UNITED STATES ARMY INFANTRY SCHOOL

Fort Benning, Georgia

11 January 1968

OPERATIONS OF THE 1ST PLATOON, FORWARD AREA SIGNAL CENTER, B COMPANY, 501ST SIGNAL BATTALION (ABN), IN SUPPORT OF THE 1ST BRIGADE, 101ST AIRBORNE DIVISION WEST OF BEN CAT, REPUBLIC OF VIETNAM, 4-16 DECEMBER, 1965. (PERSONAL EXPERIENCE OF A PLATOON LEADER)

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INTRODUCTION

The last half of 1965 is known as the "Vietnam Defensive Campaign" in current military writing with good reason. The buildup of Viet Cong units from terrorist groups to battalions, regiments and divisions had placed a severe strain on the South Vietnamese forces and their American advisors. The South Vietnamese were losing the equivalent of one battalion a week through direct enemy action, added to their continuing losses due to desertion and natural attrition.(7) The United States rapidly introduced the 1st Marine Expeditionary Force, the 173d Airborne Brigade, and a brigade of the 1st Infantry Division; followed by the 1st Brigade, 101st Airborne Division and the 1st Cavalry Division (Airmobile) with its unusual organic airlift capability.

Initially the U.S. units moved around the country in a series of operations designed to both defeat the VC and NVA forces and as a show of force over as much of the populated country as possible.(7)

The 1st Brigade, 101st Airborne Division landed at Cam Rahn Bay in July, 1965, organized, and moved to An Khe for its first major operation. From An Khe the brigade moved to Qui Nhon for a series of operations designed to secure and hold areas for the incoming Allied forces: the 1st Cavalry Division (Airmobile) and the Republic of Korea Tiger Division. In December, after less than fourteen days at Phan Rang to establish a base camp, the brigade moved into the III Corps area for its first operation with the primary mission of finding and destroying the enemy.

OPERATIONAL AREA

The 3d Brigade, 1st Infantry Division had established a base camp in a former French rubber research station at Lai Khe, northwest of Saigon. This area had long been under the domination of the Viet Cong and was bordered by the Communist strongholds of War Zones "C" and "D" and the "Iron Triangle".(Appendix 2)

These three areas had been used by the Communists since the early 1950's as havens, unchallenged by effective Allied forces. The Iron Triangle was especially notorious as a sally point for raids against the command and airfield complexes at Tan Son Nhut and Bien Hoa.(4:98) In late 1965, the VC could launch regimental-sized attacks against Allied posts, to either destroy the post or to lure relieving forces into ambush--time proven Communist tactics.(6:290) In November, elements of the 1st Infantry Division and the 173d Airborne Brigade were conducting spoiling sweeps in War Zone "D" in an attempt to destroy massed VC units.(1)

MISSION AND ORGANIZATION OF THE BRIGADE

To counter the Communist threat to the engaged Allied unit's rear areas and the Saigon area, the 1st Brigade, 101st Airborne Division was committed to operations in the Lai Khe area. The mission of the brigade was to conduct sweep and clear operations west of Ben Cat. The brigade was placed under the operational control of the 1st Infantry Division and in turn was augmented for the mission.(2)

Task organization:

Brigade Headquarters and Headquarters Company,
1st Battalion, 327th Infantry (Abn),
2d Battalion, 502d Infantry (Abn),
2d Battalion, 16th Infantry,
2d Battalion, 28th Infantry,

2d Battalion, 320th Artillery (Abn),

New Zealand Royal Artillery Battery,

A Troop, 2d Squadron 17th Cavalry (Abn),

A Company, 326th Engineer Battalion (Abn),

501st Support Battalion (Abn) (Prov).

The brigade, formed from a "ROAD" division, was augmented by several additional divisional units, one of which was my platoon, the 1st Forward Area Signal Center Platoon, B Company, 501st Signal Battalion (Abn).

PLATOON ORGANIZATION AND MISSION

The 1st Brigade communication elements operated with a unique functional organization. My platoon from the division signal battalion normally had the primary mission of providing direct support communications between the brigade and the echelons of the division headquarters. The brigade communications platoon had the primary mission of providing internal brigade communications under the divisional concept.

In Vietnam we had no division headquarters. The brigade's next higher headquarters was I Field Force (IFFV). The IFFV signal officer, Colonel Richard C. Horne, instructed the IFFV direct support signal battalion, the 54th Signal, to link the 1st Brigade and IFFV, taking the external mission from my platoon.

