

~~UNCLASSIFIED~~

APPENDIX 1 TO ANNEX DOG, TO OPERATION REPORT - IWO JIMA (CONT'D)

Transport Battalion wrecking truck in vicinity of Shore Party fuel dumps. An armored dozer was dispatched but fire had gone out without materially endangering dumps. Work had not stopped on Blue Beach 2 and was resumed on Blue Beach 1 at 2045.

Y. Division Shore Party (General):

1. D-plus-8 day:

(a) Unloading to continue from LCTs or larger craft.

Z. Yellow Beaches:

1. D-plus-8 day:

(a) Unloading proceeded normally throughout the day. All Shore Party trucks were assigned to Yellow 1 and all available LVTs to Yellow 2. Majority of unloading was confined to fuel and ammunition. Some garrison forces supplies began to land and required hauling to Green Beach thus tying up available trucks and LVTs. Short bursts of 20 mm and 40 mm fire falling on beach at 2030 did no damage, but had harassing effect and caused craft to retract.

AA. Blue Beaches:

1. D-plus-8 day:

(a) Small arms fire and mortar fire in vicinity of beached LST on Beach Blue 2 where unloading of 80 octane gasoline was proceeding necessitated backing off the LST at 0230. Apparently all assault force supplies had landed for unloading seemed to be entirely Island Command material and equipment at this point. Unloading continued normally. Road construction in area of Blue Beaches was greatly enhanced by landing of an LSM of beach mat on Blue Beach 1. Corps Shore Party assumed responsibility for beach road on Blue 1; Engineers, for road from quarry to airfield, and the Shore Party for all other roads in beach and dump area plus proposed construction of two clayed landing points seventy-five yards wide. Engineers announced that quarry would be opened D-plus-9 day.

BB. Division Shore Party (General):

1. D-plus-9 day:

(a) Directed by Corps Shore Party to furnish ship platoons for 13 LSMs or ICTs and 2 LSTs on basis of 20 men per LSM or ICT and 40 men per LST. Yellow Beach Shore Party Commander directed to furnish 180 men from 133 NCB. Blue Beach Shore Party Commander directed to furnish 160 men from "D" Company, 133 NCB. Total personnel required: 340.

CC. Yellow Beaches:

1. D-plus-9 day:

(a) The 1st Platoon of the 442 Army Port Company reported from Blue Beach and was sent to RCT-23. At 1200, an order was received from Division Shore Party Commander to embark Shore Party personnel on LSMs and LSTs to act as ship's platoons on basis of 20 men

~~UNCLASSIFIED~~

UNCLASSIFIED

per LSM and 40 men per LST. A total of 7 LSMs and 1 LST to be manned by personnel of Yellow Beaches.

Shore Party Motor Transport Section reported all vehicles operative except four trucks and two tractors damaged beyond repair. Salvage of wrecked vehicles in beach area 90% completed.

Unloading on Yellow Beach 1 decreased throughout the day and by 1900 no ships were on the beach. Control reported no ships available until morning.

Ship's platoons placed aboard three LSMs and one LST during the day.

DD. Blue Beaches:

1. D-plus-9 day:

(a) Unloading proceeded normally throughout the day. Construction was begun in clay surfacing all roads in vicinity of beach and leveling two 75 yard wide unloading points with a possible third for Division reembarkation. Shore Party was to devote 2 dump trucks to continuous hauling of clay for beach roads; other vehicles as they could be spared. Engineers were unable to work quarry at night consequently limiting Shore Party construction of landing points and roads to periods when unloading was heaviest.

"D" Company, 133 NCB, attached to Blue Beach Shore Party were directed to put men aboard designated LCTs, LSMs, and LSTs.

Except for equipment operators and truck drivers, all NCB personnel from Blue Beaches became ship's platoons.

EE. Division Shore Party (General):

1. D-plus-10 day:

(a) Division ordnance representative directed to secure from ammunition resupply ship at 1445.

442 Army Port Company transferred to Division Shore Party control at 1500. Company Headquarters and one platoon to report in morning. Company assigned to work Division Dump under direction of Yellow Beach Shore Party Commander.

Enemy shelling in vicinity of Division Shore Party CP at 1600 caused casualties among replacement personnel.

FF. Yellow Beaches:

1. D-plus-10 day:

(a) At 0800 Control reported presence of sand bar off Yellow 1 would prevent further use of that beach by LSMs and LSTs. An LCT which attempted to land beached, was unloaded, and abandoned on the beach.

At 1000, the 2nd Platoon of the Army Port Company landed and was sent to Division Dump to work as dump labor detail.

At 1200, unloading on Yellow 1 was completed and Shore Party conducted salvage operations on beach during remainder of the day.

Notified by Division Shore Party Commander at 1500 that 442 Army Port Company now under Division Shore Party control and assigned

~~CONFIDENTIAL~~

~~UNCLASSIFIED~~
APPENDIX I TO ANNEX DCG, TO OPERATION REPORT - IWO JIMA (CONT'D)

to the Division Dump. The 1st Platoon of the Army Port Company moved to Division Dump from RCT-23 dump at 1600.

GG. Blue Beaches:

1. D-plus-10 day:

(a) At 0250 a flash red caused 2 LSMs on beach to make smoke and an LST to turn off its tank deck battle lights. LSMs were directed to retract and unloading at all points ceased. A gas alert passed at 0340 from Division was not relayed to units of the Shore Party until verification could be obtained. An all clear on gas alarm was received at 0345.

Unloading proceeded normally throughout day. Last remnants of the Motor Transport Battalion gear reached beach. All equipment of the Division reaching beach indicated that Trans Group Baker was completely unloaded. Largest proportion of supplies and equipment arriving belonged to elements of the Island Command. Calls began coming in from Island Command elements requesting information concerning their personnel and material that may have crossed beach. Request from Blue Beach Shore Party Headquarters for assistance from various units regarding handling, supervision, and disposition of their equipment and personnel met with results that were entirely unsatisfactory. It posed an administrative and operational problem for Blue Beach Shore Party that could not be adequately handled and because of unfamiliarity with markings, units, and areas of Island Command elements, the Shore Party Dumps were rapidly filling with material that could not be identified.

At 1600, an enemy shelling in beach area, dump area, and in vicinity of Shore Party Motor Transport compound disrupted Blue Beach 1 causing casualties among replacement personnel attached to Shore Party. Work on beach resumed by 1615.

Naval gunfire illumination was being wind-blown into Shore Party dumps behind Beach Blue 2 threatening fire in the fuel and ammunition. The Naval Gunfire Officer of RCT-25 was contacted and adjustment was made. The threat was removed by 2130.

A flash red occurred at 2200 and the all clear at 2400. The same condition as heretofore prevailed. LSMs began making smoke while still beached. Beachmaster instead of ordering retraction, advised LSMs to cease smoking. The LSMs complied with this order and work continued.

HH. Division Shore Party (General):

1. D-plus-11 day:

(a) No comment.

II. Yellow Beaches:

1. D-plus-11 day:

(a) Company Commander and remainder of Army Port Company reported in

~~UNCLASSIFIED~~

UNCLASSIFIED

from Blue Beach at 0800. He was ordered to report to Division Dump, assume command of 1st and 2nd Platoons, and work as directed by Shore Party Officer-in-Charge.

Salvage operations continued on Yellow 1 during the day. No craft attempted to land.

Unloading on Yellow 2 proceeded normally during day. Two drifting ponton barges threatened to block beach, and salvage vessel was requested at 1200.

The Force Beachmaster relieved Trans Group Baker Beach Parties at 1500, and repeated requests to control for salvage vessel to move derelict pontoon barges. At 1600 barges were blocking Yellow 2 to extent that only 1 LSM could beach at a time. Unloading virtually stopped during the night.

JJ. Blue Beaches:

1. D-plus-11 day:

(a) By 0100 all LSMs had been unloaded and beach was clear of all ships. Blue control announced no prospects for any more ships during night.

An awkwardly loaded LST carrying extremely heavy crates of Island Command construction materials and equipment reached the beach at 0600. A request was placed with Corps Shore Party for a finger lift (LST finger lift was loaded behind crates on tank deck).

Army Garrison Transportation Group Officers investigated beaches discussing Shore Party procedure preparatory to taking over. Shore Party Commander for Island Command remained with Blue Beach Shore Party Headquarters for observation.

All unloading was Garrison Force equipment, personnel, and supplies. With exception of gear aboard LST 928, unloading proceeded normally. Guides from various units claiming materials unloaded, assisted considerably in keeping Shore Party Dumps clear, but the problem in long hauls for trucks and LVTs tied up transportation.

A twenty minute flash red at 2135 caused same difficulty as previously noted. Smoking was ordered to cease and the LST was directed to leave it's battle lights on so that unloading could proceed.

KK. Division Shore Party (General):

1. D-plus-12 day:

(a) No comment.

LL. Yellow Beaches:

1. D-plus-12 day:

(a) Activity on Yellow Beach 1 confined to salvage and construction of roads on beach area. The Beachmaster was secured by Force

~~CONFIDENTIAL~~

~~UNCLASSIFIED~~

INDEX I TO ANNEX DCG, TO OPERATION REPORT - IWO JIMA (CONT'D)

Beachmaster indicating that Navy would not send any more ships to that beach. Plans were made to move part of personnel to Yellow 2 to assist there.

Salvage operations by the Shore Party on Yellow 2 succeeded in clearing ponton barge from beach and permitted LSMs to resume landing. Beach was in full operation throughout the day.

All of the cargo being unloaded was property of Garrison Force units. Difficulty in locating units and organizational dumps slowed down unloading. Lack of area on Yellow 2 for establishing miscellaneous dumps necessitated hauling to units of Garrison when possible.

MM. Blue Beaches:

1. D-plus-12 day:

(a) No comment.

NN. Division Shore Party (General):

1. D-plus-13 day:

(a) Effective 1200, 3rd Marine Division Shore Party directed by Corps Shore Party Commander to take over and operate Beach Yellow 1. "A" Company, 4th Pioneer Battalion released from Beach Yellow 1 and assigned to Shore Party Commander of Blue Beaches. 4th Pioneer Battalion basic element to operate Blue Beaches under direction of Blue Beach Shore Party Commander. 133 Naval Construction Battalion (less "D" Company) basic element to operate Beach Yellow 2 under direction of Yellow Beach Shore Party Commander.

OO. Yellow Beaches:

1. D-plus-13 day:

(a) 0800 notified by Division Shore Party that remainder of Yellow 1 was to be assigned to 3rd Marine Division. Elements of 4th Division Shore Party to secure as relieved by 3rd Marine Division. At 1200, Yellow Beach 1 was transferred to 3rd Marine Division. "A" Company, 4th Pioneer Battalion, moved to Blue Beach and "A" and "B" Companies of the 133 NCB were assigned to Yellow 2. Yellow Beach now operated entirely by personnel of 133 NCB.

PP. Blue Beaches:

1. D-plus-13 day:

(a) Normal unloading throughout day. Received additional personnel from an Army Port Company to assist in labor on beaches. Difficulty was encountered with transportation via LVTs and trucks to operational areas of units to whom materials, equipment and supplies are being delivered. Beach Blue 2 was without trucks for a period of two and one-half hours awaiting the return of transportation assigned to hauling for Island Command elements from beaches to west side of Airfield #1. Also many Army vehicles arrived at beach from ship without any operators,

~~UNCLASSIFIED~~

tying up Shore Party vehicles because a Shore Party driver had to be put aboard to handle unloading and disposition of each vehicle.

"A" Company, 4th Pioneer Battalion, was released from Yellow Beaches, and assigned to Shore Party on Blue Beaches. A message received at 2105 from Headquarters of the Island Command permitted dim lights in hauling. At the time of receipt this appeared unsafe in vicinity of Blue 2 so limitation was placed upon interpretation of the order. However, lights below deck level on LSMs were permitted, greatly facilitating night unloading of these craft.

QQ. Division Shore Party (General):

- 1. D-plus-14 day:
 - (a) No comment.

RR. Yellow Beaches:

- 1. D-plus-14 day:
 - (a) No comment.

SS. Blue Beaches:

- 1. D-plus-14 day:
 - (a) Unloading proceeded normally.

At 2010 activity to seaward off quarry in vicinity of hydrographic survey LCMs was investigated. Report received indicated small arms fire and blinking lights were being used to indicate an LCM had broken away from it's mooring and was adrift with an inoperative motor.

TT. Division Shore Party (General):

- 1. D-plus-15 day:
 - (a) No comment.

UU. Yellow Beaches:

- 1. D-plus-15 day:
 - (a) Unloading normal. Considerable difficulty was experienced in locating Garrison Force dumps. Headquarters and 1st Platoon of the Army Port Company were released from Division Dump and sent to Blue Beach. Activity in Division Dump confined to unloading ammunition which was arriving from west beaches.

VV. Blue Beaches:

- 1. D-plus-15 day:
 - (a) Unloading proceeded normally.

WW. Division Shore Party (General):

- 1. D-plus-16 day:
 - (a) No comment.

