



JAP. POSITIONS OVERLOOKING PACDAN
Sketched from vic. LONSA

foothold on a portion of this objective ridge, but was unable to advance over the crest due to murderous fire from the reverse slope and adjacent spurs and found their position untenable. The objective ridge was reported to be defended by at least 100 Japs utilizing well camouflaged inter-connecting spider holes, with the reverse slope thickly studded with deeply-dug, reinforced caves.

The next two days were utilized in regrouping forces in preparation for the next attack. On 29 July, following an air strike, elements of the 1st Battalion, 20th Infantry, supported by elements of the 1st Battalion, BUENA VISTA Regiment, attacked the stubbornly defended ridge and, by the close of the day Company "A" had taken the left (south) part of the objective. From this advantageous position they gave close support to the attack of the 1st Battalion, BUENA VISTA Regiment, enabling it to secure the right (north) portion of the objective after a fierce fire fight. The enemy immediately launched a counterattack, which proved futile and cost them ten killed.

It was found that the enemy had transformed this ridge line and reverse slope into a veritable fortress, bristling with automatic weapons, organized in depth and excellently camouflaged against air and ground observation. On the crest of the ridge, the enemy had constructed numerous caves which were connected by tunnels. Spider holes were also dug on the military crest and the reverse slope. Many of these holes had underground connecting tunnels. The extremely precipitous approaches to the top of the ridge made it difficult to assault. Some idea of how difficult is shown by the fact that it took two hours for troops to scale the almost vertical slopes.

In the process of softening up this objective, Division Artillery (reinforced) fired over 4,000 rounds, ranging from 90mm to 8-inch, 4.2-inch mortars fired over 4,000 rounds of HE and WP, and 81mm mortars fired more than 8,000 rounds. In two air strikes nine tons of HE and 26,000 gallons of Napalm were dropped. In spite of this heavy concentration of supporting fires, the Jap fought stubbornly, tenaciously and skillfully to hold his position until the final assault succeeded.

Following up the action, the 1st Battalion went on to secure the town of PACDAN against slight opposition on 31 July. Twenty-two Japs were killed or found dead enroute and an additional 53 dead were counted in the town. PACDAN had been extensively prepared for defense by the enemy with fortified building and reinforced dugouts.

On 1 and 2 August, the 1st Battalion, 20th Infantry,

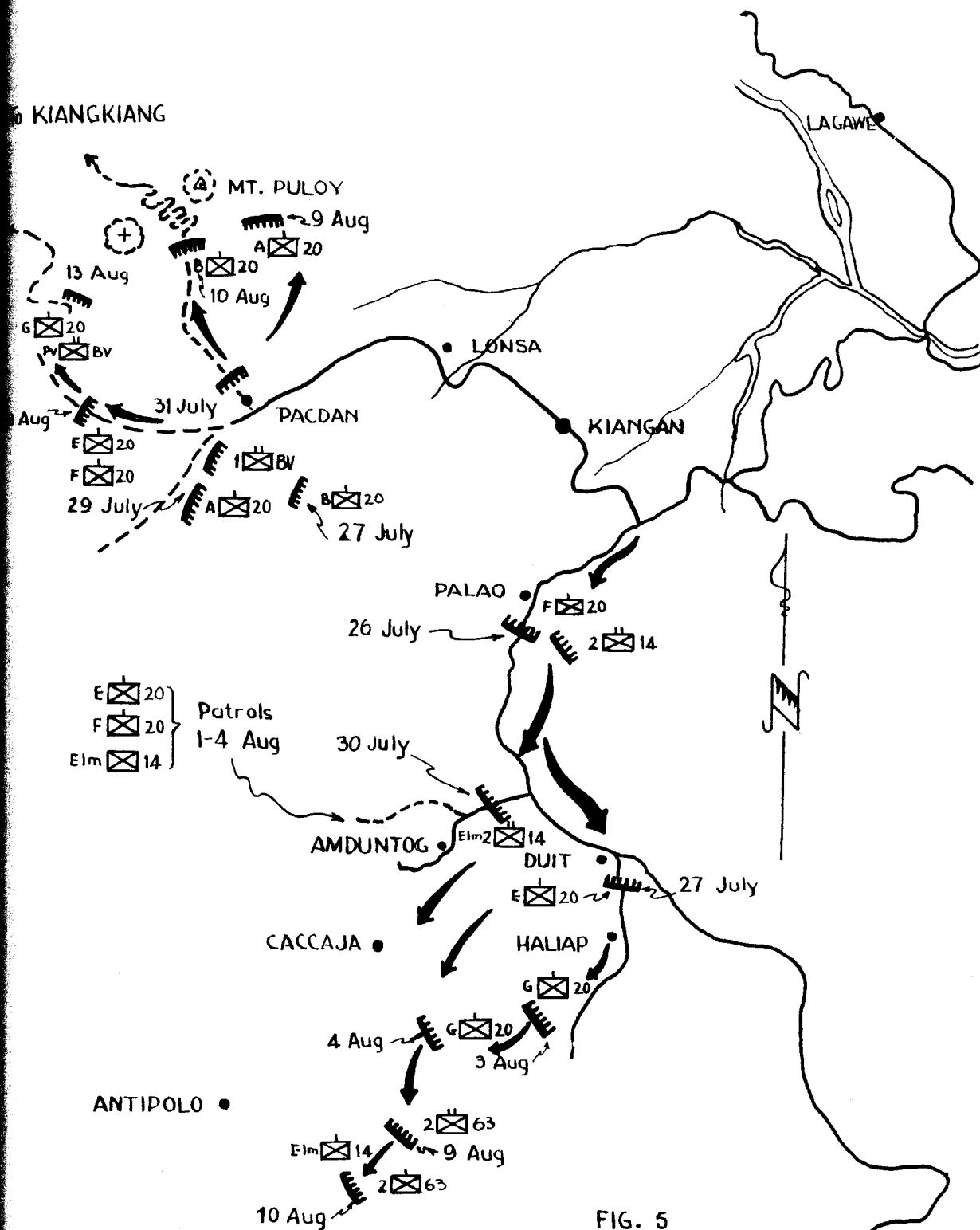


FIG. 5
20TH INFANTRY OPERATIONS
21 JULY-15 AUG

1000 0 1000 2000 3000 YDS.

