

**AN ASSESSMENT OF RECONNAISSANCE AND COUNTERRECONNAISSANCE OPERATIONS
AT THE NATIONAL TRAINING CENTER**

**A report on NTC Special Focus Rotation 87-1
submitted to the Commander, Combined Arms Training Activity,
Combined Arms Center, Fort Leavenworth, Kansas**

by

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AN ASSESSMENT OF RECONNAISSANCE AND COUNTERRECONNAISSANCE OPERATIONS AT THE NATIONAL TRAINING CENTER

1. Introduction.

a. **Subject and Scope.** The majority of brigades and task forces training at the National Training Center (NTC) have demonstrated an inability to perform reconnaissance and counterreconnaissance operations, which are fundamental warfighting tasks that establish the conditions for offensive and defensive success. As the first step in the process of resolving the issue, a team of subject matter experts within TRADOC was sent to the NTC to observe the performance of these operations by a fully-modernized brigade, conduct interviews, review past performance trends, and develop a framework for the review and improvement of TRADOC products - doctrine and training literature, training programs, organizations, and materiel. This report is a summary of the significant observations/conclusions obtained during the study.

b. **Purpose.** This report is intended to assist in identification of shortfalls and facilitate improvements in TRADOC products related to the performance of reconnaissance and counterreconnaissance operations by heavy brigades and task forces. The majority of information is also relevant to divisional and regimental cavalry organizations, who have the primary responsibility of performing reconnaissance and security operations for the combined arms force.

c. **Plan.** The first section of the report describes the mission of the assessment team, the composition of the team, and the methods used by the team to collect information. The second section summarizes the team's observations and conclusions associated with planning, preparation, and execution of reconnaissance and counterreconnaissance operations by brigades and task forces.

2 Mission, Team, and Methods

a. **Mission.** NTC Rotation 87-1 was designated a Special Focus Rotation by the Commander, CATA, Combined Arms Center, Fort Leavenworth, Kansas. A special focus rotation serves to concentrate and coordinate the efforts of several TRADOC schools and agencies to resolve a recurring shortfall in a unit's ability to perform critical warfighting tasks at the NTC. The Armor School was tasked to organize an assessment team composed of subject matter experts from TRADOC schools, which in some fashion have proponent responsibility for development of doctrine and training literature, programs of instruction, organizations, and materiel associated with reconnaissance and counterreconnaissance operations at brigade level and below. The assessment team collected information to assist in determining if existing doctrinal and training literature, organizations, and materiel provide brigades and task forces the capability to perform reconnaissance and counterreconnaissance operations opposed by a Soviet-style enemy in a mid-to-high intensity, simulated combat environment.

b. **Team Members.** The list of team members is enclosed at Enclosure 1. The team was hand-picked based on their professional knowledge and experience with reconnaissance and counterreconnaissance operations in both peace and war, and in various theatres of operation, i.e., North Africa, Sicily, Western Europe, Korea, and Viet Nam. Additionally, several members served tours at the NTC as observers and trainers, which provided the team a thorough understanding of conditions unique to the NTC which could distort the accuracy of observations. Dr. Martin Goldsmith and Dr. Jim Hodges, employed by Arroyo Center, Rand Corporation, have conducted an independent analysis of the reconnaissance issue for several months at the NTC. They provided invaluable insights to the team, shared their data and preliminary analysis, and actively participated in the collection effort. Colonel Sydney (Hap) Haszard, retired, is a distinguished Armor officer who spent the majority of his military career as a commander of mounted reconnaissance units in World War II, Korea, and Viet Nam. He served as an advisor, shared his extensive combat experience and provided the team an understanding of the enduring aspects of these vital combat tasks.

c. **Collection Methods.** Information collected by the team was obtained using three methods; personal observation, review of performance trends in Take Home Packages from previous rotations, and interviews.

(1) **Personal Observation.** Team members rode with NTC observer/controllers (OCs) on the Blue, Green, and OPFOR training teams. This enabled the team to personally observe the planning, preparation, and execution of operations by the brigade and OPFOR regiment down to platoon level. Additionally, two team members listened to radio nets and observed the execution of all operations performed by the brigade and OPFOR units on the television monitors in the Core Instrumentation Subsystem (CIS). Team members observed the preparation of every after-action review by the NTC training teams, as well as the actual after action review following each brigade and task force mission. A detailed collection plan, developed prior to the rotation, was used to guide the collection effort. The collection plan used by the team is enclosed at Enclosure 2.

(2) **Review of Performance Trends.** Realizing it would be pretentious to draw conclusions from a single rotation, the team also reviewed performance trends of the previous eighteen brigade Take Home Packages. These packages contained a wealth of information which served to substantiate personal observations and the information obtained in interviews.

(3) **Interviews.** Team members conducted extensive interviews with NTC observer/controllers on the Armor, Infantry, Aviation, and OPFOR training teams. The subjective views of these men, who see the recurring issues day after day, were particularly valuable as a means of substantiating the team's observations and conclusions. Additionally, team members conducted post-rotational interviews with soldiers from the brigade. The views of these soldiers significantly influenced the conclusions reached by the team. As expected, the soldiers provided some practical insights.

3. Summary of Observations. This section of the report is a summary of the observations and conclusions of the assessment team associated with the planning, preparation, and execution of reconnaissance and counterreconnaissance operations by brigades and task forces at the NTC.

a. Reconnaissance Operations.

(1) General.

(a) The inability of brigades and task forces to perform successful reconnaissance operations is attributable to shortfalls across the board - doctrine, training, organizations, materiel, and NTC scenarios.

(b) In comparison, the problems associated with the performance of reconnaissance operations are more challenging to resolve than counterreconnaissance operations. Solutions to the counterreconnaissance issue have been found and are practiced by most of the recent units at the NTC.

(c) Fresh information about terrain and enemy, obtained by a reconnaissance in advance of the main body, establishes the conditions for offensive success at the brigade and task force level.

(d) Fundamentally, reconnaissance serves to confirm or deny the template of terrain and enemy forces produced by the IPB process and should precede the commitment of the brigade or task force to any course of action.

(e) In offensive operations, the maneuver of a brigade or task force, should be based on a concept of reconnaissance-pull. Reconnaissance determines which routes are suitable for maneuver, where the enemy is strong and weak, where the gaps exist, and should pull the main body towards and along the path of least resistance. At the NTC, the TF axis of advance is normally chosen before the operation begins, and it is seldom altered. Commanders typically push however many forces are needed down the axis to make the attack successful. This usually results in the TF pitting its strength against the enemy's strength and sustaining a devastating number of casualties and materiel losses. With reconnaissance-pull, the axis of advance is determined by the results of reconnaissance, rather than being fixed from above, and it shifts in response to what the reconnaissance finds.

(f) Brigades, within divisions, have no organic capability to perform reconnaissance within their area of operations. Consequently, they are unable to provide their subordinate units with fresh information about terrain and enemy, vital for the precise application of combat power and the synchronization of maneuver with supporting fires. The brigade does not enjoy the benefit of having the division cavalry squadron or an armored cavalry regiment performing reconnaissance forward of its advance.

(g) TF commanders are not permitted by NTC scenarios to avoid enemy strength and attack enemy weakness, as our doctrine espouses. Commanders are confined by boundaries and axes of advance which constrain maneuver and compel a TF to attack into the prepared defensive positions of the enemy.

