10 September 1943

SUBJECT: Report on Operations of the 25th Infantry Division on New Georgia, B.S.I., August 5-24, 1943.

TO : Commanding General, New Georgia Occupation Force.

In compliance with instructions contained in unnumbered memorandum from Headquarters NGOF, dated 25 August 1943, the following informal report covering the combat operations of the 25th Infantry Division on New Georgia is submitted. This report does not cover the operations of the 161st Infantry and the 65th FA Bn while these units were attached to the 37th Infantry Division. Paragraph numbers correspond to the numbers in the memorandum from Headquarters NGOF.

1. TACTICS.

a. Infantry. (1) The mission of the 25th Division, less 35th Infantry, was to clear the area on New Georgia north of Munda Airfield, between Enogai and the Piru Plantation, inclusive. The operations consisted principally of overcoming Japanese forces withdrawing from the Munda Area to the north and northwest.

(2) The principal fighting was done by the 27th Infantry, which was initially the only regiment immediately available to the Division Commander. The only known Japanese forces were astride the two trails leading to the north from the Munda Airfield. The best available information indicated that these trails finally converged north of Zieta where a report from a Marine patrol indicated the possibility of strong Japanese resistance. The 1st Battalion, 27th Infantry marched north via the trail leading to Mt. Bao. while the remainder of the regiment advanced over the west trail to Zieta, with a view to striking the expected Japanese resistance in the vicinity of Zieta by these converging columns. The 161st Infantry followed the east column and was to continue the operations toward Bairoko after the 1st Battalion, 27th Infantry had cleared Mt. Bao. Actually this plan had to be modified as more accurate information of the enemy and trail net developed.

(3) Both columns of the 27th Infantry had to operate through extremely dense jungle and over very rough, broken ground. The trails were nothing more than muddy foot paths along which the Japanese had, in some instances, prepared well-organized delaying positions. Only one battalion could normally be employed at a time. The usual tactical method employed

was to out-flank the Japanese resistance by close-in, double envelopments. The dense nature of the country, the lack of any parallel trails and the difficulties of locating and controlling units maneuvering to the flanks forced these envelopments to be on a rather narrow front. Fortunately, the Japanese positions did not extend very far laterally off the trails.

(4) In a few instances where the Japanese were occupying previously prepared positions, it was possible to surround completely these positions and cut off the retreat of the garrison. However, when surrounded, the final reduction of the Japanese resistance presented a special problem. The positions were usually too shallow and the country too dense to permit an artillery or mortar preparation without endangering the troops that had cut off the Japanese rear. In these instances, it was necessary to use flame throwers, infantry cannon, or tanks to knock out the Japanese pillboxes. In one instance a 75mm infantry howitzer was thus employed at point-blank range.

(5) The hastily-occupied positions encountered by the west column of the 27th Infantry were even more difficult to locate than the previously prepared positions. After troops advanced they would draw fire and would be unable to discover from whence it came. Our troops would immediately halt and then endeavor to scout out the Japanese positions. This often permitted a small Japanese force to delay the advance and to inflict casualties on our troops which were forced to disclose themselves by movement while scouting out the positions. In one instance, five casualties resulted without a single Japanese being seen. This situation was beginning to have an adverse effect on the morale of the troops. To counter this condition, additional Browning Automatic Rifles were placed with the leading platoon of the assault companies, which were directed to deploy astride the trail with men separated by only a few yards. Whenever the Japanese opened fire, men in the leading platoons were directed to open fire with all weapons toward the area from which the Japanese fire was heard, even though no resistance could be seen. Thus the great fire power of our weapons was placed immediately in action. While this method seemed to produce results, it was employed only in one or two instances and additional experience must be had before definite conclusions can be drawn as to its efficacy.

b. Tanks. (1) As indicated above, tanks attached from the 11th Marine Defense Battalion were used on two or three occasions to assist in reducing prepared Japanese positions. The terrain was generally ill-suited for tanks which were forced to operate axially down the trail. This limited the employment to two or three tanks at a time. The tanks did prove very helpful in knocking out the first few pillboxes encountered, but the observation slits soon became clogged with leaves and debris which reduced the visibility of the drivers and gunners, thus forcing the withdrawal of the tanks after only a few minutes action, and before they could really breach the enemy positions. These tanks were closely followed by assault infantry troops which were able to profit by the fire from the tanks. The Japanese machine gun and rifle fire had no effect on the tanks.

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(2) While the attached Marine Corps tanks cooperated most willingly and quite effectively, the efficiency of the tanks would have been greatly enhanced had there been an opportunity for preliminary training and had the officers and men of the tank platoon been familiar with the troops with which they were to operate and the tactical methods that were to be employed.

c. Artillery. (1) The extremely dense jungle precluded any employment of artillery except by means of forward observers. Even these observers with front line rifle companies usually had to make the adjustments initially by sound. Fires were placed well out in front of the troops and then walked back to the minimum limits of safety.

(2) It was sometimes necessary to withdraw infantry units two or three hundred yards in order to permit artillery concentrations on prepared positions. This has the disadvantage of giving up ground, and on at least one occasion the Japanese profited by following the withdrawing troops, which after the concentration had to fight to regain the ground given up.

(3) Because of the nature of the terrain and the heavy woods, high angle fire with the delayed fuze had to be used almost exclusively.

(4) The effective use of artillery was often hampered by the extreme difficulty of locating front line units.

