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31 Aug 1981, DoDD 5200.10 ; AGO ltr 29 Apr 1982	

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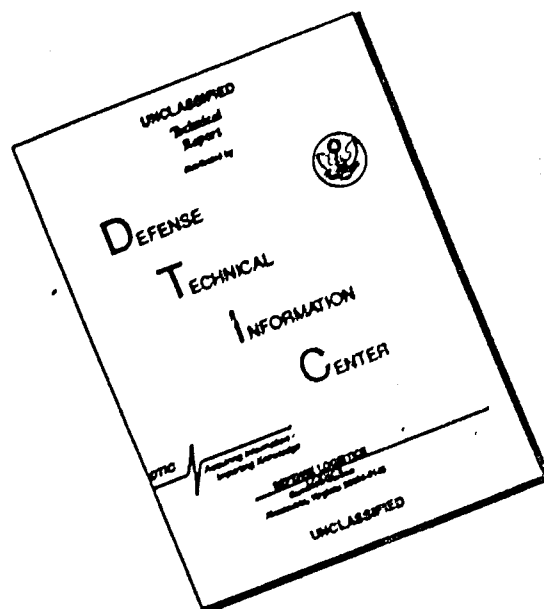
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DEPARTMENT OF THE ARMY
OFFICE OF THE ADJUTANT GENERAL
WASHINGTON, D.C. 20310

IN REPLY REFER TO

AD 508427

AGDA (M) (15 Oct 69) FOR OT UT 693053

28 October 1969

SUBJECT: Operational Report - Lessons Learned, Headquarters, 93d Engineer Battalion, Period Ending 31 July 1969 (U)

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1. Subject report is forwarded for review and evaluation in accordance with paragraph 5b, AR 525-15. Evaluations and corrective actions should be reported to ACSFOR OT UT, Operational Reports Branch, within 90 days of receipt of covering letter.
2. Information contained in this report is provided to insure appropriate benefits in the future from lessons learned during current operations and may be adapted for use in developing training material.

BY ORDER OF THE SECRETARY OF THE ARMY:

Kenneth G. Wickham

KENNETH G. WICKHAM
Major General, USA
The Adjutant General

1 Incl
as

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93d Engineer Battalion

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DEPARTMENT OF THE ARMY
Headquarters, 93d Engineer Battalion (Const)
APO San Francisco 96371

ECF-OP

9 August 1969

SUBJECT: Operational Report of 93d Engineer Battalion (Const) for
Period Ending 31 July 1969, RCS CS FOR - 65 (RI)

CINCPACAFAC, ATTN: GFOP-DT, APO San Francisco 96558
Commanding General, USARV, ATTN: AVHCC-DST, APO San Francisco 96375
Commanding General, 20th Engr Bde, ATTN: AVRI-OS, APO San Francisco 96491
Commanding Officer, 34th Engr Gp ATTN: ECF-OP APO San Francisco 96320

1. Section 1. Operations: Significant Activities:

The battalion remained assigned to the 34th Engineer Group, 20th Engineer Brigade throughout the report period. The battalion headquarters remained at Dong Tam Base, RVN (XS 4744) throughout the report period. B Company remained at Moc Hoa (XS 0391) until 19 July, at which time the unit returned to Dong Tam, leaving behind the 1st platoon to finish the construction left uncompleted. The 3rd platoon of C Company was sent TDY to the 35th Engineer Group at Phan Rang on 3 July 69. On 22 July C Company moved to Tan An (XS 5465). On 25 July two provisional companies of the 86th Engr Bn were attached to the battalion. Battalion organization is shown in Inclosure 1.

The 702nd Engineer Detachment (Power Line) remained attached to the 93d Engineer Battalion until 1 June 1969. The detachment completed the erection of the Dong Tam Power Distribution System. This included the erection of 600 power poles and the stringing of 450,000 linear feet of primary and secondary lines.

The 93d Engr Bn completed base camp construction at Dong Tam during this period. In a battalion-wide effort the fixed-wing airfield at Dong Tam was converted from M8A1 matting to an asphaltic concrete surface. In addition the runway was extended 850 feet. The sand-cement road stabilization for the base was completed as were the Helicopter Ambulance Pads for the 9th Medical Battalion. The battalion has been constructing facilities for MACV Advisory Teams in the Mekong Delta. Facilities at Moc Hoa, Cho Gao, Ben Tranh, Ham Long and Houng My were constructed during this period. Construction at these sites consisted of BOQ's, BEQ's, water treatment and storage plants, administration buildings, latrines, showers and community facilities.

