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Lessons Learned

HEADQUARTERS
1ST HUERTER BATTALION, 367th ARTILLERY
APO 96235

AVF-AT-30

SUBJECT: Operational Report for the six months period ending 31 June 1966.

THRU: Commanding Officer
52nd Artillery Group
APO 96235

TO: See Distribution

SECTION I

Significant Unit Activities

1. (G) During the majority of the period 1 May to 31 July 1966, the firing batteries were detached from the battalion and placed under the operational control of various major units in order to provide additional fire support for those units operating throughout the I Corps Zone. Battery A supported the 3rd Brigade of the 19th Infantry Division on Operation PHILIPPI. Battery B moved to the I Corps and provided fire support for the 1st Brigade of the 101st Airborne Division on Operations NIGHT WALK, CHAMBER OF HORROR, and DEFEND and JOIN PHIL JONES. Battery C supported the 1st Air Cavalry Division on Operations DAVEN GROUNDS, GLEN SONG, NIGHT WALK, and HILL CLAY. In support of these various operations, the batteries expended a total of 64,921 rounds of 155mm ammunition.

2. (U) While the firing batteries were employed in the above mentioned operations, the remainder of the battalion directed the construction of a permanent combat area, the firing unit of 1A-3. In May, plans were approved to enlarge the existing living area to eventually accommodate the entire battalion. A total of 73 buildings to be constructed in five elements of the battalion were approved for construction. The construction of these buildings and various other installations within the entire area was to be accomplished using troop labor under a 118 Attendee

On 10 June 1966 the battalion 12th section drew the initial building permits to start the construction program. As of 31 July the battalion had drawn over 190,000 feet of various size lumber, 2600 bags of cement and adequate roofing and screening material to construct 16 of the various buildings. Primary emphasis was on troop billets to provide adequate
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shelter for personnel prior to the advent of the monsoon season. Selected offices and mess halls were also among the buildings programmed for early completion. Today, 16 buildings are complete and 17 are expected to be completed prior to 1 September 1966. As part of the area development program, a wall was dug and is now in the process of being cemented to provide an additional water supply for the base camp. This will diminish the battalion's dependence on external and less pure water sources and will eliminate the numerous times consuming water runs made each day. An additional phase of the base camp development has been the design and installation of electrical power lines which will provide adequate power, utilizing existing generators to service the entire base camp area. Throughout the Self-Help Construction Program, unit troop labor and organic installations have been utilized. However, technical support has more than adequately been provided by engineer personnel located within the 3rd Main Support Center.

3. (c) Specialized training was emphasized during the period for selected members of the firing batteries, to familiarize them with Fire Direction techniques. To enhance this training, a formal four week course of instruction was administered at the base camp by battalion headquarters personnel. The course of instruction consisted of 24 hours of lecture and applicatory periods of instruction, covering the following areas: Construction and use of the 6000 mill firing chart employed by the battalion for operations in Viet Cong precision type registrations using the ring track registration method; computation of barrel parameters and the evaluation of velocity error (V) corrections; use of logarithmic tables with the Special and Center of Impact Registrations; obtaining and application of data used with special equipment; the care and use of equipment pertaining to Fire Direction center; numerous hours on standard infantry procedures and the application of these procedures in extensive team drill. The course was terminated and highlighted by a live short service practice conducted in the Phu Cat mountains (rend CR 930 370), with fire being concentrated on those areas known to be Viet Cong strongholds. On the completion of the course, these personnel were returned to their respective firing batteries and now provide adequate depth to the battery Fire Direction center. The battalion also provided an instructional radar team to the 1st Air Cavalry Division to assist in training the division's newly acquired counter mortar radar detachments. This team traveled to An Ninh and provided the knowledge and practical experience required by the battalion counter mortar radar detachment during Operations PHU HU V and PHU HU I.