SCALE: 1:58,000

mopped up in PACDAN, finding many dead Japs from artillery fire and air strikes, and pushed reconnaissance up the trail to the northwest towards MT PULOY. This formidable hill mass, 4 to 5,000 feet in elevation, rises precipitously to form a huge, heavily wooded, semi-circular rock wall around the bowl-shaped rice terraces of PACDAN. The top of this ridge was over two miles long. To turn its flanks required a long march through trail-less jungles and over even more precipitous country. The main trail to KIANG-KIANG runs northwest and north from PACDAN, winding up long and steep switch-backs to the summit of MT PULOY. Turning sharply to the west, the trail then descends the almost vertical reverse slopes of MT PULOY and runs to the northwest towards KIANGKIANG. Although still rugged and mountainous, the terrain to the northwest of MT PULOY slopes downward into the KIANGKIANG-HUNGDUAN valley. The MT PULOY barrier forms a natural obstacle and was the most logical position from which to defend the southern approaches to KIANGKIANG.

Captured maps later indicated that a Jap battalion was disposed in depth from MT PULOY to KIANGKIANG, with a reinforced company dug in on the mountain itself. At least three 75mm guns and two 47mm guns were believed to be supporting this defensive position.

Company "B", 20th Infantry, attacking up the mountain trail on 3 August, met heavy resistance from artillery, mortars and machine guns. Progress was slow and enemy opposition was bitter. Not until 6 August did Company "B" finally reach a position roughly 500 yards airline from the crest of MT PULOY, but about 1,300 yards measured along the trail. From here on was the steepest part of the trail. Heavy rains and dense fogs hampered the advance during this period, and enemy artillery harassed friendly positions nightly. In the meantime, Company "A" protected the rear and Company "C" the left (southwest) flank of Company "B".

From 7 to 10 August, Company "B", 20th Infantry, tried to find a way to knock out the resistance atop MT PULOY without success. The enemy covered the trail from commanding positions which could not be outflanked. It was now apparent that a frontal assault to take the crest would be extremely costly. During the same period, Company "C" probed along the trail leading southwest from PACDAN, encountering slight resistance, until relieved by elements of the 2d Battalion, 20th Infantry, on 9 August. In the meantime, Company "A", 20th Infantry, attacking north from PACDAN on 7 August, finally gained the top of a narrow, knife-edge ridge to the southeast of MT PULOY on 9 August. Attempts to attack to the northwest from this position were stopped by heavy fire and adverse terrain precluded any maneuver by friendly troops. The

enemy, during the period, was aggressive and made several small night counterattacks.

At this time, Ifugao scouts reported the existence of a new trail, leading over the southwestern part of MT PULUY, which had been developed by natives in the area to avoid Jap units disposed along the main trail. The 20th Infantry, therefore, ordered the 2d Battalion to reconnoiter this route with the view of attacking in this direction and by-passing the main Jap position, while the 1st Battalion contained the enemy to their front.

On 10 August, Companies "E" and "F", 20th Infantry, consolidated positions gained about 1,200 yards west of PACDAN against scattered opposition. On 11 August, Company "G" passed through this position and by 13 August, with the aid of the Provisional Battalion, BUENA VISTA Regiment, had gained 1,000 yards to the north towards the crest of MT PULUY. The Jap was now reacting to the maneuver and placed 75mm fire on Company "G's" position and made small night infiltrations. One 75mm gun was finally spotted by a cub plane on the reverse slope of MT PULUY, but was found to be in such a location that artillery fire could not reach it. On 14 and 15 August, elements of the Buena Vista Regiment attacked to within 200 yards of the crest, only to be driven back by heavy Jap fire. On 15 August, offensive operations ceased.

5. Operations in the PALAO-ANTIPOLO Area, 24 July-15 August:
(See Fig. 5).

To the south of KIANGAN, the 2d Battalion, 20th Infantry, was given the mission on 24 July to secure the DUIT-HALIAP area, and then advance in the direction of ANTIPOLLO, destroying any hostile forces encountered. The 2d Battalion and Company "L", 14th Infantry (PA), which had been carrying on guerrilla warfare against the Japs in this area for the past three months, were attached to the 20th Infantry. PALAO was secured on 26 July by Company "F", 20th Infantry and on 27 July, Company "E", 20th Infantry occupied DUIT, killing 54 Japs in scattered contacts throughout the area.

For the next few days, 20th Infantry patrols searched out the area to the southwest, Company "F" working in the area southwest of PALAO and north of AMDUNTOG, while Company "E" operated in the HALIAP area. Only small Jap groups, which avoided combat and were quickly dispersed by artillery fire, were contacted. It was believed that the largest Jap groups were in the ANTIPOLLO area, where it was estimated that about 600 Japs, mainly remnants of the GEKI FORCE, were trying to live off the land. In the meantime, elements of the 2d Battalion, 14th Infantry, attacking to the southwest from PALAO, on 30 July secured a hill about 800 yards northeast of AMDUNTOG, killing over 50 Japs in the advance.

In the three day period, 1-3 August, Company "F", 20th Infantry, with elements of the 14th Infantry killed or found dead from artillery fire, over 130 Japs in the AMDUNTOG-CACCAJA area. Company "G", which had joined Company "E" at DUIT on 31 July, advanced to the south and southwest and on 3 August seized the high ground 2,500 yards northeast of ANTIPOLLO. The next day, the advance of this company to the southwest progressed another 1,000 yards.