The battalion was also tasked with the construction of communication facilities. A revetted 20x40 building was erected for the 52d Signal Battalion at Moc Hoa and another is under construction at Ben Tre at this time. A revetment wall was erected around a communication site at Sa Dec. Recently, the battalion has undertaken the mission of constructing an operational base camp, for an infantry brigade, at Tan An. Under construction are 54,000 SF of living

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Inclosure

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EGFB-OP

9 August 1969

SUBJECT: Operational Report of 93d Engineer Battalion (Const) for
Period Ending 31 July 1969, RCS CSFOR - 65 (R1)

quarters, 20,000 SF of administrative area and 11,500 SF of storage space. A list of projects under construction and projects completed during the period are listed in inclosures 2 and 3 respectively.

Self-Help construction on Dong Tam was terminated, but construction has continued at Tan An. The battalion continued to support this construction effort with designs, surveying, issuance of materials, and technical assistance. Battalion operations were slightly disrupted due to mortar attacks during this period. The principal enemy activities affecting the 93d were rocket and mortar attacks at Dong Tam and Cho Gao. The battalion had only two reported casualties, both of whom suffered only minor wounds. Enemy action caused damage to equipment at Cho Gao. The battalion continued to be responsible for one of the six (6) sectors of the Dong Tam Base perimeter. This sector consists of eight bunkers. The battalion was subordinated in this role to the 9th Division Support Command Commander who had the tactical responsibility for defense of Dong Tam and operations in the immediate vicinity of the base. The battalion headquarters remained at Dong Tam with several major personnel changes taking place during the period. Major Stephen A. Cady, CE, to Bn S-3, vice Major Robert A. Winslow, CE; Cpt Michael J. Lieben, MC, to Bn Surgeon, vice Major Robert C. Blackmon, MC; Cpt Clarence P. Buss, CH, to Bn Chaplain, vice Captain Francis R. Smidt, CH; CE2 Benjamin J. Luster, CE, to Bn LEMO, vice 1 LT Rodney L. Wells, CE; 1LT Richard W. Ayers, CE, to Bn S-1, vice 1LT Gordon A. Adler, CE; 1LT Roger M. Boethin, CE, to Bn Const Engr. vice 1LT Fred J. Kowalinski, CE; Captain Robert N. Comerer, CE, to CO, B Co, vice Captain Roger P. Rogers, CE; Captain Peter D. Schofield, CE, to CO, C Co, vice Captain John F. Sheffey, CE. Basic personnel and administrative statistics are given in inclosure 4.

2. Section 2. Lessons Learned: Commanders Observations, Evaluations, and Recommendations:

a. Personnel: None

b. Operations:

(1) Cement Debagging Rack

(a) OBSERVATION: Many man hours are required to debag cement.

(b) EVALUATION: A simple, but efficient way of debagging cement was required. A portable debagging rack, that would be placed on the clam of a scoop loader, was found easy to construct, using available materials, and removable when the scoop loader was required to operate under designed conditions. This rack could also be used for debagging lime.

(c) RECOMMENDATION: Taking into consideration all requirements, a debagging rack can be constructed with a minimum effort using metal plate and angle iron. After the bucket is loaded, the clam can be opened without removing the rack (See Inclosure 5)

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SUBJECT: Operational report of 93rd Engineer Battalion (Const) for Period Ending 31 July 1969, .CS CS FOR - 65 (H1)

(2) Slow Sand Filter

(a) OBSERVATION: An expedient means of treating water was required due to the prohibitive cost of commercial equipment and the lack of skilled personnel to operate them.

(b) EVALUATION: A simple easy to operate water purification system is required using material immediately available.

(c) RECOMMENDATION: A slow sand filter was found to be the easiest and simplest to build and operate of the various types of water treatment devices. A chlorinator can be added to the end of the filter to complete the treatment of the water. See Inclosure 6 and 93d Engineer Battalion drawing 443-V-6 for construction details.

(3) Expedient Tire Repair

(a) OBSERVATION: When in the field, tires for engineer equipment become critical due to the lack of replacement.