(5) The difficulties of artillery employment were enhanced by the lack of any suitable map or firing charts. Artillery surveys were pushed immediately behind the front line troops, but there were no suitable aerial photographs available with which to supplement this survey. Nevertheless, effective interdiction fire was placed in front of the 27th Infantry south of Zieta, using a combination of data obtained from the survey, the one available mosaic, and sound observations from forward observers.

d. CWS. (1) Smoke pots and smoke grenades were used to mark our own positions for aerial and ground observers for identification purposes and for planes making paradrops of food and ammunition. Smoke grenades were also employed successfully in screening attacks on pillboxes and centers of resistance.

(2) Flame throwers were employed in pairs, with rifle cover, in assaults on pillboxes. Their success was limited due to malfunctioning and to the vulnerability of the operators while working up to within range of the target. Additional training is required in developing methods of moving flame throwers up under cover of darkness or smoke. Smoke grenades were only partially successful in screening their advance.

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2. EFFECTIVENESS OF SUPPORTING ARMS.

a. Artillery. (1) Despite difficulties of observation and adjustment of fire, artillery again proved very effective and was often the controlling factor in forcing the enemy to abandon his occupied positions. Where the enemy was well dug in, few actual casualties were obtained, but the concussion and morale effect is judged to have hastened the Japanese decision to give up these positions. Casualties resulting from artillery fire cannot be accurately determined. The enemy on New Georgia buried his dead and removed the wounded whenever time permitted. Areas shelled were not always immediately occupied by our troops; thus an accurate count could not be obtained.

(2) In addition to the casualty and concussion effect of HE shell, its efficiency in clearing the jungle undergrowth was of great value to the supported troops in their efforts to locate and eliminate specific points of resistance.

(3) The use of night harrassing fire was believed to be effective in reducing the enemy counter measures during the hours of darkness, but there is no direct substantiation of this belief.

(4) The shortage of local water transportation caused the frequent exchange of guns between the 89th FA Bn and battalions of other divisions. The value of prior calibration of pieces of the 89th FA Bn was thus lost and the accuracy of firing reduced. An even more serious source of inaccuracies was the abnormally high number of different lot numbers of ammunition issued to artillery units. This mixing of ammunition was so extensive that it was impossible to secure enough rounds of any one lot within a battalion to prevent firing of mixed lots on battalion missions--almost all firing was by battalion concentrations. Tests conducted at Guadalcanal indicated an average difference in range between different ammunition lots of two hundred (200) yards and extreme differences of four hundred (400) yards were noted. It was frequently necessary to adjust to within two hundred (200) yards of front line troops with one battery and then call in the entire battalion in firing for effect. The dangers to our own troops under these conditions is apparent. On several occasions such concentrations resulted in shorts within our own lines.

b. Naval Gunfire. No naval gunfire was employed in the support of this division.

c. Aerial Bombardment. None employed in support of this division.

3. WEAPONS.

a. 155mm How. (Schneider). Gave excellent results. Ammunition supply over poor roads is a serious obstacle. Inability to employ high angle fire with this weapon reduced its effectiveness and added to the danger to

front line troops. Tall trees on occasion intercepted a good percentage of rounds many yards short of the target. The 155mm How M-1, with its additional 6000 yards of range, would have been of great value considering the great difficulties encountered displacing over muddy and steep jungle roads.

b. 105mm How. This weapon fulfilled all of its requirements in an excellent manner. The shell, M-48, with its combination super quick and delay fuze gave excellent flexibility of fire. The M-54 fuze was used as a substitute for the super quick fuze, but was not employed for time fire because of the lack of observation. During one period when only this fuze was available, the need for a delay action fuze was keenly felt.

c. 81mm Mortar. (1) The 81mm mortar again proved effective for close-in fire at ranges which precluded the use of artillery. In one instance, the 27th Infantry mortars were employed at the minimum range of 200 yards.

(2) Firing positions in the dense jungle had to be cleared but this was done without very great difficulty. Necessary clearing can often be facilitated by taking advantage of occasional patches of bananas or palms.

(3) An observer was always placed with the front line troops. He had direct sound-power telephone communication to the mortar positions. Adjustment by sound often had to be made in the jungle; fires were initially placed well out in front and then walked back in by sound until effective adjustment was obtained.

(4) Great difficulty was had with the present heavy shell (old-type medium). There was a disproportionately large number of duds and many dangerous shorts. Since the light shell, which has only an instantaneous fuze, is relatively ineffective in the jungle, immediate steps should be taken to correct the difficulties with the heavy shell. Much of the ammunition used had to be dropped to the troops by air and may possibly have been damaged thereby. However, the light shell produced no difficulties, which would indicate that the defects are in the heavy shell itself, both in the propellant and the fuze or explosive.

d. 60mm Mortar. (1) This mortar is too light for effective use in the jungle. The quick fuze causes tree bursts which prevents the shell from getting down to the ground. However, the chief defect is that the mortar cannot be fired effectively at very short ranges. The propellant is much too powerful and sends the projectile far too high in the air, causing too long a time of flight and making observation and adjustment of fire extremely difficult. Practically no use was made of this weapon for the above reasons.