XX. Yellow Beaches:

- 1. D-plus-16 day:
 - (a) No comment.

~~UNCLASSIFIED~~
~~CONFIDENTIAL~~
~~UNCLASSIFIED~~

APPENDIX 1 TO ANNEX DOG, TO OPERATION ORDER - IWO JIMA (CONT'D)

YY. Blue Beaches:

1. D-plus-16 day:

- (a) With exception of difficulty with lifts requiring a 20 ton boom (Le Tourneau Crane) causing delay in unloading one LSM on beach, unloading proceeded normally.

ZZ. Division Shore Party (General):

1. D-plus-17 day:

- (a) Informed orally by Corps Shore Party Commander that 4th Marine Division to be released from Shore Party activities at 0800, 9 March.

Division Shore Party Commander attended conference at 2000 at Division Headquarters with ACofS, D-4 and the CofS regarding the organization and employment of 4th Pioneer Battalion upon release from Shore Party activities.

AAA. Yellow Beaches:

1. D-plus-17 day:

- (a) Unloading normal. Notified at 1800 that Garrison Forces would take control of beaches 0800 D-plus-18. 133 NCB to revert to Garrison Force control at that time.

BBB. Blue Beaches:

1. D-plus-17 day:

- (a) Notified at 1800 that Garrison Forces would take control of beaches at 0800, 9 March, 1945.

CCC. Division Shore Party (General):

1. D-plus-18 day:

- (a) 0700 Battalion Commander, 4th Pioneer Battalion, called conference of company commanders and staff officers regarding organization and mission of 4th Pioneer Battalion on release from Shore Party activities.

0800 All Shore Party activities taken over by Army Garrison Force. 4th Pioneer Battalion reverted to Division control. Division Shore Party disbanded.

DDD. Yellow Beaches:

1. D-plus-18 day:

- (a) 0800 relieved by Army Garrison Force Shore Party.

EEE. Blue Beaches:

1. D-plus-18 day:

- (a) 0800 relieved by Army Garrison Force Shore Party.

V - Comments and Observations on Related Items Affecting Shore Party Operations:

A. Casualties:

1. By units:

- (a) 4th Pnr Bn - 18 officers and 220 enlisted.
(b) 133 NCB - 10 officers and 220 enlisted.
(c) 1st JASCo - 2 officers and 41 enlisted.

~~UNCLASSIFIED~~
~~CONFIDENTIAL~~
~~UNCLASSIFIED~~

UNCLASSIFIED

LOG, TO OPERATION REPORT - IWO JIMA (CONT'D)

2. By beaches:

- (a) Yellow - 17 officers and 282 enlisted.
- (b) Blue - 13 officers and 196 enlisted.
- (c) Division Shore Party Headquarters - 0 officers and 3 enlisted.

B. Beach Conditions:

1. Grade and Surface:

- (a) Beach Yellow 1 had a slope of 10-50% from water's edge to toe of terrace, but other beaches had much more abrupt slopes (30-150%). The conformation of the beaches changed constantly and rapidly by surf action and quickly filled in areas of beach which were partially blocked by disabled craft and vehicles. The surface of all beaches consisted of a thick layer of fine volcanic cinders which closely resembled coarse sand. This surface would not support wheeled traffic until it had become somewhat compacted, and due to excessive slopes combined with the loose surface, some areas would not accommodate tracked vehicular traffic.

2. Surf, type of craft that could be landed:

- (a) The surf was generally high on all beaches but was especially high when the wind was from an easternly direction. LSTs and LSMs could be landed at all times, but LCMs and smaller craft could be landed only with extreme difficulty under the best surf conditions. LCTs could be used except when surf was running at its highest, but only if anchored ashore by deadmen and if kept free of backwash from larger beached craft.

3. Obstructions - beached craft, vessels, etc:

- (a) The beaches were blocked by beached enemy vessels at the points noted on enclosure (A). By noon of D-plus-1 our disabled craft and vehicles had blocked approximately 75 percent of the tenable beaches, and had to be cleared before large scale unloading could be started. Due to the tactical situation Blue Beach 2 and part of Blue Beach 1 were not tenable at this time.

4. Enemy obstacles - mines:

- (a) Mine fields located from one hundred to three hundred yards inland from the beaches and generally paralleling them restricted Shore Party activities. Mines had to be located and removed before dumps and roads could be developed.

C. Enemy Action Affecting Unloading, General Comments:

- 1. Shore Party personnel were subjected to heavy periodic artillery, mortar, and small arms fire during the first five days of the operation; thereafter, until D-plus-10, they were subjected to spasmodic mortar, artillery, small arms, and sniper fire. On D-plus-2, accurate mortar and artillery fire destroyed practically all supplies as fast as they were landed on Blue Beach 1, and on this account it became necessary to land a greater part of the supplies required for the period over the Yellow Beaches. Due to enemy action initially and the subsequent lack of shipping, Blue Beach 2 was never fully developed for unloading

~~UNCLASSIFIED~~

UNCLASSIFIED

APPENDIX I TO ANNEX DCG, TO OPERATION REPORT - IWO JIMA (CONT'D)

supplies. Generally, enemy fire caused heavy casualties in Shore Party personnel, limited unloading during the first two days to the highest priority cargo, and seriously delayed general unloading.

D. Use of LVTs and DUKWs:

1. Initial use:

(a) LVTs and DUKWs were employed in the early phases of the operation to transport priority supplies from ship to shore and to move badly needed items from the beaches to the front. LVTs were also employed for defense of the beaches, and along with the DUKWs were used to evacuate casualties.

2. Use during the general unloading:

(a) During this phase of the operation LVTs and DUKWs continued to be employed as in the early phases of the operation when required for such missions. However, during this period they were committed largely to moving supplies from landing craft and vessels to the beach and inland dumps. Both LVTs and DUKWs proved well adapted for unloading from LCTs, LSMs, and LSTs. Due to the speed of the seagoing DUKWs on land and in water and further due to their ability to launch and land under adverse surf conditions, they were found to be very effective in evacuating casualties and were used constantly for this purpose. It is to be noted in this connection that the prime mission of the DUKWs was transporting ammunition for the artillery and they were used for other unloading of supplies only when made available to the Shore Party by the artillery.

3. Liaison:

(a) Each Amphibian Tractor Battalion furnished a liaison officer to its respective RCT Shore Party. These liaison officers maintained contact with the Shore Parties, and directed the activities of the LVTs on the beach. This liaison was adequate and effective. Liaison for DUKWs was established at the DUKW landing points on the beach when and as required, and was also found to be adequate.

E. Operation Of Beach Dumps w/Locations:

1. The beach dumps for Yellow Beaches were established as noted on enclosure (A). They were initially operated by quartermaster personnel from RCT-23, assisted by personnel from the Shore Party. On D-plus-4, Division dumps were established and on D-plus-5, the Division Quartermaster assumed control and, assisted by Shore Party personnel, operated them. Continuing from this time, all Division supplies landed on Yellow Beaches were moved directly from the beach to the Division dump.
2. Dumps established behind Blue Beaches, as noted on enclosure (A), were initially operated by Shore Party personnel. On D-plus-5, operation of dumps was turned over to personnel of the 8th Field Depot assigned by the Division Shore Party Commander to work Blue Beaches under the direction of the Blue Beach Shore Party Commander. Control of dumps was

UNCLASSIFIED

UNCLASSIFIED

OPERATION REPORT - IWO JIMA (CONT'D)

maintained by Blue Beach Shore Party Headquarters, and additional working personnel were furnished to dumps by this headquarters from attached elements of Replacement Drafts. Rations, water, and designated types of ammunition were transferred from Blue Beach dumps to the Division dump commencing D-plus-6 day.

F. Traffic Control in Beach Areas Including Dumps:

1. Traffic control was established in the beach and dump areas by the Shore Party Commanders, and was enforced by the MPs assigned for Shore Party duties. Later they were supplemented by personnel from Corps Shore Party MPs.

G. Steps Taken To Improve Beach Roads and Unloading Points:

1. Initially beach roads and landing points were constructed by BLT Shore Parties and were surfaced with beach matting as equipment, personnel, and matting became available. Later, beach lateral roads along most beach areas were surfaced with beach matting by the 8th Field Depot. In the meantime, Shore Party personnel, assisted by the 4th Engineer Battalion, proceeded to surface the landing points and more important roads in the beach and dump areas with clay, finally replacing the beach matting on Blue Beaches with clay.

H. Fire (Damage) Control and Preventative Measures:

1. Comment on effectiveness of naval fire fighting equipment:
 - (a) Naval fire fighting equipment proved largely ineffective in control of fires on the beach due to the fact that it required too much time to summon such equipment through channels and get it to the scene of the fire. When on station, however, it proved of great value.
2. Preventive and control measures exercised:
 - (a) Normally revetments were prepared prior to delivery of supplies to dumps. Very inflammable materials in congested areas were covered with earth. Water pumps as available were placed at central points and made ready, and tractor dozers were held available at dump locations for action against fires. No occasion arose which required the use of the water pumps, subsequent to the time such pumps were available, but tractor dozers proved effective in fighting several small fires.

I. Salvage:

1. Friendly material:
 - (a) Shore Parties commenced salvage operation on D-day. Initially, troop combat equipment was collected, conditioned, and turned over to the RCTs, and naval equipment was delivered to the Beach masters. Later, supplies and equipment for troops were collected and delivered to the Division Salvage Officer; naval equipment continued to be delivered to the Beachmasters.
2. Enemy material:
 - (a) Very little encountered.

UNCLASSIFIED

UNCLASSIFIED

OPERATION REPORT - IWO JIMA (CONT'D)

3. Salvage of wrecked craft and its effect upon Shore Party operations:

- (a) On D-day, Shore Parties started salvaging wrecked and disabled tracked and wheeled vehicles from the beaches and continued until the beaches were largely clear of the latter. Wrecked LVTs, LVTAs, and tanks were beyond the capacity of Shore Party salvage equipment. The vehicles salvaged were moved inland from the beaches so that owners could recondition and reclaim same.
- (b) Naval personnel commenced clearing the beaches of disabled floating craft on D-plus-2 and continued until the beaches were largely clear. It is to be noted in this connection that the demolition method of destroying boats on the beaches is not very satisfactory due to the fact that the motors and keels are generally left undemolished and form navigational hazards which in many cases are more dangerous to landing operations than the original craft.
- (c) The salvage of wrecked craft by the Shore Parties and naval personnel delayed the unloading of supplies because of the fact that considerable personnel and equipment were required from the Shore Parties to affect the salvage, and further because unloading operations were interrupted by the firing of each demolition charge. Considerable delay was experienced in suitable naval salvage craft reporting to station. The vast extent of salvage activities and also breakage of lines which eventually resulted in an acute shortage of these items further slowed progress in salvage operations.

J. Employment of Wharfs, Piers, Ponton Docks, etc:

1. Surf and beach conditions did not permit their use.

K. Effectiveness and Adequacy of Ship to Shore Cargo Control:

1. In numerous instances during the course of the operation, low priority supplies were sent ashore in lieu of high priority cargo which had been requested. Selective unloading continued beyond the period of any preconceived plan, and the above statement is made to describe a situation which resulted primarily from these circumstances and not to censure the system of control.
2. On the other hand, Shore Parties frequently received information from control vessels that certain priority supplies had been dispatched to the beaches. When these supplies did not arrive on the beaches, there was no satisfactory means available to trace the cargo beyond the control vessel. It is, therefore, recommended that a more suitable system of communications be established between the beaches and traffic control boats and that a tender be made available to each RCT and Division beach on station close to shore twenty-four hours a day. This boat would be used by a Shore Party representative for checking on boated cargo in the vicinity of the traffic control boat.

UNCLASSIFIED

UNCLASSIFIED

3. It is also felt that naval personnel particularly should be thoroughly indoctrinated with the conception that during the early phase of an amphibious operation the primary consideration is not to unload ships but is to place at the disposal of troops ashore those supplies they request. It follows then that control must keep the Shore Party Commanders informed at all times as to the status of requests for priority cargo.
 4. Subject to the above comments, ship to shore cargo control was, from the point of view of the Shore Party, considered adequate.
- L. Provisions For Beach Dump and Rear Area Defense:
1. Each Shore Party unit established all-around security and coordinated their security with adjacent Shore Parties and other units so that an all-around security system was established for the entire beach and dump areas. The main lines of Shore Party defense were to seaward and to the Division north flank. LVTs and LVTAs supplemented the beach defenses particularly on the north flank.
- M. Use of 8th Field Depot Personnel and Equipment Within the Shore Party:
1. How employed:
 - (a) Yellow Beaches:
 - (1) The personnel furnished for these beaches consisted of two beach teams and one dump team of about 2 officers and 30 enlisted in each. The beach teams were used for checking supplies as they crossed the beach, and the dump team was employed in the operation of the dumps.
 - (b) Blue Beaches:
 - (1) One beach team, one dump team, one ammunition platoon (2-65) and one depot company (3-147) were furnished to these beaches. The beach team, dump team, and ammunition platoon were used to operate the dumps; the depot company was employed as working details on the beach.
 2. Additional facilities:
 - (a) Additional personnel and equipment of the 8th Field Depot, operating under Corps Shore Party Control, developed beach areas and assisted in Shore Party activities in the Division zone of action as requested.
 3. Effectiveness:
 - (a) The Corps Shore Party reinforcing elements assigned to this Division and the manner in which they performed their duties contributed substantially to the efficient handling of supplies within the Division beach and dump areas.
- N. Use of Divisional Replacements:
1. Ship Platoons:
 - (a) Replacements initially were assigned as Ship Platoons on all APAs on the basis of one officer and twenty men per hold, two men per

UNCLASSIFIED

UNCLASSIFIED

APPENDIX I TO ANNEX DCG, TO OPERATION REPORT - IWO JIMA (CONT'D)

small boat, and one officer and twenty men per preloaded LST. They functioned as Ship Platoons until their respective ships were unloaded.