At this time, in order to allow the 20th Infantry to make its maximum effort against MT PULOY, the 63d Infantry was ordered to relieve the 20th Infantry in the ANTIPOLLO sector and continue operations there. On 5-6 August, slippery mountain trails and swollen rivers resulting from heavy rains, restricted patrol movements in the area and delayed the relief, which was not completed until 7 August.

Advancing through heavy undergrowth and up to their waists in water-filled rice paddies, elements of the 2d Battalion, 63d Infantry, on 8 August advanced south along the high ground which had been taken over from Company "G", 20th Infantry. By 11 August, the Battalion, assisted by Company "H" and Combat Company, 14th Infantry, had secured the objective, the high ground 1,500 yards southeast of and overlooking ANTIPOLLO. Only slight resistance was met during the advance. From 11 August to 15 August, when offensive operations were terminated, elements of the 63d Infantry patrolled the ANTIPOLLO area. No organized resistance was encountered, but only small, poorly-armed, and disorganized Jap groups, which usually withdrew without making contact, were observed. It was apparent that the Jap in this area had had enough.

Later, after the 3d Battalion, 20th Infantry had taken over responsibility for the KIANGAN area, the Commanding Officer of that battalion carried on surrender negotiations for three days, 18-20 August, with Jap officers in the vicinity of AMDUNTOG. These negotiations all fell through, as the Japs failed to carry out instructions agreed upon. These failures were probably brought on by the disorganized state of the enemy.

6. Artillery Support (20 July - 15 August).

Despite poor road conditions, bad weather, and supply difficulties, the Division Artillery (reinforced kept artillery units well forward and were able to support effectively the advance of the Division. Battery "B", 80th Field Artillery Battalion (medium) displaced to the IBULAO RIVER near the position of Battery "C", 1st Field Artillery Battalion on 26 July. By 27 July a platoon from each of these batteries were in position on Highway 4 near GUROG from which they could support the 1st Infantry in the

HAPAO sector. These guns had to fire from positions on the trail, barely wide enough for a jeep, since there were no other position areas in this mountainous country. By 2 August, the remainder of the 80th Field Artillery Battalion had closed into the IBULAO RIVER position. On 4 August, engineer work on Highway 4 had progressed to the point where all of Battery "C", 1st Field Artillery was able to displace to a position 4,000 yards north of GUROG.

In the meantime, the 51st Field Artillery had moved from an assembly north of the LAMUT RIVER to positions in KIANGAN, closing there on 1 August. From here, effective support could be given the 20th Infantry in its advance on KIANGKIANG. The 53d Field Artillery Battalion was brought out of the line and returned to the Division camp area north of the LAMUT RIVER for a well-earned rest. The 1st Field Artillery Battalion (-Battery "C") which up to the time had been firing from positions near HUCAB, displaced to KIANGAN, closing there on 10 August.

During the period the Division Artillery lost the Corps 90mm battery (Battery "A", 161st AAA Battalion) which departed the Division zone on 4 August. Battery "B", 465th Field Artillery Battalion (8" howitzer), however, remained and continued to give the Division excellent support. This battery displaced forward from its position near PAYAWAN FARM and closed into a position area near the 1st Field Artillery Battalion on 4 August.

Artillery support was a primary factor in getting the Infantry forward in the MOUNTAIN PROVINCE fighting. Air support was not always available, as weather condition frequently caused the cancellation of strikes. Infantry attacking over rugged, mountainous, wild terrain where only foot trails existed, could not always get adequate support from its own weapons, chemical mortars, and tanks. Artillery, therefore, was the only real support that could be depended upon, rain or shine, night or day.

7. Engineer Operations.

As rains became longer in duration and more intense, engineer work became increasingly difficult. Repeated landslides and mud-holes developed without warning, and bridges, culverts, and sometimes the road-bed itself, were continually being washed out. The IBULAO RIVER Jap-truck bridge was twice washed out during the period 6-11 August, and the foot bridge was completely washed down the river. The LAMUT RIVER bridge was also knocked out at intervals, as well as smaller bridges along Highway 4 to the north.

The major engineer feat was the opening of New Highway 4 clear to the IBULAO RIVER by the 27th Engineer Construction Battalion

(XIV Corps). This marvel of field engineering was completed on 11 August in extraordinarily good time, considering the difficulties experienced. A Bailey bridge over the IBULAO RIVER was completed by Corps Engineers on 16 August. In the meantime, the 6th Engineer Battalion working on Highway 4 north of GUROG made considerably better progress than originally anticipated, and by 10 August had opened the road clear to BANAUE. With the opening of New Highway 4 to the IBULAO RIVER, Old Highway 4, which had steadily deteriorated, was abandoned and used only for tractors and dozers.

During the period, more and more difficulty was experienced in keeping open the road from the IBULAO RIVER crossing to KIANGAN. This road in places passed through rice paddies which, when wet, were bottomless. By constant work, corduroying, and filling with rock, engineers were able to keep the road passable to vehicles, with the help of tractors at the worst spots.

The Engineers played a vital part in the mountain fighting in the IFUGAO PROVINCE. The advance of the Division high into this rugged rice terrace country was made possible only by the prodigious labor of the Engineers.

8. Medical Support.

The work of the 6th Medical Battalion was no less difficult than that of the Engineers. Long litter carries over extremely rough terrain and precarious mountain roads were but routine daily problems. Particularly valuable in caring for emergency casualties were the 24th and 55th Portable Surgical Hospitals. The 55th Portable Surgical Hospital packed overland into an area near the IBULAO RIVER crossing well before the opening of New Highway 4, and the 24th Portable Surgical Hospital packed up Highway 4 into BANAUE shortly after the 1st Infantry took the town.