(2) There is a definite need either for a light mortar of the Japanese grenade discharger (so-called "knee-mortar") type, or for an effective rifle grenade which can lob a projectile at ranges from 50 yards to about 200 yards. In other words, we must fill the gap between the hand grenade and the 60mm mortar. This is believed to be the only critical gap in our infantry weapons.

e. 37mm Gun AT. Use is greatly restricted by its bulk and the limited field of fire in this type terrain. It was used twice against pillboxes: once successfully, and once with poor results. For successful use it must be moved into position under cover of darkness or smoke.

f. Heavy Machine Gun. The heavy machine gun was not used in the attack because of the difficulty of transporting it. No overhead or long range fire was possible and the guns were left at rear DP's to be brought up for defensive use when final or intermediate objectives were reached. This is SOP in this division.

g. Light Machine Gun. This gun was carried by the heavy weapons companies in lieu of the heavy machine gun, and was normally attached by platoons to rifle companies. Its use in the advance was limited due to thick undergrowth and broken ground. They were employed defensively with good effect.

h. Grenades. (1) Grenades are indispensable for jungle operations. The issue fragmentation grenade is satisfactory for defensive operations but lacks sufficient punch to be effective on the offensive, particularly in the assault of prepared positions. The British assault grenade is far more effective for offensive work. A similar grenade should be developed for our service unless an adequate supply can be had of the British grenade.

(2) The M-9A1 rifle grenade was effectively employed in some instances against Japanese machine guns in pillboxes. However, this grenade is designed primarily as an anti-tank grenade, with its thermal qualities as its chief characteristic. It does not have sufficient high-explosive effect to be really effective against pillboxes. In addition, many of the grenades issued in this action failed to function because of damp cartridges. One regiment reported 100 percent defective grenades; the other regiment, 30 percent defective.

(3) The bright yellow color of the hand grenade stands out in the jungle and constitutes a serious hazard to a man carrying it. They can be seen coming through the air, which permits the enemy to take cover and, in some instances, to return the grenade before it explodes. All grenades should be painted olive drab.

(4) As indicated in paragraph 3 d above, there is a genuine need for a high-explosive rifle grenade, unless the 60mm mortar can be modified to make it effective at very short ranges.

i. Flame Throwers. (1) Flame throwers have great possibilities in the reduction of pillboxes and other prepared positions. The actual results obtained, however, were far less effective than indicated in some of the newspaper accounts. The equipment is heavy and bulky and the carrier is thereby easily spotted and is vulnerable to enemy fire. The carrier must be covered in his approach to firing position, either by darkness or by smoke, and he

must be assisted and protected by riflemen. Best results have been obtained in this division by using flame throwers in pairs with specially trained accompanying riflemen, armed with smoke and offensive hand grenades. Further training in the development of these teams is essential.

(2) Better results would have been obtained from the flame throwers had they been available in larger numbers. At least four should be available for each infantry assault battalion.

(3) The pressure reducing valve and the hydrogen and nitrogen cylinders require a modification to make them effective. A separate report is being submitted on this equipment.

(4) The new gelatinized fuel is inferior to the old liquid fuel in the heavy jungle. The new fuel sticks to the vegetation and reduces the effective range.

4. SUPPLY AND EVACUATION.

a. Supply. (1) (2) (3) (4) This division was not involved in the initial landing.

(5) (a) Difficulties incident to supplying units on several small islands are attributed mainly to the shortage of small boats. While the advantage of centralizing control of transportation when the available transportation is inadequate are recognized, certain disadvantages of centralization, while not so apparent, are very real. A crisis to one of many units being served, such as a shortage of food, loses some of its importance when viewed by an impersonal central agency that is confronted with many problems each day. Contact with lower units is not sufficiently close to prevent mixups and delays. Boats were frequently assigned that never materialized or which arrived hours late, causing much loss of time and effort and denying much needed supplies to front line units. Centralization of facilities is also too inflexible to provide for last minute changes which constantly arise with a moving tactical situation. A greater decentralization, still holding a boat pool in reserve is recommended.

(b) Another difficulty arising from the operation of a unit on several islands is that of a lack of personnel to supervise operations at each island. Division supply personnel were completely occupied in obtaining supplies from rear islands and could devote no time to pushing supplies to the fighting units. Dumps from which divisions can draw should be established at the earliest possible time on the main island where the actual combat is taking place.

(6) (a) The supply of front-line units of a triangular division fighting in a jungle is made difficult by the fact that such supply is based

on the use of the motor transportation assigned such a unit. Terrain difficulties do not permit full use of this transportation and no substitute equipment or personnel is provided.

(b) It was necessary to hand-carry rations, ammunition and sometimes water for 3-5 miles over steep, slippery trails. Combat troops had to be diverted to this use with a resultant loss of fighting strength. Air drops of supplies, which are intended as emergency measures, had to be resorted to for a period of a week to supply two battalions. Supplies so dropped are hard to locate and recover and also their recovery requires the efforts of combat troops withdrawn from their combat mission. Recoveries averaged 60 percent.

(c) Supply by small boats proved to be the easiest and most efficient method employed. This method was followed wherever and whenever the tactical situation allowed.

(d) The use of pack trains in future operations is worthy of consideration. The maintenance of a motor road more than one or two miles inland from a beach involves an outlay of heavy road-building equipment beyond that now provided. Pack mules have operated successfully in the past over comparable terrain in the Philippines and can probably repeat the performance in this theatre. Animals can be trained to accommodate themselves to the lack of hay and a very small grain ration.

(7) Sufficiency of rations.

(a) "B" ration is excellent when it can be prepared. Its use in active operations is precluded.

