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Title: Report No. 11, Parachute Field Artillery

Author: United States Pacific Warfare Board

Abstract: This report is to present certain facts on parachute field artillery as derived from combat experiences. Information received from observations of Pacific Warfare Board member, LTC Robert Alexander, Corps of Engineers (Parachute), who accompanied the combat drops and missions of the 457th Parachute Field Artillery Battalion, 11th Airborne, Tagatay Ridge, Luzon, 4-10 February 1945, and the 462nd Parachute Field Artillery Battalion, 503rd Regimental Combat Team (RCT), Corregidor, Philippine Islands, 16 February – 8 March 1945.

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D 731.1 Parachute Field Artillery

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DISSEMINATION DIVISION
G-2 Section

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ARMY WAR COLLEGE
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SUBJECT: Report, Army Ground Forces Board, PAC

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PACIFIC WARFARE BOARD Report No. 11

SUBJECT: Parachute Field Artillery.

1. PURPOSE: To present certain facts on parachute field artillery as derived from combat experiences.

2. SOURCE: Observations of Pacific Warfare Board member, Lt. Colonel Robert Alexander, Corps of Engineers (Parachute), who accompanied the combat drops and missions of

457th Prcht FA Bn (11th A/B), Tagaytay Ridge, Luzon, 4 - 10 February 1945.

462d Prcht FA Bn (503d RCT) Corregidor, P. I., 16 February - 8 March 1945.

3. 457th Prcht FA Bn (11th A/B):

a. Two sections were dropped from four C47s on 3 February 1945. The guns were assigned, one to each infantry assault company, as insurance against stubborn Jap road blocks. The guns were put down on an almost ideal drop zone, quickly assembled and pulled up to the road. They were not needed in action on 3 February. The remainder of the battalion, 10 howitzers and 331 artillery personnel came in by drop at 0835, 4 February.

The drop zone was in rolling country composed of parallel ravines running north from Tagaytay Ridge line to lower successive ridge lines. These ravines were about 100 yards from crest to crest and 35 - 50 feet deep from crest to trough. The slope from the main ridge line was about 1 in 25. Most of the ground had been freshly cultivated and the bottoms of ravines were laced with narrow drainage ditches from 3 to 8 feet deep, overgrown with vines and fringed with trees. Small clumps of medium growth trees, usually with a native shack in the edge, were dotted about on the flat. Movement on foot was slow due to the soft soil and gradient. This condition, plus the ditches, made movement of guns and heavy equipment by hand very slow and exhausting.

Quick action was not required of the guns as the enemy had broken away some distance from the drop zone and Tagaytay Ridge road. Therefore, the times given for assembly in place and into action with minimum movement are estimates.

By single gun - 20 minutes
By battery - 30 minutes

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By battalion -- 90 minutes

The battalion was assembled complete on highway 17 at 1400 on 4 February. The mission assigned thereafter to this battalion was to cover all approaches to Tagaytay Ridge road. Organic transportation which had moved in with the amphibious landing on 1 February became available when the link-up with the parachute troops was made late on 3 February.

b. Parachute Drop - 457th.

Flight plan for the assault guns (3 February drop) put them at the tail of the infantry serial, the last 4 planes of the center V of the V of V's.

The artillery drop on 4 February was made from V's in column. The 10 howitzer sections and 331 personnel were put down from 33 C47's in an area of about 900 yards by 300 yards.

4. 462d Prcht FA Bn (503d RCT):

The battalion was put in on Corregidor in three increments. Two on 16 February and one on 17 February. Each increment went in as part of the battalion combat team which composed the remainder of each serial.

A total of 15 75mm howitzers and 24 .50 cal. HMG's was dropped.

The drop zone was extremely small and rough, in close proximity to the enemy. Wind velocities were high and flight plan was single plane in column. Release altitude was around 500 feet for equipment and 400 feet for personnel. The shortness of the field necessitated that sticks be limited to equipment or 6 - 8 men per pass. Five howitzers of 9, and 12 .50 cal. HMG's of 16, dropped, were in action late on the 16th. On the 17th, 9 howitzers and 19 cal. 50 HMG's were in action.

