

(U. S. Army)

# Reconnaissance

---

# Future

By CAPTAIN PETER G. GRASSER

**W**HAT does the future hold for the small reconnaissance unit? Will it still be required? If so, what capabilities will it possess and how will these capabilities influence its methods of operation?

The future battlefield, dispersed and fluid, made so by the improved lethality of weapons, clearly indicates the continuing need for the small reconnaissance unit. Advance technology will increase its capabilities, permitting the small reconnaissance unit to undertake, and accomplish successfully, missions of greater scope. The simple tactical operation that follows will point out these increased capabilities and how they can influence the small reconnaissance unit's method of operation.

#### Tactical Problem

*... Squadron (-) relieved of rear area security mission now; time 031700 ... secures area between Combat Command A and Combat Command B ... Troop A secures area coordinates NA5020, NA4010, NA5000, NA6208, effective 032030 May 196—...*

Upon receipt of this order Captain Sharp, commander of A troop,

**CAPTAIN PETER G. GRASSER**, Armor, received his commission from OCS at Fort Riley, Kansas in 1949, after which he was assigned to the 14th Armored Cavalry Regiment in Germany. He attended the Associate Advance Class at Fort Knox in 1954. He gyroscoped to Europe with the 3d Armored Division in 1956 where he was assigned successively as a tank company commander, tank battalion S-3 and assistant S-3 of a combat command. He is a 1960 graduate of the Command and General Staff College and is now with the Combat Developments Group, U. S. Army Armor School.

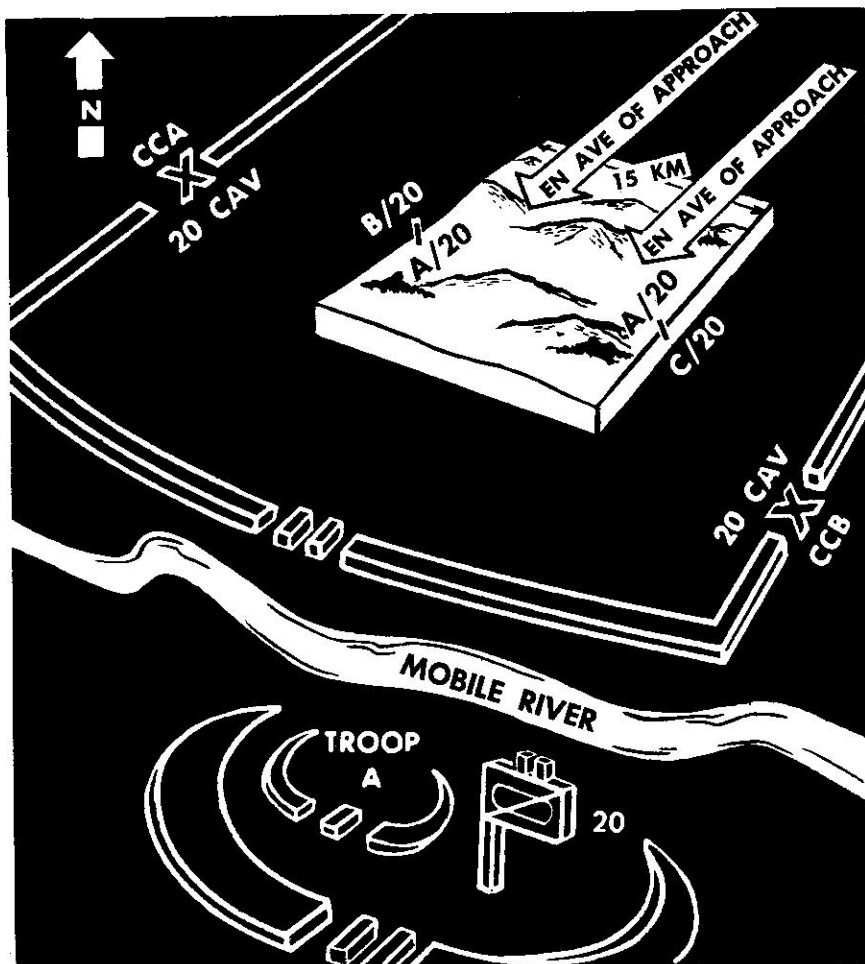


Figure 1. Situation as of 031700 May 196—.

alerted his widely dispersed platoons. His initial estimate revealed that the troop would have to march 20 miles and occupy positions under cover of darkness. Further map study indicated that the terrain was rough and wooded. There were two possible enemy avenues of approach into the 15 kilometer wide troop sector. *Figure No. 1.*

Before beginning his personal reconnaissance by air vehicle, provided by the troop aerial element, Captain Sharp orally issued a tentative plan to his executive officer, for dissemi-

nation to the troop. The platoon leaders would receive the final order later from a forward vantage point. The tentative plan included the immediate deployment of the troop aerial element to forward early warning positions.