(b) "C" ration is the only completely satisfactory jungle ration. Troops can march and fight on this ration for extended periods of time. Supplemented by rice, tea, and fruit juices it is popular with the men as well as officers. Some spoiling was noted.

(c) "D" ration is good for fast moving troops but only as an alternate in a "C" ration diet. It is useful and tasty also as a supplement to the "C" ration. Considerable spoilage (mold) was found.

(d) "J" and "K" rations are useful only to vary the diet. They do not subsist satisfactorily hard fighting troops over a protracted period and the men tire of them as a steady diet. The strongest objection to these rations is that all but the tinned elements spoil rapidly.

(8) (a) The 1/4 ton reconnaissance truck, the 3/4 ton WC and the 2 1/2 ton cargo truck all performed creditably during the operation. Unfortunately, in heavy mud conditions the use of the two larger vehicles often renders the roads impassable for the 1/4 ton. All things considered, the 3/4 ton

WC has the greatest overall utility. However, the complete replacement of the other types is not feasible. The addition of a winch to the 1/4 ton would improve its performance. The maintenance allowance of rear axles and differentials is too small for continued operation on very poor roads.

(b) The attached chart shows the vehicles used by the division in the New Georgia operation. A longer period of operation would have required considerable replacement of 1/4 ton and 3/4 ton vehicles. An additional fifteen (15) to twenty (20) 3/4 ton WCs are recommended for each infantry regiment. For general planning purposes the approved XIV Corps minimum list of vehicles is still considered appropriate. Modifications will always be required.

(c) Efficient displacement of division artillery over the type terrain and roads encountered requires heavy-duty tractors as prime movers and track laying trailers for ammunition supply. This can be provided for in one of two ways. A minimum number, two tractors to each howitzer battery and six trailers for each service battery, can be permanently assigned to the artillery in addition to its normal motor vehicles. Or, the artillery can be equipped ahead of time with a full complement of tractor prime movers and track laying ammunition carriers. Experience indicates that such equipment in this theatre would be a useful addition in all cases and a necessity in some. The movement of the 136th FA Bn into position at Zieta was made possible only through the cooperation of the 9th Defense Battalion which provided the necessary tractors.

(9) Clothing and Individual Equipment.

(a) Each individual should wear a one or two piece green suit or the camouflage jungle suit (the two-piece suit is preferable to the one pice coverall), light wool socks, field shoes, underwear, helmet, and a belt containing canteen, cup, and first aid packet. He should carry his individual weapon with one unit of fire (riflemen carry two (2) to four (4) hand grenades also) and a combat pack containing:

Shelter half
Field jacket or raincoat
Pair of socks
Head net
Spoon
Toothbrush and paste
Toilet paper
Rations (One or two days, as ordered)
Soap.

(b) Salt tablets, atabrine, chlorinating tablets, bandaids and iodine swabs should be carried by squad and assistant squad leaders in extra first-aid packet containers.

(c) A bolo or machete should be carried by one man in each squad.

(d) Other personal equipment should be stored in barracks bags in the ratio of one bag to three men. These bags are brought forward as the situation allows. In the past campaign, transportation difficulties prevented one regiment from receiving its barracks bags for two months, another regiment for one month. For this reason, extra clothing: herringbone twill, shoes, socks, underwear, should be carried in bulk by the division quartermaster or unit S-4's for issue to units as required. Issue can be made with ration issue.

(e) Shoes wear out rapidly in jungle operations because of being almost constantly wet and muddy. Supply plans should provide for a 50 percent replacement per month of active operations.

b. Evacuation. (1) Evacuations were usually made through normal channels. Battalion Aid Stations were located within a few hundred yards of front line units. In the early phases of the operations, jeep roads were maintained to within short distances of Aid Stations so that short litter hauls resulted. Jeep ambulances transported patients from aid stations to collecting stations, a half mile or more to the rear. From collecting stations patients were carried by jeep or 3/4 ton ambulances to clearing stations on the beach. Evacuation from the beach was accomplished by any available boat to the 17th Field Hospital on Kokorana Island.

(2) As the division moved to the north the road net ran out and litter hauls became increasingly more difficult, until in the final stage of the operations at Piru Plantation and north of Mt. Tirokambia it was necessary to hold the wounded and sick at battalion aid stations until boats could safely be brought around to evacuate them. No changes in evacuation methods are recommended.

(3) Poor and limited roads, difficult terrain, and climatic conditions frequently taxed the collecting companies facilities beyond their capabilities. This condition was even more prevalent during the Guadalcanal campaign. It is recommended, therefore, that additional collecting companies or medical battalions be available in Corps reserve to assist divisional units as required. Had not casualties been light, evacuation would have been unsatisfactory during the past campaign.

(4) Expedients. None.

(5) The percentage of non-battle casualties evacuated is not considered high. The total of these equalled approximately the total of killed and wounded in action. Non-battle evacuations were less than pertained in the two previous months out of combat. Malaria accounted for the largest share of those

so evacuated. Foot diseases and fungus infection, traceable to long periods spent in wet and dirty clothes and shoes, accounted for most of the others.

