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2. Transmitted herewith is the report of BG John G. Hill, subject as above.

3. This report is provided to insure appropriate benefits are realized from the experiences of the author. The report should be reviewed in accordance with paragraphs 3 and 5, AR 1-26; however, it should not be interpreted as the official view of the Department of the Army, or of any agency of the Department of the Army.

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AVHDO-DO

SUBJECT: Senior Officer Debriefing Report -
BG John G. Hill

Assistant Chief of Staff for Force Development
Department of the Army
Washington, D. C. 20310

1. Inclosed are three copies of the Senior Officer Debriefing Report
prepared by BG John G. Hill. The report covers the period 30 June 1970
thru 18 May 1971 during which time BG Hill served as Commanding General,
1st Brigade, 5th Infantry Division.

2. BG Hill is recommended as a guest speaker at appropriate schools
and joint colleges.

FOR THE COMMANDER:

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DEPARTMENT OF THE ARMY
HQ, 1st Infantry Brigade, 5th Infantry Division (Mech)
Camp Red Devil
APO San Francisco 96377

AVBL-CG

SUBJECT: Senior Officer Debriefing Report (U)

Commanding General
United States Army, Vietnam
ATTN: AVHDO-DO
APO San Francisco 96375

Country: Republic of Vietnam
Debrief by: Brigadier General John G. Hill, Jr.
Duty Assignment: Commanding General, 1st Brigade, 5th Infantry Division (Mechanized)
Inclusive Dates: 30 June 1970 - 18 May 1971
Date of Report: 18 May 1971

1. (C) The following is submitted in accordance with the provisions of AR 1-26 and UARV Reg 1-3, Senior Officer Debriefing Report.

2. (C) GENERAL.

   a. The brigade, officially designated as the 1st Brigade of the 5th Infantry Division (Mechanized), functioned as an independent brigade, directly subordinate to XXIV Corps, and conducted operations in Quang Tri Province during my tenure of service. A troop list is included as ANNEX A.

   b. A brief description of the area of operations is included as ANNEX B. Operations have been conducted on all types of terrain from the flat tide lands along the South China Sea to the east; throughout the Piedmont in the center and in the mountainous terrain in and around the Khe Sanh Plateau to the Laos-Vietnam Border in the west.

   c. During the report period, Operation Green River was terminated; Operation Wolfe Mountain was initiated and terminated; Operation Lam Son 719 was initiated and terminated and Operation Montana Mustang was initiated. Two fire support bases — AH and C2 — along the DMZ and two combat
bases, Quang Tri and Dong Ha, were continuously occupied by elements of
the Brigade. Other fire support bases were strengthened and occupied
by elements of the brigade and manned as required in support of combat
operations. The brigade conducted unilateral and combined operations
in cooperation and coordination with both ARVN and regional forces. Day-
to-day small unit operations were conducted around population centers and
along the DMZ, where recurring enemy contacts required continuous
artillery and air support. Extensive ranger patrols, air cavalry reconnais-
sance and surveillance flights were conducted daily to detect and inter-
dist enemy infiltration in the Recont Zone. Reconnaissance in force,
operations and artillery raids, were conducted into the Recon Zone when
significant targets presented themselves. Of special significance was
Operation Lam Son 719 during which the brigade opened Highway QL-9 and
secured Quang Tri Province west to the Laos-Vietnam Border in support of
ARVN cross-border operations, APPENDIX C.

3. (C) Six Command Programs.

Based on an initial estimate of the brigade and discussions with incum-
bent commanders, six command programs were instituted which were designed
to focus attention on areas which I desired to emphasize. The six
command programs are Discipline and Morale; Small Unit Tactics; Resources
Management; Maintenance; Development of Post-Bases; and Vietnamization.
The programs overlapped in certain areas and are mutually supporting, e.g.,
as facilities improved, so did maintenance, as shop spaces were added or
improved.

4. (U) Discipline and Morale. While this program was the keystone of
the entire effort, the majority of techniques and sub-programs are in
general use and not unique to this command. It should be noted, however,
that disciplinary measures were tied directly to combat requirements to
increase the soldier's understanding and acceptance of the need. For
example, uniform discipline emphasized the wearing of the steel helmet and
inspections were centered on combat readiness inspections of units preparing
to move to the field.