9. The Division Comes Out of the Line.

With the cessation of offensive operations on 15 August, the Division immediately put into effect plans which it had made to receive the surrender of General Yamashita, Supreme Commander of the PHILIPPINES, and what was left of his XIV Area Army. Pamphlets giving surrender instructions were dropped and broadcasts from L-5 planes were made. Although some negotiations were carried on with Japanese local commanders south of KIANGAN, up until the time the Division was relieved, there were no overtures made by General Yamashita. Apparently the haughty "Tiger of Malaya" was awaiting either further instructions from Tokio, or the announcement that formal surrender terms had been signed.

However, on 19 August, an American P-38 pilot, who had been forced to bail out over MT PULOY on 8 August, when his plane caught fire, and had been captured by the enemy, was returned to the 1st Infantry lines near HAPAO by a Japanese escort. Although the Japs had not told this American officer that the war was over, he had suspected as much, since while he was held captive at the main enemy headquarters (presumably General Yamashita's), the treatment accorded him by the Japs suddenly took a decided turn for the better on the morning of 15 August. The officer reported to Division Headquarters with a letter, dated 16 August, addressed to the "Commander of the American Forces" from the "Commander-in-Chief of the Japanese Army". Although the signature was illegible, it was believed to have been signed by General Yamashita himself. The letter had little to say other than that the American officer had refused to divulge any information, had conducted himself admirably, and since he was of no further value, was being returned to the American forces. On 21 August, just before the Division was relieved, this officer was flown in an L-5 over the area southwest of HUNGDUAN and positively located the main enemy headquarters where he had been held captive. That this was General Yamashita's headquarters was later confirmed, when communications between General Yamashita himself and the 32d Infantry Division were established on 25 August after a Cub plane flying over the area had dropped a message to him the day before. Cub pilots also observed at this time that large groups of Jap soldiers were assembling in the general vicinity of the headquarters, apparently in preparation for an actual surrender.

On 16 August the Division was alerted for movement to Japan as part of the American Army of Occupation. XIV Corps issued orders on 18 August for the relief of the Division by elements of the 32d Infantry Division and the Division began its movement out of the mountains.

The 1st Infantry was ordered to assemble in the Division camp area north of the LAMUT RIVER, except for one Battalion (-one Company) which was to remain at the IBULAO RIVER crossing until relieved. The 11th Infantry (2d Battalion), with the 1st Battalion, 14th Infantry, 3d Battalion, 1st Pangasinan Regiment, and 2d Battalion, 3d Pangasinan Regiment attached, was ordered to assemble at BANAUE awaiting further instructions. The 20th Infantry was ordered to assemble in the Division camp area, except for one company to remain at KIANGAN until relieved. The 14th Infantry (-1st Battalion and 3d Battalion (-Company "L") and BUENA VISTA Regiment were ordered to assemble in KIANGAN, while the 2d Battalion, 2d Pangasinan Regiment and Company "I", 3d Pangasinan Regiment, which had been securing Highway 4, were ordered to remain in place, awaiting further instructions. Company "A", 6th Engineer Battalion, elements of the 6th Medical Battalion, and the 24th Portable Surgical Hospital were ordered to remain in the LAGAWE-KIANGAN area until all 6th Infantry Division troops had been relieved.

At 1800, 21 August, the 3d Battalion, 128th Infantry of the 32d Infantry Division completed the relief of 6th Infantry Division elements in the forward areas and all Filipino units passed to the control of the 32d Infantry Division. By 24 August all troops of the Division had closed into their assembly areas. The Division was finally out of the hills.

During the campaign in the CAGAYAN VALLEY, the Division killed 7,702 Japs, took 925 PW's, and captured or destroyed over 800 enemy vehicles, tons of ammunition, and large amounts of food, medical, signal, and ordnance supplies. Battle casualties of the Division were 99 dead and 432 wounded and injured.

SUMMARY OF LESSONS LEARNED

1. Operational:

a. Beating the Jap At His Own Game:

In the campaign fought along Highway 4, where increasingly rugged, wild and densely vegetated terrain was met as the advance progressed, it was again pointedly brought out that one of the best ways to defeat the Jap is to push through his position, and once in behind him, to keep moving forward, keeping him off balance, and never giving him a chance to recover. These are favorite Jap tactics, but turned against him, they work even better. When our troops get in behind him, the Jap becomes confused and does stupid things in his efforts to recoup the situation. From the LAMUT RIVER to KIANGAN, Highway 4 runs for 20 miles, every foot of which is ideal ambush country. To keep pushing forward rapidly in such terrain, despite Jap infiltrations and harassing raids on our supply lines, was a risk, but it shortened the campaign many weeks and saved many casualties. Had our troops stopped to secure the flanks of the road in this jungle-mountain country, the Jap would have had time to get set for our successive attacks. As it turned out, the Jap was knocked off balance, and was able to make only two major stands during this drive, one near PAYAWAN FARM and the other at LANE'S RIDGE. It is true that during the earlier part of the advance, our losses from repeated Jap ambushes and raids on our supply trains, day and night, were greater than our losses in the attack. Nevertheless, these losses were justified. Lives were saved by vigorously pushing up the road and avoiding costly attacks against Jap groups on our flanks. These by-passed groups of Japs had only a limited time to harass our lines of communication, as they could not supply themselves, and were forced to withdraw sooner or later. The very fact that these tactics shortened the campaign saved additional lives.

b. Artillery and Air Preparations in Depth:

In this campaign our advance was tied to the one existing mountain road, Highway 4, because of the extreme difficulty of cross-country movement. By the same token, the Jap defense was also tied to the road. These conditions made the employment of artillery and air in depth particularly effective, as succeeding objectives, for days ahead, could be readily selected and all possible defensive localities in the area could be constantly pounded, day and night. This had an accumulative

effect that grew in intensity as the advance progressed deeper into the enemy's position. It immobilized him, disrupted his supply, evacuation, and communications, destroyed his defensive positions, caused him constant casualties, harassed his reserves, gave him no rest, and lowered his morale to the breaking point. Against these tactics, the Jap had no defense. To escape this relentless punishment, he had to either die, or withdraw far to the rear. The hundreds of Japs found dead from artillery, air bombing, strafing and Napalm strikes along Highway 4 during the advance, attested to the deadly effectiveness of these tactics. Many PW's testified as to the devastating effect constant shelling and air strikes had on the nerves and morale of their troops, not only in the front lines, but also all along their lines of communications and in their rear areas. Many, who could not stand the punishment any longer, committed suicide, ran to the rear, or made suicidal banzai attacks against our troops to end their suffering.

c. Tactics Used Against Jap Delaying Positions:

The terrain encountered by our troops shortly after the crossing of the LAMUT RIVER was a combination of very steep rugged hills, deep river gorges and densely forested jungle terrain with many bamboo thickets.

