HEADQUARTERS. H MARINE DIVISICN, FLEET MARINE FORCE, T POST OFFICE, SAN FRANCISCC. CALIFORNIA.

20 April, 1945.

Appendix 4 to Annex DCG to operation Report - IWC JIMA.

Orinance Report

Supply of Crinance Materiel was generally very satis-1. factory on all items prior to mounting out except ammunition.

2. Division ammunition requisitions (based on current Unit of Fire Table, latel 21 March, 1944) for number of weapons to be employed on the operation, including all attached units, did not coincile with the list of mounting cut ammunition compiled by Supply Service, Fleet Marine Force, Pacific. This caused considerable confusion in the computing of loading lata, since this was based on the Division requisitions, and loading plans had to be changed at the "last minute" when the information on actual mounting out ammunition was furnishei.

In order that accurate loading plans be made by a Div-3. ision prior to mounting out, correct information on how much ammunition, by number of rounis, that will be male available, should be furnished in sufficient time for combat loading plans to be male.

4. All ammunition that the Division was responsible for loating was not on hand in the Second Service and Supply Battalion Dumps at KAHULUI when the Division commencel embarkation. Ammunition was received during the entire period of embarkation, and in several cases, it was necessary to ferry ammunition to ships after they had been combat loalei.

5. The following list of ammunition shows the type and amounts received during December and January;

December ,

400	SHELL, HE, M71, w/fuze PD M48, f/90mm Gun.	
123,690	CARTRIDGE, AP-INC-TR, (2-2-1) cal50 in M.L.B.	
	SHELL, HE, M48, (SC), w/f PD M48, 75mm Gun.	
	SHELL, HE, M48, (NC), w/f PD M54, 75mm Gun.	
	SHELL, WP, Smoke, Mk II, (NC), unf., 75mm Gun.	
4,041	SHELL, APC, M61, w/f BD M66Al & Tr., 75mm Gun.	
3,100	GRENADES, Han1, Illuminating, Mk I.	
6,305	MINE, anti-tank, HE, MIAL, W/f mine anti-tank HE,	
C 010	MIAL, complete.	
6,012°	BLCCK, iemolition, M3, lbs.	2.1
		1
	BLCCK, iemolition, M3, lbs.	1

··· <u>··</u>·····

ASSI TO Operation Report - IWO JIMA (Cont'd). January

4,968 BOMB, smoke, Mk I/L, 2" Mortar, Mk 3. 4,968 BOMB, smoke, Mk 1/L, 2" Mortar, Mk 3.
4,468 SHELL, HE, M49A2, w/f PD M52, 60mm Mortar.
1,080 SHELL, smoke, WP, T-6, 60mm Mortar.
1,000 SHELL, smoke, HC, T-8, 60mm Mortar.
2,160 SHELL, smoke, WP, M60, w/f PD M57, 105mm How.
10,080 ROCKET, 4.5", Mk 3 TNT loaded and motor, 2.25", Mk 9.
20,112 ADAPTER, grenade-projection, M1.
400 GRENADE, rifle, smoke, colored, assorted.
4,425 GRENADE, hand, smoke, HC, M8, w/f M200A1.
126 SHELL, smoke, colored, assorted. BE, M84. w/f T-SQ. 126 SHELL, smoke, colored, assorted, BE, M84, w/f T-SQ, M54, 105mm How. 4,326 SHELL, illuminating, M83, w/f M65, 60mm Mortar. 2,030 FLARE, trip, paradhute, M48. 3,000 CANISTER, fixed, M2, 37mm Gun. 106,000 CARTRIDGE, ball, cal..45, M1911. 900 GRENADES, AT, N9A1. 10,080 FUZE, Mk 137-1. 300 PROJECTILE, APC, M61 (SC), w/f BD M66A1 & Tracer, 75mm Gun. 403,200 CARTRIDGE, ball, cal..30, M2, 8-rd. clips.

Had the Division been required to leave on the first scheduled date, critical shortages of the above items would have been serious. However, the delay of 30-days enabled this Division to receive, process and load shortages in mounting out ammunition so that at the time of embarkation the Division supply of ammunition was satisfactory.

It is believed that in order to have an adequate combat 6, loading plan and to be able to follow this plan, that every effort should be made to have the mounting out ammunition available to the Division thirty (30) days prior to embarkation.

7. Adverse surf conditions and deep volcanic sand on the beaches caused considerable trouble and delay in unloading and establishing beach dumps. Because of these difficulties, ammunition was lost in sunk and broached landing craft. Deep volcanic sand prevented the use of trucks until adequate roads could be established, and as a result, the ammunition could not be moved inland from beach dumps to more suitable locations. The beaches were under heavy mortar and artillery fire continually and a large amount of ammunition was lost in the beach dumps. UNICLASS?

- 2 -

ndix 4 to an inter to Operation Report - IWO JIMA (Cont'd). Division started delivery of ammunition from the Division dumps to the Regimental Combat Team dumps D plus 7. Supply of ammunition to RCT dumps was adequate for most types of ammunition, and the Division was able to maintain a Regimental Unit of Fire in each RCT dump and a Division Unit of Fire in the Division dump throughout the operation, with the exception of the following items of ammunition:

Appendix 4 to

60mm Hortar, Illuminating, M83, w/fuze time, M65. 75mm Pack Howitzer, HE, M48, and M54. 81mm Mortar, HE, M43A1, w/fuze M52. 81mm Mortar, HE, M56, w/fuze, M53. 105mm Howitzer, HE, M48, and M54. Grenades, hand, fragmentation, Mk IIA1, w/f M10A3. Grenades, hand, illuminating, Mk I.

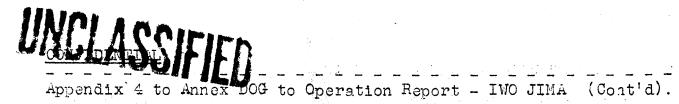
These items became critical D plus 7 and remained critical as long as the various type of weapons could be used.

9. Generally speaking, it is believed that the amount of small arms ammunition carried by the Division was sufficient, but as on the SAIPAN-TINIAN operation, mortar and artillery ammunition was extremely critical. It is believed that at least ten (10) Units of Fire of mortar and artillery ammunition should have been carried as mounting out ammunition by the Division.

Resupply of ammunition was generally inadequate due to 10. the unloading difficulties encountered, the late arrival of ammunition resupply ships and the apparent failure to selectively load these ships. Critical items of ammunition should be loaded so that they are readily accessible. At times, the Division had as little as three hundred (300) rounds of HE ammunition per Artillery Battalion after completion of morning preparation fires and would have had difficulty in carrying out additional fire missions. From D plus 7 on, it was impossible to maintain an adequate supply of artillery ammunition at the Artillery Regiment and on several days the Artillery Regiment fired more ammunition than was unloaded from the resupply ships. At no time, was the Division able to accumulate a reserve in the Division dumps. This inadequacy of ammunition resupply could have endangered the success of the entire operation.

(a) See enclosure (A) for list of ammunition lost or expended on the operation.

- 3 -



11. Organizational spare parts and accessories were adequate, but maintenance parts for the following weapons were critical throughout the operation, and it is felt that mounting out requirements should be increased:

> Maintenance parts, tank, M4A3. Maintenance parts, launcher, rocket, 2.36", M9A1. Maintenance parts, rifle, automatic, cal.. 30, M1918A2.

12. Salvage and repair of ordnance material was very satisfactory. Due to deep volcanic sand on the beaches and the impractability of salvage and repair crews to commence operations prior to D plus 5, a large quantity of small arms weapons were buried and ruined on the beaches. However, much of this equipment was recovered and made serviceable by repair crews.

(a) See enclosure (B) for the report of salvaged weapons that were repaired and returned to supply dumps for re-issue.

(b) See enclosure (C) for weapons that were repaired for RCTs.

(c) See enclosure (D) for weapons that were repaired for the Artillery Regiment and the Regimental Weapons Companies.

(d) See enclosure (E) for list of optical instruments repaired on the operation.

(e) See enclosure (F) for list of weapons lost or destroyed on the operation. It should be noted that enclosure (B) will considerably reduce this Division's combat losses on major items of ordnance.

Due to the possible presence of booby traps, extremely 13. heavy enemy fire and the fact that many of the enemy weapons captured by this Division were emplaced in solid concrete or sealed in caves, enemy weapons were demolished or rendered unserviceable and no attempt was made to salvage or essemble them. The Ordnance Salvage and Repair Sections devoted their time and energy to the salvage and repair of friendly weapons.

(a) For itemized list of enemy weapons captured by the Fourth Marine Division, see Appendix Number 1 to Annex BAKER (Intelligence) to Operation Report - IWO JIMA, UNCLASSIFIC

- 4 -



Appendix 4 to Annex DOG to Operation Report - IWO JIMA (Cont'd).

