

# GENERAL HEADQUARTERS 

U. S. Army Forces in the Pacific

## STAFF STUDY <br> OPERATIONS <br> 66 CPDETM

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UNITED STATES ARMY FORCES, İCIFIC


## "CORONTET:

OPPRATIONS IN TETE KANTO FLAMN OF HONSHU

1. The attached staff study for Operation ${ }^{\text {PCORONDTB is fur-" }}$ nished as a matter of interest only and for completion of files of all concerned. It sets forth the first draft of the plan of CIMCAFPAC formulated prior to the cessation of hostilities for joint operations in the KANTO IIAIN area of HONSHU. No effort has been made to extend the study. It is published in its present incomplete form.
2. Tstimated commitments of means are in accordance with redeployment and logistic capabilities existing as of the date of the Japanese surrender.
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Tor the Commander-in-Chief:
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R. K. SUTHBRTAND, Iieutenant General, U. S. Army, Chief of Staif.
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STAFF STUDY<br>"CORONET"<br>OFGRATIONS IN THE KANTO PIAIN OF HONSHU

15 August 1945


GENERAL HEADQUARTERS
UNITED
STATES ARMY FORCES, PACIFIC

STAFF STUDY
"CORONET"
Operations in the KANTO DIAIN of HONSHU

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GENERAL HEADQUARTERS UNITED STATES ARMY FORCES, PACISIC

STAFF STUDY
OEERATION
"CORONET"

APO 500
15 August 1945

1. DIRECTIVE (See Chart, Annex 1, The Operation Directed).
a. Thjis Staff Study is derived from "DOMFALiL", Strategic Plan for Operations in the Japanese Archipelago, General Headquarters, United States Army Forces, Pacific, 28 May 1945. It covers operations of United States Army Forces, acting jointly with the United States Pacific Fleet, to occupy the TOKYO-YOKOHAMA and KANTO PLAINS areas and effect the unconditional surrender of JATAN.

Target Date: ("Y:" - Day), I Warch 1946.
b. The following basic command relationships are established by the Joint Chiefs of Staff for operations of United States Army and Navy Forces against JAPAN:
(I) Command of all United States Army resources in the Pacific (less the U.S. Army Strategic Air Force, Alaskan Department and Southeast Pacific) is vested in the Commander-in-Chief, United States Army Forces, Pacific.
(2) Command of all United States Naval resources in the Pacific (less Southeast Pacific) is vested in the Commander-in-Chief, United States Facific Fleet.
(3) The U.S. Army Strategic Air Force, for the present, continues operations under the direct control of the Joint Chiefs of Starf to support the accomplishment of the over-all objective.
(4) The Commander-in-Chief, United States Army Forces in the Pacific is charged with making plens and preparations for

HOPMGOPET
the campajgn in JAFAN. He cooperates with the Commander-inChief, United States Pacific Fleot in the plans and prepara ations for the naval and amphibious ohases of the invasion of JAPAN.
(5) The Commander-in-Chief, United States Pacific Fleet js charged Hith making plans and preparations for the naval and amphibious phases of the invasion of JAPAN. He cooperetes with the Commander-in-Chier, United States Army Forces, Pacific, on the plans and preparations for the caranaign in JAPAN.
(6) The Comnanding General, U.S. Army Strategic Air Force cooperates with the Commander-in-Chief, United States Army Forces, Pacific and with the Commander-in-Chief, United States Facific Fleet in the preparation of plans connected yith the invasion of JAPAN.

## c. Tasks

The following tasks for Operation "CORONET" are assigned:
(1) By joint overseas expeditionary operations destroy hostile forces and occupy the TOKYO-YOKOHAMA area.
(2) Complete occupation of the KANTO FTAIN area; establish air forces, naval and logistic racilities for support of subsequent operations in Central and Northern JPAN.
(3) Conduct such subsequent operations in Central and Northern HONSHU and Japanese Islands to the northward as may be directed to terminate hostile resistance in these areas.

## 2. ASSURETIONS

a. Hostile (See Annex $2 a, ~ G-2$ Estimate of Enemy Situation, the TOEYO (FANTO) Plain of HONSHU, . 31 May 1945)
(1) That the Japanese will continue the war to the utnost extent of their capabilities and will prepare to defend the home island of HONSHU utilizing all available means. That the operation will be opposed not only by the available organized

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militery forces of the Empire, but also by a fanatioally hostile population.
(2) That by "Y"-Day, the total ground strength in the general TOKPO area will not exceed the following:

6 Mobile Combat Infantry Divisions
2 Depot Divisions
1~1/3 Armored Divisions
40,000 Naval Base Troons 60,000 Air-Ground Personnel