2. Ashore:

- (a) The problem of organizing, disposing of, and applying the efforts of such disjointed units combined with the immediate requirements for them by RCTs precluded efficient application of replacement personnel in Shore Party activities ashore.

O. Function of the Shore Party as a Supply Agency:

1. Yellow Beaches:

- (a) Issue from beach dumps or from beach:

(1) The quartermaster of RCT-23 was on the beach during the first four days of the operation and relieved the Shore Party of supply functions for that RCT. Supplies landed were placed in RCT dumps and issues were made from that point. However, during the earlier phases of the operation some supplies were issued to units of RCT-24 from the beach. Artillery ammunition landed was loaded on artillery vehicles at the beach. After Division dumps were established on D-plus-5, issues were made by the Division Quartermaster from these dumps; artillery ammunition continued to be claimed at the beach by the 14th Marines.

- (b) Method or plan for coordinating of supply:

(1) Initially requests were submitted through the RQMs. Later, when division dumps were established, requests were submitted by RCTs through the Division Quartermaster. Liaison was maintained with the 14th Marines during all phases of the operation to insure expeditious delivery of artillery ammunition landed.

- (c) Experienced QM personnel:

(1) Division Quartermaster personnel attached to the Shore Party were assigned to RCT-23 dumps on D-plus-1, and further assigned to division dumps on D-plus-5.

2. Blue Beaches:

- (a) Issue from beach dumps or from beach:

(1) Requests for supplies from the Shore Party dumps were initially received by radio, telephone, or runner from units as small as companies of RCT-25 and RCT-24. If the request could be met from supplies ashore an LVT was dispatched to the requesting unit with as much of the required material as could be made available. Guides were furnished by the unit placing request or were obtained from Shore Party personnel. Normally the smaller units made no demand for supplies but were interested only in obtaining weapons that the Shore Party had salvaged. Organizations such as tank

UNCLASSIFIED

UNCLASSIFIED

APPENDIX I TO AMFLEX DOC, TO OPERATION REPORT - IWO JIMA (CONT'D)

companies, rocket detachments, engineer platoons, and communication sections required supplies that had not accumulated on beaches. Requests of this nature and coordinated requests from BLT and RCT quartermasters were relayed as priority requirements to Blue Control for earliest dispatch to beach.

- (2) Enemy activity, surf conditions, and abnormal use of certain types of ammunition plus destruction of beach supplies by fire necessitated a priority unloading routine that extended for four days. Beyond D-plus-3, materials had accumulated in protected dumps and it was only an occasional priority request that required action by Blue Control.
- (b) Method or plan for coordinating of supply:
- (1) Ammunition of all types, fuel, and salvaged equipment were issued without accountability. An attempt at control of rations and water, though never critical items, was maintained by requiring an officer's signature on any request granted. An officer's signature plus some semblance of an organizational request for a company or larger were requirements levelled at straggler control and at precluding constant issue to individuals. No attempt was made to portion or record supplies drawn from dumps. Strict control was exercised over the issue of post exchange supplies and fruit juices. A signed request from the RCT quartermaster, countersigned by RCT Shore Party Commander was necessary before rations of this type could be drawn from dumps. This assured comparatively equal distribution.
- (c) Experienced QM personnel:
- (1) At no time did Division Quartermaster personnel operate from Blue Beach dumps. However, by D-plus-7 all supplies of an issue nature received on Blue Beaches and similar supplies already in dumps were transferred to Division Quartermaster dumps.
 - (2) Military Police attached to Blue Beach Shore Party by RCT-25 were used extensively in guarding ration, water, post exchange, and clothing dumps.

P. Shore Party Communications:

1. During the early phases of the operation, the RCT Shore Party Commanders and the Division Shore Party Commander were aboard the respective control vessels. Although the Shore Party lateral net was available for the exclusive use of the Shore Party, no direct radio communications existed between the Shore Party Commanders afloat and Shore Party elements ashore. Naval communications and tactical channels were found inadequate to handle the traffic between the several echelons of

UNCLASSIFIED

UNCLASSIFIED

APPENDIX 1 TO ANNEX LOVE, TO OPERATION REPORT - IWO JIMA (CONT'D)

Shore Party Command during this period. It is therefore considered imperative that space be allowed aboard the several control vessels to enable the Shore Party Commanders afloat to man radio equipment for keeping in communication with their units on the beach.

2. On D-plus-2, Division Shore Party Headquarters ashore established communications with the Division logistical representative aboard the Division control vessel by TBX over the Division logistical control net.
 3. Although the Division Shore Party continued to guard the Division logistical control net and all Shore Party elements continued to guard the Shore Party lateral net, after Division Headquarters landed on D-plus-4 radio was almost entirely replaced by previously operative wire communications.
 4. Shore Party communications were furnished by nine Shore Party communication teams of one officer and nineteen men, each from 1st JASCo. The Commanding Officer of 1st JASCo was Division Shore Party Communication Officer. One team was assigned to Division Shore Party Headquarters, one to each assault RCT Shore Party Headquarters, and one to each BLT Shore Party of the assault RCTs.
 5. Subject to the opening remark above, Shore Party communications were considered excellent.
 6. For further information on Shore Party communication see ANNEX LOVE, FOURTH MARINE DIVISION OPERATION REPORT, ATTACHED JOINT ASSAULT SIGNAL COMPANY REPORT.
- Q. Garrison Force Shore Party:
1. At 0800, 9 March, the Garrison Forces took over the operation of the Division beaches. During a forty-eight hour period prior to this time no less than three Garrison Force officers reported to the Division Shore Party Commander that each was to take over on the Division Beaches as Shore Party Commander. In each case the officer requested assistance, advice, and information preparatory to taking over control. These requests were willingly fulfilled at the expenditure of a considerable amount of valuable time. Yet in no instance did one of these officers have any information as to what personnel or equipment would be available to him, nor had he formulated any plan for his operation of the beaches. That this situation caused considerable delay and wasted effort is self evident.
 2. It is, therefore, considered essential that prior to any future operation the Garrison Force Shore Party Commander, in conjunction with the Landing Force Shore Party Commander, consider a plan whereby the former accedes to control of the beaches. Such a plan should be set out in sufficient detail as to apply to the transition on the various subdivisions of the beaches.

VI - Comments and Recommendations:

A. Shore Party Organization:

1. Comment:

(a) The numerical strength of the Division Shore Party is insufficient

UNCLASSIFIED

UNCLASSIFIED

APPENDIX I TO AMEMB LOG TO OPERATION REPORT - IWO JIMA (CONT'D)

by elements of the Corps Shore Party was sufficient to support the operation. A temporary organization made up basically of the organic Pioneer Battalion and an attached Naval Construction Battalion or any other temporarily attached unit is not satisfactory and does not meet the requirements of an efficient Shore Party. It is apparent that training a Shore Party for one operation is of no future benefit to the Division and is in fact a detriment. Neither is it of any lasting benefit to the attached unit so trained, and is, from their point of view, a waste of valuable time they might better spend preparing for the execution of their primary mission. Each time an inexperienced unit is attached to the Division for Shore Party activities the Pioneer Battalion must of necessity devote a large portion of its own training period to instructing and attempting to indoctrinate the attached unit. Furthermore, unless the same Shore Party organization functions on a permanent basis from operation to operation its combat proficiency can never be improved.

It must be noted that for each operation in which this Division has been engaged a different Shore Party organization has been employed. The Division is now faced again with organizing and training a Shore Party anew for a future operation. The Division Shore Party as such, therefore, has received no benefit from the past combat experience of the Division. It has, on the contrary, suffered heavy casualties among experienced Pioneer Battalion personnel; casualties brought about largely by spreading experienced men and officers thinly throughout the entire Division Shore Party to control, direct, and reinforce inexperienced units

2. Recommendations:

- (a) It is recommended that a permanent organization of size and composition adequate to furnish the basic elements of a Division Shore Party be authorized each Marine Division. The present Pioneer Battalion meets neither of these requirements.

A suggested organization to meet the minimum requirements in keeping with the above recommendation is a small Shore Party regiment consisting of a Headquarters and Service Company and two Pioneer Battalions. The composition of each battalion in both equipment and personnel should be similar to those of the present Pioneer Battalion. Headquarters and Service Company of the regiment should be similar in organization to that of the Headquarters and Service Company of the present Pioneer Battalion.

B. Shore Party Equipment:

1. Comment:

- (a) The equipment of the Pioneer Battalion alone is insufficient to operate a Division beach. It is in fact approximately the amount

UNCLASSIFIED

UNCLASSIFIED

APPENDIX I TO ANNEX DCG, TO OPERATION REPORT - IWO JIMA (CONT'D)

required to operate a Regimental Beach.

The TD-9 shovel loader is of little value for beach operations except as modified with an "A" frame crane attachment. Even then it is too light and lacks the advantages of a swing crane. On the Iwo Jima operation, however, two Shore Party shovel loaders were used to load clay for road and beach development. Finger lift attachments were not employed.

Under present allowances, no Pioneer Battalion tractors are equipped with winches. On Iwo Jima, as on previous operations there was a definite need for heavy tractors with winches for the salvage of vehicles and other heavy machinery in the beach area. These are also invaluable for discharging heavy loads which must be "snaked" or skidded off landing craft.

2. Recommendations:

- (a) That two, one-half or three-quarter cubic yard capacity shovel cranes be added to the authorized allowance of each Pioneer Company and that two TD-9 shovel loaders be deleted therefrom.
- (b) That one heavy tractor (TD-18) with large, slow speed, single drum, back take-off winch be added to the authorized allowance of each Pioneer Company.

C. Ship to Shore Movement:

1. Comment:

- (a) Elements of the Shore Party, particularly the BLT Shore Party reconnaissance sections landed on the beaches before they could serve any useful purpose. This resulted in early excessive casualties among officers and other key Shore Party personnel. In all instances the reconnaissance sections consisting of key specialists were virtually annihilated. Of four BLT Shore Party Commanders, three became casualties very soon after landing and the same ratio existed among BLT Beachmasters. The landing of Shore Party equipment was from small craft and LSMs as required and on the whole was satisfactory.

2. Recommendations:

- (a) Since the reconnaissance sections of the Shore Party serve no useful purpose that cannot be accomplished when the main elements of the Shore Party land, it is recommended that these sections land on call with the remainder of the Shore Party.

D. Employment of LSMs for landing cargo:

1. Comment:

- (a) The service rendered by the LSMs in landing cargo cannot be overstated. Some difficulty, however, was experienced in operating cranes within the confined space of the well deck.

2. Recommendations:

- (a) The suggestion that a travelling crane be installed on the port side of the LSM is submitted for consideration. If such a modif-

UNCLASSIFIED

UNCLASSIFIED

APPENDIX I TO THE JMWAVE LOG REPORT - IWO JIMA (CONT'D)

ication is feasible it will materially enhance the unloading of these craft ashore.

VII - Employment of 4th Pioneer Battalion Subsequent to Termination of Shore Party Activities:

Upon reversion of the 4th Pioneer Battalion to Division Control at 0800, 9 March, 1945, the following reorganization, based on personnel and equipment then available was effected.

A. Organization:

1. Engineer and Maintenance Units:

- (a) Officer-in-Charge - Battalion Engineer Officer.
- (b) Personnel - 4 officers and 90 enlisted; consisting of equipment operators, maintenance personnel, commissary personnel, and other specialists who could not be employed within the tactical organization.
- (c) Equipment:
 - (1) 11 tractors with dozers.
 - (2) 14 cranes.
 - (3) 3 trucks, 1-ton.
 - (4) 10 trucks, 2 $\frac{1}{2}$ ton, dump.
 - (5) 1 truck, 2 $\frac{1}{2}$ ton, cargo.
 - (6) 5 trucks, 1/4 ton; 4 w/trailers.
 - (7) 5 tractors, utility.