At 1835, from a forward vantage point, Captain Sharp issued his order to the assembled platoon leaders.

No enemy contact has been established at present. Troop A moves from rear area at EENT (1910) to occupy forward screen-

*The combat missions of conducting*

*reconnaissance, providing security and*

*economy of force operations will remain the same.*

ing position before 032030. To minimize detection, I have ordered the troop executive officer to march the platoons forward on dispersed routes. Radio listening silence is now in effect. As there are no bridges across the Mobile River in the sector, all ground vehicles must use their inherent swimming capability.

For this operation the troop nuclear and conventional fire support element will be attached to the platoons. However, the platoons will request permission to fire the nuclear weapons that have been allocated to the troop. We have received one medium range, self-propelled radar from squadron. This radar will be positioned to cover as much of the troop sector as possible. The platoon's short range radars will be sited to fill gaps and cover dead space in the medium range radar coverage. This will assist

in covering our wide sector during darkness. The troop aerial element will continue to occupy forward early warning positions.

With our 300 mile vehicle cruising range, class III will not present a problem. However, to avoid fueling during daylight hours tomorrow, the troop executive officer will have the supply GOERS from the squadron combat trains in a position to supply the troop after closing into positions tonight. The troop command post will be at coordinates NA514510. The time is now 1845. Take advantage of the remaining daylight to conduct reconnaissance before the arrival of your platoons. *Figure No. 2.*

Captain Sharp completed his inspection of the platoon positions at 2300. He would not spend the remainder of this night at his comfortable command post awaiting that first enemy contact report. Instead

he would cat nap at a position where he could be sure of good communication with his platoons and with the squadron.

Captain Sharp was long awake when at 040500 his auxiliary Receiver R442/VRC 12 spat out squadron's coded message.

FLASH . . . five small armored enemy columns 22 kilometers northeast of Combat Command A sector . . . moving on multiple routes toward Combat Command A sector . . . detected by division's surveillance drone at 040450 hours . . .

Realizing that the enemy would probably make its main effort in the north, Troop A could also expect some activity in the near future. Captain Sharp alerted Lieutenant Early, the commander of the troop aerial element, to be on the watch with emphasis to the northeast.

At 0600, Captain Sharp received Lieutenant Early's first enemy spot report:

ALFA—Message No. 1.

BRAVO—Two small tank and infantry columns.

CHARLIE—North column located coordinates NA632155. South column coordinates NA702104.

DELTA—North column sighted at 0550. South column at 0558.

ECHO—Both columns moving southwest at 15mph.

FOXTROT—Observed by Inhale 13.

GOLF—Reported by Inhale 10.

Lieutenant Early added, in code, that both columns were fired upon by aerial rockets and machine guns, and that his element would maintain contact until it could be established by the reconnaissance platoon's ground scout elements. All troop elements having receipted for this information, Captain Sharp informed squadron through its aerial relay.

There were three significant events during the next hour. At 0615, Captain Sharp monitored a B troop message to squadron.

. . . Enemy nuclear weapon, estimated less than 1 KT, detonated in vicinity coordinates