Difficulty of cross-country movement combined with limited visibility made the delaying tactics of the Japs extremely effective. These delaying positions were usually found along narrow trails at a sharp bend. Consisting of several MGs supported by a few riflemen, these positions had to be flanked, as any frontal assault along such a narrow trail would be very costly.

Flanking movements around such delaying positions, where the terrain would permit, were usually successful because of the lack of depth in each of the Jap positions. The direct fire and crushing power of tanks and Quad 50's in half-tracks, where they could be used, quickly reduced many Jap delaying positions.

Where the Jap position was a strong point, it was usually located so that its flanks were secured by natural barriers made by cliffs or deep and thickly covered draws. This necessitated the massing of all artillery and supporting weapons to keep the Jap in his reverse slope defenses, while the Infantry could advance, under covering fire, to the ridge and engage the enemy with small arms, bazookas, and grenades.

d. Air Support:

Because of fog and low-hanging clouds prevalent in the early morning hours, close-support air strikes preceding an attack were frequently delayed or cancelled. The resulting delay in the time of attack sometimes gave the attacking forces insufficient time to consolidate their gains and plan defenses properly prior to dark. Several sharp Jap counterattacks at dusk were partially successful for this reason.

A Philippine Army unit engaged with a strong Jap force in positions along a high ridge used close air support to the maximum advantage. Friendly artillery was out of supporting distance of this action. During one air strike it was noticed that the Japs pulled out of their ridge positions and occupied caves on the slopes while the strike was in progress. The following day, after the strike was completed, several planes continued to make dummy runs on the Jap held ridge. The enemy thinking the strike still in progress, stayed in his caves and allowed the Philippine Army units to take the hill and occupy the Jap positions without a single casualty.

e. War Dogs:

The Scout Dog Platoons were very effective in close terrain, because the dogs frequently pointed out Jap defenses and ambushes while they were still invisible to the Infantry.

f. Communications:

Forward units in places accessible only with great difficulty and where radio communication was lacking were frequently contacted by an observer in a cub plane equipped with an SCR 300 netted with the ground commander's radio.

g. Self-propelled Quad 50's:

Quadruple 50 cal AAA MG's, mounted on half-tracks, were successfully used in spraying bamboo-filled draws believed to contain Jap delaying parties and ambush groups. This fire eliminated the necessity for a tedious, time consuming search and thereby increased the speed of the advance. The half-tracks were used in several instances to evacuate casualties along the roads which were subject to Jap ambushes.

h. Convoying Trains:

M-8 Scout cars and the half-tracks of the AAA were

used to convoy supply trains to and from forward units. Their presence undoubtedly accounted for the safe passage of many convoys and assisted in destroying Jap ambush parties when attacks were made on convoys. The elimination of such ambushes, however, was not complete until Infantry and Guerrilla patrols and outposts had pushed out several thousand yards from the road and scoured the country for possible hiding places of Jap raiding parties.

i. Artillery:

TOT fires of several artillery battalions at irregular intervals were again used to great advantage. The effectiveness of the VT fuse was further attested by many PW reports.

90mm AAA guns, controlled and directed by the Division Artillery, were used extensively in placing harassing and interdiction fires on Jap bivouacs in rear areas and on critical points along the narrow trails.

Photo strips were used extensively, particularly in the later and more stabilized phases of the campaign. At times the strips provided inadequate coverage, apparently because a regular pattern of photographic flights had been impossible. Strips were not always issued in sufficient copies. 1/50,000 maps, while good for the plains, were distorted in both direction and distance for the mountains.

Many command, reconnaissance, liaison, and supply missions were flown by Division Artillery Cubs for all units of the Division. There is an urgent need for the organic assignment of two (2) L-5 aircraft to Division Headquarters and one (1) to each Infantry Regiment, these planes to operate under the technical control of the Division Artillery Air Section.

2. Propaganda Warfare:

During the course of the campaign (July 1 to August 21) in the CARABALLO MOUNTAINS, two methods of nullifying the enemy's combat efficiency proved to be particularly effective. The first was a 7 hour armistice on July 24, devised to allow enemy elements to surrender in comparative safety. The other was to employ PW's to reenter enemy lines voluntarily and encourage demoralized groups to surrender.

The armistice on July 24 was fully publicized beforehand by propaganda leaflets and broadcasts from a Public Address system mounted in an L-5. Although individual surrenders during

the period were negligible, the truce evidently produced these pronounced effects: (1) Our strict compliance with the terms helped to dispel the enemy's preconceived conception of our insincerity and deceit, (2) The seven hours of inactivity provided time for the Japs to consider and evaluate their plight, and (3) A moral advantage was gained by offering a chance to surrender because it implies that the enemy's state is hopeless and that the truce is a generous gift from a superior to an inferior force. The reluctance to surrender on the day of the truce can be attributed to the following conditions: special precautions were taken by enemy outposts to insure that none could approach the American lines; many elements were stranded in remote areas and had no knowledge of the location of American lines; and the disgrace of surrendering deterred such an ostensible action during the specified period. However, this unusual occurrence must have disturbed the stereotyped Japanese mind and further depressed the enemy's morale.