(h) Effective reconnaissance is directly related to the time available for the scout platoon to get the job done. Scouts platoons have a limited amount of time at the NTC to accomplish their reconnaissance tasks. This limitation compels them to abandon the set/move, overwatch, and dismounted techniques they routinely train and practice at home station. These time limitations are imposed primarily by NTC scenarios, the schedule of events, and other operational restrictions involving control of the operation by observer/controllers. For example, prior to a TF movement to contact, the current NTC scenario only gives the scout platoon about 2 hours to reconnoiter a frontage 8-12 kilometers wide and 12-20 kilometers deep before the TF crosses the line of departure. Consequently, scouts have no option but to abandon secure movement and reconnaissance techniques and press forward as rapidly as possible, sacrificing stealth and survivability. In a TF deliberate attack mission, scouts are normally restricted from reconnoitering forward of a designated phase line prior to LD time, preventing them from obtaining detailed information about OPFOR defensive positions, obstacles, and fire sacks (preconditions for assigning the TF a deliberate attack in the first place). In short, continual reconnaissance within the TF area of operations is not permitted, as doctrine and most unit training programs emphasize. In contrast, the OPFOR regiment usually possesses detailed and accurate information about the defending task force prior to an attack. There are good reasons. OPFOR recon forces are provided about 24 to 36 hours to reconnoiter a TF defensive sector prior to a regimental attack. Once a TF attack is completed, during the period when leaders of the TF are participating in after-action reviews, and the TF is reorganizing and reconstituting, the OPFOR transports Deep Reconnaissance Teams (DRT) into the upcoming TF defensive sector. They establish observation posts in the surrounding hills and high ground, and observe the TF preparing their defense. The majority of combat information about the TF is generated by these men in dismounted observation posts, not by the mounted recon forces which begin to reconnoiter the TF defense 12-14 hours prior to the regimental attack. The limited amount of time provided to scout platoons at the NTC, in some measure, has distorted the severity of the reconnaissance issue.

(2) Planning of Reconnaissance Operations by the Task Force Staff.

(a) Most TF commanders don't approach reconnaissance as an essential operation. There is a lack of command interest in most units, which is unfortunate, because there is hard evidence to show that the failure to perform reconnaissance will eventually cost the TF about two companies worth of men and equipment to obtain an equivalent amount of information about enemy strength and dispositions.

→ (b) IPB is the foundation of a sound reconnaissance plan. This is primarily the S2's responsibility. Doctrine thoroughly describes IPB in support of defensive operations, however, doctrinal literature does not describe the process of using IPB to develop courses of action for reconnaissance and offensive operations.

(c) A detailed battlefield evaluation and threat evaluation, coupled with situation, event, and decision support templates, facilitate the identification of the commander's Priority Intelligence Requirements and Information Requirements (PIR/IR).

(d) Templates of enemy fire sacks and weapon range fans from expected enemy positions are essential to survivability of the scouts and other members of the reconnaissance team. These templates form the basis for mounted and dismounted patrol plans, selection of movement techniques, and other important decisions

(e) As any other TF operation, Named Areas of Interest (NAI), Target Areas of Interest (TAI), and Decision Points (DP) are essential planning tools for the development of the TF reconnaissance plan. They are used to indicate where possible enemy positions, obstacles, fire sacks, reserves, artillery/mortar positions, enemy counterattack routes, or areas where gaps or dead spaces exist. They serve as a means to develop specific collection tasks and orient the efforts of the scout platoon. These IPB products also form the foundation of the reconnaissance fire support plan.

(f) Based on the commander's PIR/IR, the TF staff should identify specific collection tasks for the scout platoon. Once specific collection tasks are defined, then the TF reconnaissance plan can be developed. Mission type orders won't suffice at this level of operations, i.e., "Conduct a zone reconnaissance". The scout platoon must have specific guidance about where to look, what to look for, and the essential information the commander needs.

(g) Preparation of the reconnaissance plan should be the responsibility of the S3, coordinated with other members of the staff, including the XO, just as any other offensive or defensive mission. A reconnaissance operation requires task organization, integration of combat support and service support, and the synchronization of maneuver with fire support. The most effective recon operations are performed by a well-trained team of scouts, engineers, GSR, mech infantry, and aeroscouts, if available. Ad hoc task organizations don't work very well.

(h) It works best to perform reconnaissance tasks in a planned sequence instead of dispersing scouts across wide frontages (8-12 km) to accomplish multiple tasks simultaneously. This technique of command and control facilitates the commander's ability to direct or redirect the efforts of the scout platoon as it progresses. This method enhances command and control of the operation and enables the scout platoon to concentrate its collection resources. Otherwise, the scout platoon is simply spread too thin.

(i) The TF staff should develop and distribute appropriate graphics for each reconnaissance mission. Most units don't, which inhibits their ability to effectively direct and control reconnaissance operations.

(j) Fire support planning is one of the most neglected aspects in reconnaissance operations. Immediate and responsive fire support from mortars or artillery is vital to the survival of the scout platoon and its ability to develop the situation. Target lists and graphics must be developed and distributed. The mortar platoon or supporting artillery unit must be positioned and displaced to continually range 3-4 km forward of the scouts. Doctrine does not describe procedures or methods for indirect fire support of reconnaissance operations at the brigade level and below. Few units train to provide it.

(k) The scout platoon must have a "caretaker" to ensure it gets priority on maintenance and supplies. The scout platoon leader, is at a disadvantage when competing for resources with the company commanders. The S-3 or XO must make sure he gets the priority needed. The scout platoon should normally have first priority for resupply, maintenance, and reconstitution. They must get to the head of the line. If it incurs losses, vehicles from other platoons should be immediately assigned as replacements. A "light" mech infantry platoon (only 4-5 soldiers per track) is usually suitable as a temporary replacement, if properly trained. Bottom line - the TF must sustain a reconnaissance/surveillance unit.

(l) Reporting schedules should be established in the TF plan to assist in command and control, track the progress of the reconnaissance operation, and redirect the actions of the scout platoon as required.

(m) The TF plan should include the positioning of a tactical or alternate command post, relay, or retransmission team forward to maintain communications with the scout platoon.

(3) Planning of the Reconnaissance Mission by the Reconnaissance Unit.

(a) Detailed planning by the scout platoon leader is essential to mission accomplishment and the survivability of the reconnaissance force.

(b) Specific collection tasks should be assigned to each subordinate element and responsibilities should be clearly fixed.

(c) Based on the situational template developed by the S2, including range fans of the vehicles suspected in the enemy positions, the scout platoon leader should develop a mounted and dismounted movement plan, e.g., a mounted movement plan which stealthily positions scouts near the limit of the enemy's direct fire range and a dismounted movement plan which will take them from there into positions to obtain detailed information about the enemy, preferably along the enemy's flank or in his rear. This is an essential planning requirement to enhance survivability of the reconnaissance force and accomplish the mission.

(d) As a minimum, pairs of scout squads should be formed and work together. Lone scout vehicles don't survive very long.

(e) Movement techniques must be established based on the likelihood of enemy contact and the reconnaissance task at hand. Bounding overwatch within sections (a pair of scout vehicles) is the preferred technique using a set/move drill.

(f) Navigation by terrain orientation is very difficult during periods of low visibility or darkness, particularly in the expanse of the open desert. Reconnaissance section leaders should prepare navigation plans, breaking their journey into legs, and traveling on compass headings for a predetermined distance (odometer readings).

(g) Dismount points should be planned based on range fans of weapons in suspected enemy positions. From these points, patrol plans should be developed which will maneuver dismounted scouts into a position to observe reconnaissance objectives without detection. Within or near the recon objective, observation posts (OPs) should be tentatively selected. Very often, the majority of information about enemy forces can be obtained by moving into secluded OPs and observing over a period of time.

(h) Graphic control measures should be developed and distributed to all members of the scout platoon prior to deployment.

(i) The fire support plan and target list, developed by the TF fire support officer (FSO), should be distributed to all subordinate leaders in the scout platoon.

(j) The plan for communicating with the TF and supporting indirect fire units should be established. Quick fire nets or digital fire control nets must be specified. If necessary, relay procedures should be planned and described in the order.

(k) Vehicle and casualty evacuation procedures should be planned and described in detail - who evacuates, where to evacuate, when, etc.