5. (C) Small Unit Tactics. In addition to unit training programs, unit
schools, a critique program, and similar activities, three developments
merit special comment.

a. Modification of Mechanized Tactics and Loads. Analysis of mecha-
nized operations showed that the majority of injuries were sustained by
personnel who were riding on top of the tracked vehicle where they were
exposed to small arms fire and fragments from detonating RG5's, mortar
and mines. Additional injuries were also sustained when personnel were thrown from the track when it executed a quick turn or a sudden stop, detonated a mine, or encountered a sudden dip in the terrain. The majority of these injuries could have been prevented had the personnel been riding inside the M113A1 and taken advantage of the protection afforded by the aluminum hull which does not spall, the belly armor which reduces mine damage, and the built-in hand holds. In addition, the danger of fuel fires is negated by the diesel engines. Accordingly, the policy of riding inside armored vehicles was enforced. Since only four men can ride from the M113A1 cargo hatch, the eleven man infantry squads were too large for a single carrier. Accordingly, the Brigade's M113A1 assets were redistributed and the mechanized rifle platoon reorganized into a command element and five rifle squads. This reorganization permitted the entire squad - vehicle commander, driver, and four riflemen - to ride protected inside the M113A1. With two 7.62mm and one .50 cal machine gun on each M113A1, a weapons squad was not required. This reorganized, six-vehicle platoon, provides a mobile, highly flexible, well protected, heavily armed unit, which is capable of providing a dismounted force of 30 men to close on an objective most effectively.

b. Conduct of Combat Air Assaults. Combat assaults normally provide successive fire on the LZ by TAC AIR or artillery followed by ARA. This use of ARA does not add significant fire power, precludes evaluation of the effectiveness of the preparatory fires prior to the entry of lift ships on short final and may result in landing on a hot LZ. Unless the terrain is so "critical" as to justify the acceptance of the increased risk of high casualties, assaults into "cold" LZ's are always the preferred course of action. In Quang Tri Province, very little of the terrain is considered critical enough to justify the risk of taking high casualties. As a result, the tactic used in the Brigade was to immediately follow the TAC AIR or artillery prep with a reconnaissance of the LZ using a scout team from the air cav troop. In addition to providing a trained observer with covering fire to evaluate the success of the prep, this technique permits the commander to exercise several options prior to the entry of the lift ships on short final when they are most vulnerable. If the prep was successful, the commander can lead the force as planned; if the prep was marginally successful and a degree of resistance remains, the scout can identify the pockets of resistance and direct additional air, artillery or ARA to neutralize them; if heavy resistance is encountered, then the decision to either refire a more extensive preparation or divert to an alternate LZ can be made. The value of this tactic was proved on at least two occasions during Operation Len Son 719, when after a heavy prep of the LZ, the scout team detected an anti-aircraft ambush which was still effective. Although the scout team suffered casualties, the lift ships were diverted and completed a successful assault on an alternate LZ.
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10 May 1971

6. (C) Resource Management. Efforts to insure that all resources were brought to bear on the offensive missions, included measures to coordinate the intelligence effort, to improve the scout dog availability, to increase control over munitions expenditures, and many others. As one example, the results obtained in reducing the use of high cost air transportation by substituting surface transport are shown in ANNEX D. A description of two changes necessary to improve communication procedures is at ANNEX E.

7. (C) Maintenance.

a. Organization of Maintenance Support. Analysis of the maintenance situation pointed towards inexperienced personnel, parts shortages and marginal facilities. Accordingly, it was decided to build competency at company level in operator/crew maintenance and to consolidate organizational repair, scheduled maintenance and parts supply at battalion level at the fixed facilities at Quang Tri and Dong Ha Combat Base. Each platoon was assigned a mechanic and each line company retained a recovery capability. All other maintenance personnel and equipment were consolidated at battalion level, which provided a centralized pool of skills and supplies, resulting in a much improved maintenance situation overall. Further, air transportation, when available, permitted the lifting of equipment and parts quickly to forward sites.

b. Scheduled Maintenance. Specific shop spaces were dedicated to Q-service performance. Schedules were adjusted to permit each platoon
as a unit to have a one-week maintenance period for this service. In addition to preserving unit integrity, this allowed maintenance to be conducted under the direct control of the unit leaders, standardized Q-services with adequate quality control, and provided additional maintenance training for the crews. Also programmed was a 24-36 hour maintenance period for each company/troop every seven days. During this period, material and personnel maintenance was conducted in a secure area.