14. The following recommended changes in the types of weapons carried by a Marine Division are considered necessary. The changes are based on experiences encountered during the past operations of this Division.

(a) Substitute the gun, 57mm, Ml, for the gun, 37mm, AT, M3A1.

(b) Organize Division Mortar Battalion to consist of two (2) 4.2" Mortar Companies and one (1) 155mm Mortar Company.

(c) Increase the number of Motor Carriages, M7Bl, to eight (8) per Regimental Weapons Company.

(d) Substitute tank, medium, T-26El for M4A3.

(e) Provide one (1) additional tank dozer per Tank Company.

(f) Add ond (1) tank retriever to Tank Battalion Headquarters and one (1) tank retriever to Company Headquarters, Ordnance Company.

(g) Organize one (1) Tank Flame Thrower Platoon per Tank Company.

(h) Add twelve (12) Thompson sub-machine guns, cal..45, per Infantry Battalion for use in mopping up.

(i) Develop and provide a fuze for shell, 81mm Mortar, M56, to permit superquick or delayed action.

- 5 -

INCI ASSI

(j) Provide colored smoke rockets and colored smoke shell, 105mm Howitzer, for use in target designation.

(k) Provide demolition snake for use of tanks in a clearing minefields.

渊	MASSIND ppendix 4 to	Annex DOG to	Operation Re	port -
	Type Ammunition	Expended	Lost	Total
100 0000 •	Cartridges: Carbine, cal30 AP, cal30, 5-rd. clips. AP, cal30, 8-rd. clips. Tracer, cal30, 5-rd. clips. Belted, cal30, (all ratios) Grenade, Carbine, M6 Ball, cal45. Linked, cal50, (all ratios)	704,600 882,734 1,114,598 189,000 3,420,800 8,612 58,200 90,700	1,549,450717,5661,529,588420,0002,647,0007,668136,740141,880	2,254,050 1,600,300 2,644,136 609,000 6,067,800 16,280 194,940 232,580
	Shells, shotgun, 12 gauge, #00 bu	ickshot. 20,00	00 14,500	34,500
· .	Shells, 60mm Mortar: HE, H49A2, w/f PD, H52. Illum., M83, w/f T (fixed), M65 Smoke, WP, T-6 Smoke, HC, BE, T-8.	102,521 17,688 2,961 1,516	100	102,521 17,688 2,961 1,616
	Shells, 81mm Mortar: HE, 143Al, w/f PD, M52. HE, M56, w/f PD, M53. Smoke, MP, M57, w/f PD, M52.	30,599 19,128 3,993	1,000 1,000 1,177	31,599 20,128 5,170
	Shells, 37mm Gun; Canister, N2 HE, N63, w/f BD, M58. APC, M51, w/tracer.	4,808 5,230 1,760	552 4,440	5,360 5,260 6,200
	<pre>Shells, 75mm Gun: HE, M48, (SC) w/f M48 HE, M48, (SC) w/f M54 HE, M48, (NC) w/f M48. HE, M48, (NC) w/f M54. Smoke, WP, M64, (unfuzed) Smoke, HC, BE, M89 APC, M61, w/f BD, M66A1 Fuzes, PD, M46</pre>	4,858 529 198 7,031 3,282 180 5,791 3,314	473 1,160 152 1,683 654 5,389 386	5,33 1,689 350 8,714 3,936 180 11,180 3,700
	Shells, 75mm Pack Howitzer: HE, M48, w/f M48 (SF) HE, M48, w/f M54 (SF) Smoke, WP, M64, w/f M57 (SF) HE-AT, M66, w/f BD, M62 (SF) Canister, T-30. - 1-	34,258 19,873 8,019 3,899	874 1,489 1,125 2,761	35,132 21,362 9,144 6,660

Type Ammunition	Expended	Lost	Total
Shells, 105mm Howitzer:	44 3 20		50 (3)
HE, M1, W/f M48. HE, M1, W/f M54. HE-AT, M67, W/f BD, M62	46,160	4,254	50,414
HE-AT, $H67$, W/f BD, M62	42,459 23	3,75 8 3,348	46,21 ⁷ 3,371
Smoke, WF, 160, W/I 1157.	5,474	1,170	6,64
Smoke, HC, BE, M84, w/f M54.	35	174	209
Fuzes, CP, T-105	20		20
Grenades, Hand and Rifle:	100 550		100 55
Fragmentation, Mk IIA1, w/f M10A3 Smoke, HC, M8	. 102,550 2,675	550	102,550
Smoke, WP, M15.	16,925	4,600	21,52
Smoke, colored, asst'd.	1,008	•	1,00
Incendiary, Thermite, M14.	2,700	~~~	2,700
Incendiary, Frangible. Illuminating, Mk I.	417 7,420	673 1,330	1,090 8,750
AT, N9A1.	8,971	5,699	14,670
Adapter, Grenade-Projection, M1.	8,672	6,784	15,45
Adapter, Grenade-Projection, Chemic	al,T2		-
Rockets:	0 455		0 4 5
AT, 2.36", M6 Smoke, WP, 2.36"	9,455 2,060		9,45 2,06
4.5" BR, w/f Mk 137	15,410	2,350	17,76
Pyrotechnics:	,		•
Signals, Ground (f/Gren-Launcher	all) 2,056		2,05
Signals, Smoke (f/Gren-Launcher a	11) 400	* * *	40
Flares, Trip (M48 & M49)	4,890	3,688	8,57
Mines, etc.: AT, Ml.	. 20	555	57
APer, M2, M2A1, M3.	1,320	80	
Torpedoes, Bangalore, MIAL.	1,730	110	1,84
Explosive, shaped charge, 40-1b.,	T-3 178	~ ~ ~ ~	17
Grenades, Rifle, Smoke, MP, M19. 2" Nortars, Bomb, Smoke, Mk I/L.	900	110 3,070	1,01 3,07
	· · ·		5,01

	· .	Salvaged
		Repaired
arbine, cal30, Ml.		694
8.A.R., cal. 30.		137
lifle, cal30, Ml. I.G., cal30, M1917AL.		1,909 13
.G., cal30, M1919A4.		77
.G., cal50, M2.		. 33
Omm Mortar, M2.	· ·	9
2.36" Rocket Launcher.		42
auncher, grenade, M8.		14 17
auncher, grenade, M7. Dhotgun, 12-gauge.		2
B.A.R. Magazines.		1,871
Carbine, Hagazines.		492
Bayonet, 11, w/scabbard.		217
Bayonet, 111905.		409

ENCLOSURE (B)





ENCLOSURE (C) to Appendix 4 to Annex DOG to Operation Report -IWO JIMA

	Repaired f/RCT's.
Carbine, cal30, Ml.	116
B.A.R., cal30	138
Rifle, cal30, Ml.	67
M.G., cal30, M1917AL.	5
M.G., cal30, M1919A4	12
Pistol, cal45, M1911.	2
T.S.M.G., cal45.	. 1
60mm Mortar, M2.	6
2.36" Rocket Launcher	20
Shotgun, 12-gauge.	2
Rifle, cal30, M1903.	1
Flame Thrower, M2-2.	5

ENCLOSURE (C)

IM



lix 4 to Annex DOG to Operation Report - IWO

First Battalion, 14th Marines:

Issued one (1) 75mm Pack Howitzer. Straightened elevating rockers on Pack Howitzer, #1262. Replaced recoil mechanism. Replaced one (1) breech ring. Loosened stuffing box on recoil mechanism, #1667 and cleaned slides. Replaced three (3) panoramic telescopes. Replaced two (2) extractors. Replaced one (1) firing pin holder.

7

Second Battalion, 14th Marines:

Replaced one (1) 105mm tube. Replaced one (1) oil plug. Replaced two (2) trigger shafts. Replaced one (1) firing pin holder.

Third Battalion, 14th Marines: 7

Replaced two (2) operating latch, catch screw. Replaced two (2) operating latch, catch screw. Replaced one (1) firing pin and holder. Replaced six (6) 105mm tubes.

Fourth Battalion, 14th Marines:

Issued one (1) 105mm Howitzer, #9550, complete. Replaced one (1) 105mm tube. Replaced two (2) operating latch, catch screw. Replaced two (2) operating latch, catch screw. Replaced one (1) firing pin and holder.

Made daily inspection of all guns and made adjustments when necessary.

Regimental Weapons Company, 23rd Marines:

Replaced one (1) 37mm tube. Issued three (3) 37mm AT Guns that had been salvaged out of the field.

ENCLOSURE (D) to Appendix	4 to Annex DOG to IWO JIMA (Cont'd)	Operation Report -	

Regimental Weapons Company, 23rd Marines (cont'd):

Half trach #61416 was salvaged off the field. Replaced left track, fuel pump, distributor, starter, sprocket and guide, gas line and battery. Welded shell holes in side and floor of track. Made seat for driver. Straightened elevating shaft and moved right elevating hand wheel to left side. Straightened traversing shaft. Welded other bullet and shrapnel holes. Welded a 105mm Howitzer elevating hand wheel on to traversing shaft. Replaced 75mm tube. Cut one (1) track guide off Half-track #19882.