The howitzers were employed during the first part of the engagement (16 - 23 February) as direct assault weapons. Guns were moved frequently to obtain better point targets, such as tunnel and cave entrances. Movement often required dismantling the gun, hand carry over rough terrain and down steep slopes, using as many as 35 men to a gun, and reassembly. From 23 February on, the artillery was massed on the parade ground and supported the attack on the eastern end of the island. All .50 cal. HMG's were attached to infantry companies for direct support.

Assembly of guns and equipment was slow, but was the best that could be accomplished under the conditions of drop, terrain, and enemy fire.

Gun and equipment drop and recovery were as follows:

a. 75mm How.

<u>Dates</u>	<u>Dropped</u>	<u>Recovered</u>	<u>Serviceable</u>
16 Feb.	9	5	5

<u>Dates</u>	<u>Dropped</u>	<u>Recovered</u>	<u>Serviceable</u>
17 Feb.	6	4	4
18 Feb.	-	2	2
19 Feb.	-	1	-

Losses - 3 ruined front trails
1 missing parts

b. Cal. .50 HMG's:

<u>Dates</u>	<u>Dropped</u>	<u>Recovered</u>	<u>Serviceable</u>
16 Feb.	16	12	12
17 Feb.	8	7	7
21 Feb.		2	2

Losses - 3 in enemy hands - destroyed by artillery fire or
assault.
1 missing

c. Am. 75mm:

<u>Dropped</u>	<u>Recovered</u>	<u>Serviceable</u>
2200	1760	1320

5. CONCLUSIONS: Certain lessons are to be drawn from the combat missions of these two parachute field artillery battalions.

a. Parachute field artillery is practical. Five 75mm howitzers and 12 .50 cal. HMG's were in action 16 February; on the 17th a total of 9 howitzers and 19 .50 cal. HMG's was assembled. By the 18th of February, when the road to Topside had been opened, the parachute field artillery had already been extensively employed. 889 rounds had been fired with 392 enemy dead by artillery fire. The parachute field artillery was invaluable and worth all the effort expended.

b. Radio communication necessary for massing the fires of the artillery is available. Some changes in the type of equipment appear to be desirable.

- (1) Parachute field artillery frequently occupies positions where the SCR-610 is not entirely practical because of its weight for hand carry. Jeeps are rarely, if ever, available to parachute field artillery in the early and most critical stages of an operation.
- (2) Parachute field artillery could employ radios of the SCR-300 type or sets equivalent in weight and performance, such as the SCR-619. The SCR-610 weighs 70 pounds as compared to 32 pounds for the SCR-300.

- (3) In the experience of the 503d RCT the field artillery has always worked some infantry channels. Therefore, use of the SCR-300 radio will not interfere with infantry nets.
- (4) Either the SCR-300 or the SCR-619 might be issued parachute field artillery.

c. Pararacks are not required on all planes; only those carrying the howitzer sections. Some changes and additions in the paracrates are indicated.

- (1) A paracrate for all ammunition is essential as too many rounds are ruined upon landing on any but the smoothest and softest drop zone.
 - (a) Corregidor was probably as rough a selected landing as will ever be made by parachute artillery. Of the 2200 rounds of 75mm ammunition dropped, 1760 rounds were recovered of which only 1320 or 75% were usable. Some of the recovered rounds were damaged by rough landing and striking obstructions but were serviceable.
 - (b) The 457th had a similar experience with damaged rounds dropped from either C47 or L4 when operating in the Leyte hills.
- (2) The present gun paracrates restrict to drop use the M1A1 with M8 carriage. The M1 carriage cannot be dropped as the axle and wheels are not usable. A paracrate to take the M1 carriage is desirable.
- (3) Three howitzers were dropped on Corregidor with poor success in A5 containers off the pararacks. This was necessary as only 12 sets of paracrates were available for the drop.

d. Controlled Ground Pattern:

- (1) The controlled ground pattern as developed at the airborne command was used in each combat drop. It is a most feasible and satisfactory way to drop field artillery.
- (2) Two modifications are employed by the 462d.
 - (a) Front trail (paracrate M1) ejected from door in place of M9 ammunition caisson.
 - (b) M9 ammunition paracaisson dropped from pararack.
- (3) "Daisy-chain" use is not satisfactory from less than 600 feet. Either the static lines should be shortened or the bundles thrown free, each with its static line hooked in the plane. Otherwise, the lower parachutes will not function in time.

e. Parachute Troop Replacements.