(l) Procedures for resupplying should be planned and described in the order - the technique, time, location, what to expect, etc.

(m) The scout platoon leader should establish a reporting schedule to track the progress of his unit and assist in determining where to begin looking for a subordinate element if communications are lost.

(n) The scout platoon leader should be positioned in the center. This normally permits him to maintain the most effective command and control of the operation.

(o) If possible, the scout platoon should rehearse its mission. An opportunity to rehearse significantly improves the probability of accomplishing the mission.

(p) Pre-combat checks are fundamental preparations prior to execution of a reconnaissance mission. Most scout platoons fail to complete this critical warfighting task before deploying and they pay the price.

(4) Execution of Reconnaissance Operations by the TF.

(a) The majority of TF commanders and S3s do not personally direct or control the reconnaissance operation. The operation is usually left to the S-2, unsupported by the XO or other members of the staff. The TF commander, XO, S-3, and FSO should stay actively involved and supervise.

(b) Most task forces quickly lose communications with the scout platoon as it moves forward. A tactical or alternate command post, retransmission team, or relay is seldom positioned forward to maintain FM communications.

(c) The TF fire support officer must stay involved during the execution of the reconnaissance mission for several important reasons. There are about 30 or more artillery observers (scouts) out forward providing him fresh target information. Fire support units need to be displaced to continually range forward of the scout platoon. Restricted Fire Areas must be imposed around scout locations to prevent them from being killed by the uncontrolled placement of artillery fires. This is a recurring problem at the NTC.

(d) Service support assets should be positioned forward to respond rapidly to the needs of the scout platoon. Units which quickly evacuate and replace wounded scouts and damaged vehicles are the most successful.

(e) Task forces which direct reconnaissance operations on the command net enjoy greater success. Reports submitted by the scout platoon, if transmitted on the TF command net, provide most of the TF an appreciation of the situation ahead.

(5) Execution of Reconnaissance Missions by the Scout Platoon.

(a) The bottom line - scouts platoons fail to accomplish their reconnaissance tasks because they seldom survive initial contact with enemy forces. The enemy usually acquires them first and destroys them before they have an opportunity to obtain any detailed information.

(b) The scout platoon leader needs to keep a firm grip on subordinate elements - track their progress, know their current locations, insist on reports (both positive and negative), redirect them as necessary, and ensure the unit remains oriented on the recon objectives. He must position himself to maintain communications with subordinates and the TF.

(c) Proper movement techniques and smart use of terrain are fundamental to the survival of the scout platoon. Mutual support within sections is essential. Lone scout squads, operating independently, stand a slim chance of survival. Dismounted scanning of an area before exposing the vehicle and crew could save a lot of lives. Coupled with good overwatch techniques within the section, survivability could be improved.

(d) Scouts often fail because they become disoriented or lost during movement, particularly in conditions of low visibility or darkness. Good graphic control measures, navigation planning, and sustained communication between leaders, to some degree, can alleviate this problem. Navigation planning, using the lensatic compass and odometer technique, has proven effective. Many scouts have purchased vehicular magnetic compasses with their own money from commercial sources and mounted them on their vehicles. If the Army could provide a simple position-determining and heading reference device in scout vehicles, it would significantly alleviate this enduring problem and enhance the capabilities of our scout force.

(e) The most successful scout platoons obtain the majority of detailed combat information through stealthy dismounted patrolling and stationary observation. However, most scouts habitually remain mounted and blunder into obstacles and fire sacks.

(f) Dismounted reconnaissance patrols should be small. One or two soldiers with a radio are normally better than a squad. The smaller the patrol, the harder it is to detect.

(g) OPs on high ground overlooking enemy positions are exceptionally valuable, particularly when valley floors are covered with smoke. They can report enemy movement, his attempts to reinforce, or assist in the control of attacking forces, i.e., "An enemy tank platoon is moving to the other side of Hill 760 to hit A Company in the flank" or "B Company in the south is falling behind, there's a 1 km gap between him and the company to his north."

(h) If possible, scouts should keep an enemy defensive position under continual observation. Over the course of a day, a scout in a secluded OP will collect and report more than most patrols. Also, a competent defender will be continually upgrading his defense, so what was true at noon may not be true at dusk. Likewise, enemy vehicles which are hidden might only expose themselves to get fuel. A scout in the right place can capture the details of this kind of event. To enhance the security of these OPs, try to position them around and behind the enemy position. There's a tendency for defenders to be less vigilant along their flanks and rear.

(i) During actions on contact with enemy forces, most scouts reach for their triggers, attack the enemy, then find themselves destroyed in short order. This is not to say that firepower is unnecessary for scouts to perform reconnaissance. Firepower is required to survive and restore the ability of the scouts to move and continue reconnaissance. When engaged by an enemy force, the appropriate action is to return a high volume of suppressive fire immediately, aiming in the enemy's general direction, and move as fast as possible to covered terrain. Bypassing the enemy force, making the best use of cover and concealment, is usually the most beneficial course of action. In this situation, the availability of indirect fire becomes vital. Indirect fires, particularly a mix of high-explosive and smoke, can effectively suppress the enemy, screen the scouts from observation, and permit them to continue reconnaissance.

(j) There is hard evidence to substantiate the fact that scouts who initiate direct fire engagements with enemy forces are usually destroyed. Scouts, mounted in M3s, are particularly prone to do this. As a general rule, it's best if scouts use their weapons only to assist in rapid disengagement and immediate survival.

(k) Responsive indirect fires are vital to the survivability of the scouts. Leaders must anticipate its use and maintain continual communication with fire support elements. A failure to do this usually results in fratricide or the wasteful placement of indirect fires.

(l) Scouts demonstrate an inability to find and reconnoiter minefields and other barriers, particularly in darkness and periods of low visibility. This is a serious problem. It is probably the toughest issue for TRADOC to resolve. The routine attachment of engineers to the scout platoon helps in some situations. But this lack of capability within the scout platoon is a serious shortfall.

(m) Scouts should report exactly what they see or don't see. Speculation by some scout platoons has been devastating to the task force.

(n) Most scout platoons do not ensure that all night vision and thermal vision devices are operational and prepared for immediate and continual use before they deploy - and they pay the price. Scouts, in M113/M901 units, have made good use of dismounted DRAGON thermal sights and TOW sights.

b. Security Operations.

(1) General.

(a) Counterreconnaissance is the sum of the actions taken at all echelons to counter enemy reconnaissance efforts through the depth of the area of operations. Counterreconnaissance is both active and passive. It includes those combat actions designed to destroy or repel enemy reconnaissance elements and those actions designed to deny the enemy information about friendly units. Counterreconnaissance is one aspect of security, it is not routinely a mission or a task.

(b) Counterreconnaissance is not just the first phase of a defense. It is a continual requirement throughout a defensive operation. Effective counterreconnaissance actions, in large measure, establish the conditions for defensive success against Soviet-style forces.

(c) At the NTC, a brigade or TF does not enjoy the benefit of having a covering force operating forward of its positions, which the division or corps is normally expected to provide. Brigades seldom establish a screen forward of TF positions either. Consequently, each TF must assume responsibility for establishing a screen forward of its obstacle system and defensive positions. By definition, a screening force "maintains surveillance, provides early warning to the main body, impedes and harrasses the enemy with supporting indirect fires, and destroys enemy reconnaissance elements within its capability" (FM 101-5-1, Operational Terms and Symbols, Oct 85).

(d) Given the size, composition, and tactical employment of Soviet division and regimental reconnaissance units, the scout platoon alone cannot be expected to accomplish a screen mission. It requires a two-team organization with distinct responsibilities - one to conduct surveillance and acquire enemy reconnaissance elements, and another to close with and destroy them.

(e) Deception operations at the TF level, particularly the continual repositioning of maneuver forces and the use of smoke concentrations, often prove effective in fooling enemy reconnaissance forces. Anything to deny the enemy a true picture of TF intentions is beneficial.