Regimental Weapons Company, 24th Marines:

Replaced one (1) 37mm breechblock complete and one (1) 37mm tube on salvaged gun #18294. Removed shrapnel burns on sleigh and recoil mechanism. Welded braces on shield on salvaged gun. Salvaged half-track off the field. Replaced radiator w/schroud. Replaced brake drum. Replaced back plates and shoes. Replaced later track tubing. Replaced left brake tubing. Replaced air cleaner. Replaced air cleaner. Replaced right fender. Straightened radiator shield. Straightened radiator brace bottom.

Regimental Weapons Company, 25th Marines:

Replaced right axle arm for half-track. Replaced radiator w/schroud. Replaced elevating shaft housing 37mm Gun. Replaced traversing mechanism 37mm Gun. Replaced extractors 37mm Gun. 37mm Gun #18377 was rebuilt out of two salvaged guns and issued. Replaced linkage system and detent.

- 2 -

\$1 H

ENCLOSURE (D)

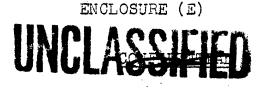
ENCLOSURE (E) to Appendix 4 to Annex DOG to Operation Report - INO JIMA

OPTICAL INSTRUMENT REPAIR

14 Sight Ml Panoramic

- 19 Sight M12A2 Panoramic.
 - 7 Sight M4.
- 2 Sight, M6 Telescope
- 1 Quadrant Gun M1.
- 12 Instrument light M14.
 - 4 Instrument Light M13
 - 3 Instrument Light M9

 - 2 Mount Sight M23 4 Mount Sight and Quadrant 105mm 6 Hount Quadrant 75mm
- 4 Binoculars.
- l Circle, aiming Ml Replaced 75 Rice bulbs. Replaced 11 Instrument Light M14 Replaced 4 Instrument Light M13.



		(i	·••	*	28.1	۰.	6	
CONT	THE FOR	in the second			:		1	
and the second second	and and a stand	-ALI-			¥	1	4	
			•	÷.,		<u> </u>		Ľ.

1

المسالمينيني جلي الجلي والمسار بيله المسار بيسايا مسار مسار مسار بلسان المسار الجرارا						
ENCLOSURE (F) to Appendix	4	to	Annex DOG JIMA	to	Operation	Report - IWO

Weapon	(a) Number Employed	(b) Days Employed	(c) Lost
Carbines, cal30, M1. Rifles, cal30, M1. B.A.R., cal30, M1918A2 M.G.'s, cal30, M1919A4 M.G.'s, cal30, M1919A4 M.G.'s, cal30, M1917A1 Shotguns, Riot-type, 12-gauge. Pistols, Automatic, cal45, M1911A1. T.S.M.G., cal45, M1918A1. M.G.'s, cal50, M2 (HB) 37mm Gun, M3A1, AT 60mm Mortars, M2. 81mm Mortars, M1. 75mm Pack Howitzers 105mm Howitzers. 4.5" Launchers, Rocket, M7. 2.36" Launchers, Rocket, M9A1. Flame Throwars, M2-2.	ll,998 8,532 1,074 1,097 162 250 1,331 111 467 36 117 39 12 36 37 187 243		$ \begin{array}{c} 2,582\\ 3,545\\ 510\\ 57\\ 79\\ 250\\ 198\\ 23\\ 17\\ 10\\ 39\\ 5\\ 0\\ 8\\ 13\\ 76\\ 46\\ \end{array} $
Combat Vehicles	(<u>a</u>)	= = =' = = (b) _	= = = = = _(<u>c</u>)
Motor Gun Carriage, M3 (Half-Track) Medium Tank, M4A3, w/75mm Gun.	15 48	26 "	0 9
Miscellaneous Ordnance Equipment	(<u>a</u>)	(b)	
Tanks, bull-dozer. Tanks, Flame-Thrower, CB-Ml. Tanks, M4A2 (Flail)	3 4 2	26 "	201

ENCLOSURE (F)

HEADQUARTERS TH MARINE DIVISION, FLEET MARINE FORCE. C/O FLEET POST OFFICE, BAN FRANCISCO, CALIFORNIA.

20 April, 1945.

APPENDIX 5 TO ANNEX DOG TO OPERATION REPORT - INO JIMA.

MOTOR TRANSPORT REPORT.

1. PLANNING AND PREPARATION.

Based on the scope of the operation and the outside possibility of an alternate target, an estimate of 62 21-ton 6x6 trucks was made and approved. These trucks were divided 20 to H&S, 14 each to "A", "B", and "C" Companies. All 50 Dukws were scheduled to go.

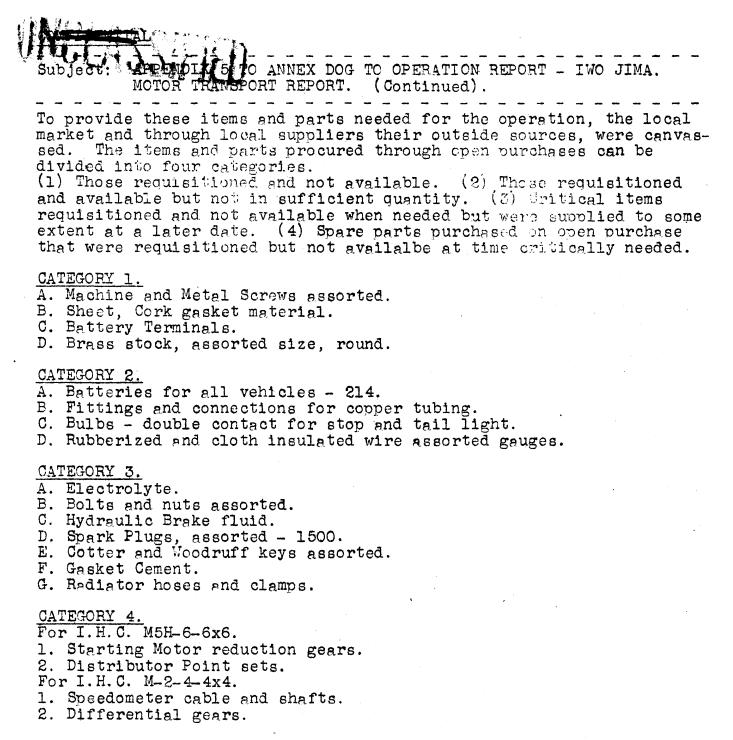
Recair facilities were provided on the basis of 2 light 1-ton repair units per company, one for use as needed at forward RCT supply dumps and the other at company headquarters. Special repair facilities were concentrated in H&S for a centralized major repair section.

Due to expected terrain, all Weesels were taken. All 1-ton cargo trucks in the Division scheduled for the operation were provided with 2 ton 2 wheel cargo trailers by drawing-in of all these trailers from rear Hehelon units - 37 from artillery, 5 from ordnance and 8 from replacement stocks; and making the requisite distribution. 13- $3\frac{1}{2}$ -ton Amphibious Cargo trailers were preloaded with water, rations, and supplies. The Pintel, with which originally equipped, being too weak; heavier pintels, as used on 1-ton 4x4 trucks, were provided. They were top deck loaded on 2 LSTs for original handling by LVTs at targer.

All vehicles in Motor Transport and Division were checked. Water proofing kits were provided as desired. Unserviceable batteries and spark plugs were replaced throughout Division. To meet the need, not being available through regular supply sources, 214 batteries and 1500 spark plugs were purchased locally. The major shortage was tires requisitions months old were unfilled. After a survey of tire needs by organizations was completed, a schedule was made for the exchange of worn tires on vehicles for tires in better condition on salvaged and used vehicles at the 2nd Service and Supply Battalion. 345 -6.00-16, 175 - 9.00-16, and 290 - 8.25-20 tires were thus procured through exchange. Also procured were 25 spare wheels for $\frac{1}{2}$ -ton 4x4 trucks and 15 for 1-ton 4x4 trucks. All organizations in the Division were provided with one extra tire per vehicle to be embarked in addition to the regular spare carried.

- Repair material and Spare parts requisitions were not being filled by Base Depots. UNCLASSIE

- 1 -



Stockroom trailers-four 2 wheel 1-ton and one 4 wheel 2-ton were stocked. The four 2 wheel 1-ton stockroom trailers had each like stocks of fast moving items and were assigned 1 to each company. Slower and heavier items were stocked in the 4-wheel 2-ton stockroom trailer and assigned to H&S, which company carried the special repair facilities. Stocks were prescribed to be on a 30 day operational basis, but a margin, where available, was carried.