60,000 Ease and Service Troops Large number of Citizens Volunteer Units
(3) That the initial assaults will be opposed at time of landing by not more thar 4 Mobile Combat Infantry Divisions, with appropriate supporting troops, and rein orced by local garrisons and home defense units.
(4) That the enemy will attempt promet reinforcement of the TOMYO area to the limit of their capabilities immediately following the initial landings. That due to interdiction of main road and railroad routes, however, this rate of reinforcement will not exceed 4 divisions per week thereafter, reaching an optimum total by "Y" 130 of 22 Infentry and 2 Armored Divisions within the entire area.
(5) That by "Y"-Day, our expended air and sea control will preclude further major reinforcement from the Asiatic Mainland.
(6) That prior to initiation of the oneration, the enemy will have been forced to withdram the bulk of his remaining landbased air force to the Asiatic Mainland, but that this force will be capable of operating against our landings by staging through homeland fields and will emphasize execution of suicide-type missions.
(7) That prior to initiation of the operation, hostile naval capabilities will have been reduced to possible suicide sorties by remnents of the Jananese Fleet and harassing or suicide attacks by submarines and.light craft.
(8) That prior to "Y"-Day, as a result of sustained air bombardment, the industrial productive capscity of the entire Japanese Empire, including MANCHURTA, North CHINA and KORFA rill have been seriously desruoted and shipping lanes vithin Enpire waters effectively interdicted.
(9) That the hostile logistic position will be such as to permit determined defensive military action initially, but due to serious potentiel shortages, particularly food for civilian consumption, this position will rapidly detexiorate under pressure and will eventually handicap enemy military operaもions.

## b. Own Forces

(1) That the entire resources available to the Commander-in-Chief, United States Army Forces, Pacific and the Commander-in-Chief, United States Pacific Fleet will be available for sunport of the operation.
(2) That the flow of redeployed United States Army Eorces to the Pacific will be maintained generally in accordamce with existing schedules.
(3) That diversion of "CORONET" resources as a result of RUSSIA's entry into the war will be limited to logistic and naval assistance on a temmorary besis at such times that they can be spared mithout prejudice to "CORONET".
(4) That prior to initiation of the operation, United States Forces are successfully established in Southern. KyUSHU as a result of "MAJRSIIC" operations.
(5) That prior to initiation of the operationg United States
action completely te destroy hostile air forces in the Japanese home islands and the Asiatic Mainland, shatter land communications, isolate the TOKYO-YOKOHAMA and the KANTO PIAIN areas, and reduce defensive installations in the objective area. All air attacks are intensified as the date of landing appronches, culminating in an all-out effort of all air forces, coordinated with Naval bomberdment, from "Y"-15 to "Y"-Day to destroy hostile air forces in HONSHU and closely supporting areas, isolate the objective area, complete the reduction of the harbor defenses of SAGAMI-TAN, and cover preliminary operations and minesweeping.

About "Y"-20, naval surface bombardment of the harbor defenses of SAGAMI-TAN and of landing areas is instituted.

About "Y"- 4 , minesveeping operations are initiated.
The Attack Force is launched from the DHITIPPINES and CENTRAL PACIFIC bases, proceeding to the objective area under cover of the Pacific Fleet and carrier and land-based aviation. It effects, on "Y"-Day, a landing of the Eighth and First Armies in the SAGAMI and KUJIKURI BEACH areas, respectively.

The First Army, supported by air and naval elements, advances rapidly to secure the eastern shore of $S A G A M I-W A N$ and TOKYO BAY, and to destroy hostile forces and seize TOYYO from the east.

The Eighth Army, supnorted by air and naval elements, advances rapidly to secure the mestern shore of TOKYO BAY, to destroy hostile forces and seize TOKYO from the west. It effects the debouchment of its armored divisions into the KUMAGAYA-KOGA area at the earliest practicable date with the okject of thereafter isolating the KANTO PIAIN area and disrurting the enemy's rear.

On "Y" $f$ 30, each Army is reinforced by a corps of three divisions. On "Y" $f$ 35, an AFPAC Reserve Corps of three divisions, and the 11 th $A / B$ Division, are available. A corps of three divisions, located in the PHILIPPINES, and divisions necessary to permit reinforcement at the rate of 4 divisions per month, located in the U.S., constitute the strategic reserve.

Service troops are promptly brought formard, land-based aviation is installed progressively and at the earliest practicable date, logistic
facilities are developed and the area consolidated. Military Government is instituted.

The China Theater conducts neutralizing attacks against hostile air forces on the Asiatic Mainland and executes diversionary attacks by ground forces. The South East Asia Command conducts air and ground operations within its assigned areas of responsibility. "The efforts of these two theaters are directed towards holding Japanese air and ground forces in position. Air and Naval elements based in the ALEUTIANS provide general support as practicable.