(6) The establishment of a rest camp was valuable in that it prevented the total loss of a number of men who would otherwise have been evacuated to a rear area. Operating under a staff consisting of a camp commander, a surgeon, aid men, and cooks, several hundred men suffering from fatigue or convalescing from minor ailments were salvaged. Neither time, personnel, nor facilities were available to establish as complete a rest camp as would be desired, nor is it likely that a combat division will ever be able to provide adequate facilities in the early stages of an operation. It is recommended, therefore, that such installations be provided by higher echelons. Some individuals sent to the rest camp by the field hospital would more properly have been retained as patients in the hospital. In order to provide any medical service at the camp it was necessary to take the battalion surgeon from a field artillery battalion.

5. ENGINEER.

a. Road Construction. (1) Inasmuch as the operations of the division involved crossing ten miles of jungled hills and swampland, the problem of road construction was of prime importance. There was no existing road net and the system of Japanese and native trails was of a confused pattern and, with rare exceptions, single-track and unimproved.

(2) Early roads invariably followed the trace of the trails along which the enemy was withdrawing. They were mere jeep trails constructed by clearing the jungle with a bull-dozer. Due to lack of sufficient heavy equipment, heavy tropical rains, and difficult terrain the maintenance of the roads was extremely difficult; at times impossible. It was usually found to be more practicable to cut a new section of road than to attempt the repair of stretches of impassable road.

(3) Early plans were initiated for the construction of an improved north-south road over which artillery could be moved. This was necessary to insure artillery support for the expected assault on the enemy positions at Bairoko. Maps lacked the detailed information on which a road-building plan could be initiated and aerial photographs were likewise of slight value due to the sameness of the terrain. After being forced to abandon one route due to the unsuitably of the terrain, another route was selected after extensive aerial and ground reconnaissance. Despite all efforts of the Division Engineers who were aided by elements of the 24th and 73rd Naval Construction Bns and Corps Engineers, this road to Mt. Tirokambia was not completed to accommodate artillery. A prolonged rainy spell produced mud of such depth that even the road-building equipment was at times unable to move, and, in fact, the breakdown of all roads was narrowly averted. By means of extensive conduroying and the use of Marine Corps tractors and track laying trailers, seven (7) 155mm howitzers and a limited amount of ammunition of the 136th FA Bn were moved up the Ziota Trail to

Ziota from where the howitzers could fire in support of operations on the north and west shores. The remaining five howitzers were finally emplaced after the Japs had withdrawn from Bairoko.

b. Water Supply. The supply of water presented no problems on New Georgia. Sufficient springs, wells, and streams were found to handle all fresh water needs. Front line troops filled canteens and water cans from sources at hand, chlorinating with Halazone tablets. Water points operated by engineers were established to serve rear units, and, following active operations, the infantry regiments also.

c. Equipment. Water supply equipment was adequate. Road-building equipment was inadequate. The D-7 angle dozer performed creditably. The D-4 and R-4 angle dozers are too light and have only limited value. The Galion power grader and dump trucks could be used only in rear areas, due to heavy rains. No bridging or stream crossing equipment was used.

d. Use of Engineer Troops for Combat. (1) Engineer troops were not employed as combat troops at any time during the operations. However, in pushing roads immediately behind the advancing infantry they were frequently exposed to enemy fire and suffered a total of seventeen (17) casualties from machine gun and rifle fire. It was usually necessary to organize local security for each bulldozer. This security was provided by an engineer platoon from the company operating the dozer. Patrols were sent out to the front, both flanks and rear. They killed several would-be snipers, and prevented any ambush.

(2) It is improbable that the Engineer Bn can ever be profitably employed on a combat mission in this theatre. The lack of roads, bridges, and established water points requires their full time employment on purely engineering projects. It will be more normal to employ combat troops to assist the Engineers than vice versa. It was found that dozers were less subject to sniping if they followed close behind the front line infantry.

6. SIGNAL COMMUNICATIONS.

a. Efficiency and Serviceability of all Types of Signal Equipment.

(1) Field wire and field cable: see b.

(2) Switchboard BD-9: The only BD-9 on hand was used with excellent results. Its light weight was a decided advantage.

(3) Switchboard BD-71 and 72: Always serviceable, but efficiency dropped with dampness. Not suitable for hand-carry through jungle because of great weight.

(4) Climbers LC-5: Serviceable, but gaffs too short for efficient tree-climbing. Tree climbers would have been better. Trees in jungle are of soft wood which is easily gouged out.

(5) Axle WL-27-(*): many broke; more rugged design indicated.

(6) Other wire communication equipment used: excellent.

(7) Radio Set SCR-193 in command car: excellent. Highly effective at regimental CP's to make contact with SCR-284's at extended ranges. Road mobility limited more by traffic regulations than by actual road conditions. All radio cars should be 3/4 ton with winch.

(8) Radio Set SCR-194: no attempt made to use this set, as distances were too great and vegetation too thick.

(9) Radio Set SCR-195: efficiency fell off sharply with dampness. Set almost always operated when dried out in the field. This is the only set which one regiment used within its battalions; the other regiment had no radio communication within its battalions. Radio operators often had to climb trees with the set to make contact.

(10) Radio Set SCR-284: use dictated by sheer necessity through lack of more suitable set. Entirely unsuited for jungle operation because of (1) great weight, (2) fragile nature of electrical components, and (3) complete failure when wet.

(11) Radio Set SCR-511: used to a limited extent from regiment to battalions. Fragility and susceptibility to dampness are marked, but not so much as SCR-284.

(12) Radio Set SCR-536: not used at all in view of previous experience with this set. 100 % failures are to be expected because of extreme fragility and susceptibility to dampness. Many sets in working condition when packed were inoperative after being shipped, stored in wet climate, and unpacked.