4. (b) During the reported period morale within the battalion was excellent. The battalion sent 10 personnel on both "Air" and "Sea" of country R&R. This constituted approximately 2% of the average present for duty strength during the period. Through personnel liaison and coordination with the Special Services Office in Qui Nhon, the following activities were enjoyed by battalion personnel:

a. USAF correspondence courses and course material.
b. Deep Sea Fishing Trips.
c. USA Variety Shows.
shelter for personnel prior to the advent of the monsoon season. Selected
offices and mess halls were also among the buildings completed for early
occupation. To date, 13 buildings are complete and 17 are expected to be
completed prior to 1 September 1966. As part of the area development pro-
gram, a well was dug and is now in the process of being extended to pro-
vide an additional water supply for the base camp. This will diminish the
battalion's dependence on external and less pure water sources and will
eliminate the numerous time consuming water runs made each day. An additional
phase of the base camp development has been the design and installation of
electrical power lines which will provide adequate power, utilizing existing
generators to service the entire base camp area. Throughout the JIC-1001
Construction Program, unit troop labor and organic facilities have been
utilized. However, technical support has more than adequately been provided
by engineer personnel located within the Qui Nhon Support Center.

3. (C) Specialized training was emphasized during the period for
selected members of the firing batteries, to familiarize them with Fire
Direction techniques. To enhance this training, a formal four week course
of instruction was administered at the base camp by battalion headquarters
personnel. The course of instruction consisted of 44 hours of lecture and
applicable periods of instruction, covering the following areas: Construc-
tion and use of the 6/40 shell firing chart employed by the battalion for
operations in Viet Nam: precision type registrations using the new two
registration methodology on definition of zero range and the evaluation of
velocity error (VE) corrections, use of logarithmic tables with sight books
and Counter of Direct Registrations; obtaining and application of data used
with special attention; the care and use of equipment possibly to fire
direction centers; numerous hours on standard battery procedures; and the
application of these procedures in extensive team drill. The course was
terminated and highlighted by a live shoot service practice conducted
in the Phu Cat mountains (coord 12.860.970), with fire being concentrated
on those areas known to be Viet Cong strongholds. On the conclusion of
the course, these personnel were returned to their respective firing batter-
ies and now provide adequate depth to the battery Fire Direction centers.
The battalion also provided an instructional radar team to the 1st Air
Cavalry Division to assist in training the division's newly acquired counter-
report radar detachments. This team traveled to 21 FRCU and provided the
knowledge and practical experience acquired by the battalion counter radar
detachment during Operations HUU HO V and SHU HM I.

4. (C) During the reported period morale within the battalion was
excellent. The battalion sent 2/0 personnel on both "in" and "out" of
country R&R. This constituted approximately 21% of the average percent
for duty strength during the period. Through personal initiative and coor-
dination with the Special Services Office in Qui Nhon, the following addi-
tional morale and welfare activities were enjoyed by battalion personnel:

a. USAF correspondence courses and course material.

b. Deep Sea Fishing Trips.

c. USA Variety shows.
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d. Vietnamese language instruction.

e. Various athletic activities to include basketball, softball and volleyball on courts and diamonds constructed within the base camp under the Self-Help Construction Program. The battalion also had numerous awards for valor and meritorious service presented to individuals which are listed below:

Bronze Star with Valor
1st Lt David R. Drake
Army Medal of Commendation with Valor
1st Lt James T. Kittman

Air Medal
Lt Col Charles C. Winger
Capt Robert E. Brown
Capt Charles F. Smith
1st Lt Denis F. Smith

Distinguished Unit Citation

SECTION II

Commander's Observations and Recommendations (C)

Part I Observations (Lessons Learned)

a. T/O: Typewriters

DIABEPSON: Battalion administration, to include the C-1 section and the personnel section, are authorized a total of three typewriters. Experience has shown that this is not an adequate number.