## b. Employment of Forces

(1) Organization

For organization of United States Army Forces in the Pacific, including major corresponding elements of the United States Facific Fleet as prescribed by CINCPAC, see Chart, Annex, $3 b(1)(a)$.
(2) Forces
(a) UNITED STATES ARMY EORCES - Command of United States Army


ADVON, $\mathrm{CHQ}, ~ A F P A C$

EIGHTH ARMY

FIRST ARMY
resources in the Tacific, except Alaskan Dopartment, Southeast Pacific, and United States Army Strategic Air Force.
Inter-theater coordination. Theater Command, STPA, Coordination of land-based air and ground operations.

- Landing Force. Operations of Ground Forces. Conduct of Military Government. Treperation of AFPAC reserve elements. Mounting of elements transported into CORONET area under AmAC control.
- Preparation of Eighth Army elements. Mounting of elements transported into CORONET area under Eighth Army control.
- Preṕaration of First Army elements.
Mounting of elements transported into CORONET area under First Army control.
- Preparation of AFFAC Air Forces for CORONET. Ereliminary air bombardment. General air support.
Air convoy cover as requested by United States Pacific Fleet.
Direct air support of ground operations in conjunction With United States Pacific Fleet.

UNITED STATES ARMY FORCES - Preparation and mounting of MIDDIE FACIFIC

Army elements from Middle

Pacific (for CINCAFTAC). Logistic support for Army elements in the Middle Pacific.

UNITED STATES ARMY FORCES - Logistic support for Army WESTERN PACIFIC elements in the Western Pacific.
(c) UNITED STATES ARMY

STRATEGIC AIR FORCE
(b) UNITED STATES FACIEIC FLEET ——

- Preparation of Army Service Command "C" elements for the operation.
Mounting of elements transported to objective area under Army Service Command "C" control.
Base development and logistic support in the objective area.

NAVAL FORCES SUFA (for CIMCPAC)

- Preparation and mounting of Naval and Marine units from STPA.
- Naval and amphibious operations, inctuding strategic and general support. Inter-theater coordination. Theater Command, POA. Preparation and mounting of Marine and Naval units from POA.
Establishment of naval
facilities in the objective area.
- VHB strategic and general air support.


## (3) Forces Required

(a) Major ground combat elements allocated for the operation
are as follows:

UNIT
EIGHTH ARMY
$X$ CORPS

MOUNTED FROM
LEYYTE
MINDANAO

| UNIT | MOUNTED EPOM |
| :---: | :---: |
| 24th Inf Div | MINDANAO |
| 31st Inf Div | MINDANAO |
| 37th Inf Div | LUZON |
| XIV CORPS | IUUZON |
| 6th Inf Div | LUZON |
| 32nd Inf Div | LUZON |
| 38 th Inf Div | LUZON |
| XIII CORPS | U.S. |
| 13th Armored Div | U.S. |
| 20th Armored Div | U S. |
| "D" CORFS | LUZON |
| 4th Inf Div | LUZON |
| 87 th Inf Div | LUZON |
| Bth Inf Div | MITIDORO |
| FIRST ARMY - | I.UZON |
| YXIV CORTS | RYUKYUS |
| 7th Inf Div | RYUKYUS |
| 27th Inf Div | RYUKYUS |
| 96 th Inf Div | MIMDORO |
| III AMPHIB CORPS | GUAM |
| lst Mar Div | RYUKYUS |
| 4 th Mar Div | HATAII |
| 6th Mar Div | GUAM |
| "B" CORPS | CEBU |
| 86 th Inf Div | ILYTE |
| 44 th Inf Div | CEBU |
| $5 \mathrm{th} \operatorname{Inf}$ Div | PANAY |

AFFAC RESEPVE

## "Y"-DAY

97th Inf Div
CEBU
(mounted and transoorted by Eighth Army)
"Y" 1 - 35
"C" CORPS
2nd Inf Div 28th Inf Div 35th Inf Div

IEYTE

LEYTE
S.UZON LUZON

UNIT
MOUNTED FROM
STRATEGIC (I.I.)
"E" CORFS

| 95 th $\operatorname{Inf}$ Div | LUZON |
| ---: | ---: |
| 104th Inf Div | LUZON |
| $91 s t \operatorname{Inf}$ Div | LUZON |

STRATEGIC (U.S.)
Divisions as required to permit a
build-up of four divisions per month beginning in May 1946.
(b) Commitment

Total commitment, United States Army Forces in the
Pacifio, with attachments, is estimated as follows:
(See Annex 3b(3)(b), Estimate of Troop Requirements). "Y"-DAY

| EASTERN FORCE | PERSONNEL | VEHICLES | D. Wiv. T. |
| :---: | :---: | :---: | :---: |
| Ground Combat | 153,782 | 16,786 | 173,086 |
| Service | 73,277 | 13,994 | 120,135 |
| Air | 14,367 | 3.485 | 24.702 |
|  | 241,326 | 34,265 | 317,323 |
| WESTERN FORCE |  |  |  |
| Ground Combat | 203,434 | 23,141 | 275,143 |
| Service | 88,656 | 13,661 | 110,196 |
| Air | 8.974 | 2,248 | 14.446 |
|  | 301,004 | 39,050 | 399,785 |
| TOTAL "Y゙-DAY COMMITMENT | 542,330 | 74,315 | 717,108 |