d. Direct Support Maintenance. The direct support maintenance philosophy was to provide maximum customer service. In spite of the lack of appropriately skilled personnel and repair parts, the brigade's DSU, through internal reorganization, improved procedures, and reorganization of work schedules, was able to support equipment densities in excess of rated capabilities. For example, the truck and wheeled vehicle repair sections, supported a 15% overload; the generator repair section, a 10% overload and the radar repair section, organized to support 20 radar sets, supported 45 sets. In keeping with this philosophy of maximum customer service, the DSU accepted all equipment for repair regardless of its condition of organizational repair, and when required, performed maintenance below their echelon of support. On-site repairs were emphasized and heavy use was made of DSU contact teams, often air transported to forward areas.

d. Operations Research. In September, 1970, the Brigade undertook an experiment by applying business administration/operations research techniques to maintenance. A team of one officer and one enlisted assistant, permanently assigned to this duty, provided statistics such as a monthly "Deadline Index of Primary Systems for Combat Track Vehicles" and a "Major Component Usage Distribution Report", showing actual major component usage for combat vehicles per month per 1000 miles, and did on-site work analysis. These reports facilitated review and evaluation, resulting in improved quality control and better supervision.

e. Supply. In spite of continued efforts by the command and the supporting commanders, the parts supply system was not able to meet actual needs. Command emphasis on controlled substitution and cross-leveling of parts between units significantly reduced the number of deadline days. Analysis showed that failure to use controlled substitution and cross-leveling of parts would have increased the deadline of M551's by a factor of 2.7, of M571's by a factor of 2.4, and M113's by a factor of 5.

f. Development of Post-Base. While funding and construction constraints limited large scale efforts, some improvements were made emphasizing self-help. As examples, roads were upgraded, concrete maintenance pads were poured, a new PX and two central and two remote trailer-type snack bars were opened, the Crafts Shop was air conditioned (recording
a threefold increase in utilization), and the library was also air conditioned and doubled its holdings.

9. (C) Vietnamization. The brigade continued to maintain close and cordial relations with both 1st ARVN Division (PA) and Quang Tri Province Officials, the two major Vietnamese headquarters in Quang Tri. The RF/PP School, inaugurated in November, 1969, continued to operate, with instruction tailored to the needs of the Province Chief. The Brigade also continued to conduct combined and coordinated operations with ARVN and Province Forces. The experience has increased their aggressiveness and willingness to conduct operations outside the security of populated areas and fire bases. Two additional training programs were instituted during this period. A maintenance OTJ program for Vietnamese personnel was started on 10 October 1970, by the Brigade's Support Battalion. By 31 December 1970, the program completed the training of 24 men: six as organizational radio repairmen, two as office machine repairmen, eight as second echelon small arms repairmen and eight as second echelon wheel vehicle mechanics (one-quarters to five ton trucks), a few of whom were capable of third echelon maintenance. In November, 1970, the Sensor Infusion Program was jointly planned and initiated to provide for the Vietnamization of the Base III Sensor Program. The program envisioned the training of four officers, two NCO's and twenty-six enlisted men during a twelve month period. United States personnel are being decreased as ARVN personnel are added.

10. (C) Conclusion. The key to most of the efforts and problems in this report is improved discipline at all levels and more professionalism in leadership. Whether effort is directed at better squad tactics, better parts supply, better relations with the Vietnamese, better care of the individual soldier or other objectives, a more exact performance by people is essential to progress.

ANNEXES:
A = Troop List
B = Area of Operations
C = Summary of OPERATION IAN SON 719
D = Comparison of Monthly Tonnages of Supply Transported by Helicopters
E = Signal
ANNEX A (TROOP LIST) to Senior Officer Debriefing Report, EO John G. Hill, Jr., 18 May 1971

The following units served with and were assigned to the 1st Brigade, 5th Infantry Division (Mechanized) during the entire reporting period, except as noted.