Additionally, we brought the three VHF terminals provided at signal battalion level for relay purposes with the platoon. Using the total of five VHF terminals, I habitually established four channel VHF systems internal to the brigade, a method of operation unparalleled in the U.S. Army.(Appendix 4) The presense of the VHF equipment and the duplication of the resources of the communications platoon dictated a reorganization of the two platoons.

The TOE and revised organizations of the platoons are shown in Appendix 1. One other change that had an impact on the operations of the FASC platoon was that it was placed under the operational control of the brigade signal officer. As the only other Signal officer in the brigade, I also acted as an "assistant signal officer" in the absence of the signal officer or at an alternate command headquarters. In the narration the operations of elements of both platoons are discussed as they affected the communications missions under my supervision.

NARRATION

When we were alerted for the move to the III Corps area, I was instructed to remain at Phan Rang. The brigade had just arrived at Phan Rang, and we were beginning to establish the base camp communications in coordination with the 54th Signal Battalion. My platoon sergeant, PSG Ralph Parker, and I were to remain behind with a wire team and two VHF teams to install and coordinate the signal support projects. I had provided the departing VHF teams with a system diagram so that they could establish a system without further technical guidance.(Appendix 4)

The smaller vehicles and the bulk of the brigade personnel had flown out of the Phan Rang airfield on 4 December in C-123 aircraft. On the same day the AN/MRC-68 VHF terminals, mounted on three-quarter ton trucks and trailers, had convoyed to Cam Rahn Bay to be picked up by C-130's. I knew the trucks had safely completed their convoy because of a confirming radio report that same day. The security equipment to be used by both platoons on the AM radios and in the communications center also had convoyed to Cam Rahn with the VHF trucks. Primarily to safeguard the security equipment, but also for overall control, I had

established a temporary CW AM radio link with the convoy and had received their arrival report by this means.

In a telephone conversation with Cpt Meyer, the signal officer, on 5 December I was informed that these vehicles had not arrived at Bien Hoa and were needed immediately. This call prompted a three day search for six missing vehicles and operators, and my participation in "Operation Checkerboard".

Before I could leave Phan Rang I had one important task to coordinate. The remaining battalion of the brigade, the 2d Battalion, 327th Infantry (Abn), was securing the base camp and conducting limited operations south of Phan Rang. Two of the platoons VHF terminals were providing a VHF link between the base camp and the battalion's tactical CP. Sgt Allred's team was in direct support of the tactical CP, while SSG Kirn's team provided the base camp terminal. I called the battalion communications officer, Cpt Kidd, and informed him that PSG Parker would be in charge of the platoon's operations in the Phan Rang area. PSG Parker had been kept abreast of the situation, and was accordingly left in charge.

Flying out of Phan Rang on a C-123, I arrived at Bien Hoa prior to dark on the 5th and found that the missing vehicles still had not arrived, nor did anyone have any information as to their location.

At 0800 hours the next morning, the 6th, I boarded a C-123 bound for Phan Rang. After a thirty minute wait the aircraft commander told me he had an indefinate delay, and that I might check the ships across the strip. As I was talking to one of the pilots on the opposite side of the field, I watched my orginal aircraft take off without me. The aircraft commander on the ground told me he would be

taking off for Nha Trang, and that I might be able to get back to Phan Rang from there. Desperate for a ride, I took his offer and was airborn about 1100 hours for Nha Trang. Five minutes out of Bien Hoa the C-123 turned south toward Saigon. The crew chief told me that they had been diverted to Tan Son Nhut, and in ten minutes we were on the ground. I looked out of the tail ramp as we taxied down the strip and saw the aircraft that I had originally tried to ride. Jumping out of one plane and running to the other, luck was finally with me, and I took off for Cam Rahn Bay in less than five minutes.

Landing at Cam Rahn Bay airfield, I found the VHF teams with the other communications vehicles waiting in line to be loaded out. SSG Valintine, one of the VHF team chiefs, informed me that the Movement Control Officer, Lieutenant Dan Struble, had told him that it would be several days before the brigade headquarters elements would be out-loaded; the maneuver elements would go first. I contacted Lieutenant Struble, explained the need to move the signal vehicles early; and by night my equipment and men had closed into Bien Hoa, where the brigade was marshalling for the forthcoming operation.