(1) General.

- (a) The replacements being supplied from the parachute school are a superior product and no change is desired in their procurement, selection, training, and availability. Local training involving restricted selection does not provide a product with the mental and physical toughness which these assault troops must have.
- (b) 503d RCT has indicated that it:
 - 1. Prefers replacements from the parachute school.
 - 2. Definitely does not want as replacements over-strength or mass transfers from other parachute units.
 - 3. Does not desire to set up a replacement training schedule of its own.
- (c) Parachute elements of the 11th Airborne Division are of much the same opinion.

(2) Artillery Replacements:

- (a) Great need was shown for basic infantry training of artillery personnel.
 - 1. Quantities of equipment and supplies fell on Corregidor in terrain dominated or occupied by the enemy. In order to retrieve these items, artillery personnel, organized and operated as infantry, went out on salvage missions. Artillery personnel also furnished its own close in perimeter defense.

f. Ammunition Types, Artillery.

- (1) Ammunition taken on the Corregidor drop and resupply consisted of: HE - 60%, WP - 30%, and AP - 10%.
- (2) For the type of missions actually accomplished combining direct and indirect fire support, the ammunition percentages desired are: HE - 50%, WP - 40%, and AP - 10%.
- (3) For normal indirect fire support missions in a cut-up and rocky terrain the percentages thought best are: HE - 40%, WP - 30%, Time - 20%, and AP - 10%.
- (4) Canister would have been very useful if available. For direct assault fire, HE followed by WP is most effective.

g. Individual Equipment.

(1) Helmets, Parachutist.

- (a) The helmet and liner M1C or helmet M1 with liner parachutist and chin cup are regarded as essential. The normal loss of helmets on a jump is about 10% when the standard type helmet with only the web strap is used. Field expedients are not satisfactory.

(2) Parachute Jump Boots.

- (a) The combat boot is not a satisfactory replacement for the "parachute jump boot" in protection to the feet and ankles on landings nor as support in ground movement for parachute troops.
- (b) The parachute boot has stood up better than the combat boot under field conditions of parachute work and is definitely superior as foot, instep, and ankle support for paratroopers who do more hand carry of all types than do any others, cover longer distances faster on foot, and because of their organization, weapons and equipment are usually operating in the more rugged types of terrain.
 - 1. Any deficiency in the composition half sole of the parachute boot can be remedied. The important consideration is that the boot is properly shaped and constructed to do its job for the paratrooper.

(3) Parachute Jump Suits.

- (a) This uniform is unsuited to combat in this theater because of color and construction.
- (b) A preference is shown by paratroopers for the one piece coverall. //

(4) Infantry Pack, Cargo Pack, and Suspenders, Model 1944.

- (a) This assembly is the most satisfactory yet developed for parachute troops.
- (b) Two minor improvements would better the assembly for all troop use:
 - 1. Grenade carrying loops on each suspender.
 - a. Two loops about three inches apart high up on each suspender would hold a grenade securely by its firing pin lever in all combat movements, place it for quick use, and obviate the need

of improvised or manufactured pouches which are cumbersome and sometimes hard to open. Too many grenades are lost when just hung any place

2. Grommets on the web strap connecting the two segments of the new cartridge belt (one only now provided).

a. No trooper wants anything on his belt forward of the hip bones. There is not sufficient room on the belt as now designed back of the hips for jungle first aid pouch, two canteens, knife, and entrenching tool, which are minimum standard equipment.

b. Grommets on the connecting web adjustment strap would give several inches more space for carrying purposes.

h. Parachute Equipment - Storage and Transport Packing.

(1) The problems presented in maintenance, packing, storage, and transportation of parachute equipment is a serious and difficult one and parachute troops operating in this theater have been under severe handicaps in maintaining this equipment at a high standard.