(b) EVALUATION: An expedient means for patching tubeless tires was required.

(c) RECOMMENDATION: A tubeless tire can be patched temporarily with T-17 membrane. Make sure that the membrane is cut large enough to insure a good seal around the hole and apply an ample amount of membrane glue. Hold the membrane against the tire until dry and then replace the tire on the rim.

(4) MOISTURE CONTROL FOR EARTHWORK

(a) OBSERVATION: Due to heavy rains and the high water table conditions in the Mekong Delta, the moisture content of the soil becomes a major problem when earthwork is required during the rainy season.

(b) EVALUATION: A fast and effective means for protecting earthwork projects was required.

(c) RECOMMENDATION: It was found that T-17 membrane provided an excellent cover for areas to be worked on. The membrane facilitated water runoff when the area was not being worked. The durability of the membrane makes it desirable to use as a protective covering and it is easily moved with the use of a scoop loader.

(5) Reuse of K-Wall Revetment

(a) OBSERVATION: The reuse of K-Wall was desired because of its proven effectiveness and ease in erection.

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9 August 1969

SUBJECT: Operational Report of 93rd Engineer Battalion (Const) for
Period Ending 31 July 1969, RGS CS FOR - 65 (RI)

(b) Evaluation: K-Wall can be dismantled without too much difficulty. It requires 1 day for a five (5) man crew to dismantle 36 cubes (18 cubes - 2 high)

(c) RECOMMENDATION: K-Wall should be dismantled for reuse whenever possible. Extra fastening clips should be ordered or fabricated to rebuild the K-Wall, since it was found that approximately 25% of the clips break or are damaged to such an extent that they cannot be reused.

(6) Transporting of a 16S Mixer

(a) OBSERVATION: It was found when transporting a 16S mixer on a lowbed across rough roads the mixer is top heavy and can be upset very easily.

(b) EVALUATION: It was found that by deflating the tires on the mixer and then chaining it down, the mixer was stabilized considerably. The air should not be let out completely, since the rim will cut the tire tube.

(c) Training: None

(d) Intelligence: None

(e) Logistics:

Construction Materials Supply

(a) OBSERVATION: Availability of construction material is very poor.

(b) EVALUATION: A more effective method of material coordination and delivery is required. Some materials brought into country are not of any use in the type of construction being undertaken. Cement is constantly being delivered in such condition that only 50% is usable. Difficulties have arisen when requisitions are sent from one depot to another. The Long Binh Depots do not seem to know what they have on hand. Delivery dates on construction materials are not being met even with a 60 day lead time. Material shipments come in spurts. Materials will not arrive for several months, then suddenly more materials will arrive than can be handled.

(c) RECOMMENDATION: No simple solution is envisioned to solve this problem area. However, it is felt that a reappraisal of procurement and distribution practices currently in effect would be helpful.

f. Organization:

Reduced Personnel Strength of a Construction Battalion

(a) OBSERVATION: The present reduced TOE strength for a construction battalion is unacceptable.

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Period Ending 31 July 1969, RCS CS FOM - 65 (I)

(b) EVALUATION: It is impossible to substitute an unskilled Vietnamese for a GI and expect the same results. Also, the Vietnamese cannot replace the GI on additional duties such as guard, shotguns on convoys, and CC. Thus the overhead remains the same, but with fewer personnel to do the work.

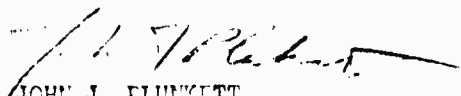
(c) RECOMMENDATION: Instead of being at a reduced strength the battalion should be authorized a 10% overage. This overage would insure the working strength of the battalion is always the TOE strength, even with the loss of personnel due to short tours, R&R, security, and transportation difficulties in the Delta. The Vietnamese should supplement the GI; not replace him.

g. Other: None

7 Incl

as

Incl 2, 3 and 4 wd HQ, DA


JOHN J. FLUNKETT
LTC, C
Commanding

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EGF-OP (9 Aug 69) 1st Ind
SUBJECT: Operational Report of 93d Engineer Battalion for Period Ending
31 July 1969, RCS CSFOR-65(R1)

DA, HEADQUARTERS 34TH ENGINEER GROUP (CONG), APO 96320 13 August 1969

TO: Assistant Chief of Staff for Force Development, Department of the Army,
Washington, D.C. 20310
Commanding General, 20th Engineer Brigade, ATTN: AVBI-OS, APO 96491