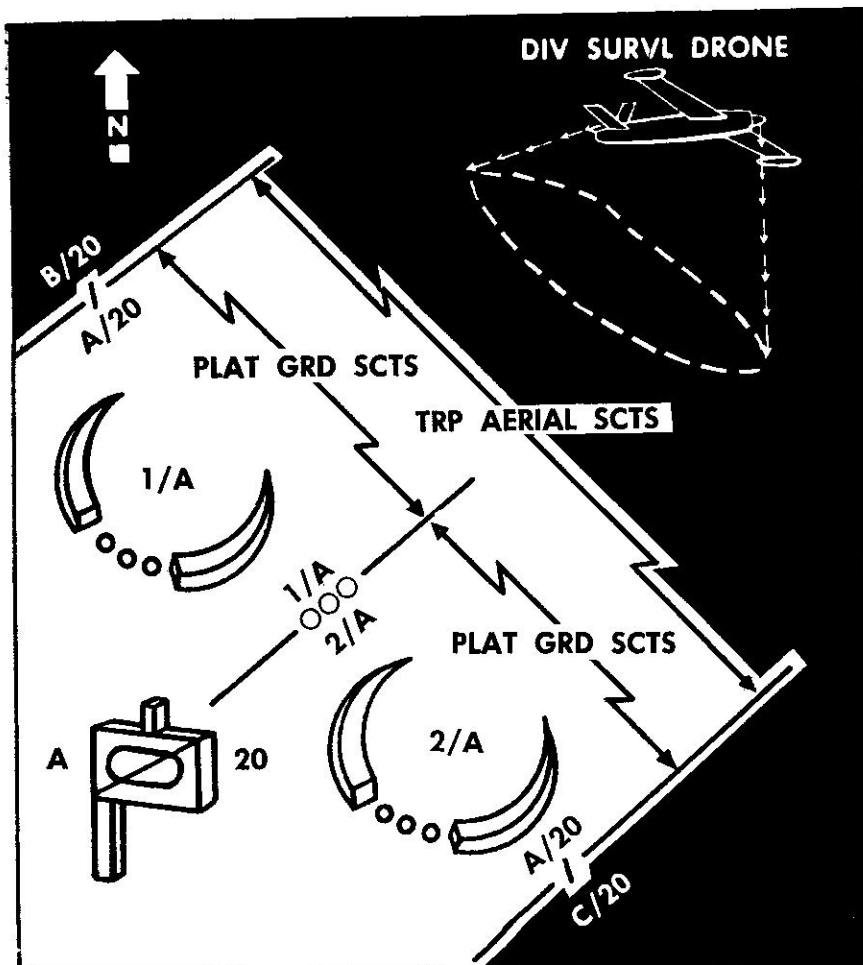


Figure 2. Situation as of 032030 May 196—.

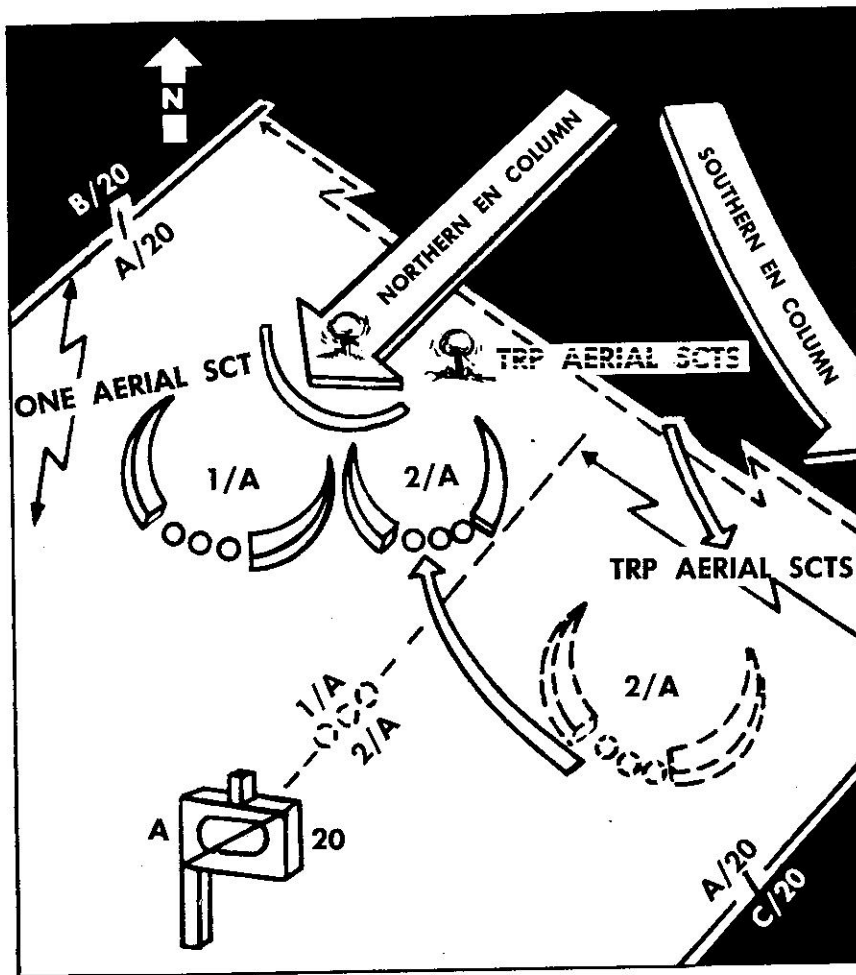


Figure 3. Situation as of 040745 May 1961.