The technique of using PW's to encourage their comrades and compatriots to surrender was again tried during the campaign. After the care and attention afforded these PW's, they were enthusiastic about locating other enemy elements and revealing the unexpected kindness of our treatment. Formosans were employed for missions because they had not been so extensively indoctrinated with the ignominy of surrender and were therefore willing to face their comrades after having done so. However, this procedure is limited by certain conditions. It could hardly be expected that PW's could proceed through organized enemy positions and return unmolested with any sizeable group, and ample protection from any retributions on the part of civilians had to be insured. During August, when PW's contacted enemy groups west of SANTA CRUZ, NUEVA VIZCAYA, several Jap groups, mostly Formosan, the largest of which totaled 65, returned with the PW's and surrendered to our troops.

3. Supply and Evacuation:

a. Supply by Air:

Early in July the main effort of the Division was being made in the mountainous terrain west of the CAGAYAN VALLEY, where only one usable supply route, Highway 4, and mountain trails passable only to foot troops and in a few instances to pack animals, existed. It soon became apparent that the Division would have to resort to air supply of combat troops. All combat units were instructed to select the best available air drop areas within their zones of action as they advanced.

During the first part of July, the 14th Infantry Regiment, a Philippine Army unit, operating near DUIT, south of KIANGAN, came under control of the Division. This unit, with a strength of 1500, was isolated from all roads, and on 5 July the first air drop asked for by the Division in the campaign was requested. Later, both 20th Infantry and 63d Infantry troops, were committed in this area and air drops continued until friendly troops were withdrawn from the sector at the end of the campaign. Air drops in the DUIT area were not always successful, owing to inexperienced Philippine Army troops' selecting air drop areas too close to the front lines, and on a few occasions the enemy benefited as much from air drops as the Filipinos did.

In KIANGAN, air drops were used to supply 2000 to 3500 troops for over two weeks. Air drops in KIANGAN were very successful, as supplies dropped outside the drop area could be recovered.

At BANAUE, air drops of ammunition and rations for a strength of 1900 troops commenced on 22 July. By 4 August, the strength in the BANAUE sector had increased to 4000, necessitating the use of pack horses and carrying parties to supplement the limited amounts of supplies that could be dropped, because of drop commitments in other areas. Air drop at BANAUE was discontinued on 10 August when Highway 4 was opened to jeep traffic. During August, a force of 400, sent from BANAUE to DUCILIGAN by the 1st Infantry, and another 1st Infantry task force of 1500 at HAPAO, were also partly supplied by air.

On 25 July the 11th Infantry Regiment (PA) (reinf) under the control of the 6th Division, was committed near BUNHIAN, where no road net existed and supplies had to be hand-carried from MARSAT GRANDE, located 25 miles to the east. By 28 July this unit was heavily engaged 1000 yards from MAYOYAO, and could no longer bring forward sufficient supplies from MARSAT GRANDE, now 40 miles away. Air supply was initiated 27 July and continued every three days until 9 August, at which time the 11th Infantry moved to BANAUE.

During the period 3 July to 15 August a total of 53 airdrops were made to supply troops whose strength reached 7000 at the peak of air drop supply during the last week of July and the first week of August. Part of the losses was caused by damage to containers.

Total tonnage of supplies air dropped and recovered during the period 6 July to 14 August were as follows:

	<u>Tons Requested</u>	<u>Tons Received</u>	<u>Tons Lost</u>	<u>% of Loss</u>
Rations	506	374	132	26.1%
Ammunition	213	157	56	26.3%
Signal Supplies	11	8	3	27.2%
Medical Supplies	2	1.5	.5	25.0%
Totals	<u>732</u>	<u>540.5</u>	<u>191.5</u>	<u>26.17%*</u>

* Average Loss.

Air drop areas should be carefully selected and located well in rear of front lines to insure full recovery of supplies dropped. Markings of drop areas should be changed frequently to insure that the enemy will not be able to set up an air drop area within his own lines and receive the air drops through the use of U. S. markings. The use of varied colored smokes to mark drop areas proved to be very successful and does away with the need for changing panel markings frequently.

b. Hand Carriers and Pack Animals,

In the area west of KIANGAN, a total of two battalions were operating in rough, densely wooded terrain, precluding the use of air drops. Civilian carriers were used in large numbers with excellent results. During the initial phases of operations in KIANGAN, supplies were air dropped in a central location and hand-carried to the front line units. Later, as roads became passable to KIANGAN, supplies were hauled in by truck to the hand-carry starting point.

A peak total of 4000 troops were deployed in the BANAUE sector, which required the use of civilian carriers to haul supplies into the area to supplement those dropped by air. A total of 500 carriers were employed to haul supplies 15 miles from GUROG to BANAUE, a two day trip due to the terrain, and a trip in which only half of the carriers could carry supplies, while the other half rested.

Carriers had been used prior to this time in the LUZON Campaign with only fair degree of success, because civilians were reluctant to work in areas where enemy snipers were found, but in the CAGAYAN VALLEY civilians would not quit under fire. This fact probably accounts for the great success the Division had in the employment of civilian carriers in the latter part of the campaign.

The Division found that owing to the large number of troops in the BANAUE and KIANGAN area, the combined use of carriers available and air drops could not adequately supply the troops committed, and that other methods of supply had to be used to supplement those already in use. Pack horses filled this need. By 3 August the Division Civil Affairs Section had procured 98 horses and had turned over 68 of them to the 1st Infantry and 30 to the 20th Infantry. Heavy pack saddles were available in large quantities, but only 35 light wooden saddles, suitable for small Filipino ponies, were obtained. Cargo pack boards were found to be an excellent substitute for pack saddles. In addition to hiring the horses, the Civil Affairs Section hired one civilian to take care of each horse. Pack teams consisting of 17-20 horses, were organized and an experienced soldier packmaster was placed in charge.

The success of the Division in employing pack trains indicates that plans for mountain operations should provide for an ample supply of pack horses.

c. Evacuation.