RECOMMENDATION: The C-1 section should be authorized a typewriter. The personnel section should be augmented by two typewriters: one additional for the finance and one for the records clerk.

b. T/O: Promotion Space

DIABEPSON: Authorization for increased enlisted strength over T/O without a concurrent authorization to promote above T/O creates a promotion block. This in turn affects initiative.

RECOMMENDATION: Authorization for increased enlisted strength over T/O should always be accompanied by authorization to promote over T/O.

c. T/O: Split platoon operations, such as those experienced by "A" battery on Operation PVAU OX XV, "B" battery on Operation PVAU OX XVI, and "C" battery on all operations throughout the period, plus the need for a twenty-four hour capability in both platoons, have increased the battery requirement for T/O trained personnel beyond the T/O assigned strength.

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DISCUSSION: To meet the increased need for persons trained in FAC techniques, the Battalion initiated a four-week school in the base camp area for commanders who showed an aptitude for gunnery. Using available equipment and materials, the men were given instruction in fire direction with particular emphasis on procedures used in Vietnam. At the conclusion of the course, the students were returned to their units and an evaluation of their abilities was furnished the Battery Commanders.

DISCUSSION: Artillery units deploying to Vietnam should anticipate this requirement and in addition to conducting training for non-FAC personnel, should bring the necessary instructional material (FAC Cell notes and lesson plans in particular) to accomplish further training in Vietnam upon arrival.

d. ITC: Prefabrication of Buildings

DISCUSSION: The new Prefabrication Program utilizes relatively unskilled troops to perform all phases of construction to blueprint standards. Unless the construction program is under unified supervision, waste of material and poor standards may result. The control of all materials was consolidated under one individual qualified in carpentry. Further, a permanent crew was assigned to construct sides, end, and rafter sections for the buildings using prefabrication forms to insure uniform production. Once prefabricated, an entire building was issued to the battery concerned and a standard structure could then be erected.

DISCUSSION: Prefabrication proved to be a successful method of overcoming waste of material and time. Utilization of manpower and material must not be left to chance.

e. ITC: Hand and Power Tools for Construction

DISCUSSION: The CCE of a combat unit does not include sufficient carpentry tools to permit construction on the scale required by a self-help program. An engineer unit is normally assigned the requirement of support, both technically and logistically, but experience has proven that heavy construction projects preclude the loaning of tools except in a limited number.

DISCUSSION: Units preparing for movement to this theater of operations should procure through supply channels a large number of tools. Hammers should be placed on crew leaders, hard ears (both sides to sharpen them), and an adequate number of steel rammers, hammers and carpenters axes. If funds allow, it is recommended that each company or battery sized unit purchase several heavy duty drill bits, with a minimum of three (3) extra blades, and adequate extension cords per unit.

f. ITC: Repair Parts

DISCUSSION: A great percentage of down time of the FAC...
DISCUSSION: To meet the increased need for persons trained in FDC techniques, the Battalion initiated a four week school in the base camp area for cannoniers who showed an aptitude for gunnery. Using available equipment and materials, the men were given instruction in fire direction with particular emphasis on procedures used in Vietnam. At the conclusion of the course, the students were returned to their units and an evaluation of their abilities was furnished the Battery Commanders.

OBSERVATION: Artillery units deploying to Vietnam should anticipate this requirement and in addition to commencing training for non-FDC personnel, should bring the necessary instructional material (FT 2110 notes and lesson plans in particular) to accomplish further training in Vietnam upon arrival.

d. ITEM: Prefabrication of Buildings

DISCUSSION: The Self Help Construction Program utilizes relatively unskilled troops to perform all phases of construction to blueprint standards. Unless the construction program is under unified supervision, waste of material and poor standards may result. The control of all materials was consolidated under one individual qualified in carpentry. Further, a permanent crew was assigned to construct side, end and rafter sections for the buildings using prefabrication forms to assure uniform production. Once prefabricated, an entire building was issued to the battery concerned and a standard structure could then be erected.