- 1st BN, 61st Inf (M)
- 1st BN, 77th Arm
- 3rd Sqdn, 5th Cav
- 5th BN, 4th Arty (155-MM)
- Co P, 75th Infantry (Ranger)
- A Troop, 1st Sqdn, 12th Cav
- Co A, 7th Engineers (Cbt)
- 29th Signal Co
- 75th Spt Bn (C3)
- 43rd Scout Dog Plt
- Det 2/7th FCYOM BN
- 48th Public Information Det
- 65th Cal Det
- 407th Radio Research Det
- 517th Mil Intel Det
- TACP, Det 205, 20th TASS, USAF
- Co C, 2nd BN, 34th Arm
- 14th BN, 3rd Inf
- 3rd BN, 607th Inf
- 1st Sqdn, 1st Cav (Air Cav Tp)
- 1st BN, 62nd Arty (155-MM)

NOTES:

1. This squadron was originally attached without its Air Cav Troop. C Troop, 3-17th Cav originally OPCON to Brigade, was redesignated D Troop and assigned to 3-5 Cav in February 1971. The entire squadron remains attached to the Brigade.

2. Attached during entire period.

3. OPCON during entire period.


5. OPCON during OPERATION LAM SON 719.
The area of operations of the Brigade extends westward from the densely habitated coastal plain along the South China Sea through the sparsely habitated rolling hills of the piedmont to rugged unpopulated mountains around the Khe Sanh Plateau and along the Laotian Border.

North-South through the area, at the base of the foothills, QL-1 connects the principle cities, Dong Ha and Quang Tri, with the rest of Vietnam. The Cua Viet River connects QL-1 and Dong Ha with the coast and is the only principle water route through the Coastal Plain. Two routes run west from QL-1 through the Piedmont. From Quang Tri City, the Quang Tri River flows west through the Ba Long Valley and terminates in the Khe Sanh Plateau. The Cam Lo River and QL-9 run parallel and westward from Dong Ha through the first range of mountains where QL-9 turns south to the Quang Tri River and continues on west to the Laotian Border. Running southeast from the Khe Sanh Plateau is the Da Krong River Valley. (App 1)

The vegetation follows the population. Along the coast there are only a few garden plots tucked among the sand dunes. Along the coastal plains there are rich fields of rice, a few vegetable plots and very little wild growth. The jungle begins at the piedmont, with cleared areas where rice and vegetables are grown. Further west the thick secondary growth gives way to the primary jungle. Operations in the area are significantly affected by the vegetation, habitation and terrain.

Incls 1 & 2 to App 1 show generalized Brigade Areas of Operation.
GENERALIZED BRIGADE AO
EXCEPT DURING LAMSON 719
(ALL BOUNDARIES APPROX)
GENERALIZED BRIGADE AO
EXCEPT DURING LAMSON 719
(ALL BOUNDARIES APPROX)
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ANNEX C (SUMMARY OF OPERATION LAM SON 719) TO SENIOR OFFICER DEBRIEFING REPORT, BG JOHN O. HILL, JR., 15 MAY 1971

The Brigade's participation in Operation Lam Son 719 was essentially a four phased operation. Phase I: Attack west to secure and open QL-9 and seize and secure the airfield and surrounding area at Khe Sanh. Phase II: Conduct a mobile defense of the Khe Sanh area and assist the passage of RVN forces to the west. Phase III: Continue Phase II and conduct operations to destroy the enemy in Western Quang Tri Province. Phase IV: Assist in the retrograde of RVN and US forces to the east, and on order, close at Quang Tri Combat Base.

Phase I was initiated on 29 January 1971 with the conduct of an artillery raid to FSB Vandergrift to preposition forces for a coordinated attack to the west. On 30 January 1971, engineer elements and a troop dismounted cavalry began to infiltrate westward on QL-9 - axis of the main attack - to preposition work parties who began operations at first light to improve QL-9 from Ca Lu to Khe Sanh. Simultaneously, a cavalry task force accompanied by engineer - cavalry road building teams conducted a secondary attack in north central Quang Tri Province and initiated construction of what was to be known as Red Devil Road. At daybreak on 30 January, two infantry battalions were combat assaulted into selected airheads to seize and secure key terrain along QL-9 between Ca Lu and Khe Sanh. A third infantry battalion followed by engineers was combat assaulted into an airhead at the Khe Sanh Airstrip, the link-up of forces in the south was completed on 31 January 1971, and QL-9 was opened to Khe Sanh. The cavalry task force in the north continued to make satisfactory progress. On 01 February, 1-1 Cav Squadron attacked southwest along QL-9 and by 05 February had secured border crossing sites along the Laos-Vietnam Border.