2. Tactical Units:

- (a) Officer-in-Charge - Under normal battalion control - Battalion Commander.
- (b) Personnel - 17 officers and 380 enlisted as follows:
 - (1) Battalion Headquarters Company - 5 officers and 26 enlisted:
 - a. Communication Section - furnished by 1st JASCo, 1 officer and 30 enlisted.
 - b. Medical Section (Navy) - 1 officer and 10 enlisted.
Additional enlisted from Division Surgeon on request.
 - (2) Company "A" - 3 officers and 81 enlisted, organized and equipped as follows:
 - a. Company Headquarters - 1 officer and 13 enlisted.
 - b. One (1) platoon (Rifle) - 1 officer and 44 enlisted.
 - c. LMG Section - 1 officer and 24 enlisted.
 - d. Automatic weapons:
 - 1. 4 BARs.
 - 2. 3 LMGs
 - 3. 2 .50 Cal. MGs.
 - (3) Company "B" - 5 officers and 138 enlisted, organized and equipped as follows:
 - a. Company Headquarters - 2 officers and 13 enlisted.

UNCLASSIFIED

UNCLASSIFIED

TO: MILA DCG, TO OPERATION REPORT - IWO JIMA (CONT'D)

- b. First Platoon - 1 officer and 43 enlisted.
- c. Second Platoon - 1 officer and 41 enlisted.
- d. Third Platoon - 1 officer and 41 enlisted.
- e. Automatic Weapons:
 - 1. 5 BARs.
 - 2. 6 LMGs (1 section to each platoon).
 - 3. 3 .50 Cal MGs.

(4) Company "C" - 4 officers and 115 enlisted, organized and equipped as follows:

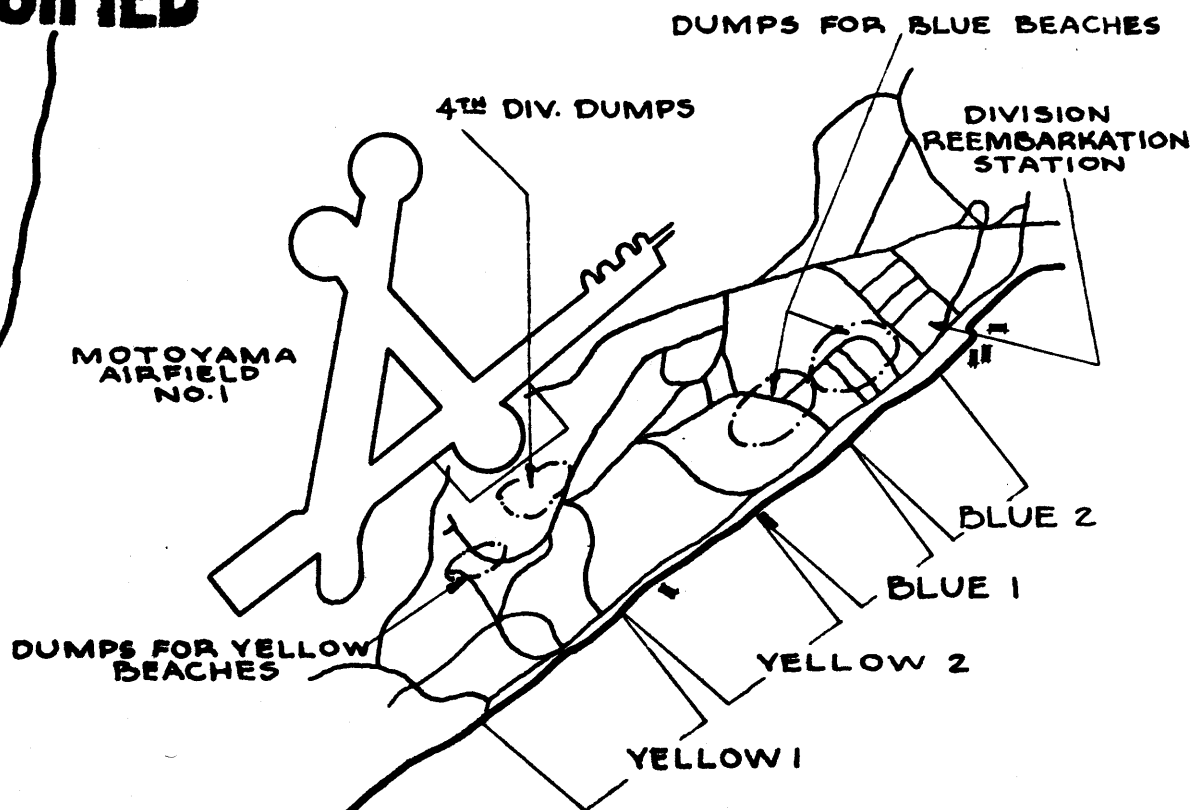
- a. Company Headquarters - 1 officer and 10 enlisted.
- b. First Platoon - 1 officer and 35 enlisted.
- c. Second Platoon - 1 officer and 35 enlisted.
- d. Third Platoon - 1 officer and 35 enlisted.
- e. Automatic Weapons:
 - 1. 5 BARs.
 - 2. 6 LMGs (1 section to each platoon).
 - 3. 3 .50 Cal MGs.

B. Missions:

- 1. Engineer and maintenance units:
 - (a) Develop roads, parking areas, and landing areas for reembarking Division.
 - (b) Assist Division QM in movement of Division supplies.
 - (c) Assist in reembarkation of Division.
- 2. Tactical units:
 - (a) Be prepared to assemble on one hour's notice as Division Reserve; not so committed.
 - (b) Provide beach defense within Division zone.
 - (c) Assist Division QM in movement of Division supplies.
 - (d) Assist in reembarkation of the Division.

UNCLASSIFIED

~~UNCLASSIFIED~~
~~UNCLASSIFIED~~



**ENCLOSURE "A" TO APPENDIX I
TO ANNEX DQG TO OPERATION
REPORT - IWO JIMA
OVERLAY-BEACH & DUMP AREAS**

— ROADS
— BEACHED ENEMY CRAFT

REFERENCE MAP: SPECIAL AIR & GUNNERY
TARGET MAP 1:20000

NOTE: BLUE BEACHES SHOWN AS DEVELOPED.

~~UNCLASSIFIED~~
~~UNCLASSIFIED~~

~~UNCLASSIFIED~~

ENCLOSURE (B) TO APPENDIX ONE TO ANNEX DOG TO OPERATION REPORT - IWO JIMA

MEDICAL EVACUATION REPORT

For the Iwo Jima Operation the evacuation of wounded was organized under the Shore Party Evacuation Officer, designated as the Division Evacuation Officer, assisted by four Combat Team Evacuation Medical Officers, each to be landed with their assigned corpsmen and medical supplies on each of the four assault beaches. It was planned to set up evacuation stations at strategic spots to most effectively and efficiently treat and evacuate the wounded of the division.

Accordingly, the four evacuation teams were boated with the shore party personnel supporting each of the assault landing teams, and were put ashore from 30 to 90 minutes after "H" hour. One Fourth Pioneer Medical Officer and 12 corpsmen landed at 0930 on beach yellow one under heavy enemy artillery and mortar fire. Almost immediately this group sustained casualties, equipment was destroyed, and they were unable to organize or establish an evacuation station. By 1100 the doctor and six corpsmen were wounded and evacuated. Four more corpsmen were killed.

At 1000 a Medical Officer, Dental Officer, and eight corpsmen of the 133rd Naval Construction Battalion landed on beach yellow two under heavy enemy mortar and artillery fire. This evacuation team was dispersed and sustained casualties so that they were never able to establish an evacuation station in their sector. By late afternoon the doctor, dentist, and five corpsmen were casualties and evacuated.

Another Fourth Pioneer Medical Officer and 14 corpsmen were landed on beach blue one at 0930 under enemy fire. By 1130 the doctor and three corpsmen were casualties and evacuated. The remaining corpsmen joined a beach party medical platoon of the USS NAPA (APA 157) and worked effectively while under direct enemy fire caring for casualties in the beach area of yellow two. The second Medical Officer and nine corpsmen of the 133rd Naval Construction Battalion were landed on beach blue one at 1100. These men were scattered and unable to organize an evacuation station due to the heavy enemy fire. By 1130 this Medical Officer was a casualty and evacuated.

At approximately 1500 on D-day the Shore Party Evacuation Officer landed on blue one with 20 replacement corpsmen and two Pioneer corpsmen. There was no equipment for establishing an independent aid station. The enemy fire in the area at this time was sporadic but effective and many casualties needed treatment on the spot. A quick reconnaissance revealed no organized evacuation of wounded on either beach blue one or yellow two. The Shore Party Evacuation Officer was unable to reach yellow one at this time. It was decided to set up an evacuation station immediately on beach blue one at the only existing road of egress from the front lines. With the aid and equipment of a beach party medical platoon of the USS SANBORN (APA 193), five of the 133rd Naval Construction Battalion corpsmen and the 20 replacement corpsmen, an aid and evacuation station was established by 1600.

Work was continuous throughout the night. It was impossible to keep adequate records the first day but it is estimated that over 200 casualties were evacuated during the first 24 hours. There were many casualties among the shore party and beach party personnel, but fortunately no one was hit in the aid station itself. By the following morning, on D-plus-1 day, a critical shortage of medical supplies existed, i.e. litters, blankets, plasma, etc., and urgent requests for re-supplies, corpsmen, and doctors were sent out at 1000 via the Beachmaster.

By 1100 on D-plus-1 another evacuation station was established on beach yellow two with two beach party medical platoons aided by six Pioneer corpsmen. The

~~UNCLASSIFIED~~

UNCLASSIFIED

ENGINEER (B) TO ANNEX DOG, TO OPERATION REPORT - IWO JIMA (CONT'D)

Medical Officer, Dental Officer and eight corpsmen of the Tenth Amphibian Tractor Battalion were found operating an aid station between beaches yellow one and two. Due to their poor location away from the natural flow of evacuation they were never able to evacuate many. Since the enemy shelling continued, it was decided to leave them at their original site to treat and evacuate the wounded in that vicinity. On yellow one the surgeon of the Twenty-Third Marines and one beach party medical platoon were found evacuating for the Twenty-Third Marines. Since all the evacuation medical officers for that Regiment had been wounded and evacuated, it had been necessary for this Medical Officer to remain on the beach and evacuate. In spite of the heavy toll in casualties, (i.e.) 80% of the evacuation medical officers and approximately 50% of the corpsmen, medical evacuation stations on each of the established Fourth Marine Division assault beaches were in operation. Beach blue two was not developed until a later date.

There remained a critical shortage of medical evacuation personnel, and when "A" and "C" Medical Companies landed between 1600 and 1700 on D-plus-1 day, they were immediately assigned to evacuation stations. "A" was placed at the blue one station and "C" at the yellow two station. Shortly thereafter one-half of "C" was transferred to yellow one beach, relieving the Twenty-Third Regimental Surgeon to return to his Regimental duties. With this bolstering of personnel it was possible to begin keeping adequate records of casualties and to give more efficient treatment to the wounded.

From this time the personnel problems were never acute in the evacuation stations, and it was possible to fortify the assault teams with replacement corpsmen and docotrs. The following accounts for the personnel received and assigned by this office: at 0900 on 21 February 20 corpsmen of "D" and "E" medical companies were obtained. Ten were immediately dispatched to the Twenty-Third Regiment, and remaining ten retained at the blue one station for further assignment. Frequent requests were being received from regiments and battalions for replacement collecting sections. They were losing corpsmen rapidly as casualties. At 1300 on the 21st ten corpsmen of "E" company were sent to the Twenty-Fourth and ten men of "A" company to the Twenty-Fifth Regiments. At 1700 that date fuel and ammunition dumps were blown up about 100 yards distance from the blue one station. It was impossible to leave due to the presence of several casualties. Fires in the medical supplies from hot fragments blown from the dumps were fought until 2400. Two casualties received slight additional wounds from this but no other losses were inflicted.

On February 22, at 0845, ten corpsmen of "B" medical company were sent to the Twenty-Fourth Regiment. A request was sent to the Division Surgeon at this time for more corpsmen and medical supplies. At 1100 eight men of "E" company were assigned to the Twenty-Fifth Regiment and nine men of "D" company were sent to the Twenty-Fourth Regiment. At 1230 "A" Medical Company, minus one medical officer and 21 corpsmen, were released from beach blue one to return to the USS HINSDALE (APA 120). The others were held at the aid station to assist in evacuation.

On February 23 one Medical Officer of the Thirtieth Replacement Draft was transferred to the Twenty-Fifth Regiment. At 0730 a shelling of the beach closed the blue beach evacuation station, but casualties were removed without loss to the

UNCLASSIFIED

UNCLASSIFIED

ANNEX DOG, TO OPERATION REPORT - IWO JIMA (CONT'D)

yellow two station for evacuation. At 1500 this date "B" Medical Company officers and men came ashore, and were assigned to work at the blue one station temporarily. At 1530 the Division Surgeon visited the station. On February 24 another medical officer of the Thirtieth Replacement Draft was transferred to the Twenty-Fifth Regiment.