OBSERVATION: Prefabrication proved to be a successful method of overcoming waste of material and time. Utilization of manpower and material must not be left to chance.

o. ITEM: Hand and Power Tools for Construction

DISCUSSION: The TOE of a combat unit does not include sufficient carpentry tools to permit construction on the scale required by a self help program. An engineer unit is normally assigned the requirement of support, both technically and logistically, but experience has proven that engineer construction projects preclude the loading of tools except in a minimal manner.

OBSERVATION: Units preparing for movement to this theater of operations should procure through supply channels a large number of hand tools. Emphasis should be placed on claw hammers, hand saws (both files to sharpen them), and an adequate number of steel measuring tapes and carpenters levels. If funds allow, it is recommended that each company or battery aided unit purchase several heavy duty FILE Saws, with a minimum of three (3) extra blades, and adequate extension cords per saw.

f. ITEM: Repair Parts

DISCUSSION: A great percentage of down time of the I55mm howitzer is due to frequent breakdown of the firing mechanism safety latch plunger FS1 1025. Addition of the safety latch plunger to the 2nd echelon IIL will
result in immediate availability of this item at user level. Presently, replacing the safety latch plunger is a 2nd echelon responsibility. Since direct support units for the 155mm howitzers are normally not immediately available, a training program was initiated whereby user personnel were instructed on the simple operation of replacing the safety latch plunger.

**OBSERVATION:** By adding the safety latch plunger to the 2nd echelon all more realistic demand data could be compiled and the item would be stocked in sufficient quantity to minimize deadlines.

c. **ITEM:** Potable water shortage in the Field

**DISCUSSION:** During extended field operations it has been found that one water trailer is not enough to supply the battalion with sufficient potable water. This problem is often multiplied when elements, such as combat sections, infantry elements, and searchlight platoons are attached and must be supported. Additional hardships are experienced when firing batteries operate away from the parent unit. When a firing battery is further placed in split operation, that is two platoons of the battery are in separated firing positions, the problem is severely magnified. With only one water trailer available these elements must do the best they can with 5 gallon water cans.

**OBSERVATION:** This situation can be remedied by issuing an additional water trailer to units of this size. Another possibility is the availability of a collapsible rubber tank similar to the one used to transport gasoline.

d. **ITEM:** Disinfecting of medical instruments

**DISCUSSION:** Because of the climate in this particular area, it has been noted that the use of "Noniodized Solution", the normal solution in which instruments are disinfected, causes rust on the instruments in a very short period of time.

**OBSERVATION:** This situation can be corrected using "Isopropyl alcohol", a disinfecting solution easily obtained in the theater.

i. **ITEM:** All radio communications

**DISCUSSION:** The equipment available to the battalion, the M-484 A-8, has a peak output of less than 100 watts. It has been found that during the time from 2000 hours until 0200 hours, this output is insufficient to overcome the atmospheric phenomena in Vietnam and all radio messages either fail to reach their destination or arrive hopelessly garbled. The only solution that has been to attempt to route AI traffic during daylight hours and to send nocturnal messages utilizing the equipment of units nearby that possess a greater output.

**OBSERVATION:** The feasibility of providing all units that must rely on AI communications with the more powerful unit, the M-484 A-1, should be explored to alleviate the present AI difficulties in Vietnam.
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Part II Commanders Recommendations

None

CHARLES C. WIGGINS
Lt Col
Arty
Comanding

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SUBJECT: Operational Report for Quarterly Period Ending 31 July 1966
RCS(OSFOR-65)

HEADQUARTERS, 52D ARTILLERY GROUP, APO 96295, 19 August 1966

TO: Headquarters, Department of the Army, AKPR: AOSFOR, Washington, D.C. 20310

1. Forwarded.
2. Concur in commander's observations. Report is considered adequate.

O. L. TUSBASH
Colonel, Artillery
Commanding