1. The subject report submitted by the 93d Engr Bn has been reviewed by this HQ and is considered comprehensive and of value for documentation and review of the reporting unit's activities and experiences.
2. This HQ concurs with the submitted report with the following comments:
 - a. Ref para 2b(5), page 4: The K-Wall revetment lends itself very well to reuse. Fastening clips should be obtained from the manufacturer in order to achieve maximum reuse of the revetment.
 - b. Ref para 2b(7), page 4: Procurement and delivery of construction materials continues to be a problem in the Delta. This problem area should be evaluated by higher headquarters.
 - c. Ref para 2f(1), page 4: Concur that present reduced TO&E strength is unacceptable and that unit be reorganized at full strength.

FOR THE COMMANDER:



DONALD L. WHEELER
Major, AGC
Adjutant

CF:
CO, 93d Engr Bn

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AVBI-OS (9 Aug 69) 2nd Ind

SUBJECT: Operational Report of the 93rd Engineer Battalion (Construction)
for the Period Ending 31 July 1969, RCS CSFOR-65(R1)

DA, HEADQUARTERS, 20TH ENGINEER BRIGADE, APO 96491

TO: Commanding General, United States Army Vietnam,
ATTN: AVHGC-DST, APO 96375

1. Submitted in accordance with USARV Regulation 525-15, dated
13 April 1968.

2. Subject report for the 93rd Engineer Battalion (Construction) has
been reviewed and is considered adequate with the following comments:

a. Section II, paragraph 2b(2), page 3: Evaluation of treated
water will be made by Preventive Medicine Units on periodic bases to
determine potability.

b. Section II, paragraph 2b(3), page 3: This method is an expedient
only. Repair kit, tubeless tire, FSN 4910-522-6921 will be utilized
where possible.

FOR THE COMMANDER:

[Signature]
S. B. KENNEDY
Major, AGC
Adjutant

Copies Furnished:
CO, 34th Engr Gp
CO, 93rd Engr Bn

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AVHGC-DST (9 Aug 69) 3d Ind

SUBJECT: Operational Report of 93d Engineer Battalion (Const) for Period
Ending 31 July 1969, RCS CSFOR-65 (R1) (U)

HEADQUARTERS, UNITED STATES ARMY, VIETNAM, APO San Francisco 96375 16 Jul 1969

TO: Commander in Chief, United States Army, Pacific, ATTN: GPOP-DT,
APO 96558

1. (U) This headquarters has reviewed the Operational Report-Lessons Learned for the quarterly period ending 31 July 1969 from Headquarters, 93d Engineer Battalion (Const).

2. (C) Comments follow:

a. (U) Reference item concerning "Moisture Control for Earthwork", Section II, page 3, paragraph 2b(4); concur. This method appears satisfactory. Only salvage or unserviceable T-17 membrane should be used for this purpose. The issue of T-17 membrane specifically for the described purpose is not appropriate.

b. (U) Reference item concerning "Transportation of a 168 Mixer" Section II, page 4, paragraph 2b(6); concur providing the tires are reinflated after chaining down. Consideration should also be given to grounding the stabilizer legs for additional stability.

c. (U) Reference item concerning "Construction Materials Supply" Section II, page 4, paragraph 2b(7); concur. A reappraisal of construction materials procurement, storage, and distribution practices is currently underway. Ground Forces Division, USAICCV is attempting to place forecasted quantities of asphalt and cement products on a requirement type contract wherein incremental quantities can be called forward as required and through-put to the using unit. Current attempts to reduce transportation handling losses of cement include delivery by 20 bag pallets rather than 40 bag pallets and a closer inspection of cargo handling practices by support command representatives when notified by a customer unit that shipments have been received in an unsatisfactory condition. Referral of requisitions from one depot to another and discrepancies in stock status reporting are also recognized problems. Continuing effort is being directed toward the purification of stock status reports and improving requisition referral methods between depots.

d. (C) Reference item concerning "Reduced Personnel Strength of a Construction Battalion", Section II, page 4, paragraph 2f; nonconcur.

(1) The engineer construction battalions, previously reduced from a Type A to a Type B strength level under the civilianization program, are being brought back up to their previous military authorization. This action is currently in progress and is being accomplished by MACV from spaces accruing from inactivations.