NCLASS

Subject: APPENDIX 5 TO ANNEX DOG TO OPERATION REPORT - IWO JIMA. MOTOR TRANSPORT REPORT. (Continued).

WARE POST OF

2. LOADING AND MOVEMENT

Approximately ten days prior to embarkation date, arrangements were made with 2nd Service and Supply Battalion for such transportation as available to augment Division Transportation. The need was anticipated as Division Transportation would be embarked during the phases of each Combat Team loading and the essential housekeeping functions for rations, supplies, PX, trash etc. had to be continued.

By this arrangement 40 trucks were made available and 25 operators. The additional operators to man the trucks provided and all additional shift operators were provided by the Division Motor Transport Battalion. These trucks and in addition 15 trucks allocated from Division, were to be used in dock area. It was arranged to quarter and ration all operators at the 2nd Service and Suoply Battalion. A separate Motor Pool area was setup, and an officer, dispatchers, mechanics, and radio vehicles were assigned by Motor Transport.

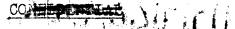
In conference with Division TQM the tonnage to be hauled of various classes of supplies was determined and also the location of sources, destinations, and time wanted at ship-side. This covered supplies from dumps and depots and not organizational gear. The quantity of organizational gear to be transported, was determined by Motor Transport direct with the separate organizations.

The factors - (1) number of trucks that could be sootted and loaded at one time at loading points and loading time - (2) transit time to and from ship-side - (3) unloading time and number of trucks that could be spotted and unloaded at one time; were considered and the number of trucks that could be efficiently employed determined. Working parties required for loading and unloading were determined. These were provided by Division TQM.

Motor Transport Officers, NCOs and radio vehicles were provided for all loading and unloading points to insure steady flow of vehicles eliminate congestion, decrease or increase available transportation as needed. This was readily controlled through Motor Transport radio net from Motor Transport Headquarters, to loading and unloading points, Motor Park and Dispatcher office set up in proximity to docks.

Based on these transportation requirements truck assignments were made, operators provided. In addition to trucks assigned, an emergency pool of 10 trucks was provided at docks to handle incidental runs and any periodic heavy demands.

The Division Londing and Movement Orther Provide Tobling of ships in groups with three days allocated provide rotation



Subject: APPENDIX 5 TO ANNEX DOG TO OPERATION REPORT - IWO JIMA. MOTOR TRANSPORT REPORT. (Continued).

The days were allotted as follows: 1st day-movement of supplies to ship-side locations, - 2nd day loading supplies aboard ship, - 3rd day loading of troops.

Docks were scheduled to be clear prior to arrival of the first transport division. However the local authorities had permitted the unloading of a merchant ship and jammed pier #1. By the 24th Of December it was obvious they could not effect clearance of the pier with their labor and transportation due to Christmas holidays. Replacement Battalions working party and Motor Transport trucks and drivers under direction of Division TQM's cleared dock in record time on Christmas Day and night. Loading of Division proceeded on schedule the morning of December 26th.

Practically all supplies, (ammunition, rations, water, fuel, QM supplies) except organizational gear was located in dock area. Hauls averaged about five miles except hauls to LSTs loaded at Maalaea Bay. The Division arrangement for use of freight cars to augment trucks, facilitated loading. Trucks on first movement day were allocated as follows:

Ammunition	25 trucks.
Fuel	10 trucks.
Rations and QM	10 trucks.
Emergency pool	<u>10</u> trucks.
TOTAL:	55 trucks.

These trucks were stationed at control point in dock area as previously arranged. This saved time and mileage to and from Camp.

Working parties were transported from Camp and, when reliefs necessitated, trucks transporting relief to docks carried relieved group back to Camp.

Trucks, approximately 25, were operated under Motor Transport control from camp to docks to transport organizational gear. Organizational transportation was preloaded, moved to ship-side for loading.

On the second day, the 10 emergency trucks handled needs in dock area and 10 trucks were also provided TQM for preloading of freight cars for next group to be loaded.

The third day all available transportation within Division under control of Division Motor Transport, was utilized to move troops. Troops for each Transport Division were moved in two movements. Distance Base Camp to Docks was approximately 15 miles; 30 miles round trip. Approximately 125 trucks were employed in each movement. Trucks in each movement were divided into convoy echelons predicated on number of troops of respective units for respective ships and docks.

- 4 - UNCLASSIFIED

LISTING TO BE Subject: APPENDIX 5 TO ANNEX DOG TO OPERATION REPORT - IWO JIMA. MOTOR TRANSFORT REPORT. (Continued).

-----(Two docks were used with two ships berthed at each dock). Troop loading area and convey echelons to carry units were numbered to correspond. Convoy echelons of each movement left on 10 minute departure schedules. Echelons to respective docks were staggered to avoid congestion.

No congestion was experienced. Troops from first movement were all aboard ship before troops in second movement arrived. All troops were aboard in ample time prior to evening mess. Movement schedules on RCT personnel were prescribed by Division Motor Transport based on troops to be moved, transportation available and dead line time to be aboard. RCT cooperation was excellent.

In embarkation from Base Camp, during the loading of supplies, gear and troops; only on two occasions was it necessary to use trucks for second shifts at night. These were on ammunition when quantity for AK's was considerably increased over tonnage originally submitted. All movements of supplies were completed within prescribed time limits. The Division TQM submitted the tonnage to be moved and when wanted. Motor Transport determined trucks needed, time required to complete within TQM prescribed time, and starting times. The excellent under-standing and cooperation of the Division TQM permitted Motor Transport to do its job on time, without confusion, smoothly.

Operations were materially assisted by the retention and utiliz-ation ashore of Motor Transport personnel and their embarkation on respective ships at completion of loading out of elements of the Division. This personnel was embarked on their respective ships at Maalaea Bay during the initial phase of the rehearsal.

3. LOADING OF MOTOR TRANSPORT

Motor Transport Personnel and equipment was loaded out as follows:

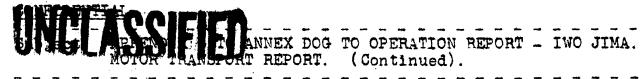
Personnel on thirteen ships.

Equipment on twelve ships.

H&S Co. - 4 ships. "A" Co. - 4 ships. المحمد المحم المحمد "B" Co. - 2 ships. and the second

"A", "B" and "C" Companies were attached to RCT 25, 24 and 23 respectively. Battalion, less the three (3) companies, was assigned to the Division Support Group. Fourth Matthe Amphibious Truck Company and the 476th Army Dukw Company were attached to 14th Marlaes

- 5 - *



All Motor Transport gear was preloaded on organizational vehicles. RCT gear and Division gear were preloaded on the balance of the trucks except four (4) that were possibly to be unloaded during rehabilitation at Pearl after initial rehearsals at Maalaea Bay to effect readjustment of cargo loading.

A substantial rear echelon of 6 officers and 150 men was provided, based on contemplated need of moving the rear echelon and balance of Division equipment and supplies, to a forward Base Camp.

4. REHEARSALS

Transportation requirements on Division Motor Transport were light during rehearsals at Maalaea Bay. Fuel in drums was transported to selected beach refueling dumps for refueling of all LVTs participating in this rehearsal. Gasoline tankers were procured from Puunene Air Station, the 2nd Service and Supply Battalion and the Rear Echelon of the 476th Army Dukw Company for refueling of all Dukws during rehearsal. Eight jeeps were provided for use of Corps and Division on the beach from rear echelon vehicles.

Only transportation required during rehearsal at Forward Area was for NGF Parties and this was furnished by the Island Commander, Tinian, through arrangements made by VAC.

5. REHABILITATION PERIODS

During rehabilitation at Pearl, transportation was arranged for use of Division under control of dispatcher. Two (2) cars and 8 jeeps were provided by Corps. Additional jeeps were procured from Division replacement stock then in hands of 6th Base Depot. A few jeeps were unloaded from ships for use of RCT staffs.

"A" frames, propellar shafts, water proof clothing, and needed items were procured for the 4th Marine Amphibious Truck Company. Needed items were procured for Battalion and Transport Companies. Needed items for Motor Transport rear echelons were secured and shipped. For detail list, see enclosure "A".

Transportation needed at Saipan after rehearsal at Forward Area was provided by 2nd Marine Division.

6. OPERATIONS ON IWO JIMA

On D-day, the 19th of February, the M29C of "B" Company was sent ashore by RCT 24, but failed to land as the landing craft transporting it capsized off Yellow Beach Cne. The orew reached shore safely. - 6 -

المرجع والمرجع ومحمور مرجع والمرجع والمرجع والمحصولة المتحصية أتأبر المحمور المراجع المحاور والمرجع والمرجع

Dject: APPENDIX 5 TO ANNEX DOG TO OPERATION REPORT -- FWO JIMA. - MOTOR TRANSPORT REPORT. (Continued).