CONVOY TO LAI KHE

On 8 December I was told by the company commander that I would be a march unit commander in a serial under the commanding officer of the New Zealand artillery battery, and to report to the New Zealand battery CP for a briefing. That evening the battery commander gave a detailed briefing and the procedures to be followed. The route was in use by the 1st Infantry Division, but not constantly secured. Signal call signs and primary and alternate frequencies were distributed for the convoy control net, and instructions given to report several check points. One of the American

artillery officers would be on the convoy control net as an aerial observer. For convoy protection, we had supporting fires of several long range artillery units in the area. At no time would we be out of the range of at least one tube. In addition, tactical aircraft would be on call, and an Army gunship would be over the convoy at all times. In an emergency, the artillery battery in the serial was prepared to go into firing positions by the road.

Each vehicle in my march unit, all signal elements, would have an NCO vehicle commander. When I returned to the platoon area I assembled all of the vehicle commanders. I passed along information such as route, time of departure, expected time of arrival, and order of march. We went over the recently established convoy SOP to be sure everyone understood it. In addition to the men and equipment from the two platoons, a radio team from the 54th Signal was with us; a detailed explanation of our SOP was given to the team chief. (Appendix 5)

The following morning, prior to mounting up, everyone in the march unit assembled for a final briefing. Each point in the SOP was covered, and each NCO had an opportunity to study the route on the platoon's one map. I inspected each vehicle to see that the SOP was being followed, and conducted a quick radio check.

The march unit left the platoon area at 0800 hours, departed the assembly area at 0900 hours, and crossed the SP about 1000 hours, with a 50 kilometer trip ahead.

My jeep crossed the RP on the east edge of Ben Cat just after 1700 hours, the trip completed without serious incident to my march unit. Vehicles both to the front and rear of our march unit encountered sniper fire and several vehicles were destroyed by command detonated mines.

OPERATIONS OF THE FORWARD CP GROUP

The brigade advance party had established a Forward CP in the rubber plantation east of Lai Khe. Lieutenant Kusenburger, communications platoon leader, had supervised the communications elements flown in with the advance party and had established communications with the 1st Infantry Division through the 121st Signal Battalion.

When my march unit arrived, both the organic AM radio teams and the supporting Single Side Band team attempted to establish contact with Phan Rang as soon as they closed into the new CP. Although the AM radio, an AN/VSC-1 could monitor the more powerful transmitter approximately 180 kilometers away at the base camp, an AN/GRC-26D; the AN/VSC-1 at the local terminal could not get an acknowledgement from the distant station and did not succeed in entering the net. The SSB radio, a KWM-2, established a voice link in a very few minutes. This link was used primarily as a phone patch to Phan Rang for logistical traffic throughout the remainder of the operation.

As soon as the various members of the march unit had been positioned in the brigade Forward CP, I was instructed by the signal officer to establish a VHF system to the units just outside of Ben Cat. Up to this time the only means of communications to these units had been by FM radio.

I took SSG Garrison's team to the vicinity of the 2-502 Infantry where he set up on the edge of the rubber growth and established radio contact with Sgt Maher at the Forward CP in less than thirty minutes. While SSG Garrison was setting up the VHF terminal, I contacted the communications officer of the units in the area and coordinated a wire plan to tie in the units to the brigade headquarters.

On previous operations we had established an informal SOP that the subordinate units would lay the short lines to tie their switchboards with the VHF terminal. This system was terminated with one common user circuit each to the 2-502 Infantry and the 2-320 Artillery, with a sole-user (point-to-point) circuit to each of the two battalions' operations section. The remaining units tied in to the nearer of these two units for access to the area telephone system.

Captain Cleve J. Burd, a former company commander of the signal platoon's parent company, arrived at Lai Khe the afternoon of the 9th. Captain Burd accompanied the CP group with Captain Meyer and subsequently replaced Captain Meyer as the brigade signal officer on 11 December.

The planned operation was characteristic of most sweep and clear operations in Vietnam; the maneuver battalions moved along one edge of the operational area then swept forward, moving both on the ground and by means of helicopter lifts. The operation started on the edge of a rubber plantation, moved through rubber and then into dense jungle. Maneuver units moved to the operational area by foot and helicopter; the artillery and brigade troops moved by organic vehicles.

Around 2000 hours on the 11th, B52 bombers began a raid on the jungles 15 to 20 kilometers to the west of our CP at Lai Khe. Just prior to that time the 2-502 Infantry began moving to the rubber plantation by foot. They maintained a rear CP in the vicinity of SSG Garrison's VHF terminal, but their command communications consisted of back-pack radios, AN/PRC-25's.