(13) Radio Set SCR-593: not used because of tactical situation. Previous experience indicates the set is rugged, but storage battery life is very short. Batteries must be filled daily to maintain electrolyte at proper level.

(14) Converter M-209-A: very successfully used. Each unit should keep at least two on hand, since the converter is subject to occasional mechanical failure.

b. Recommendations on Type of Field Wire Required.

(1) Wire W-110: Successfully used under all conditions. Should be used in preference to W-130 without regard to T/BA allowances except when transportation difficulties require a lighter-weight wire. Interruptions due mainly to vehicular traffic and falling trees.

(2) Wire W-130: valuable because of large amount which can be carried by hand by battalion communication sections. All long W-130 lines were used ground return, since the metallic circuit developed shorts in one to three days. When not physically damaged, ground-return lines several miles in length stayed in operation for weeks with little maintenance.

c. Amount of Signal Supplies on Hand on Landing and Amount Found to be actually Required: 30-day maintenance allowances specified for each unit closely approached actual expenditures. The only major shortage was Wire W-130. Because it was not available at Guadalcanal, units left there with only a small fraction of their T/BA allowance. W-110 cannot be substituted for W-130, since the tactical needs are entirely different.

d. Experience of Units Using Field Wire or Other Available Cables for Submarine Installations: One W-110 circuit about ½-mile long was laid across Bairoko Harbor. Contrary to approved practice, this line had a splice about 150 yards from shore, insulated with friction tape only. However, the circuit has been in operation for two weeks without interruption.

7. INTELLIGENCE.

a. Reconnaissance. (1) Division, regimental, and battalion commanders and selected staff officers made aerial reconnaissances of the terrain and enemy positions. The principal objects of these flights were; first, to locate on the ground certain key terrain features shown on the map or which were believed to exist after a study of known ground forms; and second, to select suitable, high-ground approaches to the north and west shores. The heavy jungle growth and the use of fast moving combat planes for these missions made the task extremely difficult. All ground forms looked strikingly alike and only the most prominent hills, ridges and swamps could be positively identified. However, enough information was obtained in this way that the more detailed ground reconnaissances could be intelligently planned. The proper relation between the positions of Mt. Bao, Bairoko, Mt. Tirekumbia, and Zieta was established only after several flights. Previous locations established by a ground reconnaissance were highly inaccurate, and this was the source of considerable confusion to the troops on the ground. No Japanese troops or installations were located on any flight.

(2) Photo reconnaissance was of little value due to the limited number of terrain features distinguishable through the heavy growth. Some difficulty was experienced in obtaining photographic coverage in the time required and of the exact area requested. Oblique photographs would have been of great value if they could have been obtained early in the game.

(3) The official aerial mosaic map was almost wholly valueless for ground or air-ground operations. The 1:20000 colored map obtained from the 1st Amphibious Marine Corps was far superior, though some of the ground forms were erroneous.

(4) The information of trails furnished by the report of Capt. T. Mullahey, USMC, was of value but was so inaccurate in its location of Mt. Bao and Tirokambia that much confusion and delay was caused before additional ground reconnaissance discovered the actual location of these important hills. Some reports of our patrols were likewise inaccurate and indicate the need for further training in the preparation of road sketches with accurate records of distances and directions.

(5) Because of the extremely heavy jungle, ground reconnaissance was necessarily extensive. Patrols were dispatched to determine enemy positions, to locate suitable approaches to certain localities, to secure observation, and to select and mark routes for future roads. Movement through the jungle being slow and tedious, all possible use was made of existing trails, though travelling across country on a compass bearing was successfully employed when trails could not be found or their use was denied by the presence of the enemy. It was commonly found that patrols over-estimated the distances travelled and only when they reached an unmistakable land mark could the extent of their coverage be definitely known. The tendency to exaggerate distances is undoubtedly due to the difficulties encountered and the longer time required to traverse a given distance in a jungled and broken country.

(6) The use of native patrols and native scouts with soldier patrols was of great value but only when carefully handled. Inasmuch as the available scouts were mostly Fijiians and Solomon Islanders, their geographical knowledge of New Georgia was no greater than that of the combat troops. Information furnished by native patrols were often inaccurate and lacking in data of military significance. The need for natives who had lived on New Georgia and could positively identify localities was keenly felt. Though native patrols made a number of deep penetrations behind the enemy positions, the information they reported was not of great value. They knew what they saw but not exactly where they saw it, and no great reliance could be placed on their interpretation of information. However, on several occasions, native scouts were attached to intelligence patrols and proved very valuable. Their ability to move silently, their instinctive knowledge of the bush, and their keen hearing and eyesight enabled them to precede the white soldier and give timely warning of the presence of Japanese soldiers.

b. Prisoners of War. No prisoners were taken. It is likely that valuable information regarding the enemy evacuation could have been obtained from a prisoner, had one been secured. A more determined effort along this line would in all probability have secured results.

c. Captured Documents. (1) Fewer documents were taken on New Georgia than during the division's action on Guadalcanal. The reasons for this were apparent. The enemy was withdrawing and travelling light, most of the bivouacs evacuated were transient camps, and the permanent bivouac at Bairoko had been systematically and carefully evacuated over a period of time. Nevertheless, valuable identifications and dispositions were determined from those documents taken.