On D plus 1, the tractor with angledozer and operator of "H&S" Company, through an error in unloading ship, was landed on Yellow Beach Two and was employed by the Shore Party at that beach. The first echelon of "C" Company with vehicles was landed on Yellow Beach Two. Company Headquarters was established approximately 150 yards south of the east edge of the central turning circle of Airfie'd #1-target square 164-Y. The advance element of "A" Company with its M290 landed on Flue Beach One. Due to adverse conditions in the area, the advance element was ordered reembarked by RCT 25. The M290, however, remained ashore and operated with ECT 25.

On D plus 2 to D plus 4, the other elements of "C" Company with vehicles and equipment were established ashore. The Company Headquarters, as established, which was in close proximity to BCT 23 supply dump and Vellow Beach Cne, was maintained throughout the operation. Advance element of "A" Company with 2 trucks landed on D plus 3 and merged with "C" Company. The Division Yotor Transport Officer, radio operator and M29C radio equipped, and runners, landed on D plus 4 and established initial Division Motor Transport CP at "C" Company Headquarters.

On D plus 5, the first echelon of "H&S" Company arrived ashore and was established in area previously selected by the Division "otor Transport Officer--target square 165-L.

On D plus 6, additional personnel of "H&S" Company landed. Also, "B" Company was established ashore adjacent to "H&S" advance echelon-target square 165-M. This location was in proximity to BCT 24 supply dump. "A" Company likewise was established ashore at previously selected location approximately 200 yards from Blue Béach One and adjacent to BCT 25 Headquarters and dump--target square 165-S.

On D plus 10, Battalion Headquarters and the remainder of "H&S" Company were established ashore and the Division Motor Transport CP was transferred from "C" Company to the Battalion area--target square 165-L.

The Motor Transport Pattalion was accordingly established in the area; "C" Co. in area of RCT 23 dump and Yellow Beach One; "A" Co. in area of RCT 25 and Blue Beach One; "B" Co. in area of RCT 24 and Battalion; and "H&S" convenient to Division dumps and road net.

Service setups were as planned except that due to proximity to RCT dumps and short hauling distance from Regiment to Battelion dumps, no service or transport echelons were located at RCT dumps, trucks allotted reporting to dumps daily.

ASST

UNCLASSIE!	ANNEX DOG TO SFORT REPORT. (CO	OPERATION RE ontinued).	IPORT - IWO JIMA.
The following M debarked:	otor Transport ve	chicles and e	duloment were
TRUCKS 1/4-ton 4x4 1/4-ton 4x4 w/radio 1-ton light repair 21-ton 6x6 cargo 21-ton 6x6 wrecking 21-ton 6x6 gasoline Carrier M-29C TD-9 Generatore	•	TOTAL 27 4 6 43 1 2 6 8 2	· · · · · · · · · · · · · · · · · · ·
TRAILERS Steam Jennys 1/4-ton cargo 1-ton Cargo 1-ton Greasing 2 Wheel water 2 Wheel water 2 Wheel Stockroom 4 Wheel Stockroom Arc Welder Machine Shop #1 Tire Repair TOTAL:		2 9 8 2 37 4 1 4 2 1 169	• • • • • • • • • • • • • • • • • • •

Eighteen (18) 23-ton 6x6 trucks were not unloaded. Operational requirements were such that vehicles then ashore were deemed adequate and proved so.

In the initial phase, trucks could not be used due to beach and road conditions. The volcanic sand or ash was too soft for traction. As roads became established, trucks absorbed a steadily increasing proportion of the haulage job. Trucks generally began functioning the morning of D plus 4.

In the early stages, 6 trucks were assigned from "C" Company to Yellow Beaches for unloading of landing craft. These operated on a 24 hour basis. Five (5) trucks operated in like manner on Blue Beach. Three (3) trucks were assigned to burial officer. Batance of trucks were emoloyed hauling RCTs supplies, Division Q' supplies, and serving Division units and Division attached units.

Six 1/4-ton 4x4 trucks with trailers, 4 from Division Staff sections, 1 from Headquarters Company and the form "C" Company, 4th "otor Transport Battalion were furnished

- 8 -

UNCLASSIFIED

Subject: APPENDIX 5 C ANNEX DOG TO OPERATION REPORT - INO JIMA. MOTCR TRANSPORT REPORT. (Continued).

of 2 to each RCT. These were provided to increase the supply facilities from Regiment to Battalion dumps, since terrain conditions precluded extensive use of heavy transportation in some forward areas.

On D plus 10, Division delivery of rations, water, housekeeping and general supplies, ammunition and defense materials from Division dumps to Regiment dumps was astablished. Deliveries were made daily.

Additional emergency night deliveries were usual on ammunition, barbwire, and illuminating shells. Truck platoons operating from Regiment dumps handled transport from Regiment to Battalion dumps.

Under this program certain daily truck assignments were established:

Commissery section	6
General supplies	2
Ammunition	5.
Selvege'.	S
Burial	3
RCT's-5 per Regiment in lines, 3 per	
Regiment in reserve	13
Bomb disposal	1
TCTAL:	32

The additional trucks were employed to sugment the above when needed and for transport needs of Division Headquarters, Headquarters Battalion, V40-4, Replacement Battalions, additional ammunition requirements, prisoners, movement of dumps, clearing of areas, etc.

Approximately 10% of trucks were serviced daily. This servicing involved about 2 to 5 hours and included minor mechanical adjustments, repair of tires, radiators, and shell damage. Only one 21ton 6x6 cargo truck was destroyed and permanently out of operation.

Total Motor Transport Battalion vehicle losses for the operation consisted of one 21-ton 6x6 cargo truck, one 21-ton 6x6 Wrecker, one M29C, and one water trailer. Other vehicles damaged were repaired and returned to service.

7. SERVICE

A grand total of 1232 recorded jobs were completed in the course of the operation. These include repair jobs only and repair jobs involving replacement of elements or units. A classified breakdown of these jobs is as follows:



NNEX DOG TO OPERATION REPORT - INO JIMA. REPORT. (Continued).

		REPAIR INVOLVING	
TYPE JOB	REPAIR ONLY	REPLACEMENTS	TOTAL
Ignition	274	151	395
*Batteries Charged only			32
Power Train	57	40	.97
Motors	38	9	47
Carburetors	60	14	74
Brakes	31	2 5	33
Cooling System	34		39
Chassis	20	13	33
Tires	33	18	51
Tubes Melding	139	28	167 111
Lubrication and oil chang	• • •		79
Oil Filters	60		3
Machine shop special jobs	5		39
Tractor Overhaul	•		l
Selvage Jobs-vehicles		· ·	10
Construction Shape charge	Launcher R.C	.T.24	l
Jobs for 133rd Naval Cone		alion	1 2 1 3 5
Job for 3rd Marine Divisi			1
Jobs for 5th Merine Divis	sion		3
Jobs for 8th Field Depot		、	
TOTAL:			1232

*All batteries included in ignition repairs and replacements totaling 90, were also charged.

The tire repair trailer justified itself. The tire situation on embarkation for the operation was critical and tire stocks on hand small. While terrain and the short hauls did not place the strain on tires as at Saloan, the tire trailer enabled 33 tires to be rebuilt and used, as well as speeding up the repair of tubes. As a result, no tire shortage was experienced.

The selvege of vehicles, as noted, provided rebuilt engines, transmissions, etc., which facilitated repairs by unit exchanges, and made possible repairs that otherwise could not have been effected.

Operations were facilitated through Battalion radio net which provided communication direct between Companies and Battalion.

All personnel and vehicles were dug in. Areas were organized for defense against infiltration and contact established with adjoining units. UNCLASSIF

10 -

ubject: APPENDIX 5 TO ANNEX DOG TO OPERATION REPORT - INO JIMA. MOTOR TRANSPORT REPORT. (Continued).

Congregation of personnel and promiscuous roaming were not permitted. As a result, though areas were sporadically under artillery and mortar fire, Battalion casualties were extremely low. "H&S" - 1 W&E, "A" Co.- 1 KIA, 2 W&E, 1 WNE, "B" Co. - 2 WNE, 2 shell shock and evacuated. Fourth Amphibian Truck Co. - 5 M&E, 1 WNE. 476th Army Dukw Co. - 3 W&E, 3 S&E. Total casualties - 21.

A temporary Provisional Battalion was organized and activated by Division on March 9th. Motor Transport assigned 6 officers and 90 enlisted to this Unit. Eight (8) .30 caliber machine guns and 2 1/4-ton 4x4 cargo trucks, with 1/4-ton trailers were also provided for the Provisional Battalion. This unit was disbanded and these officers, men, equipment and vehicles were returned to the Motor Transport Battalion on the afternoon of March 12th.

8. PREPARATIONS FOR RE-EMBARKATION

- **19**17 1917 - 1917 1917

.