That night the brigade had its first significant loss of communication since arriving in Vietnam. A squad-sized element employed in the "checkerboard" concept of saturation patrolling lost contact with its company headquarters,

Company A, 2d Battalion, 502d Infantry (Abn). The squad made contact with a larger Viet Cong force, but without communications the squad could not request assistance or fire support.(8)

When radio contact was lost, the battalion communication officer requested brigade assistance in the form of an aerial FM relay. The request was forwarded and an Army O-1 "Bird Dog" landed at the Lai Khe strip. One of the FM section RTO's went aloft and attempted to contact the unit both with aircraft radio and with an AN/PRC-25 he had taken up, but with no success.

PLANNING THE TAC CP

The following morning the brigade S3, Major Marcus Hansen, alerted the brigade headquarters to prepare a TAC CP to move in support of the maneuver battalions. The main consideration used by the brigade in deploying advance CP's was to prevent a loss of communications based on the scheme of maneuver. With the loss of communication experienced the previous night, it was expected that FM communications would be lost as the operation moved further away from the established CP's.

The brigade signal officer informed me that he would accompany the TAC CP, and I would supervise the signal elements in the TAC CP: one VHF team, a wire team, and two FM radio teams. The communications platoon leader, would supervise the operations of the remaining elements of both platoons at the forward CP.

Although a signal annex to the operation order was written, it did not include the missions of the two platoons except in very general terms. The internal missions were given out on a piece-meal basis as the need arose, rather than as planned commitments. Initially the other subordinate leaders and I were uncertain as what was to

be expected of us. Therefore, to satisfy any contingency, we took every spare radio, telephone, generator, and man that we could move.

OPERATIONS AND MOVEMENTS OF THE TAC CP

On the morning of 10 December the TAC CP moved out in convoy. The convoy briefing that morning was not detailed, but it was pointed out by the S3 that the area we would enter had long been under the Viet Cong domination. All movements would be tactical.

The signal elements consisted of the signal officer's vehicle, two AN/VRC-49 vehicles from the FM radio section, the wire team three-quarter, the AN/MRC-68 terminal, and my vehicle. With sixteen enlisted men and three officers, the signal element constituted more than half of the TAC CP; the command and staff group consisted of about eleven enlisted men and seven officers.

In addition to each man's XM-16A1, the wire team had a 3.5 inch rocket launcher with a case of ammunition, and my driver had a M-79 with about eighteen rounds. Each man had a minimum of one basic load of ammunition for his rifle, and I had several smoke grenades for signaling.

Recognizing the restricted means available to the CP to defend itself against a prolonged attack, the CP group moved with and located in the area of the artillery battalion and the other brigade troops.

The move to the first CP site was very slow. The cavalry troop, assisted by engineers, was clearing the road to the front of the column.

Just before noon the CP group halted and the order given to set up operations. Leaving the radio and wire teams under the supervision of SSG Duncan, the acting

communications platoon sergeant, for the initial internal CP installation, I devoted my attention to the VHF installation. This was the platoon's first operation in this type terrain; previous operations had been in the highlands or the coastal plains. I was especially concerned about the ability of the VHF radio signal to penetrate the dense jungle surrounding us.

The VHF terminal was set up on the edge of a woodline. The initial propagation of the directional antennas would travel across a stream and rice paddy area before crossing the low wooded ridges between the TAC and Forward CP's. Voice radio contact was made as soon as the antennas were connected. While the VHF team was setting up, the wire team had run four wire pairs the forty feet over to the AN/MRC-68. In less than thirty minutes the four channels were checked out from end to end. One circuit was installed as a sole-user from the operations element in the TAC CP back to the operations element at the Forward CP. The operations center at the Forward CP also had sole-user circuits to each subordinate unit rear CP and to the 1st Infantry DTOC. At the Forward CP each of these sole-user circuits terminated in a SB-22 switchboard operated by the duty officer or NCO. Through this switchboard the commander at the TAC CP could have a direct telephone link with the DTOC.

The TAC CP radio teams established stations in all FM nets, duplicating the operations of the Forward CP. The Forward CP would continue to operate as the net control station (NCS) on the brigade command net, with the TAC CP as an alternate NCS. In addition to the command net, the FM radio section operated in the 1st Infantry Division command net and maintained the NCS for the brigade air-ground net. The S4 section operated the NCS of the brigade FM

admin-log net. All FM stations at the Forward CP operated with AN/PRC-25's and RC-292 antennas. The TAC CP operated with vehicular radios, either the AN/VRC-46 or -49.

Returning to the switchboard, I found the internal CP was wired in. I then took a wireman with my vehicle and driver to lay the lines to the engineer company and the cavalry troop, about 300 meters to the south just off the road. The artillery battalion laid two pairs over to our switchboard, a distance of less than 200 meters.