Phase II-III was initiated on 07 February 1971. Brigade elements were continually repositioned and successfully conducted a mobile defense across an area approximately 50 km by 20 km to secure Route 9, the Khe Sanh supply area and the Ca Lu supply area. On or about 09 February 1971, ARVN forces began to cross the border into Laos in force. The Brigade continued its mission and assisted the crossing of ARVN troops. Cavalry elements reinforced by air mobile infantry in high terrain were used to screen the northern and southern flank of the Brigade AO. Infantry elements continued day to day small unit saturation patrol operations throughout the Brigade AO. Air cavalry and Ranger elements continued surveillance and interdiction operations on likely avenues of approach beyond the ground screen. On locating an enemy force, elements reinforced to fix the enemy with fire power being used for his destruction. Engineer efforts continued during this period to include the construction of Red Devil Drive from Khe Sanh west to Hill 960 and numerous other roads and tank trails in western Quang Tri Province. Red Devil Road which was completed on or about 09 February as well as Red Devil Drive were upgraded to support wheeled vehicle traffic. On 03 March 1971, OPCON of an armor Battalion Task Force was released to the 3rd Bde, 101st Abn Div (ANBL) along with responsibility for the Ca Lu area.
Phase IV was initiated on or about 16 March. The armor Battalion Task Force previously released to the 3rd Bde, 101st Abn Div (ANBL) returned to Brigade control, then attacked south along QL-9 to relieve 1-1 Cav Sqdn in place and break up an NVA attempt to interdict the road. On 26 March, the control of one Cav Squadron and one Infantry Battalion and responsibility for QL-9 to the Sanh was passed to the 11th Brigade. During this period, the brigade assisted in the reentry of RVNAF forces from Laos into Vietnam. The brigade also provided the covering force as RVNAF and US forces redeployed from western Quang Tri Province and retired to Home Station by 08 April 1971.

A mech infantry tank force from the brigade was placed on FOG to the 101st Abn Div (ANBL) during Operation Lam Son 719 for the conduct of operations along the DMZ.

The success of the operation is measured by the rapidity with which the route to the west was opened, the inability of the enemy despite regimental size attacks to cut route 9 and impede the supply effort, the denial to the enemy of the ability to put effective indirect fire on the supply base and the interception of his ground attempts to penetrate the screen and knock out the supply base byapper attack.

NOTES: Additional details can be obtained by consulting Combat Operations After Action Report, Lam Son 719, 29 January 1971 to 08 April 1971, submitted by the 1st Brigade, 5th Infantry Division (Mechanized) (SECRET).
ANNEX D (COMPARISON OF MONTHLY TONNAGES OF SUPPLY TRANSPORTED BY HELICOPTER) to Senior Officer Debriefing Report, HQ John O. Hill, Jr., 16 May 1971.

**NOTES:**
1. Monsoon Rains limit available flying time.
2. In support of a five Bn equivalent force.
3. In support of a nine Bn equivalent force.
4. Period of high intensity air mobile operations.
5. Includes retrograde operations at end of LAM SON 719. Supported force reduced from nine to five battalion equivalents after 08 April 1971.
ANNEX E (SIGNAL) to Senior Officer Debriefing Report, BG John G. Hill, Jr.,
18 May 1971

Two changes which improved communications are discussed below.

a. Tandem Use of RATT and SSB Nets. The brigade is currently
authorized the one-way, reversible, CRC 142 RATT sets. This gives no
provision for stations with high precedence traffic to interrupt a station
sending lower precedence traffic. This deficiency was overcome by colocating
the Air Request Net (SSB) equipment with the RATT to provide full duplex
voice capability to control the traffic flow over the RATT net. The SSB
subsystem was also designated as the alternate Brigade command net because
of its extended range. The high traffic handling capacity, extended range
and security of this tandem system made it the most important means of
communications in the brigade. The utility of this system was especially
noted during Operation Lam Son 719 when extended distances between brigade
elements made the RATT/SSB system the only fast and secure means of
communications to the battalions.

b. UHF for Battalion Aircraft Control. The brigade is authorized
AN/VRC 24 and AN/PRC 111 UHF radios, originally intended for use in con-
trolling tactical air strikes. The attachment of a USAF TACP reduced the
need for this net and the system fell into disuse. Despite problems
with supply and repair parts, the system was revived to provide each
battalion with its own air control net. Prior to this revival, battalion
commanders depended on their FM command net to control both their ground
maneuver elements and their supporting aircraft which resulted in cluttered
command communications as more elements - TAC Air, gunships, air cav and
additional ground units - entered the net. Engagements where available
UHF resources were utilized proved that this system increased the commanders
capability to control his forces.