NA4045 (Combat Command A sector), time 0615. Will conduct survey using aerial scout from organic aerial element to ascertain extent of contamination . . .

Lieutenant Early at 0625 reported that the southern enemy column, identified earlier, was now proceeding south toward C troop's sector. He said that his aerial scouts would continue observing this force until C troop had established contact. Captain Sharp immediately coordinated this action by radio with C troop. At 0643 Lieutenant Stop, platoon leader of the 1st Reconnaissance Platoon, occupying the troop's north sector, reported that his ground scouts had made contact with the north enemy column 4 kilometers northeast of his main position. The size of the column was estimated to be 6 tanks and 6 armored personnel carriers.

With this information, Captain Sharp directed Lieutenant Early to  
**ARMOR—March-April, 1961**

release one aerial scout to the 1st Reconnaissance Platoon to cover, by observation, the troop's north flank. The rest of the aerial scouts were to move to cover the 2d Reconnaissance Platoon sector. He then ordered Lieutenant Quick, platoon leader of the 2d Reconnaissance Platoon in the south, to move upon arrival of aerial scouts, to a blocking position south of the 1st Platoon, and assist in the destruction of the enemy column opposing the 1st Platoon. *Figure No. 3.*

It was now time for Captain Sharp to join and coordinate the actions of his two reconnaissance platoons. He intended to use two of his allocated low-yield nuclear weapons. These would be delivered by his organic fire support element. This would be supplemented by the maneuver and conventional fires of his two platoons, plus any additional fires that he could obtain from squadron.

At 0745, Captain Sharp carried

out his plan. The platoons were then directed to return to their initial positions. Captain Sharp notified squadron of Troop A's success.

### Essential Precepts

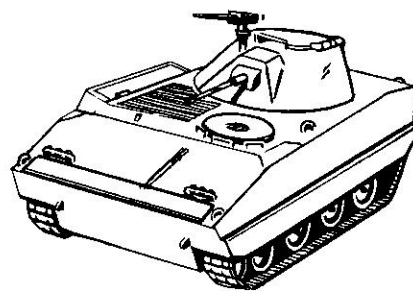
It is extremely doubtful if today's reconnaissance troop could accomplish the mission assigned to A troop. The dispersed, fluid battlefield demands that future reconnaissance units possess greater capabilities for effective reconnaissance and security operations. The achievement of these capabilities must be based on certain essential precepts. These applied precepts are not necessarily new. The battlefield environment of the future simply demands that greater consideration be given them now, than before.



HEL HU-1A

### Mobility Differential

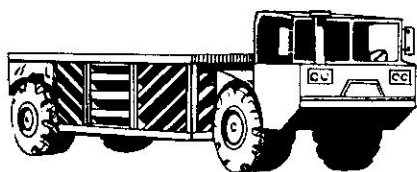
Reconnaissance units must have a mobility differential greater than the force they support. They must be able to cover the front and flanks of fast-moving formations. Terrain obstacles should have little or no effect on the ability of reconnaissance units to move. In A troop's situation, all of the ground combat vehicles organic to the troop were armored, tracked, and capable of swimming inland waterways. The vehicular night vision devices allowed rapid movement during blackout conditions. Organic air vehicles enabled the troop's eyes and ears to be moved in the shortest possible time.