Evacuation was one of the most serious problems faced by the Division. When troops first reached the IBULAO RIVER-KIANGAN area, all evacuation from forward positions was by a long, difficult hand carry over precipitous mountain trails. Air evacuation by L-5's, landing on the road just north of the IBULAO RIVER, was not feasible, since a safe airstrip could not be constructed in this rough terrain.

Litter bearers faced longer and more difficult carries, as the troops advanced deeper into the mountains, trails became less distinct, and rains increased in intensity and duration. One of the most difficult carries was that from the ANTIPOLLO position to KIANGAN. The route, although only about 8 miles long, traveled over the top of a 3000 foot mountain, passed through rice paddy areas three to four feet under water, and crossed four large streams which were unfordable during rains. The trip normally required two days for a man walking in dry weather. In rainy weather, the trip often took four days. Casualties were often hand-carried, not by enlisted medical personnel, (this back breaking job would kill a white man), but by Ifugao natives. These brown, naked men, sixteen or more to a litter, carried casualties out with great difficulty, but more swiftly than could be done by American soldiers. Where trails became narrow ledges on the mountain side, natives carried the litters on their heads with one man at each end. A single misstep would have sent the casualty hurtling down hundreds of feet to the floor of the canyon. However, our casualties were evacuated without a single loss. One severe

"puncture wound of the chest" case was carried 8 miles from the vicinity of ANTIPOLLO to KIANGAN by the litter bearers of a Collecting Company and civilians. The trip required 28 men and eight hours of gruelling labor. When the hospital was reached the casualty was barely able to murmur, "Thank God and the Medics, we made it."

In the inaccessible areas in which the Division found itself operating, portable surgical hospitals were packed into the mountains and proved their weight in gold. Their presence in mountain fighting is a must, if seriously wounded men are to be given a chance to live.

d. The Employment of Weasels.

On 3 July, 12 weasels were received by the Division, 5 each of which were issued to the 1st Infantry and 63d Infantry, and 2 to the 6th Signal Company.

Weasels were used to haul supplies and lay wire on soft slippery roads, but in spite of cautious employment and driving, at the end of one week of operation, more than half of the weasels were deadlined because of broken parts and worn out track suspension systems. In some places, weasels were immobilized by mud so thick that the tracks lost all traction. Because of their inherent mechanical weaknesses, the use in the future of weasels in mountainous terrain is not recommended.

e. Enemy Equipment Salvage.

Throughout the whole campaign, large quantities of captured supplies presented a problem, because the Division had only one section of a Quartermaster Salvage Platoon attached. It was necessary to set aside quartermaster transportation and personnel to collect and evacuate captured equipment and supplies to rear collecting points. Because of the small size of the provisional salvage group, much of the captured supplies could not be evacuated, but had to be destroyed to prevent recapture, souveniring and looting. Unit commanders are not able to carry on and supervise salvage operations simultaneously with tactical operations. This work should be done by qualified teams attached to a Division for an entire operation.

5. Personnel Matters.

a. Casualties.

Battle casualties during the period (1 July to 15 August) averaged slightly over 8 per day; non-battle casualties were comparatively light. Living conditions in the upper

CAGAYAN VALLEY and in the mountains of IFUGAO PROVINCE were far from desirable. However, by continued careful supervision and strict enforcement of sanitary measures, illness was held to a minimum except in one isolated instance.

b. The Readjustment Program and Morale.

The initiation of the Readjustment Program consumed considerable time and planning throughout the period. In June, 8 officers and 105 enlisted men were relieved from assignment with the Division; in July, 6 officers and 200 enlisted men; in August, 5 officers and 940 enlisted men, and later in August, 600 additional enlisted men. This relieved from assignment with the Division all enlisted personnel with Adjusted Rating Scores of 85 or higher.

The morale of personnel of the Division was uniformly excellent throughout the period. Initially, there was considerable question and some dissatisfaction among the men concerning the Readjustment Program. As further information was disseminated and all personnel came to realize all the problems involved, the general outlook concerning the Readjustment Program became more favorable.

c. Labor

Because of poor condition of roads and the distance involved, it was necessary throughout July and the first part of August to secure large numbers of native carriers to furnish supplies of rations and ammunition to the front line units. From 1500 to 2000 of these laborers were secured through the Division Civil Affairs Office, daily. When the use of carriers was insufficient, Civil Affairs secured horses which were organized into pack trains. To secure this number of animals, it was necessary to comb the entire area. Local civil officials assisted materially in the procurement of labor and pack carriers.

6. Medical

a. Water Supply:

As in previous operations, water was drawn from wells sunk near the banks of streams and not from the streams themselves. Although the engineers located water points as close to forward troops as possible, hand carry of water was often necessary. Troops were frequently forced to resort to the use of boiling and halazone tablets to purify water from springs or streams. The restricted amount of water precluded

adequate sterilization of mess-kits in some instances.

b. Insect Control:

A Mosquitoes of the anopheles minimus variety were found to be breeding in large numbers along the banks of nearly all the streams in areas occupied by American troops. Whenever feasible the banks of streams within two miles of bivouacs were sprayed weekly with 5% DDT in oil.

Flies were present in indescribable numbers. Control measures afforded by adequate field sanitation, burial of the numerous enemy dead, use of fly traps and DDT, and destruction of breeding places quickly reduced the fly population in fully occupied territory. In forward areas, however, the full effects of swarms of flies were seen in the health of troops.

c. Communicable Diseases:

The problem of supply and evacuation in the HAPAO area produced an excessive number of diarrhea cases in one battalion. There were several contributory factors. Widely dispersed troops depended on air drops and pack trains for food and water. Food containers dropped by air frequently burst, exposing the food to contamination. Water was sufficient in many instances only for drinking and cooking, and not for adequate sterilization. Flies were thick. Enemy action prevented the burial of numerous enemy dead in the close proximity of our troops. A Filipino battalion, whose sanitation standards were poor, were fighting alongside the American battalion. Diarrhea and dysentery rapidly increased in number to 178 in the one American battalion in two weeks. This outbreak brought out forcibly how difficult it is to eliminate diarrhea in a forward area during combat, once it has become thoroughly infected.