Shore Party Doctors of the 21st Regiment were functioning at the yellow one station with two medical officers of "C" medical company, evacuating casualties of that Regiment as well as for some of the Fourth Marine Division. However, from this date the bulk of the Fourth Marine Division casualties were going out over the blue one station, while the yellow one station evacuated largely for the Third Marine Division. The yellow two station was never able to get many of the wounded off the beach after the first days due to the lack of boats and unsatisfactory location. At 1730 on the 24th, six men of "E" company were transferred to the Twenty-Third Regiment. On 25 February, ten men of "A" company were transferred to the Twenty-Fourth Regiment. On the 26th of February, six Thirtieth Replacement corpsmen were transferred to the Twenty-Third Regiment and the following day six more were transferred to the Twenty-Fifth Regiment.

Throughout the first 11 days of the battle the beaches were under enemy fire. Mortar, artillery, rocket and small arms fire were received at frequent intervals both day and night on and near the beaches. Shore and beach party personnel received upwards of 50% casualties. Evacuation sections received numerous casualties. On D-plus-1 day a direct hit was made in the yellow two evacuation station, killing one beach party doctor, a corpsman, and wounding several others. No patients were hit. Fortunately no other stations received direct hits, and no patients under care ever received any further serious injury. Treatment and evacuation of casualties continued unceasingly throughout the operation in the face of direct enemy fire. Many hundreds of casualties received excellent and expert first-aid and shock treatment, practically none were kept on the beaches over 30 minutes at any time, and considering the seriousness of the wounds the physical condition of the patients was excellent when they were received aboard the hospital ships.

In determining the sites of our evacuation stations several factors had to be taken into consideration. The safety factor, while of great importance, is often over-emphasized. To maintain a safe distance from enemy fields of fire, from our own ammunition and fuel dumps, and from concentrated areas that may draw enemy fire are points to consider. But to allow these factors to predominate will often leave an evacuation station isolated and ineffectual in serving its purpose. An example of this was illustrated by the Tenth Amphibian Tractor Battalion station. This was excellently sited, and was relatively safe, but it was so far from natural roads of egress and from the beach that it could never be used efficiently as an evacuation station.

On the other hand, the station on beach blue one was located primarily where casualties from the front could be readily received and just as readily evacuated. The station was placed as close to the main road leading from the beach to the front as was possible, and at the same time near where the majority of the boats bringing personnel and supplies to the beach were landing. These boats had to be obtained as opportunity presented in order to get the constant flow of casualties.

UNCLASSIFIED

UNCLASSIFIED

beach. Shore and beach parties are glad to have the station so strategically located. It simplifies their problem of furnishing boats for evacuation of wounded and for delivering incoming medical supplies.

The construction of the evacuation stations is a gradual and progressive thing. On D-day and D-plus-1 the Beach Blue One Station was located in a cleared area of approximately 30 yards long by 15 yards wide right on the beach. The only protection was a waist high revetment of sand bags on the landward side. A medical supply dump was established nearby. As time and opportunity presented, facilities were expanded and dug in deeper. When available the Shore Party furnished a Seabee platoon and bulldozer to clear and revet three areas each 20 by 30 yards. Tarpaulin were placed over each so that there were three enclosures to house casualties temporarily for first aid and shock therapy with protection against the weather. Sand bags and sand revetments provided fairly good protection against any but direct hits from enemy shell fire. Thus was established the finished evacuation station. But for the first days of the battle there was little more protection than for the other personnel ashore. There was neither time nor equipment to establish elaborate stations early in the operation. The main concern was treating and evacuating the many casualties coming to the beach continuously.

In addition to treating the casualties that funneled through 24 hours a day from the front and surrounding areas, it was our responsibility to get them evacuated safely and rapidly to the ships off shore designated to receive them. In spite of the many hazards faced, the undertaking was successful. In contrast to previous operations evacuation continued throughout the day and night from the first, and no casualty was kept on the beach for more than a few minutes unless being treated for shock. The presence of the LST(H)s off shore was a marked advance in the evacuation chain afloat. Better records were kept from the initial phases, the badly wounded were given further medical care necessary immediately, and casualties were routed directly to ships designated to receive them. This precluded the necessity of each boat load of wounded looking for a ship to take them on. Casualties evacuated at night were received and held on the LST(H)s. This alone was a great boon, for on previous operations casualties had been known to float around all night in an open boat looking for a ship to receive them.

Initially, casualties were evacuated largely by LCVPs and LCMs which had brought personnel or supplies ashore. However, after D-day these boats became increasingly difficult to obtain and very dangerous to use. Stormy weather with heavy off shore winds resulted in the broaching and loss of many LCVPs and LCMs. By manning bow lines and loading the boats rapidly with wounded a vast majority got off the beach safely. Those that did broach were salvaged immediately, and no casualties were lost to the sea. At night occasionally evacuation was via LSMs or LCTs - the only ships that could approach the beaches at the time.

By D-plus-4 all small boats were ordered to stay clear of the beaches, and our subsequent evacuation was done via LVTs and DUKWs. The former were most cooperative and did an efficient and successful job evacuating to the LST(H)s off shore. This time LVT(4)s with ramps were used exclusively, which had marked advantages over the

UNCLASSIFIED

UNCLASSIFIED

ENCLOSURE (B) TO APPENDIX I TO ANNEX DCG, TO OPERATION REPORT - IWO JIMA (CONT'D)

older, less roomy LVT(2)s. But their inherent limitations remained; and, when, on D-plus-9 day, the LST(H)s with their attached floats were withdrawn, the LVTs could no longer be used. They were too rough and unmaneuverable to unload casualties to large ships. It was fortunate that DUKWs could be obtained at this time, and these again, as on previous operations, proved to be the most efficient and satisfactory means of evacuating. They were roomy, comfortable, and maneuverable. They could be loaded with casualties right at the aid station or even at the more remote Division Hospital and dispatched directly to the hospital ships without further transfer of the patients. They were maneuverable and could unload at the ships as well as LCVPs or LCMs. Furthermore they were not stopped by the existing surf, nor, as on Saipan, by reefs. To date they are the vehicle of choice to evacuate casualties.

Until D-plus-9 evacuation continued day and night, the LST(H)s holding all casualties sent out after dark. On February the 28th, these ships were withdrawn. But by then our Division Field Hospital was operable, so that from that time, all casualties received at night were held and treated there. On March 5 the Corps Surgeon ordered all evacuation to be done over purple beach on the west side due to off shore winds and high surf on the east. The Corps Evacuation unit was to do this evacuating. Air evacuation, controlled by Corps, began on this date too.

On March 8, evacuation of casualties was returned to the eastern beaches due to another shift in the wind. All evacuation from this time on was done through the blue one and yellow one stations. DUKWs were used exclusively at this time and very successfully. Hospital ships were receiving the casualties. All casualties received at night were now held ashore in the division and corps hospitals. White cases, those hospitalized 14 days or less, were now being held in field hospitals ashore. This procedure was followed until the island was officially secured and the Fourth Marine Division was embarked. The evacuation was closed March 15, 1945, and at this time all remaining sea evacuation was turned over to the Third Marine Division station on beach yellow one.

Aside from the primary function of treating and evacuating the wounded, one of the busiest and most important tasks was acquiring and supplying medical gear and supplies to the forward elements as well as to beach stations. As always this was most difficult and critical during the first days of the operation. Again the resupply of litters and blankets failed on D-day and D-plus-1. The litters exchanged from the ships receiving casualties never seem to reach the beaches during this period. Because of the treacherous beaches and heavy losses by enemy gunfire, much of the pre-arranged supplies never reached the evacuation station. Truck loaded medical supplies and gear landed days late, and ambulance jeeps were wrecked and lost at the water's edge. Casualties were being evacuated from the lines by LVTs and Weasels, but the vast majority were brought out by litter bearers. Much of the medical gear was lost initially and none was coming in. Urgent messages eventually brought some litters, blankets, plasma, etc. from the ships, but for three days it was touch and go to meet the demand. Again was demonstrated the necessity for close liaison and cooperation between the medical units afloat

UNCLASSIFIED

and between the Medical Officers of the Navy and the Marines.

On this operation brandy was in great demand by the front line troops. It proved a valuable stimulant to those subjected to the exhaustion and the exposure in the battle lines. Another article in increasing demand was serum albumin. This proved to be efficient and easy to give in the front line areas. It seemed to be as effective as plasma in the treatment of shock and could be given much more rapidly, allowing more rapid evacuation. Finally, it was so much easier to carry in the quantities necessary to treat the many seriously wounded. More serum albumin was needed than was available. A good deal of plasma was given at the evacuation stations, and by D-plus-6 units of whole blood brought in from the ships and later by air were given. This was an important adjunct in treating severe shock, though its most important use seems to be in ships or in field hospitals where definite treatment is to be given.

STATISTICS

During the entire battle of Iwo Jima from D-day until the island was secured casualties of the Fourth Marine Division were treated and evacuated and for the last eight days of the campaign evacuation was for the entire corps. In addition records were kept of the patients seen. The name, serial number, rank, and organization of each patient was obtained. The diagnosis, prognosis, and treatment of each was noted and whether it was a battle casualty, also the disposition. The heavy losses to the evacuation personnel on D-day and the lack of established evacuation stations made such records unavailable for the first 24 hours, which was an unavoidable lapse. However, it is felt that records from the LST(H)s during this period should offset the loss.

For the 26 days of the battle the Fourth Division stations evacuated a total of 7,227 patients, 4,916 of which were of the Fourth. In addition to this were 940 patients evacuated without records on D-day; those evacuated over purple beaches by corps from March 6 to March 8; and those evacuated by air. Records for the latter two were kept by our division field hospital.

The following interesting information is acquired from the records:

Totals Evacuated:

<u>DATE</u>	<u>STATION</u>	<u>OFF EVAC</u>	<u>ENL EVAC</u>	<u>TOTAL</u>	<u>DAY'S TOTAL</u>
2-19-45	Blue 1	8	162	170	4thMarDiv - 167 Corps - - - 3
2-20-45	Blue 1	9	226	235	4thMarDiv - 228 Corps - - - 2
2-21-45	Blue 1	3	272	275	4thMarDiv - 272 Corps - - - 3
2-22-45	Blue 1	3	113	116	4thMarDiv - 551
	Yellow 1	(Reports not broken down.)		365	Corps - - - 9
	Yellow 2	Evac since 2-20-45.)		79	
2-23-45	Blue 1	1	130	131	4thMarDiv - 380
	Yellow 1	(Reports not broken down)		132	Corps - - - 20
	Yellow 2			137	

UNCLASSIFIED

ENCLOSURE (B) TO APPENDIX I TO ANNEX DCG, TO OPERATION REPORT - IWO JIMA (CONT'D)

<u>DATE</u>	<u>STATION</u>	<u>OFF EVAC</u>	<u>ENL EVAC</u>	<u>TOTAL</u>	<u>DAY'S TOTAL</u>
2-24-45	Blue 1	2	149	151	4thMarDiv - 238
	Yellow 1	(Reports not broken down)		39	Corps - - - 6
	Yellow 2			54	
2-25-45	Blue 1	7	241	248	4thMarDiv - 132
	Yellow 1	7	259	266	Corps - - - 420
	Yellow 2	5	38	43	
2-26-45	Blue 1	8	284	292	4thMarDiv - 332
	Yellow 1	14	343	357	Corps - - - 320
	Yellow 2	0	3	3	
2-27-45	Blue 1	7	312	319	4thMarDiv - 364
	Yellow 1	17	229	246	Corps - - - 201
	Yellow 2	consolidates report with Yellow 1 hereafter.			
2-28-45	Blue 1	5	244	249	4thMarDiv - 269
	Yellow 1	7	254	261	Corps - - - 241
3-1-45	Blue 1	16	263	279	4thMarDiv - 291
	Yellow 1	7	248	255	Corps - - - 243
3-2-45	Blue 1	7	333	340	4thMarDiv - 279
	Yellow 1	10	297	307	Corps - - - 268
3-3-45	Blue 1	4	289	293	4thMarDiv - 311
	Yellow 1	13	465	478	Corps - - - 460
3-4-45	Blue 1	1	207	208	4thMarDiv - 212
	Yellow 1	8	245	253	Corps - - - 249
3-5-45	Blue 1	3	101	104	4thMarDiv - 108
	Yellow 1	0	50	50	Corps - - - 46
3-6-45	Blue 1	0	52	52	4thMarDiv - 52
	Yellow 1	0	0	0	Corps - - - 0
3-7-45	Blue 1	(No evacuation)			
	Yellow 1	(No evacuation)			
3-8-45	Blue 1	1	74	75	4thMarDiv - 76
	Yellow 1	4	78	82	Corps - - - 81
3-9-45	Blue 1	6	215	221	4thMarDiv - 227
	Yellow 1	5	99	104	Corps - - - 38
3-10-45	Blue 1	6	93	99	4thMarDiv - 78
	Yellow 1	1	114	115	Corps - - - 136
3-11-45	Blue 1	1	9	10	4thMarDiv - 4
	Yellow 1	1	13	14	Corps - - - 20
3-12-45	Blue 1	2	66	68	4thMarDiv - 54
	Yellow 1	4	103	107	Corps - - - 121
3-13-45	Blue 1	1	53	54	4thMarDiv - 55
	Yellow 1	4	114	118	Corps - - - 117
3-14-45	Blue 1	0	45	45	4thMarDiv - 38
	Yellow 1	3	126	129	Corps - - - 136
3-15-45	Blue 1	3	31	34	4thMarDiv - 29
	Yellow 1	(No evacuations)			Corps - - - 5

UNCLASSIFIED

ENCLOSURE (B) TO APPENDIX 1 TO ANNEX DOG, TO OPERATION REPORT - IWO JIMA (CONT'D)

<u>DATE</u>	<u>STATION</u>	<u>OFF EVAC</u>	<u>ENL EVAC</u>	<u>TOTAL</u>	<u>DAY'S TOTAL</u>
3-16-45	Blue 1	0	9	9	4thMarDiv - 9
	Yellow 1	(No evacuations)			*Corps - - - 0
GRAND TOTAL		209	7018	7227	4thMarDiv - 4916

*-Includes all organizations ashore not of the Fourth Marine Division.