(f) Certain conditions at the NTC tend to distort the problem associated with defeating Soviet-style ground reconnaissance forces. For example, the reconnaissance threat at the NTC portrays only those assets normally available to a motorized rifle or tank regiment. The OPFOR reconnaissance elements have the "home court advantage." They know the area where the TF will be defending in each scenario. They are intimately familiar with the most covered and concealed routes through the TF sector. Their OPs in the hillsides overlooking TF defensive sectors are prepared positions they return to time after time.

(6) Planning Of Security Operations by Task Forces.

(a) IPB provides the basis for developing a sound security plan operations through the depths of the TF sector or battle position. Using IPB products, the commander can develop his tentative course of action, then establish his PIR/IR.

(b) A detailed terrain analysis of the TF area of operations is fundamental to security planning. Likely avenues of approach for mounted and dismounted enemy reconnaissance elements are particularly important to identify. These approaches, or routes, should be templated through the TF sector or position.

(c) A situational template of enemy forces and a description of their echeloned entry into battle is fundamental to staff planning. In the planning of counterreconnaissance actions, the expected size and composition of enemy recon patrols is particularly important and should determine the task organization of the screening force.

(d) Wargaming and event templating are important staff processes used to develop a course of action. From these staff actions, NAI, TAI, and DP are established. These areas form the basis for a surveillance plan which should extend forward of TF defensive positions all the way back to the TF rear boundary (a graphic depiction of where to look and what to look for).

(e) Each NAI, TAI, and DP, throughout the depth of the TF sector or position, should have someone in position to observe them and report information related to the commander's PIR/IR within those areas. This is a fundamental requirement.

(f) From the commander's PIR/IR, specific collection tasks for the screening force and other units in the TF should be established.

(g) The scout platoon alone, even equipped with M3s, is not capable of accomplishing all the tasks associated with a screen mission forward of the TF. As a minimum, the screening force requires two elements - a force dedicated to acquire enemy recon elements and a force to close with and destroy the enemy recon elements. A force consisting of the scout platoon, GSR, and a company/team, preferably mech heavy, seems to work best at the NTC.

(h) The primary purpose of a screen mission is to prevent enemy observation of the TF activities and dispositions. This requires the screening force to defeat enemy reconnaissance elements about 3-5 km forward of TF defensive positions and obstacles. The disposition of the screening force must be made accordingly.

(i) Counterreconnaissance actions must extend through the depth of the TF sector. It isn't the sole responsibility of the screening force. Company/teams, command posts, and trains must be equally vigilant and establish observation posts around their positions and patrol as necessary.

(j) Deception measures can pay big dividends - but they must be believable. The skillful emplacement of heavy concentrations of smoke fools the OPFOR sometimes. Frequent repositioning of maneuver units is the most effective deception technique. Always assume the enemy is observing. Create a false picture of the TF dispositions.

(k) Graphic control measures are essential to the effective command and control of counterreconnaissance actions and the safe withdrawal of the screening force into the main battle area.

(l) The withdrawal of the screening force must be planned as a rearward passage of lines. Screening forces left to withdraw on their own initiative usually blunder into friendly ditches and minefields or they are shot by other TF elements as they return. Contact points, passage points, routes, and lanes must be established and controlled by the stationary units.

(m) Responsive fire support is essential to successful accomplishment of the screen mission. Based on IPB, the FSO should develop a fire support plan tailored to satisfy the TF commander's intent and the scheme of maneuver, and ensure it is distributed to the leaders of the screening force. Batteries must be positioned to range 3-5 km forward of the screening force. Fire support teams (FIST) must be integrated into the screening force to establish digital communications.

(7) Planning of Security Operations by the Screening Force.

(a) Specific surveillance tasks for the screening force and other TF elements stem from the commander's PIR/IR and selected NAI, TAI, and DP.

(b) Screening forces, which have been task organized and train together prior to NTC, are the most effective performers. Ad hoc task organizations created at the NTC do not perform well. The screening force should have a single commander, preferably a company/team commander on the ground, not the S-2 back in the TOC. Most successful units use the scout platoon, augmented with GSRs, as the surveillance/acquisition force. Mech-heavy teams, equipped with M-2s, are a good choice for the killing force because of their capability to work against both mounted and dismounted enemy recon forces.

(c) The killing team of the screening force should position astride the most likely avenues of approach enemy recon forces are expected to use. It is very important that the leaders of this team know exactly where the scouts and GSR elements are positioned beside or forward of them. A lot of scouts are killed by their buddies when this discipline breaks down. Designated no movement areas and periods of time are also helpful techniques to assist the killing team in sorting friend from foe.

(d) Observation posts established by scouts should be planned in depth, not strung out in a linear fashion across the frontage of the TF sector. Scouts have great difficulty withdrawing to subsequent OPs without being acquired, engaged, or overrun by the high speed approach of the OPFOR regiment. OPs should have overlapping fields of observation so the forward scout squad or section can visually hand over the advancing enemy to his partner behind him before he hustles back to the next OP. Based on the commander's PIR/IR, some scouts may have to remain forward and continue to observe NAI, TAI, and DP after the enemy has passed, i.e., to identify the second echelon battalion and determine where it's going, its strength, and composition or observe where the regimental artillery group is positioning.

(e) Company/teams, command posts, and trains must also plan observation posts and patrols forward and around their positions. OPFOR reconnaissance elements frequently penetrate screen lines and drive right into company defensive positions undetected.

(f) Graphic control measures for the conduct of the screen mission and the rearward passage of lines must be prepared and distributed to all leaders in the screening force. NAI, TAI, DP, OPs, contact points, passage points, routes of withdrawal, friendly obstacles, are essential information.

(g) The TF fire support plan, with a target list, should be distributed to leaders of the screening force prior to deployment.

(h) Communications procedures with the TF and fire support units should be described in the plan. Reports should be passed directly to the TF on the command net.

(h) The screening force should develop a responsive vehicle and casualty evacuation plan. TF support assets should be positioned forward to reduce response time. The location of casualty and vehicle collection points should be known by all soldiers in the screening force.

(i) Periods of resupply must be carefully planned to prevent detection of screening force elements. The plan must restrict movement to a minimum. Solid communications must be established with the designated service support elements.

(j) A reporting schedule should also be established to ensure soldiers occupying OPs remain vigilant and ensure both negative and positive combat information continues to flow up to the TF.

(k) The positioning of the screening force commander is an important planning consideration. He should be generally centered, or positioned astride the most dangerous enemy avenue of enemy approach.

(l) As any other complex operation, rehearsal significantly increases the probability of mission success. Forces which have the opportunity to rehearse perform much better than those who don't.

(m) Pre-combat checks often spell the difference between success and failure of the screen mission. Units frequently fail to check their vision devices and weapons prior to deployment.

(8) Execution of Security Operations by Task Forces.

(a) A screening force should immediately be emplaced when the TF completes an attack or moves into a sector to establish a defense.

(b) Units perform best if the TF commander or S-3 directs and controls the operation, ensuring combat support and combat service support are synchronized with maneuver.

(c) The TF has the responsibility to establish and maintain communications with the screening force and all subordinate units. A tactical or alternate command post, retransmission team, or relay station should be positioned forward to satisfy this essential requirement.

(d) The TF FSO must stay actively involved in supporting the screening force. Scouts, positioned well forward, are typically the first users of indirect fire support. Employed effectively by the scouts, the accurate placement of artillery can quickly strip the initiative away from the attacking enemy force.

(e) The S-2, FSO, and XO should analyze the combat information transmitted from the screening force and other units of the TF. Speculation by the scout platoon leader or screening force commander has often been the principal source of TF failure.

