force to react. Reconnaissance by fire is always characterized as aggressive.

13-66. Smoke and battlefield obscuration, fog, rain, and snow all result in reduced visibility. Generally, reconnaissance during limited-visibility conditions takes more time. However, these conditions provide for better stealth and enhance the survivability of reconnaissance assets. A commander frequently employs dismounted reconnaissance patrols at night. These patrols use light amplification and thermal observation devices, electronic surveillance devices, and surveillance radars to compensate for reduced visibility conditions.

13-67. In limited visibility, mounted reconnaissance tends to focus on road networks. The enemy can detect engine and track movement noises of friendly mounted reconnaissance elements at considerable distances at night, which makes them susceptible to ambush. Strict sound and light discipline, along with masking sounds, such as artillery fires, helps a mounted reconnaissance force from being compromised or ambushed.

13-68. High winds, extreme temperature, and loose topsoil or sand may adversely affect aerial reconnaissance. Air reconnaissance units plan their missions in much the same way as ground units. They use the same type of operations graphics and consider the same critical tasks. The air reconnaissance commander organizes his assets to accomplish his mission by considering the same IPB aspects as those associated with ground forces. He focuses on air hazards to navigation and anticipated enemy air defense capabilities. (The effects of weather and atmosphere conditions are discussed in FM 2-01.3.)

RECUPERATION AND RECONSTITUTION OF RECONNAISSANCE ASSETS

13-69. When any small unit is employed continuously for an extensive period of time, it can become ineffective. When this occurs, restoring the unit to an acceptable level of effectiveness may require either recuperation or reconstitution. Recuperation—a short break for rest, resupply, and maintenance—is often sufficient to return the unit to the desired degree of combat effectiveness. Leaders in reconnaissance units probably need more rest than their subordinates. If the recuperation period is extended, it can also be used to conduct refresher training, new equipment training, or any required specialized training for the next mission.

13-70. Units and systems performing reconnaissance are vulnerable to detection, engagement, and destruction by the enemy. When this occurs and the unit can no longer perform its primary mission, the commander must determine whether to reconstitute, by either regenerating or reorganizing the unit. (See FM 4-100.9 for additional information concerning reconstitution.)

13-71. Regenerating a unit requires significant resources. The organization two echelons above the unit being regenerated conducts the procedure. For example, a battalion task force can regenerate its scout platoon. In the

regeneration process, the battalion could use a combination of weapon system replacement operations, battle damage assessment and repair, normal replacement operations, and medical returnees to provide the needed resources. These resources, combined with training, could be used to regenerate the scout platoon. Alternatively, the commander could designate one of his line platoons as the task force's new scouts. This approach has significant training implications and requires adjustments to the line platoon's table of organization and equipment.

13-72. A unit commander can reorganize his unit with the approval of the next higher commander. For example, an armored cavalry troop commander could reorganize his two scout and two tank platoons into three platoons containing a mix of scouts and tanks. This approach to reconstitution also requires training time and other equipment resources to ensure the combat effectiveness of the resulting composite organization.