The two separate companies, the brigade TAC CP, and the artillery battalion were organized into a continous perimeter, with the engineers assisting in manning the brigade CP portion.

Even though the maneuver battalions were less than 8000 meters from the TAC CP at that time, remembering the loss of communications experienced by the 2-502 Inf, the signal officer requested an aerial relay during the night for the FM command net. During the day, FM communications had been lost intermittently with the battalions as they moved through dense wooded areas with the back-pack radios. The losses were blamed on the dense vegetation. Just before sunset Sgt Warren, FM radio section chief, entered the FM command as the RTO on the aerial relay overhead. Using men from both the AM and FM radio sections, Sgt Warren maintained aerial relays on call throughout the remainder of the operation.

From late afternoon on the 10th when the initial installation was completed until the next afternoon, no unusual activities took place. The signal elements used the time in operating the switchboard, FM radios, and VHF terminal, and preparing individual positions. Captain Meyer left the CP on 11 December and Captain Burd took over as the brigade signal officer.

The following day the maneuver battalions began moving out of FM radio contact, dictating a second TAC CP move. The Forward CP was contacted and an aerial relay requested to cover any loss of direct FM communication while we were moving. At the same time the Forward switchboard and VHF terminal were notified that we were moving.

The radio and VHF teams dropped their antennas and began packing while the wire team packed the switchboard and recovered wire. Rather than trying to salvage the recovered wire, the wiremen dumped it in a foxhole over other refuse, doused the whole with gas and burned it beyond recovery.

The signal elements were packed and ready to move in twenty minutes. As soon as our vehicles pulled onto the road, the TAC CP moved to the next site.

The new position was about the same straight-line distance from the Forward CP, around 7750 meters. Intervening between the TAC CP and the Forward CP were two masking ridgelines. In addition to the terrain mask, the ridges were topped by dense hardwood forests, with a canopy averaging 30 meters above the forest floor. Facing the terrain mask, I would have ordinarily used the forty feet maximum antenna height with the VHF terminal; however, the artillery battalion was massed directly across the road and needed as much firing clearance as possible. The twenty feet high antenna we initially tried proved satisfactory.

Sgt Maher back at the Forward CP had experienced an antenna problem of a different type. Terminating two VHF systems at his truck, he was required to set up four antennas in and around the rubber trees. Due to the difficulty in maneuvering the guy lines around the trees in the restricted area of the small perimeter, he tried twenty feet high

antennas on both of his systems, placing the antenna heads below the level of the rubber leaves. Much to our surprise each system made excellent contact, and apparently the lack of true "line-of sight" clearance did not affect the signal strength.

The wire and radio communications were re-installed in the new CP similarly to the original TAC CP site. The only significant difference was the addition of the two battalions organic to the 1st Infantry. They moved into the CP area as the brigade reserve and located along the axis of the road.

The first platoon communication problem occured when the RT-524 components of the FM radios began to go out one by one. Since we were operating on three nets and had six RT-524's on the four signal vehicles, the immediate solution was to switch units from one vehicle to the other. During the same period, the VHF team began having difficulty with their generators. The spare generator was put in operation and the team worked over the two faulty pieces, but with no success. A call was made to the maintenance section at the Forward CP, alerting them of our problem, and the bad generators and radios were placed on the next UH1D supply ship returning to Lai Khe. Module replacement by the radio section solved the problems with the RT-524's, but the PE-75 generators had to be sent to the direct support maintenance company. The generators continued to be a problem the entire operation.

The TAC CP was located on the edge of the woodline in the ruins and yard of a farm. In the yard and by a thatch hut were small bunkers, common to the dwellings in this part of Vietnam. The entrance of the main bunker adjacent to the hut was stained by the purple smoke used in clearing

the bunker. On the other side of the road from the farm, rice paddies spread to the edge of the SONG THI THIN river; on the other side of the river lush growth grew up to the edge of the forest about 700 meters away.

The artillery firing positions were on the dry paddies next to the road, firing over the TAC CP to the north and west in support of the operation. The only hostile fire received by the CP was from a sniper firing across the artillery positions from the opposite side of the river. The artillery battery responded by returning 105mm direct fires at a range of about 250 meters. No further sniping was encountered. The cavalry troop fired 81mm H and I fires close in to the perimeter throughout the night.

An airmobile assault was planned for one of the reserve battalions currently located with the brigade TAC CP. With the cavalry troop commander, Captain Wilson, and the brigade S3, I went on an aerial reconnissance of the operational area. I was able to confirm that there were no significant terrain obstacles in the area, but that the dense growth would probably continue to hinder FM communications.