Classification of casualties by organizations at Blue 1 Station:

<u>DATE</u>	<u>2R.</u>	<u>2AR.</u>	<u>2SR.</u>	<u>1AR.</u>	<u>ENGR.</u>	<u>PIR.</u>	<u>HQ&SER.</u>	<u>NSIC*</u>	<u>UNIDEN**</u>	<u>TOTAL</u>
2-19-45	13	19	49	3	1	7	5	11	62	170
2-20-45	11	49	73	3	1	10	10	18	60	235
2-21-45	11	44	45	0	9	15	7	19	60	275
2-22-45	4	38	45	6	2	3	5	6	7	116
2-23-45	0	89	21	1	0	1	5	8	6	131
2-24-45	2	101	15	1	5	6	4	5	12	151
2-25-45	29	122	38	2	2	1	6	10	28	248
2-26-45	95	36	120	1	5	2	15	7	11	292
2-27-45	91	34	166	5	3	1	19	0	0	319
2-28-45	79	32	99	1	2	1	18	13	4	249
3-1-45	70	63	113	2	2	2	8	14	5	279
3-2-45	18	130	153	1	8	1	22	4	3	340
3-3-45	55	122	62	0	4	1	3	36	10	298
3-4-45	57	122	17	1	3	1	5	2	0	208
3-5-45	14	53	20	0	3	0	7	7	0	104
3-6-45	3	7	12	0	0	0	0	0	30	52
3-7-45	No evacuations.									
3-8-45	15	39	7	0	0	0	0	5	9	75
3-9-45	33	44	25	3	1	0	4	70	40	221
3-10-45	3	12	26	2	2	0	6	41	7	99
3-11-45	1	0	2	0	0	0	0	7	0	10
3-12-45	7	2	44	0	3	1	1	6	4	68
3-13-45	4	0	33	0	3	1	1	7	5	54
3-14-45	3	4	22	0	2	0	3	8	3	45
3-15-45	4	6	18	0	1	1	1	3	0	34
3-16-45	0	4	5	0	0	0	0	0	0	9
Total	622	1174	1230	32	62	55	155	307	366	3003

*-Includes Replacement Battalions, 133 NCB, etc.

** - Many of these had been recorded previously at our 4th Division Field Hospital, after 2-28-45.

UNCLASSIFIED

TO ANNEX DQG, TO OPERATION REPORT - IWO JIMA (CONT'D)

Classification of casualties by prognosis over Blue 1 Station:

DATE	RED*		BLUE**		WHITE***		DEAD	
	NO.	PERCENT	NO.	PERCENT	NO.	PERCENT	NO.	PERCENT
2-19-45	37	33%	39	34%	35	31%	3	2%
2-20-45	53	22%	58	29%	88	44%	3	1%
2-21-45	56	25%	62	28%	102	46%	2	.9%
2-22-45	17	16%	24	23%	62	59%	2	1%
2-23-45	13	8%	36	24%	100	67%	1	.6%
2-24-45	20	14%	38	21%	77	57%	2	1%
2-25-45	40	16%	63	25%	141	57%	0	0%
2-26-45	46	17%	68	26%	145	55%	0	0%
2-27-45	68	22%	101	33%	139	45%	0	0%
2-28-45	21	8%	106	43%	120	48%	1	.4%
3-1-45	37	14%	126	51%	86	35%	2	.8%
3-2-45	68	21%	129	42%	108	35%	5	1%
3-3-45	53	22%	92	38%	90	37%	3	1%
3-4-45	64	33%	92	46%	39	19%	0	0%
3-5-45	33	33%	42	42%	25	25%	0	0%
3-6-45	4	18%	11	50%	7	31%	0	0%
3-7-45	No evacuation.							
3-8-45	18	30%	33	55%	9	15%	0	0%
3-9-45	38	28%	79	42%	52	27%	0	0%
3-10-45	38	32%	47	54%	12	13%	0	0%
3-11-45	2	20%	6	60%	2	20%	0	0%
3-12-45	15	28%	26	49%	12	23%	0	0%
3-13-45	12	22%	33	62%	8	16%	0	0%
3-14-45	13	28%	32	72%	0	0%	0	0%
3-15-45	3	8%	17	50%	14	42%	0	0%
3-16-45	0	0%	2	22%	7	78%	0	0%
TOTAL	878	24%	1362	36%	1480	39%	24	1%

*-Requiring over 30 days hospitalization.

** -Requiring over 14-30 days hospitalization.

***-Requiring less than 14 days hospitalization.

Classification of casualties by diagnosis over Blue 1 Station (No. & Percent):

DATE	BELLY		CHEST		HEAD		EXTREM.		MULT.		COMB FAT		MISC&SICK	
	NO.	PERCENT	NO.	PERCENT	NO.	PERCENT	NO.	PERCENT	NO.	PERCENT	NO.	PERCENT	NO.	PERCENT
2-19-45	10	8%	7	6%	14	12%	49	42%	10	8%	8	7%	16	14%
2-20-45	11	5%	6	2%	17	8%	96	47%	14	6%	15	7%	33	16%
2-21-45	6	2%	5	2%	16	7%	112	51%	20	9%	13	5%	50	22%
2-22-45	2	1%	2	1%	10	9%	23	21%	15	14%	24	22%	29	27%
2-23-45	3	2%	5	3%	17	11%	46	31%	15	10%	28	18%	36	24%
2-24-45	2	1%	8	5%	20	14%	50	36%	12	8%	37	27%	6	4%
2-25-45	5	2%	10	4%	38	11%	65	26%	29	11%	54	22%	43	17%
2-26-45	7	2%	11	3%	24	8%	72	26%	16	5%	71	25%	73	26%
2-27-45	4	1%	12	3%	31	10%	102	33%	15	4%	62	20%	72	23%
2-28-45	5	1%	6	2%	22	8%	79	31%	7	2%	46	18%	89	36%

UNCLASSIFIED

~~UNCLASSIFIED~~

ENCLOSURE (B) TO APPENDIX TO ANNEX DCG, TO OPERATION REPORT - IWO JIMA (CONT'D)

DATE	BELLY		CHEST		HEAD		EXTREM.		MULT.		COMB FAT		MISC & SICK	
3-1-45	5	2%	8	3%	24	11%	91	40%	13	5%	34	15%	51	22%
3-2-45	8	2%	8	2%	23	7%	133	42%	19	6%	66	21%	83	26%
3-3-45	8	3%	8	3%	21	9%	70	30%	9	3%	38	12%	78	33%
3-4-45	16	7%	9	4%	24	12%	79	40%	16	7%	24	12%	54	27%
3-5-45	10	7%	5	3%	12	8%	33	23%	8	5%	20	14%	50	35%
3-6-45	2	3%	2	3%	9	17%	18	33%	6	11%	10	18%	6	11%
3-7-45	No evacuations.													
3-8-45	9	4%	15	6%	31	13%	54	23%	15	6%	35	11%	69	31%
3-9-45	3	3%	3	3%	7	7%	35	35%	12	12%	11	11%	29	29%
3-10-45	2	2%	6	7%	13	15%	21	24%	10	12%	5	5%	28	32%
3-11-45	2	20%	0	0%	0	0%	6	60%	0	0%	2	20%	0	0%
3-12-45	2	2%	6	8%	10	14%	21	31%	9	13%	4	5%	26	38%
3-13-45	4	7%	9	16%	10	18%	12	22%	10	18%	2	3%	6	11%
3-14-45	4	9%	2	3%	6	14%	18	47%	7	13%	0	0%	5	9%
3-15-45	0	0%	1	2%	2	5%	10	29%	1	2%	6	17%	14	41%
3-16-45	0	0%	1	11%	0	0%	3	33%	0	0%	4	44%	1	11%
TOTAL	140	4%	111	3%	401	11%	1279	34%	271	7%	619	17%	937	24%

Classification of wounds by casuative agents at Blue 1 Station (No. & Percent):

DATE	SHRAPNEL	SMALL ARMS	BLAST CONCUSSION	MISCELLANEOUS*
2-19-45	51 44%	24 21%	12 10%	28 24%
2-20-45	86 57%	28 12%	10 6%	26 17%
2-21-45	90 50%	34 18%	17 9%	37 21%
2-22-45	46 48%	11 11%	12 12%	26 27%
2-23-45	58 43%	22 16%	16 11%	39 28%
2-24-45	44 53%	21 25%	6 7%	12 14%
2-25-45	65 51%	23 10%	10 7%	28 22%
2-26-45	102 43%	91 39%	17 7%	23 9%
2-27-45	130 48%	74 27%	18 6%	46 17%
2-28-45	91 46%	47 24%	17 8%	36 19%
3-1-45	113 49%	73 29%	21 8%	41 16%
3-2-45	145 51%	62 21%	24 7%	52 18%
3-3-45	79 38%	68 33%	15 7%	44 21%
3-4-45	93 51%	63 33%	7 3%	16 8%
3-5-45	54 54%	26 26%	4 4%	16 16%
3-6-45	17 42%	9 22%	4 10%	10 24%
3-7-45	No evacuations.			
3-8-45	33 56%	15 25%	2 3%	9 15%
3-9-45	88 48%	52 28%	14 7%	28 15%
3-10-45	31 34%	50 55%	4 4%	5 5%
3-11-45	8 80%	2 20%	0 0%	0 0%
3-12-45	31 53%	7 12%	3 5%	17 28%
3-13-45	18 33%	29 53%	2 3%	5 9%

~~UNCLASSIFIED~~

UNCLASSIFIED

ENCLOSURE (B) TO APPENDIX I TO ANNEX DCG, TO OPERATION REPORT - IWO JIMA (CONT'D)

<u>DATE</u>	<u>SHRAPNEL</u>	<u>SMALL ARMS</u>	<u>BLAST CONCUSSION</u>	<u>MISCELLANEOUS*</u>
3-14-45	13 28%	26 57%	1 2%	5 11%
3-15-45	11 41%	8 29%	0 0%	8 29%
3-16-45	1 20%	3 60%	0 0%	1 20%
TOTAL	1410 45%	868 29%	236 7%	560 19%

*Includes burns, etc.

Since 2,694 out of 4,916 casualties evacuated for the Fourth Marine Division were over the Blue 1 Station it is believed the figures presented are typical of the casualties for the division throughout the battle. Since the wounded were kept for so short a period at our stations the percent of dead is not indicative of the rate of death sustained.

These statistics show that an average of 107.8 patients per day were evacuated including one day no casualties at all went out of the station. 389 were evacuated the first 24 hours, 664 the first 48 hours, and 845 the first 72 hours.

In treatment a total of 189 units of plasma, 29 units of serum albumin, and 48 units of whole blood were given.

CONCLUSIONS AND RECOMMENDATIONS

1. A brief review of evacuation personnel and experiences during the battle of Iwo Jima is presented. In general the work of evacuation was efficient and effective - a vast improvement over previous operations was realized both by the naval forces afloat and Marine units ashore. Casualties were gotten off the beach both day and night from the beginning and arrived aboard ships in record time after being wounded.
2. In spite of high casualty rates the shore party evacuation personnel did a fine job throughout; and the medical companies, later attached, though relatively inexperienced, did remarkable work. Beach party medical platoons were cooperative and worked well, but generally did not remain ashore long enough to become integrated in the organization. The value of a division evacuation officer was demonstrated on D-day when we were able to establish adequate evacuation facilities for the wounded of the division in spite of heavy initial losses to the combat team evacuation personnel.
3. The limited use of Weazels initially suggested a valuable function for these vehicles in the future for evacuating wounded on sandy terrain where ambulance jeeps cannot operate. DUKWs again proved to be the vehicle of choice to evacuate casualties off shore, and it is highly recommended in future operations to obtain DUKWs initially for the specific function of evacuation. In addition movement of casualties and medical supplies in the beach areas was necessary throughout. It is recommended that an ambulance jeep, two Weazels, and eight DUKWs be specifically assigned to the Shore Party Medical Section for future operations.
4. Medical resupply during the early phases of the battle remains a problem. Critical shortages of litters, blankets, serum albumin, etc. developed during the first three days. Beneficial and valuable results were obtained in the increased use of serum albumin in the front lines and in administration of brandy to cases of fatigue and exhaustion. Plasma and whole blood were invaluable in the treatment of shock.