Many cases of fever of undetermined origin were admitted to Division hospitals, the greater part of the 138 cases of malaria admitted between 1 July and 15 August being from troops in active combat. One causative factor was the failure of troops in combat to take the required suppressive dose of two atabrine tablets per day. One successful method used by several units in combat, was to administer 4 tablets daily, to make up for the periods of close contact when it was not always possible to get atabrine to all men.

7. Engineer.

a. Landslides:

The engineer problem of opening and maintaining

Highway 4 was complicated by excessive landslides. These were usually cleared in the normal manner by dozing the debris over the side of the road and by restoring original grade and drainage. However, in numerous cases the roadbed itself had slipped away from the mountain side. In such cases, it was necessary to blast out foundations, crib up revetments, and fill in a new roadbed. To speed up the operations, it was found that considerable time was saved, except in solid rock, by construction of low cribs, 2 or 3 feet outside the previous road bed, and 4 or 5 feet below. An initial low narrow fill was pushed across, enabling light vehicles to cross the dip immediately. The expedient was subsequently developed by a strong retaining wall and filling to the former level, without interrupting necessary traffic.

b. Maintenance of Old Highway 4:

A heavy drain on the strength of the 6th Engineer Combat Battalion was the maintenance of Old Highway 4, a narrow, one-way, hand-constructed road which had been abandoned several years previously. The road had been surfaced with hand placed stone and was capable of carrying six ton loads. Division traffic resulted in quick deterioration of the road. It was found that hand labor to place rock and corduroy in the worst places was the only satisfactory method of maintenance. Trucks were limited to half-capacity loads. A continuous pick and shovel ditching gang was necessary to counteract the innumerable springs that bubbled along and in the road bed. Much of the time, two companies and 200 civilian laborers were thrown into the fight to keep Old Highway open, and even then it was out 60% of the time.

c. Bridges:

In the rugged mountainous area of operations, bridging the numerous rivers and gorges was made doubly difficult by fluctuating flow of water, steep banks, and inaccessible by-passes. Intermittent rains transformed dry washes into raging torrents within an hour. In order to keep a line of supply open behind the advance of infantry troops, bridges were improvised from materials at hand. A destroyed bridge to the rear provided a valuable supply of 12" standard steel I beams, 16 feet long, and 18" steel box girders, 30 feet long. Use of these members resulted in a 50% saving of time, labor, and lumber. In one case, these long box girders, used as stringers over a deep gorge, made possible a 35 ton bridge, saved 2,000 board feet of lumber, and allowed supplies to get to the advancing infantry 24 hours before expectation. These

salvaged steel members expedited work in five similar crossings which would otherwise have been delayed until standard timbers could be brought up from supply depots far to the rear. At the IBULAO RIVER, the engineers devised a unique solution. The river was approximately 300 feet wide and 3 to 4 feet deep, the current was swift, and the river bed strewn with boulders that made fording treacherous. The area was scouted for abandoned Jap trucks, which were dragged into the river to serve as bents, across which 6 by 12 timbers were laid for a treadway. Bulldozers maneuvered the vehicles into position and then heaped rocks and boulders around them as anchors. High water occasionally rose over the bridge for four or five hours, but repair crews easily replaced damaged sections in short time. This 8 ton bridge carried the bulk of the supplies to an Infantry Regiment plus 3500 Philippine Army troops for several weeks, until a Bailey bridge could be brought forward and constructed at this critical point.

FINIS

The LUZON Campaign was over. For 219 successive days, from 9 January to 15 August 1945, troops of the Division had been in combat. Landing in the assault at LINGAYEN GULF, the 63d Infantry (Corps Reserve) saw heavy fighting in the capture of ROSARIO, while the rest of the Division pushed inland, and fought the battle of the CABARUAN HILLS and took MUNOZ where the largest concentration of Jap armor encountered in the Pacific War was liquidated. After seizing SAN JOSE, the gateway to the CAGAYAN VALLEY, the Division advanced to BALER BAY and DINGALAN BAY on the east coast of LUZON. Moving swiftly down the CENTRAL VALLEY, the 1st Infantry in a rapid advance retook the major part of the peninsula of BATAAN, while the rest of the Division launched the first assault against the heavily fortified SHIMBU LINE east of MANILA. Here were fought some of the most savage engagements of the Pacific War. When the Division left this area, the center of the SHIMBU LINE had been shattered, and its right anchor greatly weakened. After mopping up in BATAAN and ZAMBALES Province, the Division moved to the north up Highway 5 and relieved the 37th Infantry Division in the ARITAO-BAGABAG area. After seizing SALINAS-PINGKIAN and KAYAPA in rapid succession, the Division launched the drive up Highway 4 which wound up the LUZON Campaign.

In this campaign, the Division killed 20,480 Japs and took 1,369 PW's. Friendly losses were heavy, battle casualties totalling ~~901~~ dead, 7 missing, and 3,229 wounded and injured. Troops attached to the Division during the campaign suffered an additional 62 dead and 288 wounded and injured. The losses of the three Infantry Regiments of the Division were a little over 93% of the Division total. Battle casualties by regiment were as follows:

	<u>KIA</u>	<u>WIA</u>	<u>IIA</u>	<u>MIA</u>	<u>DOW</u>	<u>TOTAL</u>
1st Infantry	212	660	238	4	46	1,160
20th Infantry	205	719	296	2	46	1,268
63d Infantry	<u>246</u>	<u>890</u>	<u>197</u>	<u>1</u>	<u>56</u>	<u>1,390</u>
<u>Totals</u>	663	2,269	731	7	148	3,818

The fighting was over. Once again in an assembly area, the Division looked forward to an active part in the Occupation of Japan, and immediately began an intensive rehabilitation program.

SECRET