(f) The TF must give priority for casualty evacuation, vehicle replacement, and personnel replacement to the scout platoon or other elements directly involved with surveillance of critical NAI, TAI, and DP within the TF sector. The TF commander cannot afford to be blind.

(g) The defensive scenarios at the NTC present the TF a perplexing problem. In the absence of a covering force, the TF is compelled to employ a company-sized force to effectively accomplish the screen mission. Yet, the TF must reposition the majority of this force in the main battle area before the OPFOR regiment advances in order to concentrate sufficient combat power to win. There is little time for the withdrawing unit to prepare its defensive fighting positions. This operation is laden with risk and difficult to synchronize; too soon and enemy reconnaissance patrols penetrate the main battle area; too late and the force is not positioned or prepared to assist in destroying the regiment.

(10) Execution of Security Operations by the Screening Force.

(a) The success of the screening mission and subsequent TF defense hinges upon the survivability of the scout platoon. However, most scout platoons are destroyed before the OPFOR main body advances or shortly thereafter. There are many reasons.

(b) The scout platoon leader must position himself where he can maintain communications with his subordinate elements. Obvious terrain features should be avoided to preclude detection by enemy reconnaissance elements. He should possess good fields of observation across the TF frontage, if practical.

(c) Well-sited, thermal-equipped OPs on high ground looking down are usually able to detect most types of enemy recon elements in the open desert. Occupation of observation posts must be stealthy. Dismounted scouts should lead their vehicle forward and keep it concealed behind the OP as much as the terrain will permit. During daylight, OPs should be manned by dismounted scouts. As darkness descends or low visibility conditions develop, the M3 with its thermal optics should be moved up slowly and quietly into a prepared position. Engines should be run only when absolutely necessary to recharge the batteries. A hand-held thermal viewer with similar capability could eliminate this dangerous operation.

(d) The drill of acquiring enemy reconnaissance patrols and guiding elements of the killing force into positions to engage them should be rehearsed if practical. This really pays off. Rehearsed Target Reference Points (TRP) and supplementary firing positions are important control measures.

(e) Too many vehicles running around at night make counterreconnaissance actions difficult. Soldiers tend to become complacent about moving vehicles and this makes it easier for the enemy reconnaissance elements to slip through.

(f) OPs should be manned by three men for continual observation. One soldier can sleep and the other two can keep each other alert and awake. A lone, tired observer in a prone or sitting position will invariably fall asleep no matter how well motivated.

(g) Scouts who initiate direct fire engagements against enemy recon elements, composed of several BMPs and BRDMs, are usually acquired and destroyed by them or follow on forces of the OPFOR advance guard. Some scout platoons, equipped with M3s, have successfully destroyed enemy recon elements on their own. However, while scout elements become involved in a direct fire engagement, they quit observing their designated areas, and other enemy recon elements slip through. The enemy routinely employs this technique of diverting the scout's attention, then rapidly bypassing the outpost.

(h) Units which depend on TACFIRE for indirect fire support have serious problems establishing a responsive fire support system forward of the TF main battle area. Either quick fire FM voice nets should be established for the screening force or artillery forward observers (FO) or FIST elements with digital message devices (DMD) must be added to the screening force to interface with the TACFIRE fire direction center (FDC). Many of these artillery observers in the screening force find they cannot communicate with the FDC because they are out of FM communications range. Artillery battalions seldom move the TACFIRE shelter forward or position retransmission teams to maintain communications with the observers.

(i) Scouts attempting to withdraw to their next OP are usually acquired, engaged, and overrun by the advancing OPFOR regiment. They simply cannot move backwards as fast the enemy is advancing forward. They enjoy no mobility advantage such as aeroscouts possess. If required to displace to another OP, the decision to move must be made when the enemy is 2-3 km forward of their current position (out of the enemy's direct fire range). In effect, they must break contact to survive. This is why it is so important to place OPs in depth so that when the scout displaces, his sister element behind can pick up the enemy and continue to track him, and assure that visual contact is never broken.

(j) Elements of the screening force must adhere to TF control measures established for the rearward passage of lines. Uncontrolled return of the screening force always results in fratricide, caused by the effects of friendly obstacles, direct fire, or artillery.

(k) Surveillance elements should adhere to an established reporting schedule. This reassures the commander that his force is alert and functioning properly and develops a history of combat information, which provides valuable insights into enemy intentions.

(l) GSRs placed behind scouts are often confused by their movements on the screen line. GSRs placed generally on line with the scouts, helps prevent this confusion.

(m) Many scout and GSR elements deploy with inoperable or unserviceable night vision and thermal vision devices. This seriously handicaps the screening force. Units in M113/M901 equipped units are making good use of DRAGON thermal sights and dismounted TOW thermal sights - again establishing the importance of developing and fielding a hand-held thermal vision device for scouts.

(n) The M13 is unsatisfactory for use as a reconnaissance vehicle. The large profile, height, and noise it generates makes it impossible for scouts to move stealthily across the battlefield. The thermal viewer on the M13 is an attractive feature, but it would be better to have an equivalent thermal capability in the hands of scouts so they can work away from their vehicle. When operating the thermal viewer in the M13, the noise of the cooler is so loud it masks the scouts' sense of hearing which they depend on during conditions of low visibility or darkness. Additionally, scouts have to crank up their engines every 30-45 minutes to recharge the batteries when operating the thermal viewer. This has frequently disclosed the location of OPs. Bottom line - scouts need a vehicle that's smaller, quieter, faster, with a longer operating range than their opponent. They need some firepower, preferably high-volume suppressive weapons, and a mounted/dismounted thermal vision capability. Anti-tank killing requirements can be fulfilled with existing shoulder-fired weapons. TF scouts envy the OPFOR scouts who operate in HMMWVs. They move quietly, quickly, with equal or better mobility than the M13. In large measure, the HMMWV's characteristics contribute to the renowned success of the OPFOR reconnaissance elements.

(o) With the introduction of the M13 came a reduction in the number of scouts available in each scout squad to perform dismounted reconnaissance and surveillance operations. Although authorized 5, scout squads in the active force usually muster 3 or 4 men in each squad. The M13 requires 3 men to operate the vehicle effectively, usually leaving only one scout to dismount. Given this limitation, the tendency is for scouts to remain mounted. Additionally, the scout riding in the back cannot observe outside the vehicle. Consequently, when he dismounts he is completely disoriented and the vehicle commander or gunner must take the time to orient the scout before he can act. To compensate for this reduction in dismount capability, scout section sergeants put their dismounted scouts on one vehicle and man the other with the minimum three-man crew.

(p) The scout platoon should be composed of eight or ten vehicles instead of six. Additional vehicles would free the platoon leader and platoon sergeant to perform all the ancillary tasks associated directing and sustaining the platoon, without degrading the collection effort.

TEAM MEMBERS

COL Sydney Haszard (Retired)	Hudson, Kentucky
LTC G.R. Jacobsen	USAARMS
LTC Jim Crowley	USAIS
MAJ Alan Brimelow (RAAC)	USAARMS
MAJ Bob Wilson	USAARMS
MAJ John Rosenberger	USAARMS
MAJ Fred Gramling	USAIS
MAJ David McQueen	USAISC
CPT Emmett Holley	USAARMS
CPT Kevin Merry	USAAVNS
CPT Paul Morris	USAIS
CPT Steve Guerts	USAFAS
CPT Tom Burnett	CATA
Dr. Martin Goldsmith	Arroyo Center
Dr. Jim Hodges	Arroyo Center

Enclosure 1

APPENDIX B : COLLECTION PLAN

INTELLIGENCE SYSTEM

a. Planning Phase (Reconnaissance)

- Did the S2 receive a graphic intelligence estimate from higher headquarters before combat operations? Did the estimate include overlays depicting weather and terrain analyses and a situational template of enemy forces?
- Did the S2 receive any intelligence or combat information from subordinate or adjacent units before combat operations began?
- Did the S2 get out and perform a personal reconnaissance of the area of operations prior to combat operations?
- Did the S2 begin to prepare his intelligence estimate immediately after the unit received a warning order from higher headquarters?
- Did the S2 use the five-step Intelligence Preparation of the Battlefield (IPB) process to produce a graphic intelligence estimate for the staff and commander?
- In his estimate, did the S2 describe observation and fields of fire, concealment and cover, obstacles, key terrain, avenues of approach, and mobility corridors within the area of operations?
- Did the S2 produce overlays depicting weather and terrain analyses within the unit's area of operations?
- Did the S2 produce an overlay depicting a situational template of enemy forces within the unit's area of operations and area of interest?