UNCLASSIFIED

UNCLASSIFIED

TO ANNEX DCG, TO OPERATION REPORT - IWO JIMA (CONT'D)

To maintain adequate liaison, cooperation, and contact between medical forces afloat and ashore it is recommended that a medical officer thoroughly familiar with the situation and problems ashore be maintained with the medical staff afloat.

5. Statistics show a great increase in the number of casualties evacuated over previous operations. Casualties observed proved to be much more seriously wounded than ever before, the vast majority being from shell fragment. Many concussion cases were seen, and combat fatigues with associated neuroses were a major problem. Records were, in general, excellent, but many casualty tags were found incomplete.

UNCLASSIFIED

UNCLASSIFIED

~~CONFIDENTIAL~~

~~UNCLASSIFIED~~

HEADQUARTERS,
FOURTH MARINE DIVISION, FLEET MARINE FORCE,
FLEET POST OFFICE, SAN FRANCISCO, CALIFORNIA.

20 April, 1945.

APPENDIX 2 TO ANNEX DCG TO OPERATION REPORT - IWO JIMA

MEDICAL REPORT

OUTLINE AND INDEX

	<u>PAGE</u>
1. Planning, Preparation and Embarkation.....	1
A. Preparatory Period	1
(1) Planning and Training	1
(2) Hygiene and Sanitation	1
(3) Supplies and Equipment	2
B. Embarkation	3
2. Debarkation, and Ship to Shore Movement	5
3. Assault Phase	6
A. Shore Evacuation	6
B. Water Evacuation	10
(1) Casualty Evacuation LST's	11
(2) Distribution of Casualties to Ships	12
(3) Function of Specialists	13
C. Fourth Marine Division Casualties, Iwo Jima	
Operation	14
(1) Casualties - Representative Total as per early	
Medical Record Section Figures (Including	
1,774 K.I.A.)	14
(2) Types of Injuries	14
(3) Regional Distribution, Fragment and Gunshot	
Wounds	15
(4) Medical Personnel Casualties	15
D. The Regiments and Battalions	16
E. The Medical Battalion	18
F. The Division Hospital	19
(1) Physical Aspect	19
(2) Personnel	20
(3) Equipment and Supplies	21
(4) Hygiene and Sanitation	23
(5) Security	23
(6) Division Hospital Statistics	24
(7) Clinical Observations	26
G. Air Evacuation	27
H. Hygiene and Sanitation	28
(1) Topography and Climate	28
(2) Japanese Installations of Sanitary Importance...	28
(3) General Sanitary Measures	28
(4) Special Sanitary Problems	30
(5) Entomological Consideration	30
(6) Malaria and Epidemic Control Unit Activities ...	30
(7) Burial of the Dead	31
(8) Use of DDT	32
a. Ground Application	32
b. Airplane Application	32

OUTLINE AND INDEX

UNCLASSIFIED

UNCLASSIFIED

MEDICAL REPORT

OUTLINE AND INDEX (CONT'D.)

	<u>PAGE</u>
(9) Medical Intelligence	34
I. Medical Records	36
(1) Planning and Training	36
(2) Assault Phase	38
4. Reembarkation	39
5. Recommendations	40

UNCLASSIFIED

UNCLASSIFIED

APPENDIX 2 TO ANNEX LOG. MEDICAL REPORT

1. PLANNING, PREPARATION, AND EMBARKATION

A. PREPARATORY PERIOD

(1) PLANNING AND TRAINING:

During the period following the return of this Division from the Saipan-Tinian operation, replacement personnel were received and trained. Requisitions were prepared and submitted. Medical Company personnel were alternately assigned to the U. S. Army Station Hospital for training. However, a Division Hospital would have provided facilities and opportunity for much more adequate and satisfactory professional training of personnel. Surgeons who were not given the opportunity to touch a knife for six months prior to the operation had to perform the most difficult and extensive type of abdominal operations during the battle. Since the organic medical personnel must treat all injuries and diseases under the arduous conditions of combat, surely they should be allowed the professional experience of treating division personnel during rehabilitation and training periods. This point cannot be too strongly emphasized.

Personnel not required for hospital duty continued with field training. Selected groups were assigned to the Division Jungle and Scout Sniper Schools for varying periods. At a series of semi-monthly meetings of Medical Department Officers problems were presented and thoroughly discussed.

(2) HYGIENE AND SANITATION:

The four principal problems encountered during the preparatory period were:

a. An epidemic of infectious hepatitis affecting approximately 300 patients. This epidemic developed aboard ship while enroute to camp from the Saipan-Tinian operation; reached its peak in late September; and declined in early November. No deaths occurred, but prolonged hospitalization was necessary.

b. Skin diseases, principally fungus infections and skin ulcers, were frequent in spite of the cool autumn climate. The admission rate from August to January was over twice the rate during March, April and May. The chief cause was a lack of hot water showers, as the water was so chilly that troops did not bathe frequently or thoroughly.

(ONE)

UNCLASSIFIED

UNCLASSIFIED

G: MEDICAL REPORT (CONT'D)

c. A considerable percentage of physically and mentally unfit troops were furnished to the division as replacements. Many of these were convalescent from hospitals, and were in no condition to endure the rigors of combat training. 15% of Medical Surveys involved replacement troops.

d. The maintenance of a balanced, diversified diet for troops. An insufficient amount of fresh fruits and vegetables and fresh meat was provided. Since avitaminosis and malnutrition were widespread after the Saipan-Tinian operation complete rehabilitation of troops was delayed.

Specific measures for preventing disease during the oncoming operation were:

a. Comprehensive training of the battalion 3 man sanitary squads, and the 50 man sanitary squad of the attached 133rd Naval Construction Battalion, by the M & E Control Team.

b. The inoculation of all personnel against plague, cholera and epidemic typhus. These inoculations were completed in an average of less than 15 days on approximately 25,000 men. No serious reactions occurred, and less than 0.1% were admitted to the sick list. All personnel received a tetanus booster, and most troops received a typhoid booster and cowpox vaccination during the same period.

c. The impregnation of utility uniforms with dimethyl-phthalate and 10% DDT in talc. The uniforms of approximately 15% of the troops were impregnated prior to embarkation. Because of a shortage of clothing, it was necessary to treat the remainder aboard ship shortly before D day. A new suit of clothing should be issued to each man about one month prior to embarkation, to be stenciled, impregnated, and reserved for D day. Furthermore, the supply of reserve clothing carried to the target by the quartermaster should be impregnated.

(3) SUPPLIES AND EQUIPMENT

The procurement of supplies was effected by the Commanding Officer of the Medical Battalion, with the assistance of the Division Medical Property Officer, and was accomplished very efficiently. Crating and marking proceeded rapidly. Twenty Wilson drums were packed with essential assault supplies and carried in the Division Reserve. Because of supply and transportation difficulties from the States complete refitting of

(TWO)

UNCLASSIFIED

UNCLASSIFIED

APPENDIX 2 TO ANEX DOG: MEDICAL REPORT (CONT'D)

critical medical equipment and supplies was not fully accomplished until just prior to embarkation. This resulted in considerable difficulty in distribution as many units had embarked prior to receipt of supplies designated for them. Complete distribution was effected during rehearsal and staging periods.

Previous experience revealed that one of the most important preliminary measures necessary to insure proper and efficient sanitation is the procuring of sufficient quantities of quartermaster supplies. Accordingly a list of minimum necessary supplies and their recommended distribution was compiled and submitted to the quartermaster, who in turn, procured, carried, and distributed them during the operation.

RECOMMENDATIONS:

1. That a Marine Division operate a Division Hospital with complete medical and surgical facilities during the rehabilitation and training period.
2. That hot water showers be provided in the base camp.
3. That the ration allowance for rehabilitating troops be augmented by more fresh fruits, fresh vegetables and fresh meat.
4. That a new utility uniform be issued to each man one month prior to embarkation for stenciling, impregnation with dimethylphthalate and DDT, to be reserved for D day.
5. That the reserve supply of clothing, to be carried to the target by the quartermaster, be impregnated with dimethylphthalate and 10% DDT in talc prior to embarkation, under the supervision of the Medical Department.

B. EMBARKATION AND MOVEMENT TO THE TARGET:

Embarkation of this division commenced on the 27th of December, 1944 and was completed on 3 January, 1945, except for loading minor elements and shifting personnel after the rehearsal.

In general, medical personnel embarked with the RCT and Support Group units to which attached, on transports and smaller craft, as designated, with the advice of unit medical officers:

UNCLASSIFIED

UNCLASSIFIED

APPENDIX 2 TO ANNEX DOG: MEDICAL REPORT (CONT'D)

The Medical Battalion (less detachments) was embarked as follows:

H&S Co. (less Supply Section) . . .	APA 193-Sanborn
Supply Section	APA 190-Pickens
A Co. (less Collecting Section). . .	APA 120-Hinsdale
B Co. (less Collecting Section). . .	APA 118-Hendrix
C Co. (less Collecting Section). . .	APA 196-Logan
D & E Co.	APA 193-Sanborn

Hospital Sections of medical companies were embarked on ships having the largest casualty capacity, when practicable, to facilitate the care of casualties received on board, during the initial stages of the battle.

One (1) Medical Officer and two (2) men from A Medical Company embarked on LST(H) 931, and a similar group from C Company embarked on LST(H) 930, to act as 4th Division liaison medical personnel during the period these ships were to remain on stations at the target.

Organic vehicles were combat loaded with essential items of equipment and supplies to supplement that designated as "hand carry". Seabags were packed with battle dressings, plasma, serum albumin and other items essential in the early stages of the assault. These were loaded in troop spaces, to be carried ashore by assault medical troops.

Two and one-half (2 $\frac{1}{2}$) ton 6 x 6 trucks, for the first time organic to the Medical Battalion, were combat loaded with equipment and supplies essential in establishing surgical units ashore.

RCT reserve medical resupply items were loaded as designated, with the advice of unit medical officers. Attached Medical Companies carried an additional reserve, which was loaded on ships to which they were assigned. The remaining Medical Battalion equipment and supplies were divided between two APA's and an AK. H & S Medical Battalion carried a division reserve in addition to that loaded by RCT's and medical companies.

For detailed loading, attention is invited to paragraph 2 of Annex Dbg.

The loading priority given medical equipment and supplies proved generally satisfactory.

UNCLASSIFIED

UNCLASSIFIED

APPENDIX 2-10: MEDICAL REPORT (CONT'D)

During the trip to the combat area, sanitary conditions aboard ships were satisfactory. No epidemics or unusual diseases occurred.

2. DEBARKATION AND SHIP TO SHORE MOVEMENT.

Medical personnel attached to Regimental Combat Teams debarked as directed by unit commanders. In general they were boated as follows: Company Aid men with platoons; Battalion Aid Station personnel with Battalion Command Posts and Regimental Aid Station personnel with Regimental Command Posts. Collecting Section detachments were boated with the Battalion Command Posts to which attached. Shore Party Medical Personnel in support of Battalion Landing Teams were boated prior to H hour.

Personnel of the assault landing teams landed between H plus 3 and H plus 90 minutes (0903 to 1030) on D day. Reserve Landing Teams and Regimental Command Posts of the two (2) Assault Combat Teams were landed by H plus 265 minutes (1315). Four Medical Shore Party evacuation teams were landed between H plus 30 and H plus 120 (0930 to 1100). The Shore Party Medical Officer (Battalion Surgeon, Fourth Pioneer Battalion) and his Hospital Corps personnel, were landed at H plus 6 (1500).

Personnel of the Reserve Combat Team completed boating at 1535 and had landed by 1900 on D day.

Able and Charlie Medical Companies, less collecting sections, were ordered ashore at 1100 on D plus one (1) to support the 25th and 23rd Combat Teams in evacuation of casualties from the beaches. Able Medical Company landed at 1530 on D plus one (1) and Charlie Medical Company at 1430 on D plus one (1).

Because of an order to unload APA 118, Baker Medical Company was landed at 1630 on D plus 3, without prior approval by Division Headquarters.

A total of one (1) Medical Officer and nine (9) Hospital Corpsmen of the 10th Amphibious Tractor Battalion and eighty (80) corpsmen from Dog and Easy Medical Companies were ordered ashore between the period 1630 on D day to 1015 on D plus 3, in response to requests for replacements. During the same period two (2) Medical Officers, one (1) Dental Officer and forty (40) Hospital Corpsmen of the 24th and 30th Replacement Drafts landed and were assigned as replacements by the Shore Party Medical Officer.

UNCLASSIFIED

UNCLASSIFIED

APPENDIX 2 TO ANNEX DOG: MEDICAL REPORT (CONT'D)

The Division Surgeon and his assistants were landed on the morning of D plus 4, the Commanding Officer of the Medical Battalion on D plus 5, and H&S Company, Fourth Medical Battalion on D plus 6. Dog Medical Company landed at 1400 on D plus 8 and Easy Medical Company at 1045 on D plus 10.