**COMD & RECON VEH**  
Significant Fighting Capability

In reconnaissance operations the reconnaissance unit attempts to avoid

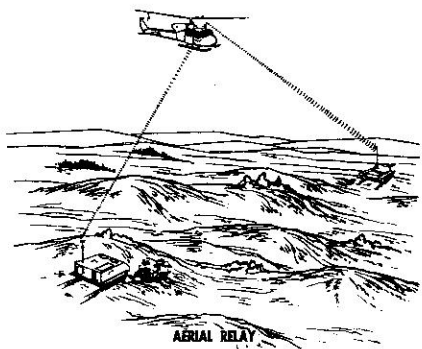
detection and engagement. However, as most enemy information will be protected, the reconnaissance unit often must fight to obtain its information. In conducting security type operations, the reconnaissance unit must be able to destroy, or at least fix the enemy with its organic weapons. All of A troop's combat vehicles, both ground and air, were equipped with adequate weapons to accomplish this. The troop's organic low-yield nuclear weapon element increased the ability of this small unit to fix and destroy the enemy.



**GOER CARGO**

### Sustained Independent Operations

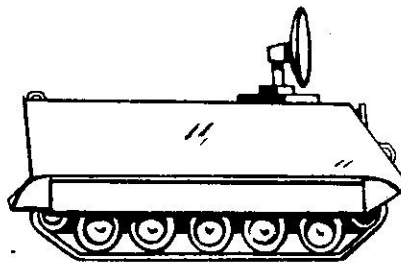
The type of missions envisioned for reconnaissance units will require continuous operation at extended distances for long periods of time. The equipment organic to A troop was simple to operate and maintain. The logistical system supporting the troop was flexible and responsive to its needs.



**Communication**

The communication system must provide for positive command and control of fast-moving, widely dispersed reconnaissance units. The system must be flexible in order to cope with every possible contingency. It must transmit rapidly great volumes of information with maximum resistance to enemy jamming and spoofing.

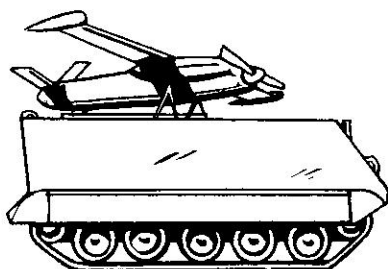
Captain Sharp could not have brought all his resources to bear on the enemy had he not had adequate and reliable communication.



**SP RADAR**

### Combat Surveillance

Combat surveillance is inherent to all reconnaissance and security missions. Until recently, the reconnaissance troop's primary means of overwatching the battlefield was through the eyes and ears of its individual soldiers. This did not permit the continuous, all-weather day and night watch over the dispersed battle area. Organic short-range radars, plus the attached self-propelled radar element were able to compensate for this weakness. This mounted ground surveillance equipment was able to operate continuously, and contributed immeasurably to the troop's effectiveness.

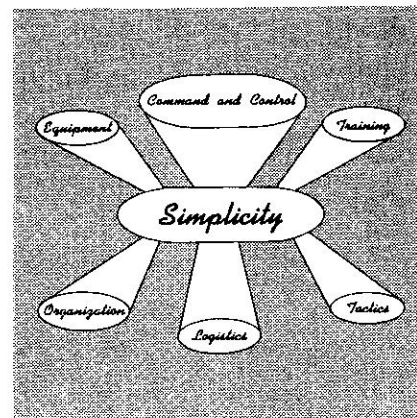


**DRONE AN/USD-2**

### Target Acquisition

The ultimate aim should be to incorporate a target acquisition capability into the reconnaissance unit to permit rapid delivery of fires on targets detected during reconnaissance and security operations. Initially, it may be advisable for separate units to provide target acquisition for the reconnaissance unit because of the scarcity and complexity of equip-

ment. This was the case in A troop's situation. The division's drone system, organic to the aviation company, assisted in providing the entire division with target information.



### Simplicity

The demand for improved reconnaissance and security, of necessity, requires the development and introduction of mechanical and electronic equipment of increasingly greater capabilities and in increasing quantities. It is essential that every effort be made to keep this equipment as simple to operate and maintain, and as rugged and simple mechanically as practicable. The reconnaissance unit organization must be simple and practical in terms of training, command, control and logistical support. Troop A's equipment was simple to operate and maintain. Its organizational structure, command and control facilities, and the available logistical system gave the troop commander great flexibility and latitude to cope with the changing situation.

All of the characters portrayed in the exercise involving A troop are real; only the names have been changed to protect the innocent. The same may be applied to the future reconnaissance unit. The combat missions of conducting reconnaissance, providing security, and economy of force operations will remain the same; only the equipment, organization and operational techniques have been changed to protect the innocent on the battlefield of the future.