In accordance with allotment made by VAC, ll additional 33-ton amphibious cargo trailers, or a total of 24, were collected for reembarkation to rear area. Of this number, 10 were in operative condition and 14 were in need of repair. Twenty-two (22) were supplied to the Division GM for a pre-loading with salvaged Division equipment.

On D plus 20, the 476th Army Dukw Company was detached to the Army Garrison Forces and at the same time the 22 Dukws operative out of the original 50, were transferred to the Army Garrison Forces.

On D plus 23, the 30 Dukws of the 4th Marine Amphibian Truck Company which were operative out of the original 50 were transferred to VAC. VAC loaned 2 of these to Division TQM for use in contacting ships during reembarkation. On D plus 26, by arrangement, the 30 Dukws were to be transferred to the Army Garrison Forces. 27 were delivered. The remaining 3, in VAC control, were to be delivered by VAC to the Army Garrison Forces.

Re-loading and re-embarkating of the Division was started on D plus 23 and completed as far as Motor Transport Activities were concerned, at 2400 on D plus 27. As hauling of gear and supplies of Division organizations was completed, trucks were pre-loaded with battalion or Division gear. Motor Transport Officers and MOOs were stationed at dumps, beaches and aboard landing craft to supervise movement, loading and unloading of trucks.

Division transportation, as reembaried, was supplemented by the loan of 10 trucks and drivers from V transferences.

- 11 -

Subject: AFPENDIX 5 TO ANNEX DOG TO OPERATION REPORT - IWO JIMA. MOTOR TRANSPORT REPORT. (Continued).

These trucks reported at 1830 on D plus 27 and were employed until completion of Division reembarkation on D plus 28.

- 12.-

Contract Relie

AINIGLAG ALTIN

Subject: APPENDIX 5 TO ANNEX DOG TO OPERATION REPORT - IWO JIMA. (Continued).

-

-ig - i

ENCLOSURE "A" - MOTOR TRANSPORT REPORT.

Needed items for Iwo Jims Operation procured during Rehabilitation Period.

<u>Item #</u> 1. 2. 3. 4.	Quantity 11 16 15 16	<u>CHEMICAL MARFARE</u> <u>Article</u> COVERS, protective, individual. 11 MASK, Gas, service lightweight, (Army)M3-10-6. OINTMENT, protective, S-461, tube. 15 OINTMENT, protective, BAL, tube. 16
5.	l	ENGINEER EQUIPMENT HOSE, f/equipment, welding, oxygen and soctylene set.
6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21.	20 44 47 7 20 40 19 6 6 6 6 20 5 5 5 5 35 35 35 300	GÉMERAL SUPPLY CAN, mest, w/cover. COVER, f/helmet, steel, complete, w/liner. 9 CAPPIER, f/pick-mattock, intranching CUF, M1910, f/canteen, M1910. FORK, haversack. KNIFE, haversack, 13 MET, mosquito, head. PACKETS, first aid. PCNCHO, rubberized, cloth, camouflage. 21 POUCH; f/packet, first aid. SPOCN, haversack. TENT, shelter, each-half, w/l guy line. BCDY, steel, helmet. 2 HEADBANDS, f/helmet, steel. LINERS, f/helmet, steel. LINERS, f/helmet, steel. LIPSTICK, anti-chap.
22. 23.	60 26 2 2 144	ORDNANCE MAGAZINES, assembly, f/carbine, cal30, Ml. POCKETS, magazine, double web, f/carbine. RIFLES, Caliber .30 Ml. SLINGS, Rifle, caliber .30 Ml. GREASE, Rifle, lubs. 1/4 oz.
1. 2. 3.	10 7 3	BULBS, battery charger. BATTERY, cable 36". CABLE, Ignition, rolls 10 gauge - 13 -

O ANNEX DOG TO OPERATION REPORT - IWO JIMA.

		-	ENC	LCSURE "A" - MOTOR TRANSPORT REPORT.
Ī	tem #	<u>Quant</u> :		Article
	4. 5.	5 30		PERMATEX, Assorted. SHEETS CORK, gasket material.
	6.	15		ELECTPOLYTE, gallons.
	7. 8.	200 20		FITTINGS, assorted gas line
	9.			BRAKE FLUID, Hydraulic. RADIATOR HOSE, assorted.
	10.	4	gal	.SHEROLITE.
	11. 12.	50 75		LAMPS, auto, assorted. GASKET, paper assorted, yds.
	13.	200		SPARK PLUGS.
	14. 15.	600		RIVETS, assorted.
	16.	500 2		SHIM, stock sets. TERMINALS, assorted.
	17.	100		COPPER TUBING, ft. 3/16"
	18. 19.	600 5		KEYS, (Woodruff), assorted. CIL PANS, for 6x6.
	20.	100		REAR HUB, oil seals, 6x6.
	21. 22.	100		CENTER BEARING, oil seel, 6x6.
	23.	2 20		FRONT HUB, Oil seel, 6x6. CARBURETOR, 6x6.
	<u>94</u> .	2		CAREURETOR, 1-ton.
	25. 26.	10 10		CARBURETOR, repair kits, jeep. STARTING MOTORS, fields, 1-ton.
	27.	5		REDUCTION GEAR HOUSINGS, 6x6.
	28. 29.	10 50		CLUTCH, repair kits, jeep. FRONT HUB, oil seals, 1-ton.
	30.	10		DISTRIBUTOR CAPS, 1-ton.
	31.	2		CYLINDER, HEAD, jeep.
	32. 33.	2 75		CRANKSHAFTS, jéep. ROLLER BEARING, transmission, main shaft, jeep.
	34.	10		GENERATOR, fields, 6x6.
	35. 36.	12		KITS, No.3"A" frame installations w/tackle. WELDER, 200-300 amp, trailer mtd, ea Lincoln
	00.			or equal MC# 59327.
	37.	1		EQUIPMENT, welding electric arc (less welder).
	38. 39.	1 50	•	E.S. Equipment welding electric arc, set. BRUSHES, wire.
	40.	5		PROPELLERS, for Dukw mod G.M.C.
	41. 42.	400 200		HOT PATCHES, assorted (G-6 - G-9). VALVE STEMS, (assorted).
	43.	500	•	VALVE CORES.
	44.	200		COATS, parka.
	45.	164		COATS, parka. TROUSERS, parka. - 14 -
	a, ^{§1}			
i j				

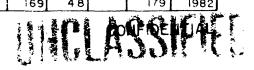
A STATISTICA I

* a. 17 224 etilali

(Con

.