(2) A marked improvement was noted in handling of captured documents by the front line troops. Few papers were scattered or mutilated. Efforts to instill an appreciation of the value of enemy documents in the individual soldier were apparently successful.

8. JAP TACTICS.

a. Ground. (1) In this campaign the Japanese defended effectively on both high and low ground. His positions were well organized and concealed. A high percentage of automatic weapons were used. These were mutually supporting, covered by riflemen, well sighted, and some had fields of fire previously cleared. Corridors were particularly well covered. As on Guadalcanal, he also organized reverse slopes and ravine bottoms. Japanese held their fire until our men were at point-blank range.

(2) Both protective and tactical wire was encountred and in one case a double band of natural obstacle, constructed from stakes and vines, enclosed a strong, well-knit strong point.

(3) Well dug-in outpost positions were found considerably in advance of main positions. Mortars were seemingly registered on these positions.

(4) All weapons were encountered to include 25mm and 75mm dual-purpose guns, 37mm guns, and the 70mm howitzer.

(5) The action of the enemy was defensive, terminating in a covered withdrawl. He showed his usual determination on the defense but was less inclined to hold on and die in place than he was on Guadalcanal. The enemy took advantage of our failure to maintain contact at night to withdraw under cover of darkness. We must develop more aggressive night patrolling to counter this Jap tactic.

(6) Five counter-attacks were encountered, one coming at night. The night attack was launched largely with grenades; possibly from grenade dischargers held in a horizontal position. The daylight attacks were characterized by an intense and sustained automatic fire, waist high. In one attack, on failing to locate any flank due to our all around defense, the enemy employed grenades and machine guns to clear undergrowth sufficiently to see our positions.

(7) A captured document revealed instructions for the enemy to move forward under our artillery fire to better oppose the attack which would follow. This method was successfully used on at least one occasion. Our troops should not be withdrawn to permit artillery fire unless infantry mortars, which can fire closer to our front-line troops, cannot do the job.

(8) On occasions our troops were allowed to advance to

within grenade range before the enemy opened up, first with grenades and then with rifle fire.

(9) A large number of U.S. Weapons, grenades in particular, were employed by the enemy.

(10) Protective measures and secrecy discipline while moving along trails and in rear areas were poor.

(11) Japanese areas were well away from all prominent terrain features or buildings which could be seen or readily identified from the air. Most of those passed through by our troops, particularly in Bairoko, had escaped any damage from our air bombardment, which seemed to be directed at areas which had already been bombed and were limited to locations close to obvious objects which the Japs carefully avoid. It would be profitable if some of our air personnel would examine and study, on the ground, some of the captured Japanese positions and bivouacs.

(12) Not a single authenticated case of a sniper concealed up a tree was encountered, and not a single booby trap. The "Sniper-up-the-tree", the booby trap and the alleged cunning of the Jap have been so grossly exaggerated in War Department Intelligence Bulletins and popular newspaper and magazine reports that unseasoned men are unduly frightened when first entering combat. It is time that some official steps be taken to counter these exaggerations. Every effort has been made in this division to suppress such exaggerated reports.

b. Air. No comments.

9. ANTIAIRCRAFT. No comments.

10. TRANSPORTATION.

a. Motor. See 4 a (8)

b. Water. See 4 a (5)

11. PERSONNEL.

a. (1) Acclimation Period in this Area. No period of acclimation is recommended for this theatre. Because of the prevalence of malaria and tropical skin diseases and the debilitating nature of the climate, the efficiency and strength of a command decreases progressively the longer it remains in the area. Hawaii is the ideal semi-tropical area for a partial acclimation for troops enroute here from the United States.

(2) After arrival of a unit in the tropics it should be given a week or more of training to actually familiarize the officers and men with

the nature of the jungle and the jungle noises of birds and insects. Such training should involve marches, day and night security, and the establishment of overnight bivouacs with all-around defense.

b. Seasoned troops can remain in combat successfully for periods up to one month. Front line companies should not be kept in the attacking echelon longer than three days. The leading battalions in the attack should be rotated after a few days or a week, depending upon the stiffness of the resistance encountered and the ruggedness of the terrain. If practicable, regiments should be relieved after two or three weeks in the front line in attack.

c. (1) Basic training for troops in this theatre should follow normal training lines with an additional period of jungle and amphibious training to emphasize the following.

(a) Patrolling and sketching in the jungle, including use of the compass.

(b) Marching and security in the jungle.

(c) Night patrolling and night security.

(d) The establishment of night bivouacs in the jungle.

(e) Offensive use of BAR.

(f) Methods of reduction of pillboxes.

(g) Adjustment of artillery and mortar in the jungle.

(h) Methods of locating and designating front lines and aerial targets in the jungle.

(i) Characteristics of Japanese weapons.

(j) Loadings and landings from small boats.

(k) Supply and evacuation by hand carry, jeeps and small boats.