The 2d Battalion, 502d Infantry had brought an AN/VRC -46 radio mounted on a M-274 "Mechanical Mule" to the battalion CP. Whenever the battalion could stop to set up this radio and a RC-292 antenna, FM communications were excellent. When the battalion was moving with back-pack radios, the ground stations at the brigade CP's would occasionally lose contact.

As the helicopter assault and continued ground operations moved the units further away, the need arose for the coordination of long range fire support. The VHF circuits were revised to give the artillery battalion Fire Direction Center (FDC) a sole-user circuit to the 1st Infantry DivArty

FDC, as a "quick-fire" channel. This allowed the direct coordination of fires on a continuing basis between all of the artillery units.

At 1600 hours on the 14th, we were notified that a 250 pound incendiary bomb had been found half-buried just south of the CP. I went over to the VHF terminal to alert them for a possible move because of the bomb and found that the bomb was just across the road from the terminal, less than fifty feet away. The VHF and switchboard operators notified all the distant terminals that we were shutting down until the bomb was detonated and that the CP would be on FM communications until further notice.

Because of the possibility of damage to any equipment left behind, the entire CP was struck and moved 300 meters north up the road.

The loss of FM communications to the subordinate units was prevented by the brigade commander, Colonel Timothy, going overhead with a command and control helicopter. A greater problem was caused by the mass of troops and equipment congested on the road, including at least two artillery batteries, in what seemed an almost "administrative halt" to the operation. Fortunately, the Viet Cong either did or could not take advantage of the confusion. Bomb disposal specialists were flown in, and they detonated the bomb around 1730 hours. Accompanied by a driving rain, the TAC CP and adjacent units closed back into their positions. We had re-established all communications by dark, but spent a miserable night throwing up shelters in the rain and setteling down in the water to wait for morning.

TERMINATION OF THE OPERATION

The TAC CP remained in the same location until the termination of the operation on 16 December. The motor movement back to Lai Khe was halted by the discovery of a 155mm projectile wired as a command detonated mine on the side of the road just across the bridge from Ben Cat. When the mine was disarmed the convoy continued back to the Forward CP.

The operation had covered a large area previously controlled by the enemy, uncovering several base camp complexes and cashes. The largest Viet Cong force contacted was estimated as platoon-sized. The use of the checkerboard concept of saturation patrolling and multi-battalion sweeps had insured that the Viet Cong were not continuing the assembly of a major force in the area. The signal elements under my supervision had successfully maintained our portion of the brigade communication system.

ANALYSIS AND CRITICISM

The points discussed in this section are those I consider important to the success or contributing to a problem of Operation Checkerboard. This operation took place when American units were just beginning large airmobile operations, and many things that are common-place now, were then unique. Large cargo helicopters were not commonly available to move artillery and cargo. Resupply of repair parts and end items was only beginning to be readily available. Operationally, the previous six months had matured the brigade as a separate unit.

1. The efficient use of the two platoons' resources was largely a result of the functional reorganization of the platoons. The lack of unity of command distracted from the platoons' efficiency. Under the operational control of the signal officer but commanded by the headquarters commandant, the platoons' response to the split command and operational control was not always satisfactory. Conflicting personalities increased the difficulty in coordinating these two control channels. The goal of the three signal officers under which I worked was the establishment of a signal company. This would add administrative and logistical responsibility to operational control for the two platoons, strengthening the platoons' command structure. The flexability and adaptability of the teams and their NCO's allowed their shifting from one platoon to another, with little loss of efficiency. This success was due primarily to excellent team chiefs and the high state of proficiency of most of the teams.

2. The priority of movement of signal equipment and personnel was not properly coordinated on the initial move. This was recognized when the equipment failed to appear and the mistake was not repeated on the deployment to Ben Cat. A greater problem was the failure of the signal officer to be completely familiar with the planned scheme of maneuver. Apparently, this was the reason for the failure of the signal officer to give the two platoons more than general guidance when the TAC CP deployed. This may have been due in part to some change in plans. Rather than operating separately, I feel the signal officers at all command levels should constantly be an essential member of the plans and operation section, rather than operating independently.

3. I feel the lack of any enemy action against my march unit can be contributed directly to the strict adherence of the members of the convoy to our SOP and to the basic soundness of the SOP. The capability of the VC to react was demonstrated when they struck both to the front and to the rear of us. This SOP was based on a directive issued by the brigade commander, and most of the points should have been followed by the entire convoy.