and a second	-** AF	PE	NDIX	6 -	TO 4	ANNE	EX D)0G	TO	() ep	ĒRA	TIOI	N RE	EPOF	RT -	IWC	JIN	MA-	20-	APF		945	5			
CONFIDENTIAL	BR	EAP	<d0< th=""><th>WN</th><th>OF</th><th>EQU</th><th>JIPN</th><th>IEN</th><th>ΤВ</th><th>k SI</th><th>JPP</th><th>LIES</th><th>5<u>,4</u>℡</th><th><u>+</u>MA</th><th>ARIN</th><th>IE</th><th>DIVI</th><th>SIO</th><th>n f</th><th>REIN</th><th>IFOR</th><th>CEI</th><th>)</th><th></th><th></th><th></th></d0<>	WN	OF	EQU	JIPN	IEN	ΤВ	k SI	JPP	LIES	5 <u>,4</u> ℡	<u>+</u> MA	ARIN	IE	DIVI	SIO	n f	REIN	IFOR	CEI)			
			V 43			RCT_3			10.4	1	<u>43</u>	-		CT <u>2</u>	<u> </u>	1 10		NSDI 87			-		1 110	T		
OFFICERS ENLISTED	85 1533 APA 196	1339 APA 158		66 1426 APA 154	168 4 AKA 60	1677 LSTS	253		104 1019 APA 33	1406 APA 156	76 1446 APA118	73 1309 APA206	186 AKA 65	189 AKA21	LSTS	12 292 LSMS	1201 APA120	1425 APA 190	83 1197 APA 193	81 1394 APA157	21C	60 1677	247	 		221 7
	40CAN	NEWBERRY	MIFELW	2 OWNOS					ed In FLO	41.37	HENDAL	1. Ver	SHORE SHORE	4 ATEMIS			HINSONE	tens	80gh	v	AMPUTH MPTON				S T,	O T
	007	N.									+														S	AL
BAGGAGE OFFICE EQUIPMENT ORGANIZATIONAL EQUIP.	.4 .4 .67.7		3 7.2 .7 17.5		3 .4		 		4.2 7.5 57.2	2.5	1.1	.7					1.6 1.7 50.2	.5	1.7		.8				<u> </u>]	44 18 79
MESS ÉUIPMENT CAMP EQUIPMENT SPECIAL EQUIPMENT	6.2 2.3 26.3	5.5 .3	<u>52</u>	34		b			12.6 13.0 35.1	<u>1.7</u>	<u>5.9</u> .8	1.0	3.7 2.4				4.2 3.5 31.6	4.4	6.4 9.9		3.6					90 180 107
AVIATION MATERIAL HEAVY LIFTS (CRATED)																										
AMMUNITION(SMALL ARMS) HIGH EXPLOSIVES PYROTECHNICS AND FUZES	4 <u>38</u> 45.9 .4	43.8 45.9	45.9	45.9	447.6	5 164. 6 30.4	6.0		43.8 44.8 .8	44.8	44.8	43.0	2 7.0 4 51.8 .4			1.5		<u>55.0</u> .4	45.9 .4	4 <u>3.8</u> 4 <u>5.9</u> .4	447.6	112.9 225. 45.7	6.0		27.1 1185.3	83 349 90
GASOLINE OTHER PETROLEUM PRODUCT WATER	44.1 S 10.5 48.9	10.5	10.5	10.5	5 24.4	8.9	5.0		43.1 10.5 48.9		10.5	45.6 16.1 48.9				10.0	43.1 10.5 48.9	10.5	45.6 10.5 48.9	45.6 10.5 48.9	27.3	630	5.0		105.8	156
OTHER LIQUIDS RATIONS	5.0 48.0	4.2	5.0	5.0) <u>45.8</u> I 151.4	<u>50</u> 24.4			69.4	3.4	5.0		49.1	29 4.0		191.1		5.0	5.0 70.1	5.0	49.2	8.4			14.1	396 173
PX SUPPLIES SIGNAL ENGINEER					14.	7.5	30.0						70.0 30.0								70.0 165.3	11.2	30.0		12.1	
ORDNANCE MOTOR PARTS MEDICAL			<u> </u>		+								26.2	30.0				11.7			167.1					22
CHEMICAL QM SUPPLIES(GENERAL)													40.7 160.9	200.2							24.0 141.2					74 502
TOTAL CARGO TOTAL VEHICLES GRAND TOTAL	349.9 202.3	189.7	186.8	161.3	367.6	460.4			145.9		124.1	953	1661.1 493.8	6 7.8		460.3		171.0	149.7	125.1	483.9	16552	579.8		1 344.4 1072.0 2416.4	903
	552.2	5331				18386	664.4	I					2154.9			16 (2 .9		528.4			2194.9	12307.6	1 024.0	II		
AMBULANCE 1/4- TON AIR COMPRESSOR 105 CU FT. BOOM ASSEMBLY (SHOVEL)			3	9	1				2	<u> </u>							4	ک	13	3	2					
CARTS CRANE, CRAWLER DISTILLATION UNIT	ļ'	2			<u> </u>	<u> </u>	2		2	6		27				4	3	22		<u>!</u>			2	 	6	
DISTILLATION UNIT, 1500GAI DIST. U., PORT., 1800-2500					7				7		·····		9		· · · · · · · · · · · · · · · · · · ·		5				2					
DRAGLÍNE DUKW EARTH AUGER					 																				100	1
GENERATOR 10-KVA GUN 37 MM		4	4	4						4	4	4	I	1		6		4	4	4	1					
HALF-TRACK HOWITZER, 75 MM HOWITZER, 105 MM	D																		2		1				12 36	
HOWITZER, 155 MM LVT(2) LVT(3)						49																33				1
LVT (4) LVT (A) (+)						51 2																65 2				1
LVT (A) (2) LVT (A) (4)						17																17			4	
SLEDS,LARGE SHOVEL,GAS SCRAPER					13								3	3			1									
TANK, MED. W/FLAIL TANK, MED. W/FL.THROW. TANK, MEDIUM							1 2 14					<u> </u>				16							1 2 14			
TANK, MEDIUM W/DOZER TANK, RECOVERY																 3							I			
TRACTOR, D-6 W/ BLADE TRACTOR, TD-18 W/CRANE TRACTOR, D-9, W/BLADE			4		<u> </u>										·····	?			· · · · · ·							
TRACTOR D-9, W/CRANE TRACTOR, HD IO, W/DOZER TRACTOR, TD-18, W/DOZER					+		4									3							6 6			
TRACTOR, DEEP TOW D-8 W/DOZER TRACTOK, TD-14 W/DOZER							6									2										
TRACTOR TRACTOR, TD-18	3	7		2	3						2	2	11				4		2	1	5		-			
W/DOZER. (ARMORED) TRLR. 1/4 TON CARGO TRLR. 1/4 TON W/RADIO	8	10	10	9	9	4			20	10	I C		3			9	5	18	9	14	9	4			1	10
TRLR, 1/4 TON, MACHINE TRLR, 1/4 TON, 2-WH, STKRM TRLR, 1/2 TON, RADIO					+												1									
TRLR. I TON. 2-WH CARGO TRLR. I TON. LUBRICATION	7		1		6 2	3			4	1		3	5 2			2	9 2		5	2		2			1	
TRLR, I TON, 2-WH. STKRM TRLR, I TON, AIR COMPR.				i	+						↓	 	1			1		+			3	2				
TRLR, I TON, SCR-299 TRLR, I TON, LIGHTING TRLR, I TON W/RADIO P.U.					 	 						↓														
TRLR, I TON, WTR. 300GAL TRLR, 2 TON, 4-WH CARGO TRLR, 2 TON, 4-WH STKRM.	5	9	8	2	2	1				1	4	1	15 2			3	4	7	5	4	14	3				ε
TRLR, 2 TON,4-WH.WELDIN TRLR, 3 TON, WATER PURIF			L		1	i						+					······				2					
TRLR. 3TON SHOWER UNIT TRLR. 5 TON 4 WH MACH SH TRLR 15 TON MACH SHOP					ļ	···· ··· ·							1								3					
TRLR, LOWBED TRLR, GAS TRLR, ARC WELDER			1			1						 									3	4				
TRLR, ANTENNA, SCR-270 TRLR, STEAM TRLR, 4-WH. AIR COMPR.					4													1			2					
TRLR, 2-WH, PE-95 TRLR, I/2 TON, CARGO TRLR, 2/W DUMP		1						+		l		8	3			3							ļ			
TRLR, CHRYSLER PUMP TRLR, MIXER, 10-S 8, 7-S-G-142					2				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~								, 					2	1			
TRUCK, 1/4 TON, 4 X 4 TRUCK, 1/4 TON, W/RADIO TRUCK, 1/4 TON, WIRE	10	16 7	14 8	4		8 10			27 16 4	19 4 1	16		7			21	10	16 7	12	16 15	22	6 14	1		5 10	2 1
TRAILER, AMPHIB. TRUCK.3/4 TON, CARGO TRUCK, I TON, RECONN.			6		1	7											6					<u>6</u> 3				
TRUCK, I TON, CARGO TRUCK, I TON, 4X4, REP. TRUCK, I TON, 4X4 W/RADIO	10	6	2	6	6				2	8	9	6 2	9				5	5	11	7	5 2					ç
TRUCK, 1-1/2 TON, W/RADIO TRUCK, 2-1/2 TON, 6X6 CARG) 2	7	6	5	4	1	2		1	3		3				8	2	7	4	2	29	4				10
TRUCK.2-1/2 TON.6X6 DUMP TRUCK.2-1/2 TON.6X6 WRECK TRUCK.FWD.4X4	3	3	3	6			8						12			- 3	4	1			8 3	1	10			6
TRUCK WATER 750-GAL TRUCK HIGH LIFT TRUCK PERSONNEL CARR	IER							+						2				2								
TRUCK, 1/4 TON ROCKET TRUCK, I TON AMBULANCE				1																						
TRUCK.1/2 TON.AMBULANCE TRUCK.4 TON.CARGO ROLLER.TANDEM		1			2						2															
ROLLER SHEEPSFOOT ROOTER, 2/W					2						L															



<u>ANNEX EASY</u>

TO

FOURTH

MARINE DIVISION

OPERATIONS REPORT

IWO JIMA

CUNCLASSIFIEDS

COMMUNICATIONS

PART I - PRE-EMBARKATION

1. PLANNING

. . . .

the Charles Harden

7 17 1

(a) Overall plans for the operation were announced in sufficient time to permit the formulation of a comprehensive and well integrated communication plan. Tentative communication plans of higher echelons were issued at an early date, making possible a series of conferences between the Attack Force Communication Officer, the Landing Force Signal Officer, and the several Division Signal Officers. These conferences served to eliminate most of the potential sources of trouble.

(b) In a few instances the communication plans of higher echelons were inadequate from the standpoint of Divisions and lower units. This Division was assigned insufficient voice calls and was obliged to make up the deficiency from the call list of another Division not participating in the operation. As it is now customary in radio dispatches and telephone conversations to refer to units by their voice radio calls rather than their actual names, each Division should be assigned sufficient voice calls to permit the assignment of a call to each organic or attached unit. A total of fifty voice calls per Division are required for this purpose. The number of CW calls required is considerably less, as CV calls are required only for those units which are equipped with CV radios. Twenty-five CV calls per Division should be sufficient.