Medical equipment and supplies urgently needed by assault troops, were sent ashore when requested. Otherwise they were landed in accordance with unloading priority. This proved generally satisfactory.

Attention is invited to Regimental Combat Team reports and Section 4 of Annex Dog for detailed debarkation and landing.

3. ASSAULT PHASE.

A. SHORE EVACUATION.

During the twenty-six (26) days of the battle of Iwo Jima, the Fourth Marine Division shore evacuation stations evacuated 8,167 casualties, of which 5,150 were Fourth Division Personnel.

The Senior Medical Officer of the Pioneer Battalion was designated as the Shore Party Evacuation Officer. Under him were four evacuation teams, each composed of one medical officer and 10 to 14 hospital corpsmen, to be landed on each of the four assault beaches. Accordingly the four evacuation teams were boated with shore party personnel supporting each of the assault landing teams, and were put ashore during the first two hours after H hour. So violent was the enemy fire along the beaches, that these teams were unable to set up effective evacuation stations, and heavy casualties were sustained.

At 0930 one Medical Officer and 12 corpsmen of the Pioneer Battalion landed on Yellow One beach. Almost immediately this group suffered casualties, their equipment was largely destroyed, and they were unable to organize or establish an evacuation station. By 1100 the medical officer and 6 corpsmen had been wounded and evacuated and 4 corpsmen had been killed.

At 1000 a Medical Officer, Dental Officer and 8 corpsmen of the 133rd Naval Construction Battalion landed on Yellow Two beach under heavy enemy mortar and artillery fire. This team sustained casualties, were dispersed, and were unable to set up an evacuation station. By late afternoon the Medical

(SIX) **UNCLASSIFIED**

UNCLASSIFIED

LOG: MEDICAL REPORT (CONT'D) - - - - -

Officer, Dental Officer, and 5 corpsmen were casualties and evacuated.

A Medical Officer and 14 corpsmen of the Pioneer Battalion were landed at 0930 on Blue One beach. By 1130 the Medical Officer and 3 corpsmen were wounded and evacuated. The remaining corpsmen joined a beach party medical platoon on Yellow Two beach and worked effectively.

At 1100 a Medical Officer and 9 corpsmen of the 133rd Naval Construction Battalion were landed on Blue One beach, but were dispersed by heavy mortar fire and were unable to organize an evacuation station. By 1130 the Medical Officer had been wounded and evacuated.

A Medical Officer, Dental Officer, and 8 corpsmen of the 10th Amphibian Tractor Battalion landed on Yellow One beach at 1330 and set up an aid station between Yellow One and Yellow Two. They were located away from the natural flow of evacuation, but did a magnificent job of treating casualties in their area during the first 7 days of the battle.

The Shore Party Evacuation Officer landed on Blue One beach at 1500 with 2 Pioneer Battalion corpsmen and 20 replacement corpsmen, and set up an evacuation station along the only main road of egress from the front lines. Working continuously throughout the night, they treated and evacuated 389 casualties during the first 24 hours.

In the meantime, the Regimental Surgeon of the 23rd Marines, assisted by one beach party medical platoon, was evacuating from Yellow One beach.

Thus in spite of the heavy toll in casualties: i.e. 80% of the shore party medical officers and approximately 50% of the corpsmen; evacuation stations were established and functioning in each of the three established Fourth Marine Division assault beaches by 1600 on D day.

On D day and D plus one (1) forty (40) corpsmen from the collecting section of D and E Medical Companies were sent in as replacements to the regiments. However there was a critical shortage of medical evacuation personnel, and Medical Companies A and C were landed at 1600 on D plus one (1): Company A began evacuating at the Blue One beach station. Company C set up an evacuation station on Yellow Two beach.

(SEVEN)

UNCLASSIFIED

~~CONFIDENTIAL~~

APPENDIX 2 TO ANNEX DCG: MEDICAL REPORT (CONT'D) -----

Shortly thereafter one-half of Company C was transferred to the Yellow One station to relieve the Regimental Surgeon of the 23rd Marines and permit him to return to his regimental duties. With this increase in personnel it was possible to give more efficient treatment to the wounded; and also keep adequate records.

At about 1800 on D plus one (1) a large ammunition dump 150 yards from the Blue One station was blown up, and burned with intermittent explosions for two hours. At 1700 on D plus two (2), large fuel and ammunition dumps were blown up about 100 yards from the Blue One station. All personnel continued to work at the station treating casualties. They fought fires started in their medical supplies by hot fragments until 2400.

On D plus three (3) Medical Company B was ordered ashore, as the APA on which they were embarked was completing unloading. They were ordered to Blue One evacuation station. A surgical team of A Medical Company, composed of two surgeons and 3 corpsmen, was ordered to return to the APA on which they had embarked, to perform surgery. They were returned to Blue One evacuation station on D plus seven (7).

On the night of D day there was a critical shortage of blankets, litters and plasma. Recurring shortages occurred during the first three days, resulting from difficult surf conditions and destruction of supplies by enemy fire. After D plus three (3) there were adequate supplies. Whole blood was used by all stations after D plus six (6) with excellent results. The Blue One station administered 189 units of plasma, 29 of serum albumin and 49 of whole blood.

Until D plus nine (9), when the Division Hospital was established; a replacement pool of corpsmen was established at Blue One beach evacuation station. All replacements and detachments were sent to this pool, and thence to the regiments, as ordered by the Division Surgeon. This procedure prevented the confusion that would otherwise have resulted, since personnel from Blue One station guided the replacements directly to the designated regiment or battalion. Furthermore, by keeping this pool built up, it was possible to furnish replacements to regiments immediately upon request.

While some of the early casualties were evacuated by LVT'S most of them were evacuated by the LCVP's and LCM's which had brought personnel ashore. After D day these craft became

(EIGHT) **UNCLASSIFIED**

UNCLASSIFIED

DOG: MEDICAL REPORT (CONT'D)

increasingly difficult to obtain and very dangerous to use as stormy weather and heavy off shore winds resulted in the broaching of a large number of them. By D plus four (4) all small boats were ordered to stay clear of the beaches, and subsequent evacuation was via LVT's and DUWK's. After D plus nine (9), when the LST(H)'s were withdrawn, it was no longer possible to use LVT's as they were too unmaneuverable to unload casualties on large ships. DUWK's were obtained, and again, as on previous operations, proved the most efficient means of evacuating casualties. They were loaded with casualties immediately in front of the evacuation station, or even at the Division Hospital, and dispatched directly to ships without further transfer of patients.

Until the Division Hospital was established on D plus nine (9), casualties were evacuated day and night. On and after D plus nine (9) all casualties occurring after 1700 were received in the Division Hospital.

On March 7, all water evacuation was assumed by corps on Purple beach on the western shore, because of surf conditions. The Fourth Division resumed evacuation from the eastern beaches the following day.

Throughout the first 11 days of the battle our beaches were under fire. Mortar, artillery, rocket and small arms fire was received at frequent intervals both day and night. Shore and beach party personnel suffered over 50% casualties. Throughout, the work and spirit of the doctors and corpsmen was magnificent. Due to their unselfish devotion to duty the several thousand evacuated casualties received excellent first aid and shock treatment. No casualty was kept on the beach over 30 minutes except when his condition required more prolonged shock therapy.

The use of Weasels would have greatly facilitated the handling of casualties along the beaches particularly during the early phases of the battle, when jeep ambulances could not travel along the soft sandy beach.

Shore evacuation stations were set up with the aid of the Shore Party bulldozers. An area approximately 20 feet by 30 feet would be dug out, its walls would be reinforced with sandbags, and a tarpaulin supported by a central ridge pole would serve as a roof and blackout. There were three of these installations adjoining each other on Blue One beach, and a single installation on each of the two Yellow beaches. These

(NINE)

UNCLASSIFIED

stations adequately protected casualties while they were being treated for shock and awaiting evacuation. They provided ample working room for medical personnel. Furthermore, they would have been a valuable annex to the Division Hospital, had all evacuation been suspended due to bad weather, for 50 or more of the less seriously wounded could have been treated and retained at these stations.

Records of 2,694 casualties from the Blue One beach evacuation station reveal the following statistics:

Red Injuries - -	24%	Wound Fragment- -	45%
Blue Injuries- -	36%	Wound Gunshot - -	29%
White Injuries -	39%	Blast Concussion -	7%
Dead - - - - -	1%	Miscellaneous - -	19%
Head - - - - -			11%
Chest - - - - -			3%
Abdomen - - - - -			4%
Extremities - - - - -			34%
Blast Concussion - - - -			7%
Combat Fatigue - - - -			17%
Misc. and Sick - - - -			17%

RECOMMENDATIONS:

1. That Shore Party Evacuation Station personnel be landed on a hotly contested beachhead not earlier than E plus five (5) hours.

2. That two (2) Weasels be assigned to the Shore Party Evacuation Officer to be used in transfer of patients along the beach.

B. EVACUATION BY WATER.

While shore to ship evacuation of casualties, and their subsequent treatment is a responsibility of the U. S. Navy, it is also of direct concern to the Landing Force. During the early phases of the attack the functions of Naval and Landing Force Medical personnel overlap and are intimately related. Medical Companies work aboard ship for several days, and should be strategically located on ships so as to permit them to function at maximum capacity. The urgency of the early establishment of a hospital ashore is directly dependent upon the efficiency of water evacuation and adequacy of facilities for mass treatment of casualties aboard. Therefore the following general observations

UNCLASSIFIED

LOG: MEDICAL REPORT (CONT'D)

and recommendations are submitted.

(1) CASUALTY EVACUATION LST's.

Their use marked a definite advance in the chain of water evacuation, resulting in a more equitable distribution of casualties; earlier treatment of serious cases; and making night evacuation feasible. However these LST(H)'s were not sufficiently equipped for the adequate treatment of casualties; when LSM's were evacuating, the transfer of patients through hatches was slow and difficult; the pontoon barges were not completely satisfactory; and the complement of medical personnel was inadequate. LST(H)'s provide a source of complete information for recording casualties, since all evacuated casualties flow through them. Their reports, however, are sent to higher echelon; and Marine Divisions are not informed. Since the report is typewritten, an additional copy could easily be made available to the Division Surgeon concerned. The Fourth Marine Division assigned one Medical Officer and two hospital corpsmen (from medical companies attached to RCT's) to each of its two assigned LST(H)'s. In addition to assisting in the treatment of casualties, this liaison team sent complete evacuation records to the Division Surgeon.

Each LST(H) began to receive casualties at about H plus 40. Most of the casualties received during the first 6 hours were in shock, since beach evacuation stations were unable to set up and administer shock therapy because of heavy enemy fire. A large percentage of these cases required treatment prior to further evacuation to APA's, and the number of doctors and hospital corpsmen aboard was insufficient.

When assaulting a hotly contested beachhead, the relative importance of two of the functions of the LST(H)'s can not be too strongly emphasized:

a. During the early phase, and prior to establishment of fully functioning shore evacuation stations, their primary function is to render shock therapy and apply splints and dressings.

b. After shore evacuation stations are established, their main purpose is to effect an equitable distribution of casualties to APA's and AH's.

On D plus 3, as a result of a heavy sea for 3 days, the constant pounding of LVT's punctured the outboard pontoons of the casualty transfer barges. The bar [unclear] off Blue Beach one. The bar [unclear] condition,

UNCLASSIFIED

~~UNCLASSIFIED~~

APPENDIX TO ANEX DOG: MEDICAL REPORT (CONT'D)

seriously impeding the handling of casualties, until a serviceable one was obtained on about D plus 5. The same condition applied in lesser degree to the pontoon barge of the LST(H) 930. These pontoon barges should be protected by bumpers or fenders.

The transfer of patients from the pontoon barge to the LST(H) was slow and was the occasion for considerable delay. The addition of a second crane would double the speed of transfer, since the pontoon barge is sufficiently long to permit the simultaneous use of two cranes.

RECOMMENDATIONS:

1. That LST(H)'s be specially fitted for the transfer and mass treatment of casualties, and used for that purpose only.
2. That the LST(H) pontoon barges be protected by fenders or bumpers.
3. That a second crane be added to LST(H)'s to transfer casualties from the pontoon barge.
4. That a complete Medical Company (less collecting section) be embarked on each LST(H) to augment the organic Medical Staff during the early phases of the attack.
5. That a copy of the LST(H) casualty report be sent to the Division Surgeon concerned.

(2) DISTRIBUTION OF CASUALTIES TO SHIPS.

Although distinctly improved as compared to former operations, several deficiencies were noted. There was an inadequate number of LCVP's to provide for transfer of casualties from LST(H)'s to APA's. Consequently an APA would be ordered to take station near an LST(H) and receive all casualties from her. This procedure compensated for the shortage of LCVP's, but the individual APA would be kept at this station too long; and as many as 100 to 140 casualties would be taken aboard within the space of 2 to 4 hours before she was relieved by another APA. The surgical facilities of this APA would be grossly overtaxed, and emergency surgery could not be performed early due to the deluge of patients. In the meantime the surgeons of other APA's would be comparatively idle.

(TWELVE)
~~UNCLASSIFIED~~