12. GENERAL COMMENTS.

a. Operations conducted through the jungle are necessarily slow and tedious. Plans should be laid accordingly. In many cases, it will be easier to organize a flankingamphibious operation than to attempt a frontal push overland.

b. This division was brought into the New Georgia campaign by echelon and without its full complement of artillery and service elements. This broke up trained combat teams and required artillery and service support from units not familiar with the division and its methods of operations, resulting in a certain lowering of efficiency.

c. Jungle orientation is extremely difficult with the result that the accurate location of elements of a unit is a constant problem. The only certain method of insuring and maintaining locations is to run a continuous and accurate route sketch behind each unit starting from an unmistakable point in the rear. The Field Artillery Survey which, in this division, is always pushed right behind the advancing front line has proven most valuable.

d. The lateral exchange of intelligence assumes a tremendous importance in operations through terrain of the type encountered. Enemy dispositions and intentions are so difficult to determine that any such information gathered should be given the widest distribution.

e. The need for a slow moving artillery spotter plane was again forcibly demonstrated. With an almost complete lack of ground observation, efficient aerial observation is a necessity. The combat planes available for spotting on New Georgia had too much speed and an insufficient field of view for good observation.

f. The need for the authorized cannon company self-propelled howitzers was emphasized on numerous occasions. They would have been invaluable for knocking out pillboxes and clearing fields of fire.

g. Opportunities for effective use of time shell by artillery are few in jungle country. Too much M-54 time shell was issued. No more than five percent of all ammunition should be time shell.

h. The maps available in this campaign were not suitable for use by artillery. The six hundred (600) yard grid employed on the official CICSOPAC photomap created confusion and delay. It is recommended that in future operations a 1:20,000 map be issued for ground operations and that large-scale vertical and oblique photographs of likely areas of action be secured and distributed to ground troops prior to operations or as soon thereafter as practicable.

i. For an attack through the jungle a temporary modification in the organization and equipment of the heavy weapons companies in the infantry regiments was found necessary. Not more than three (3) 81mm mortars can be efficiently employed and the heavy machine gun is too heavy for rapid movement. The light machine gun was habitually carried instead of the heavy, and six (6) to eight (8) additional BARs were issued to each heavy weapons company.

The remaining mortars and heavy machine guns were brought forward as the situation allowed. By attaching a platoon to each rifle company, automatic fire support was available from the light machine guns or BAR depending on the speed of advance. The company was, on occasion, retained intact and employed as a fourth rifle company, thus permitting the simultaneous relief of two front-line companies of an assault battalion by the two support companies. Further study and experimentation is necessary before a final solution to this problem can be reached. Sufficient experience has been gained to show that the normal employment of the heavy weapons company is not possible in attack through the jungle.

j. Deviation from the previously-accepted principle of firing only when the enemy could be seen was tried on several occasions and appeared to have merit. If an entire attacking echelon halts and takes cover when fired on by one or two of the enemy, the impetus of the attack is lost. In dense vegetation it is almost impossible to locate a single enemy rifleman. The alternative was to advance in a deployed formation and have all the riflemen and automatic riflemen open up with a heavy volume of fire in the general direction from which the enemy fire was coming and keep moving. In this way the greatest advantage is taken of our fire superiority and the attack is not held up by the inability to see one or two isolated enemy riflemen. (See paragraph 1 a (5) above.)

13. RECOMMENDATIONS.

a. Combat teams should be maintained intact wherever possible in order to profit from previous team training and from the common understanding established over a period of time.

b. Artillery and infantry mortars should be trained extensively in the adjustment of fire in the jungle paying particular attention to adjustment by sound.

c. Flame-thrower teams consisting of flame-thrower operators, riflemen, and automatic riflemen should receive intensive training as a team. This training should emphasize a co-ordinated attack against pillboxes in heavy jungle after a close approach under cover of darkness or smoke.

d. Artillery battalions in this theatre should be equipped with at least six (6) tractors and six (6) track-laying trailers for movement of howitzers and ammunition over difficult roads. An alternate solution is to have available in the theatre a full complement of tractors and trailers for issue to units whose employment is of a nature to require them.

e. Heavy road-building equipment within the engineer battalions should be materially increased. A division cannot advance faster than its road system, and experience has demonstrated that present TBA equipment is insufficient to build and maintain the necessary roads in this theatre. At least one additional D-7 or D-8 angle dozer per lettered company is required.

f. A more-portable replacement for the SCR 284 radio is required and should be issued all units in this theatre. The SCR 511 has excellent possibilities. Efforts should be made to convert it to a jungle set by waterproofing it and making it sturdier.

g. Two switchboards, BD-9, should be issued to each infantry battalion and two BD-11s to each regiment in addition to the BD-71s and BD-72s now authorized. The latter gave excellent results but are not sufficiently portable for rapid movement in difficult country.

h. In future operations within this theatre, every effort should be made to secure the services of native scouts who have lived on the island where the operations are to take place; these scouts to be attached to divisions or regiments.

i. If practicable, a 1:20,000 map or mosaic and large-scale vertical and oblique photographs of critical areas should be furnished ground troops before operations commence.

j. Organic artillery spotter planes should be obtained for divisions in this theatre.

k. Authorized self-propelled howitzers for infantry cannon companies should be procured and issued.

l. An expendable parachute and container for dropping supplies should be developed. Large scale salvage and return of those items is not practicable in the jungle.

m. Prompt steps should be taken by the War Department to provide a suitable high-explosive rifle grenade or low-angle, short-range mortar for use in the reduction of pillboxes and to bridge the gap between the hand grenade and the 81mm mortar. The 60mm mortar with present quick fuze is not satisfactory for use in the jungle. (See paragraph 2 d (1) above.)

n. Units going into jungle operations for the first time should have a short period of training in the tropics with special emphasis on items indicated in paragraphs 11 a (2) and 11 c above.

For the Division Commander:

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1 Incl: VEHICLE CHART.