(c) Instructions in CentComTwo relative to the crypto-aids to be landed by each Division were not explicit. This uncertainty was not eliminated by the Landing Force Operation Order.

(d) Air raid warning and anti-aircraft control instructions contained in the Joint Expeditionary Force Operation Order and in the Landing Force Operation Order caused some confusion in this Division, in spite of repeated efforts to clarify the matter. The Landing Force could completely eliminate the present uncertainty and confusion by announcing the effective air raid warning and anti-aircraft control conditions over the regular Landing Force vire and radio circuits, thereby relieving Divisions of the necessity of monitoring the Local Air Varning Net.

(e) Plans for using the shackle cipher as a means of authentication did not crystallize until after the Hawaiian rehearsal. Prior to that time, three widely differing sets of instructions for shackle authentication had been promulgated, and much

- 1 -

中的行动。 METEDENIET AL ANNEX EASY TO 4TH MARINE DIVISION OPERATION REPORT, INO JIMA.

confusion had resulted, as attested by the large number of Hawaiian rehearsal messages which were incorrectly authenticated. Profiting by this experience, the Landing Force abandoned the message authenticator system and standardized a simple system of station authentication which was already in use in both the 4th and 5th Marine Divisions. This system of station authentication proved very satisfactory in the ensuing operation.

(f) Last minute changes in the shackle cipher itself resulted in considerable waste of time and scarce materials. This Division had just completed the printing and distribution of some 36,000 shackle grids based on alphabets listed in the Landing Force Rehearsal Order when a new series was substituted, necessitating a complete re-printing and redistribution. It is believed that Landing Force could eliminate such difficulties and give considerable assistance to Divisions and lower echelons by assuming the responsibility for printing and distributing all shackle grids.

(g) The communication plan of this Division was embodied in the following documents issued prior to the operation:

> 4th Mar Div SIGSOP-3.
> 4th Mar Div SOI-6.
> 4th Mar Div Communication Guide for Commanders and Staff Officers.
> Annex How to 4th Mar Div Opn Plan No. 49-44.
> Annex How to 4th Mar Div Rehearsal Plan No. 2-44.
> Annex Charlie to 4th Mar Div Training Order No. 2-45.

(h) Owing to changes in plans of higher echelons, numerous changes were required in several of the above documents. In the case of SOI-6, a total of ten changes were issued, an excessive number in view of the difficulty in disseminating such changes, particularly after embarkation. It is hoped that an earlier crystallization of plans will be possible in future operations, in order to materially reduce the number of changes required.

2. ORGANIZATION

(a) The following communication units were attached to this Division for the IWO JIMA Operation, either for the performance of some special function or for the general reinforcement of the communication personnel of the Division:

> lst Joint Assault Signal Company (JASCO). Detachment 726th Signal Air Marning Company (726th SAN Det).

- 2 -

Detachment V Amphibious Corps Signal Battalion (VAC Sig Det). V Amphibious Corps Liaison Team (VAC Ln Team).

(b) An Air Liaison Party was assigned to each Landing Team, each Combat Team, and Division Headquarters. The battalion and regimental parties were each augmented for the operation by the addition of three enlisted, while the Division Headquarters party was increased by two officers and ten enlisted. These additions were necessitated by the operational requirements imposed by higher authority. The present T/O allowances are entirely inacequate to meet these requirements.

ANNEX EASY TO 4TH MARINE DIVISION OPERATION REPORT, INO JIMA.

Shore Fire Control and Naval Gunfire Liaison Parties (c) were organized and assigned to Landing Teams, Combat Teams, and Division Headquarters in accordance with FMF Pac Special Order No. 86-44, which materially augmented the hopelessly inadequate T/O allowances.

(d) Nine Shore Party Communication Teams were organized from the Shore Party Section of the JASCO, one at T/O strength for each of the four Shore Parties of each assault Combat Team, and a somewhat larger team, comprising 2 officers and 19 enlisted, for the Division Shore Party. The duties of Shore Party Communication Officer were performed by the JASCO Commanding Officer.

(e) Administrative control of the various elements of the JASCO remained with the JASCO Commanding Officer.

(f) The 726th SAW Det, comprising 1 officer and 34 enlisted, and the VAC Ln Team, comprising 1 officer and 5 enlisted, were placed under operational control of the Division Signal Company. The VAC Sig Det, comprising 1 officer and 45 enlisted, was attached to the Division Signal Company.

(g) Replacement communication personnel accompanied the Division in the 24th and 30th Replacement Drafts. In accordance with orders from higher authority, these replacement personnel were not available for transfer to communication units of the Division until actually required as casualty replacements. This arrangement proved disadvantageous, for reasons which will be brought out later.

(h) At embarkation, the communication personnel strength of the Division was 26 below the authorized "T/O plus 5 percent". This strength was augmented for the operation by the addition of the 45 enlisted personnel of the VAC Sig Det and the 74 enlisted personnel of the 24th and 30th Replacement Dra

- 3 -

EASY 10,44 FARINE DIVISION OPERATION REPORT, INO JIMA.

3. TRAINING

(a) Training for the next operation was begun immediately on return from the TINIAN operation. Training programs were conducted by all organizations, commencing with basic re-training and ending with several Division CPX's in which all units participated.

(b) As a large influx of new types of radio equipment had begun, special efforts were made to train technicians in the adjustment and repair of these sets. Maximum advantage was taken of the skill and facilities of the Division Signal Repair Section to train regimental and battalion repairmen. This training resulted not only in improved standards of maintenance in lower echelons, but created a closer liaison between the higher and lower echelons of repair.

(c) Advantage was also taken of the training facilities offered by the FM school conducted by FMF Pac. Selected personnel from all units were sent to this school with profitable results. It is hoped that this school will be available for additional training in the future, and that the school will be expanded to provide instruction in each new type of equipment as it is introduced to the Pacific theater.

(d) Special emphasis was also devoted to training in radio countermeasures. A representative of the Signal Officer's Section, FMF Pac, conducted a school in this subject for all radio operators of the Division. Although the course was of short duration and came too late in the training cycle for maximum effectiveness, the results were very good, and it is hoped that this type of training will be extended and intensified.

(e) Unfortunately, most of the replacements for the casualties suffered in the SAIPAN and TINIAN operations did not reach the Division until the training period was nearly over. As a consequence it was impossible, in the time available, to bring these replacements to the high state of training achieved by personnel who had completed the entire training program. Many of the replacements were ex-radar personnel with no experience in communications. These personnel were developed into passable voice radio operators in the time available, but will require a great deal of additional training before they can be assigned to other tasks.

(f) Communication personnel of the 24th and 30th Replacement Drafts did not arrive in time for adequate training, nor were they available for assignment to communication units where training could be most effectively and expeditiously carried out. Many of these replacements had had no experience in combat units, and were

- 4 -

TASK TO 4TH MARINE DIVISION OPERATION REPORT, INO JIMA.

unfamiliar with much of the communication equipment in common use. This was particularly unfortunate in the case of non-commissioned officers who should have been ready to fill key positions in a Communication Platoon or Section. A few signal repairmen had had no experience in repairing the various types of radio equipment used by the Division, and in some cases had not even seen some of the equipment prior to joining the Division. There was not sufficient time to familiarize these men with this equipment prior to embarkation.

(g) Communication personnel of the Naval Gunfire and Air Liaison Parties were not as well trained as other communication personnel in the technique of communications. This deficiency does not reflect on the diligence of JASCO officers. It stems from an inherent defect in the JASCO structure. The officers assigned to Naval Gunfire and Air Liaison Parties are not communication officers, nor are they qualified to instruct their personnel in the technique of communications. This places the burden of instructing well over a hundred communication personnel in these teams on the shoulders of the two qualified communication officers in JASCO Headquarters. As these officers already have full-time executive and administrative duties it is a credit to them that the training reached as high a standard as it did. The situation was frequently aggravated by prolonged official absences of officers in charge of teams, and by last minute replacements of skilled officers with officers of no training or experience whatsoever.

4. EQUIPMENT

MAILIN

(a) The Division embarked for IWO JIMA in a generally excellent state of material readiness. The few shortages which remained had no serious effect on the ensuing operation.

(b) Excess equipment which the Division had on hand was utilized in two ways. In some instances the excess was placed directly in the hands of the using units to meet operational needs not provided for by the tables of allowances. In the remaining instances the excess was maintained on hand as an emergency pool. It was anticipated that difficulty would be experienced in establishing signal repair facilities on the exposed INO beaches during the first few days of the operation, and that a considerable amount of damaged equipment would have to be replaced outright, pending eventual repair. The emergency pool was set up to meet this situation should it occur.

- 5 -

UNCLASSIEIEL