4. The single side band radio TOE to the platoon, the AN/VSC-2, had not then been issued. We had the old AN/VSC-1, which had as its basic radio the AN/GRC-19. The operational capability of this radio is very dependent on the training and close attention of both the operator and the organizational maintenance personnel. We had operated over longer distances (200 kilometers) from An Khe to Nha Trang than attempted on this operation, but the variables--men, antennas, terrain, and equipment--failed to be properly controlled on this operation. On a later operation we

operated operated over 300 kilometers, proving that good operators and radios could accomplish the mission.

The single side band radio demonstrated its capability to communicate where the AN/GRC-19 could not. The radio used was the KWM-2, a military adaptation of a radio widely used by ham operators. The Army has recognized the difficulties in operating the AN/GRC-19 and associated sets and has begun replacing them with the AN/GRC-106, a single side band set.(5:7-18)

5. FM communications in Vietnam are the best ever experienced by the U.S. Army in combat, due entirely to the new family of radios. Of particular importance is the AN/PRC-25 back-pack radio. After Operation Checkerboard, it became well known that the primary cause of loss of communications with the AN/PRC-25 was due to moisture damage to the Handset H-138/U. The squad in the 2-502d Infantry that lost contact with its headquarters had just swum across a river, soaking the entire radio. Replacement of the handset returned the radio to full use.(8)

As a field expedient solution the handsets were often encased in plastic bags. Since then a new Handset, H-189/U, has been issued that should solve the moisture problem.

6. On each CP move I made, emphasis was placed on the use of wire communications until the very last moment, as a security measure. While I agree with this practice, it created a problem for the wire teams given the mission to recover the wire due to the short time allotted. While in the ZI the cost of wire made recovery practical, at the time of this operation we felt that the field wire (WD-1/TT) was not economical to recover. However, the cost of WD-1/TT is around $50.00 for an 800 meter roll, which multiplies into about $1250.00 (50 kilometers) worth of wire for

this operation alone. I feel that a fast, easy means of wire recovery would save a considerable amount of money, and would prevent wire from being left in the battle area for the VC to salvage.

7. The PE-75/AF generator was issued with the AN/MRC-68 VHF terminal. No longer Standard A, the generators were old and constantly needing major repairs at organizational level. This problem had been recognized prior to Operation Checkerboard, and twelve replacement generators had been requisitioned with an "A" priority and endorsed by Colonel Timothy. The generators had not been received by the platoon six months later; although at least two of the generators had been issued to the brigade and diverted to other uses. Meanwhile, the PE-75/AF generators continued to be a problem to the platoon.

8. My failure to order a complete sweep of the CP could have been disasterous if the buried bomb had detonated. In an area known for booby-traps, hidden tunnels, and command detonated mines, a detailed search of the CP area should have been made as soon as the initial installation was completed. Constant attention was paid to perimeter security and individual positions, but the perimeter and positions would have been relatively ineffective against men or mines hidden within the CP.

9. The most unique activity of the 1st FASC Platoon was in the operation of the VHF section. To the best of my knowledge, this platoon ~~is~~ was the only unit providing VHF communications at brigade level in the U.S. Army. The use of VHF as a replacement of wire lines was highly successful. In an environment where the U.S. forces rarely controlled the countryside, especially at night, wire lines were constantly cut or long sections removed. Not only was this a loss in communications and material for the U.S.

forces, but a primary source of wire for the Viet Cong. The VHF operated over enemy controlled ground, and also allowed telephone-to-telephone communications over terrain where it would have been impossible to lay wire.

We found that the restrictions associated with the VHF radios often could be overcome. This operation was our first in rubber plantations and across dense jungle. At the short ranges used, less than ten kilometers, satisfactory communications was achieved shooting the directional signals through the dense vegetation. Prior to this operation we had operated shots of over fifty kilometers, proving long range operations are possible in certain terrain.

The most significant aspect of the four channel operation was the availability of multiple channels of communications to the headquarters elements. When staffs of various echelons of command must coordinate, in addition to command and control, one channel such as that provided by a radio net is not adequate.

This operation demonstrated the varied applications of VHF systems. One system was installed in direct support of a battalion operation at Phan Rang. The terminal at the brigade Forward CP provided general communications support to units located east of Ben Cat through the four channels to that location, and also linked the two echelons of the brigade CP. One of the channels on the latter system provided a special link for artillery fire support coordination centers. As applied in this artillery channel, the VHF terminal also demonstrated its capability to route circuits to their termination, eliminating wire splices or switchboard connections. This is accomplished internally by the VHF operator and reduces the possibility of a loss of communication due to wire failure or switchboard error. The use of the internal patch panel in the VHF terminal also allows a

greater flexability in routing circuits, which also provides the signal commander better control of the system.