- Did the S2 accurately describe the actual or suspected location of enemy forces, obstacle systems, infantry positions, fire sacks, types of antitank weapons and reserves?
- Did the S2 identify the enemy's likely counterattack routes?
- Did the S2 draw range fans of Threat weapon systems from known or suspected positions to depict where scouts would be vulnerable to direct fire engagements and where dead space or gaps might exist?
- Did the S2 accurately describe the enemy's weaknesses given the existing situation?
- In his estimate, did the S2 describe the enemy's most probable course of action?
- Given the commander's intent, concept of the operation, and his Primary Intelligence Requirements/ Information Requirements (PIR/IR), did the S2 immediately develop a reconnaissance plan to obtain required information about enemy and terrain?
- Did the S2 receive PIR/IR from his commander or did the S2 develop them on his own initiative?
- Did the S2 receive PIR/IR from higher headquarters which had to be considered while developing the reconnaissance plan?
- Did the S2 work with the S3 or XO to organize the reconnaissance force and develop the reconnaissance plan?
- Did the reconnaissance plan include all available reconnaissance assets?
- Did the S2 request aerial reconnaissance support from higher headquarters?

- When the reconnaissance force was determined , were elements of the reconnaissance force immediately issued a warning order?
- Was a single leader designated to direct and control the reconnaissance operation? If so, who?
- Did the S2 develop and issue specific collection tasks to the reconnaissance force?
- Did the reconnaissance plan specify required reports and a reporting schedule?
- Did the S2 prepare and provide the reconnaissance force a realistic terrain and threat template to guide the collection of required information?
- Did the specific collection tasks provide the commander the information about enemy and terrain required to support his scheme of maneuver?
- Did the specific collection tasks also serve to confirm or refute the information derived from the IPB process?
- Was the reconnaissance operation time-phased and controlled by the S2? What control measures were used? Checkpoints? Phase Lines?
- Was the reconnaissance plan issued in the form of an annex to a written operations order , a fragmentary order over the radio, or face-to face with leader(s) of the reconnaissance force?
- Was the reconnaissance plan prepared and issued in sufficient time to permit the reconnaissance force to plan, issue orders and prepare for the mission?
- Did the S2 provide an intelligence update to the unit leadership just prior to crossing the line of departure? How was it issued? Face-to-face in an orders group or over a radio net?

b. Execution Phase (Reconnaissance)

- Did the S2 continually refine templates during the battle and pass changes to unit commanders?
- Did the S2 supervise reconnaissance operations? If not, who did?
- Did the S2 receive reports from the reconnaissance force which served to confirm or refute the information developed during the IPB process?
- Did the S2 rapidly disseminate reconnaissance information to all subordinate units when reported?
- Did the S2 rapidly transmit reconnaissance information to higher headquarters and adjacent units?
- Did the S2 recommend new PIR/IR to the commander as current reconnaissance information was received?
- Did the S2 coordinate with flank units to obtain combat information within their areas of operation?
- Did the MTOE provide sufficient personnel and equipment for the S2 to adequately conduct sustained 24-hour operations?
- Did the equipment provided in the authorization document work adequately and enable the S2 and his section to function effectively?
- Did the S2 have adequate communications available to transmit taskings to reconnaissance /surveillance forces, receive information, and pass reports?

c. Planning Phase (Counter- Reconnaissance)

- Did the S2 receive a graphic intelligence estimate from higher headquarters before combat operations began which included overlays depicting weather and terrain analyses and a situational template of enemy forces?
- Did the S2 receive any intelligence or combat information from subordinate or adjacent units before combat operations began?
- Did the S2 request or receive information gathered by CEWI assets from higher headquarters?
- Did the S2 get out and perform a personal reconnaissance of the area of operations prior to combat operations?
- Did the S2 begin to prepare his intelligence estimate immediately after the unit received a warning order from higher headquarters?
- Did the S2 use the five-step Intelligence Preparation of the Battlefield (IPB) process to produce a graphic intelligence estimate for the staff and commander?
- In his estimate, did the S2 describe observation and fields of fire, concealment and cover, obstacles, key terrain, avenues of approach, and mobility corridors within the area of operations?
- Did the S2 produce overlays depicting weather and terrain analyses within the unit's area of operations?
- Did the S2 produce an overlay depicting a situational template which depicts enemy order of battle, Named Areas of Interest (NAI), Target Areas of Interest (TAI), and Decision Points (DP)?

- Did the S2 determine what the enemy's intelligence objectives would be? Did he describe the probable routes and techniques the Threat reconnaissance forces would use to obtain information? Did he describe the likely size and composition of Threat recon forces?
- Did the S2 identify likely positions which Threat recon forces would occupy to observe the activities/dispositions of the unit?
- Did the S2 describe when to expect Threat recon forces within the area of operations?
- In his estimate, did the S2 describe the enemy's most probable course of action given the existing situation?
- Given the commander's intent, concept of the operation, and his Primary Intelligence Requirements/ Information Requirements (PIR/IR), did the S2 immediately develop a surveillance plan to obtain required information about enemy forces?
- Did the S2 receive PIR/IR from his commander or did the S2 develop them on his own initiative?
- Did the S2 receive PIR/IR from higher headquarters which had to be considered while developing the surveillance plan?
- Did the S2 work with the S3 and identify Named Areas of Interest (NAI) on the battlefield where significant events will occur?
- Did the S2 work with the S3 and identify Target Areas of Interest (TAI)?
- Did the S2 work with the S3 and identify Decision Points (DP)?
- Did the S2 work with the S3 to organize the surveillance /screening force and develop the surveillance plan?

- Did the surveillance plan utilize all available surveillance assets? Scouts, tank termals, radio direction finding, GSR, infantry patrols, aeroscouts, night observation devices, remote sensors, etc.?
- Did the S2 request aeroscout support from higher headquarters?
- Did the S2/S3 select appropriate assets to collect intelligence at NAIs?
- When the surveillance/screening force was organized, were elements of the force immediately issued a warning order?
- Was a single leader designated to direct and control the surveillance operation? If so, who?
- Did the S2 develop and issue specific collection tasks to the surveillance force? Where and when to look?
- Did the surveillance plan ensure continual and complete coverage of the defensive sector regardless of visibility conditions?
- Were observation posts planned in depth or deployed linearly across the sector?
- Did the surveillance plan specify required reports and a reporting schedule?
- Did the S2 prepare and provide the surveillance force a realistic terrain and threat template to guide the collection of required information?
- Did the S2 provide company/team commanders with PIR/IR and coordinate with units to conduct patrols?
- Did the S2 coordinate surveillance operations with the FSO, ALO, and engineers?

- Did the S2 advise the commander on deployment of GSR to support the scheme of maneuver?
- Did the S2 employ GSR forward during defensive operations or were GSR assets attached to scout platoons?
- If GSR was employed separately, did the S2 assign areas, methods of search, and locations to ground surveillance radars(GSR) in a general support role?

b. Execution Phase (Counter- Reconnaissance)

- Did the S2 direct and control surveillance operations? If not, who did?
- Did the S2 receive reports and assessments from the surveillance force which served to confirm or refute the information developed during the IPB process?
- Did the S2 rapidly disseminate surveillance information to all subordinate units when reported?
- Did the S2 rapidly transmit surveillance information to higher headquarters and adjacent units?
- Did the S2 recommend new PIR/IR to the commander as current surveillance information was received?
- Did the S2 continually refine templates and pass changes to commanders during the battle?
- Did the S2 receive patrol reports from company/teams if they were used to collect information?