(a) Structures for the proper storage, maintenance, and packing of parachutes are usually non-existent in this theater. Packing for shipment is also a difficult problem. Suitable materials for packing cases which are moisture-proof and durable enough to withstand water shipment and stacking in the open sun, mud, and rain are almost non-existent in the field.

(2) Conditions for further moves by parachute troops will be no better, and it is regarded as desirable to provide parachute troops with the following:

(a) Portable Structures.

1. T/O & E should include portable buildings for field use totaling about 1800 square feet of clear floor space with a usable height of 10 feet, per company or battery in a parachute unit.

(b) Packing Boxes.

1. T/O & E should include knockdown storage bins.

a. The bin unit could be so constructed that it can be used for shipment of at least three complete parachute assemblies (personnel or cargo, including container).

b. Specifications for the bins to include:

- (1) Structurally able to withstand any expected handling.
- (2) Water, air, and moisture proof.
- (3) Gasketed pressure cover (nut and bolt).
- (4) Compartmented for three assemblies.
- (5) When stacked up will form storage bins.

- (3) Due almost entirely to the conditions which have prevailed up until now as to storage, packing, and shipment, the 503d RCT had:
 - (a) To requisition 1630 personnel parachute assemblies from the 11th Airborne Division, even though it had on hand approximately 4000 personnel parachutes from which enough (3000) could not be inspected and repacked in time for the Corregidor mission.
 - (b) Three men killed from malfunctions, at Corregidor, which number is not normally to be expected in 10,000 jumps.
 1. One malfunction resulted from the static line snapping about three feet from the back pack and not even starting the cover lashings. The paratrooper's life was saved by instant use of his reserve.
 - (c) Six other men who pulled their reserves because of partial malfunctions or blown panels.
 - (d) Suffered much loss of equipment because of cargo parachute or container malfunction.
- (4) The conditions that obtain and the lack of suitable storage structures or containers has resulted in an abnormally high expenditure of parachute assemblies. The 503d RCT has had a turn-over in stock of 15,600 personnel assemblies and 4,200 cargo parachutes. There remains on hand as serviceable after inspection and repacking about 3,000 personnel assemblies and 300 cargo parachutes.
- (5) The 11th Airborne Division has not been in the theater as long but proportionately has about the same record even though a division is able to cope with such problems better than a separate regiment.

i. Parachute Equipment - Individual.

(1) Quick Release Device:

- (a) The typical landing on Corregidor was either in trees or a rolling twisting fall complicated by the slope of the ground, the high rate of driftage, and the parachute remaining inflated at an angle to the roll. Upon coming to rest suspension lines would be looped and tangled around neck, arms, legs, feet and body.
- (b) The combination of being wrapped in a ball of string plus the normal equipment and weapon load made release from the harness most difficult. Cutting had to be resorted to frequently.
- (c) A quick release device for parachutists appears to be imperative. //
- 1. The English type (German, modified) of a four terminal spring plunger release would not be satisfactory as it interferes with and almost eliminates the use of the reserve parachute.
 - a. Discarding the reserve parachute is not recommended. Six lives were saved at Corregidor by use of the reserve, despite the low altitude of the jump. ✓

(2) Parachutist "Jump Knife".

- (a) This is a single blade, pressure button, release spring opening knife. It was issued to all parachutists for general use and in particular for emergency use in getting out of the parachute harness. The issue of such knives has been suspended.
- (b) It is recommended that "jump knives" be included as parachute equipment to be issued to the individual. // when parachutes are drawn for combat or training purposes. Knives can be considered as parachute equipment, to be returned to store with the salvaged or recovered parachute assembly. Previous trouble from loss of knives when issued as individual equipment can be avoided or reduced considerably as acquisition by unauthorized personnel will be more difficult.

6. GENERAL CONCLUSION:

- a. That parachute field artillery can be dropped and thereafter operate successfully in very rugged terrain as demonstrated in the Corregidor operation and in the Leyte hills.

b. These two operations appear to indicate that the controlling factor in the use of parachute troops including artillery, is tactical and not terrain.

For the Commander-in-Chief:

/s/ B. M. Fitch

/t/ B. M. FITCH

Brigadier General, U. S. Army
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