A limitation of the VHF terminals, displacement time, was minimized on the operation by the efficient and effective operations of the VHF team with the TAC CP. Each of the platoon's teams had highly skilled NCO's and operators. The VHF set up and tear down times did not exceed that of the FM radio and wire teams, and in fact was not considered a limitation when operating with my platoon.

The large bulk and transportation problems associated with the AN/MRC-68 in an airmobile enviornment has been solved by the introduction of the AN/MRC-111 series of quarter-ton mounted VHF terminals. These sets can be moved by UH1D helicopters, and their capabilities are the same as the AN/MRC-68.

The VHF section's operations fulfilled a need dictated by the operational requirements of a separate brigade carrying out combat operations in widely dispersed areas. I feel the use of VHF systems at brigade and lower level enhances the brigade's over-all communications system and can be successfully applied in many varied situations. The training and maintenance requirements are no greater than those associated with other types of communications equipment found in the infantry brigade.

10. The failure of the AM radio teams to establish communications was largely due to lack of training of both the team chiefs and the operators. These men, with their typing ability, were often used as clerks prior to being committed to Vietnam. This group was not as well trained in their job as the remainder of the platoon. This lack was corrected over the months following Operation Checker-board.

11. The very success of the communications operations was characterized by the seemingly routine nature of the two platoons' activities. A new operational enviornment, a change of signal officers, changes in platoon organizations--these were all accepted by the men and the mission completed .

LESSONS LEARNED

1. The use of organic VHF multi-channel radio relay equipment significantly adds to the capabilities of a brigade communications system.

2. Training of signal specialists must be continous to retain learned skills and to develop the finesse desired in support of military operations. This is an old problem, and must be corrected by command emphasis to overcome the pressures of other commitments.

3. Another old problem is the need to concurrently intergrate signal planning with the planning of the scheme of maneuver. This is sometimes overlooked by the operations officer or his subordinate, the signal officer. The signal officer should be primarily a planner and an operator only when absolutely necessary.

4. The organization of the brigade headquarters communications platoon in a ROAD airborne brigade is not sufficient to support the brigade on a separate mission. The signal unit attached to support the brigade must be tailored to the mission and the operational enviornment; as opposed to the arbitrary attachment of a TOE direct support signal platoon.

5. Convoy SOP's and unit training should receive continued command emphasis.

6. Signal personnel should never be allowed to become complacent. A "sense of urgency" must be maintained, or they become dulled by the nearness of battle and the inability on their part to become directly involved in combat. This was a result of training in my platoon and motivated the individuals and teams to superior performance even without direct supervision.

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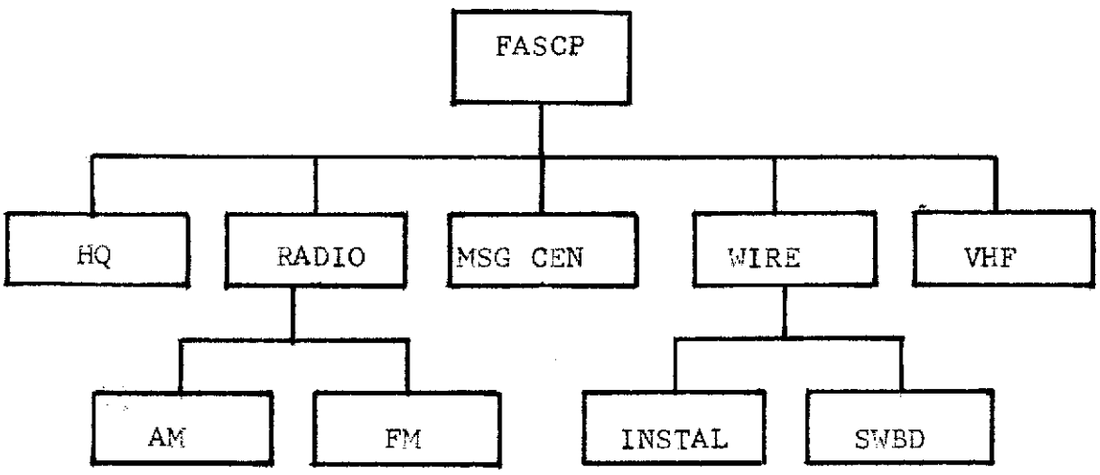
APPENDIX 1: ORGANIZATIONAL CHARTS

1. TOE Organizations

A. 1st Forward Area Signal Center Platoon



B. Brigade Communications Platoon