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AVHGC-DST (9 Aug 69) 3d Ind

SUBJECT: Operational Report of 93d Engineer Battalion (Const) for Period
Ending 31 July 1969, RCS CSFOR-65 (R1)

(2) To provide the requested ten percent overstrength would require drawdown from another unit because USARV operates under a limited manpower ceiling. A temporary overstrength is granted only in extreme cases for operational necessity when the tactical situation dictates.

FOR THE COMMANDER:



C. D. WILSON

1LT, AVN

Assistant Adjutant General

Cy furn:
93d Engr Bn
20th Engr Bde

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GPOP-DT (9 Aug 69) 4th Ind (U)
SUBJECT: Operational Report of HQ, 93d Engineer Battalion (Const) for
Period Ending 31 July 1969, RCS CSFOR-65 (R1)

HQ, US Army, Pacific, APO San Francisco 96558 4 OCT 69

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

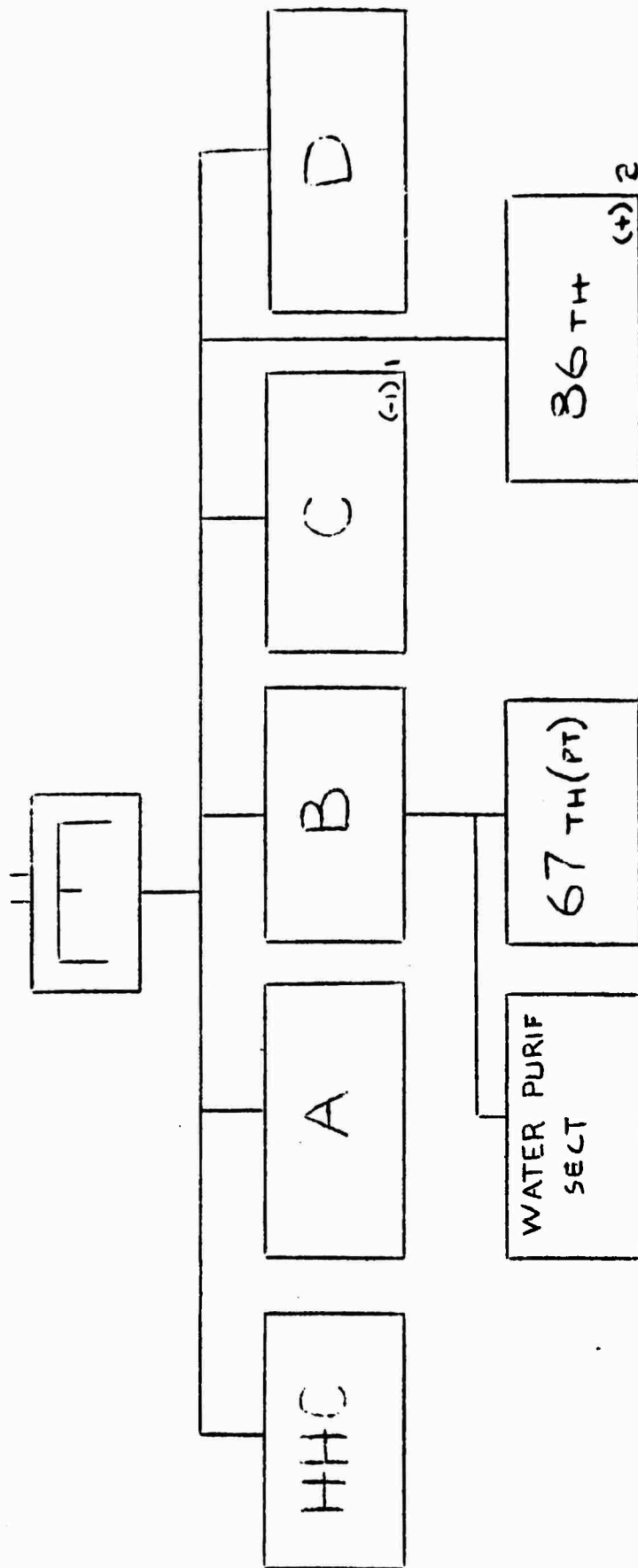
This headquarters has evaluated subject report and concurs as indorsed.