MANEUVER SYSTEM

a. Planning Phase (Reconnaissance)

- Did the commander view reconnaissance operations as the first phase of his offensive operation?
- Did the plan require the scout platoon to perform a route reconnaissance from the unit's assembly areas to the line of departure?
- Did the plan require the scout platoon to recon more than two routes?
- Did the plan require the scout platoon to perform route/zone reconnaissance from the LD along the axis of advance to the objective?
- Did the plan require the scout platoon to reconnoiter the objective area?
- Did the plan require the scout platoon to recon more than one objective?
- Did the plan require the scout platoon to pass through the objective area and recon enemy counterattack routes?
- Were engineers tasked to move behind the scout platoon to reconnoiter minefields/obstacles, conduct hasty breaches, and make hasty road repairs?
- Did the plan require the reconnaissance force to cross the LD forward of the lead elements? How long before?
- Did the plan require the scout platoon to coordinate a forward passage of lines?
- Was the scout platoon leader a member of the orders group?
- Did the scout platoon leader receive a reconnaissance plan from the S2 with necessary graphics?

- Did the scout platoon leader have an opportunity to review the reconnaissance plan with the S2 face-to-face?
- Did the scout platoon leader have the opportunity to develop/coordinate a fire support plan with the FSO prior to deployment?
- Did the scout platoon leader prepare a plan to accomplish all collection tasks required? Did he also prepare supporting overlays with graphic control measures?
- In his plan, did the platoon leader specify a platoon movement technique?
- In his plan, did the platoon leader address how the platoon would guide the unit during conditions of low visibility?

b. Preparation Phase (Reconnaissance).

- Did the platoon leader issue his order face-to-face with his entire platoon or only with his subordinate leaders?
- Did the platoon have sufficient time to prepare for the mission?
- Did the platoon use a pre-combat checklist to prepare for the mission?
- Did the platoon have enough time to wargame and rehearse the mission before deployment?
- How many scouts were on each scout vehicle (average no.)?
- What was the assigned vs. authorized strength of the platoon?
- How many scout vehicles were operational before the platoon deployed?
- Were all night vision and thermal devices functional? What type of devices did the platoon intend to use?

- Did each squad have a functional radio to use in dismounted recon operations?
- Were all vehicular radios operational? Did the radios possess a secure capability?
- Did each section have mine detectors and material to mark minefields and lanes?
- Did the platoon have an adequate amount of fuel, water, ammunition, and rations to accomplish the mission?

c. Execution Phase (Reconnaissance).

- Did the Scout Platoon cross the SP/LD at the time specified?
- Did the Scout Platoon cross the SP/LD far enough in advance of the battalion to properly execute its mission?
- Was the platoon using the movement technique specified by the platoon leader?
- How far did the scout platoon travel from the AA to the objective?
- What was the width of the zone or axis the scout platoon was required to reconnoiter?
- Did the platoon recon the route(s) from the assembly area up to the LD and report their trafficability to the tactical operations center (TOC)?
- Did the platoon reconnoiter the entire length of the axis of advance from the LD to the objective and survive?

- Did scouts frequently dismount to obtain more detailed information about terrain or enemy or did they remain mounted the majority of the time?
- Did scouts dismount to reconnoiter enemy positions well out of range of direct fire weapons systems?
- Did the platoon detect and report the location and strength of enemy security outposts within the area of operations?
- What techniques did the scouts use to maneuver their Bradleys around the security outposts without being detected?
- Were the scouts detected by the Threat security outposts? Why were they detected?
- Would a light weight, hand-held thermal viewer, with good resolution out to about 2000 - 3000 meters , improve the scout's ability to obtain detailed information about enemy and terrain?
- Did the platoon locate, classify, and determine the dimensions and type of all obstacles, to include existing gaps and bypasses.
- Were scouts capable of reconnoitering minefields/barriers during the hours of darkness?
- If tasked, did the platoon breach obstacles, provide day and night markings, and report the exact location of the breach and lane to the TOC?
- If tasked to find a bypass, did the the platoon mark the bypass, report its exact location, and describe how it is marked (materials used)?
- If tasked , did the platoon mark the routes of advance for follow-on forces? How were the routes marked (day and night)?

- Did the platoon post guides along the axis of advance to assist in follow-on forces during low visibility conditions?
- Did the platoon recon all key terrain and suspected enemy locations where Threat forces could place effective indirect or direct fires along the axis of advance?
- Did the platoon determine the trafficability of terrain along the axis of advance and report the information to the TOC?
- Did the platoon reach the objective area and remain effective?
- Did the platoon find and accurately determine the location, type, and total number of enemy antitank weapons in any Threat defensive positions encountered?
- Did the platoon accurately describe the orientation of enemy antitank weapons and determine their fields of fire? Did the platoon identify gaps in the coverage or deadspace which could be exploited?
- Did the platoon determine if the enemy position was mutually supported by others nearby?
- Did the platoon find a covered and concealed bypass around the enemy position?
- Did the platoon identify the flanks and rear of the enemy position and find suitable approaches into these areas for maneuver forces?
- Were scouts able to accurately report their locations most of the time (withing 200 meters)?
- Were scouts detected by Threat forces from their defensive positions? Why were they detected?
- Did the platoon find and report the location and type of obstacles surrounding the enemy defensive position?

- Did the platoon establish an observation post overlooking the objective area to assist in guiding the accurate maneuver of forces and the accurate placement of indirect fires within the objective area?
- Did the platoon continue to recon beyond the objective to find other enemy positions, obstacles, likely avenues of counterattack or reinforcement, or avenues of withdrawal?
- While performing reconnaissance, did any element of the scout platoon deliberately engage Threat forces with direct fire weapons? If so, why? What was the outcome of the engagement?
- How many scout squads survived the mission?
- Was the battalion plan changed based on the fresh information about enemy and terrain the scouts provided?
- Did the battalion commander have a clear picture of enemy dispositions and strength prior to maneuvering his forces?

d. Planning Phase (Counter-Reconnaissance)

- Did the commander view counter-reconnaissance operations as the first phase of his defensive operation?
- Did the plan establish/organize a counter-reconnaissance force to destroy or repel enemy recon elements?
- Did the plan organize one force to conduct surveillance and acquire enemy recon forces and another to close with and destroy them?
- What forces comprised the surveillance/acquisition force?
- What forces comprised the killing force?

- Did the plan employ deception operations to disrupt Threat intelligence collection efforts?
- Did the plan require the scout platoon to perform a screen well forward of the unit's defensive positions and obstacle system?
- Did the plan require the scout platoon to establish surveillance along an initial screen line oriented on battalion-size avenues of approach into the unit's defensive sector?
- Was there a plan for the withdrawal of the surveillance force under pressure or to occupy hide positions permitting the Threat forces to bypass?
- Was the scout platoon reinforced with additional surveillance assets; i.e. GSR, tanks with thermals, REMS, etc?
- Was the scout platoon leader a member of the orders group?
- Did the scout platoon leader receive a surveillance plan from the S2 with necessary graphics?
- Did the surveillance provide for continual and full coverage of avenues of approach into the unit's defensive sector?
- Did the scout platoon leader have an opportunity to review the surveillance plan with the S2 face-to-face?
- Did the scout platoon leader have the opportunity to develop/coordinate a fire support plan with the FSO prior to deployment?
- Did the scout platoon leader prepare a plan to accomplish all collection tasks required? Did he also prepare supporting overlays with graphic control measures?