FOR THE COMMANDER IN CHIEF:



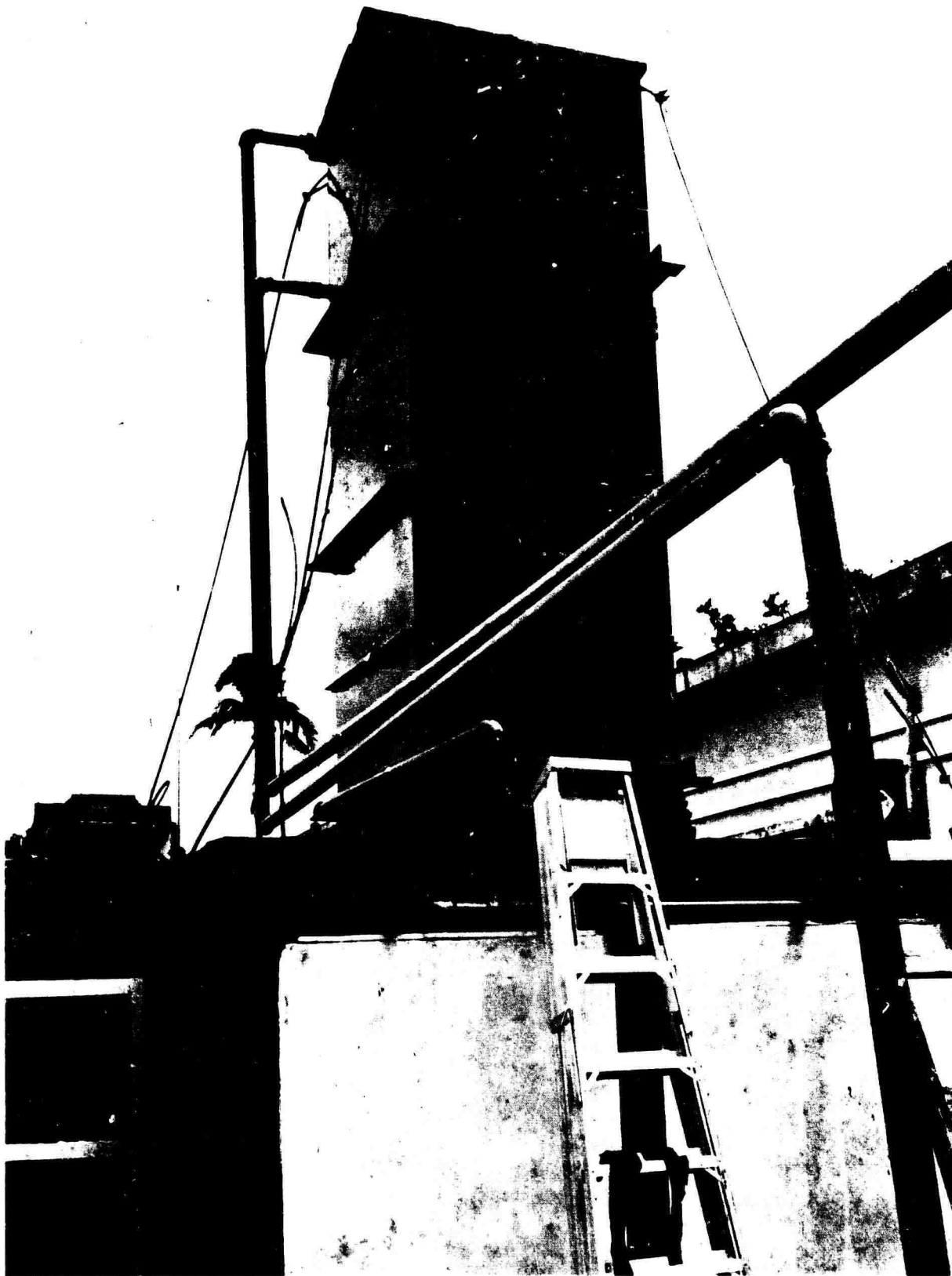
C. L. SHORTT
CPT, AGC
Asst AG

93RD ENGINEER BATTALION (CONST)



1. Earthmoving Platoon of C Company TDY to the 35th Engineer Group.
2. Two Provisional Companies of the 86th Engineer Battalion attached to the Battalion on 25 July 1969





Incl 6

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Incl 7

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