- In his plan, did the platoon leader specify where observation posts should be positioned and oriented?
- In his plan, did the platoon leader address how the platoon would perform continual surveillance during conditions of low visibility?

b. Preparation Phase (Counter-Reconnaissance)

- Did the platoon leader issue his order face-to-face with his entire platoon or only with his subordinate leaders?
- Did the platoon have an adequate amount of time to prepare for the mission?
- Did the platoon use a pre-combat checklist to prepare for the mission?
- Did the platoon have enough time to wargame and rehearse the mission with other elements of the counter-recon force before deployment?
- How many scouts were on each scout vehicle (average no.)?
- How many scout vehicles were operational before the platoon deployed?
- Were all night vision and thermal devices functional? What type of devices did the platoon intend to use?
- Did each squad have a radio to use in dismounted surveillance operations?
- Were all vehicular radios operational? Did the radios possess a secure capability?
- Did the platoon have an adequate amount of fuel, water, ammunition, and rations to accomplish the mission?

e. Execution Phase (Counter-Reconnaissance).

- Did the commander insist an aggressive counter-recon attitude throughout the unit to include command posts and trains?
- Who commanded the counter-reconnaissance operation?
- How far was the initial screen line from the unit's defensive positions and primary obstacle system?
- How wide was the frontage the surveillance force had to cover?
- How many observation posts did the platoon establish along the initial screen line?
- Did scouts occupy OPs without being detected by Threat forces?
- Was local security established around OPs?
- Did the platoon leader check fields of observation once the OPs were set?
- Could the OP be evacuated rapidly without exposing the vehicle and the crew?
- How many scouts in OP positions survived the mission?
- Did the scout platoon have a functional sleep plan?
- Were there enough scouts at each OP to maintain 24-hour, continual surveillance of the avenue(s) of approach?
- Were mounted or dismounted patrols conducted along the FEBA and along probable enemy infiltration routes?
- Did scouts move their thermal equipped vehicles into the OP position during periods of darkness or low visibility?
- Were GSR elements employed at the OP sites to augment the capability of the scout sections?

- Did the GSR element send spot reports to the scout platoon leader or directly back to the TOC?
- Were observation posts correctly positioned and oriented on the correct avenue(s) of approach?
- Were scouts required to conduct dismounted patrols between observation posts?
- How far could the scouts see from their OPs during the day?
During the night?
- Which vision devices did the scouts primarily use during the day? At night?
- With available night vision devices, how far could the scouts see and accurately determine the identity of the objects observed?
- Would a light weight, hand-held thermal viewer, with good resolution out to about 2000 meters, improve the scout's ability to obtain detailed information about enemy and terrain?
- How far behind the observations posts was the maneuver force positioned?
- Did the maneuver force also have sectors to observe?
- Did scouts/FDs engage Threat recce and main body elements with indirect fires? How far away from their positions? What was the outcome of the engagement?
- Did scouts deliberately engage Threat recce forces with direct fire? If so, why? What was the outcome of the engagement?
- What was the scout platoon leader's training background? Did he have any training at all in scout platoon operations before he assumed command?

FIRE SUPPORT SYSTEM

a. Planning Phase .

- Did the S2 coordinate with the Fire Support Officer and develop fire support plans for each reconnaissance/surveillance operation?
- Was the recon or counter-recon force allocated priority of fires initially?
- Were targets plotted on known, suspected, or probable enemy locations?
- Were priority targets designated?
- Did the FSO prepare and provide a target overlay to leaders of the recon or counter- recon force?
- Was COPPERHEAD planned for employment against Threat recce forces? If so, were FOs or combat lasing teams attached to the recon or counter-recon force?
- Were firing positions planned to ensure that mortar platoon or supporting artillery was always in a position to range 3-4 km forward of the recon or counter-recon force?

b. Preparation Phase.

- Did leaders of the recon or counter-recon force have the opportunity to rehearse the fire support plan with the Commander and the FSO before they deployed?
- Was digital (TACFIRE) communications established between the recon or counter-recon force and the indirect fire support elements prior to deployment? If not, was a voice net established?

- Did each of the scout squad leaders have a target overlay posted on their map?
- Was an artillery forward observer attached to the scout platoon? Did the FO have a Digital Message Device to communicate with the TACFIRE Fire Direction Center of supporting artillery?
- Where did the FO ride in the scout platoon?
- Was a Combat Lasing Team (COLT) attached to the scout platoon?
- Was supporting artillery or the mortar platoon in position to provide indirect fires for the recon or counter-recon force before deployment?

c. Execution Phase.

- Was a TACFIRE communications link maintained between the recon or counter-recon force until the mission was completed? What technique was used?
- Was the FO/FIST/COLT in a position to observe targets?
- Was the GLVVD/COPPERHEAD system employed by elements attached to the recon or counter-recon force? If so, were the fires effective?
- Did the scouts transmit accurate calls for fire? If not, why?
- Would a hand-held laser range finder improve the accuracy and responsiveness of the fire support system?
- Would a position determining system on scout vehicles improve the accuracy and responsiveness of the fire support support system?

- Did scouts use artillery/mortar fire as their primary means of firepower to develop the situation and restore their ability to maneuver?
- Did the mortar platoon or supporting artillery reposition as necessary to range 3-4 km forward of the recon or counter-recon force?
- Was the recon or counter-recon force without responsive indirect fire support at any time? If so, why?
- Did the scout platoon transmit calls for fire directly to the mortar platoon? If so, what technique was used?
- How long did it take, on the average, between the time a call for fire was transmitted and the time rounds impacted on the target?

COMMAND AND CONTROL SYSTEM

a. Planning Phase.

- Did the S2 or S3 issue a warning order to the recon or counter recon force giving them maximum time for preparation?
- What distances were leaders required to travel to receive a written or oral operations order?
- Did the unit have a tactical SOP?
- Did the SOP have standard report formats to support intelligence collection?
- Did the scout platoon adhere to the unit SOP?
- Did the unit use the Terrain Index Reference System (TIRS) to control the movement of subordinate elements and report information?
- Did the scout platoon use TIRS or some other reference point system?

b. Preparation Phase.

- Did the battalion position retransmission teams to sustain communications with recon or counter-recon forces well forward of the main body?
- Was a communications relay system of any sort established to ensure that recon reports were received by the TOC?
- Could all vehicles in the scout platoon communicate with one another before they deployed?
- Did all scout leaders have the required graphic control measures placed on their map?

c. Execution Phase.

- Did the scout platoon send its spot reports on the battalion operations/intelligence net (O/I) before the battle?
- Did the scout platoon send enemy spot reports and assessments on the battalion command net during the battle?
- Who commanded the reconnaissance operation?
- Who commanded the counter-reconnaissance operation?
- How did the surveillance/acquisition force communicate with the maneuver force during the counter-reconnaissance operation? Which net did the team use?
- Did the reconnaissance or counter-reconnaissance force use a relay to transmit reports when the element could not talk directly with the TOC ?
- Were reports submitted in the format specified in the unit SOP?
- Did the scout platoon use any means of communication other than radio?

COMBAT SERVICE SUPPORT SYSTEM

a. Planning Phase.

- Did the S4 plan the type, quantity, and frequency of resupply for the scout platoon?
- What technique of support was planned to resupply the scout platoon and evacuate its casualties and damaged vehicles?

b. Preparation Phase.

- Did the scout platoon have sufficient fuel, water, ammunition, and rations to perform their assigned mission?
- How was the scout platoon resupplied before it deployed?

c. Execution Phase.

- Did vehicles in the scout platoon run out of fuel before the mission was accomplished?
- Was the scout platoon resupplied as planned? If not, why?
- Did the technique of resuppling the scout platoon work?
- How were disabled scout vehicles evacuated? How long did it take once maintenance elements were notified?
- How were casualties in the scout platoon evacuated for treatment?