## $" Y "+30$

EASTERN FORCE

| Ground Combat | 72,698 | 17,498 | 121,069 |  |
| :--- | ---: | ---: | ---: | ---: |
| Service | 89,385 | 14,440 | 130,503 |  |
| Air | $-6,955$ | $-1,157$ | $-9,378$ |  |
|  |  | 169,038 | 33,095 | 260,950 |


| WIESTERN_FORCE | PERSONNEL | VEHICLES | D.T.T. |
| :--- | ---: | ---: | ---: |
| Ground Combat | 74,528 | 20,761 | 129,158 |
| Service | 141,145 | 20,809 | 203,765 |
| Air | $-13,106$ | -2.899 | $-21,539$ |
|  | 228,779 | 44,469 | 354,462 |
| TOTAL "Y"f30_COMMITNENT | 397,817 | 77,564 | 615,412 |

"Y" 1 (35

## AFFAC RESERVE

| Ground Combat | 56,797 | 7,478 | 63,485 |
| :--- | :---: | :---: | :---: |
| Service | $-17,389$ | 2,606 | 22,421 |
| TOTAL "Y" -35 COMMITMENT | 74,186 | 10,084 | 85,906 |

("Y" $Y^{\prime \prime} 15$ ) to ("Y" ${ }^{\prime \prime} 60$ )
(SHORT TURN-AROUND - KYUSHU)

| Service | 22,657 | 6,527 | 51,577 |
| :--- | :---: | ---: | ---: | ---: |
| Air | $\frac{58,345}{}$ | $-14,939$ | 87.543 |
| TOTAL ("Y"f15) to ("Y"f60) COMMITMENT | 81,002 | 21,466 | 139,120 |

(REAR ECHELONS)

| Combat | 76,31.1 | 21,401 | 127,499 |
| :---: | :---: | :---: | :---: |
| Service | - | 16,381 | 48,699 |
| Air | - | 2,303 | 7.543 |
| TOTAL "Y" 660 COMMITMENT | 76,311 | $40,085$ | 183,741 |
| TOTAL COMMITMENT TATER BORNE | 1,158,128 | 222,514 | 1,741,023 |
| TOTAL COMMITMENT AIRBORNE | -13,518 | $\underline{-}$ | - |
| TOTAL TROOP COMMITMENT | 1,171,646 | 222,514 | 1,741,023 |

(c) Naval Assault Lift

CINCPAC has estimated the following naval assault lift as available for the operation:

| TYPE | EERSONNEL | VEHICLES | D. Ti. T. |
| :---: | :---: | :---: | :---: |
| 210 APA | 273,000 | 10,500 | 105,000 |
| 85 AKA | 21,250 | 10,200 | 85,000 |


| TYEE | PERSONNEL | VEHICLES | D. TI, T. |
| :---: | :---: | :---: | :---: |
| 6 XAP | 8,400 | 300 | 6,000 |
| 120 APD | 18,000 | - | 600 |
| 6 LSV | 4,800 | 300 | 1,500 |
| 22 LSD | 5,280 | 1,100 | 15,400 |
| 67.5 I.ST | 202,500 | 40,500 | 342,500 |
| 480 LSM | 24,000 | 4,800 | 72,000 |
| 16 AP | 32.000 | 800 | 11.200 |
| TOTAL ASSAULT LIFT | 589,230 | 68,500 | 639,200 |
| Plus 21 XAK |  | -4.410 | $-79.800$ |
| total | 589,230 | 72,910 | 719,000 |

(d) Air Deployment

For deployment of air units, see Charts, Annex 3b(3)(d)I and Annex 3b(3)(d)II.
(4) Operations Required (See Chart, Annex 3b(4), The Operations
(a) U.S. Army Forces in the Pacific are assigned tasks for the operations as follows:

1. Advance Echelon, United States Army Forces, Pacific
a. Command Landing Force.
b. Conduct ground operations.
c. Prepare AFPAC Reserve elements for the dperation.
d. Mount elements transported to the objective area under AFPAC control.
E. Commit reserve elements as dictated by developments.
f. Direct occupation and defense of radar and aircraft warning installations as arranged with Commanding General, Far East Air Forces.
g. Institute. Military Government in occupied areas.
h. Prepare to conduct further operations to force Japanese unconditional surrender, as directed. -12-
2. Eighth Army

ㄹ. Prepare Eighth Army elements for the operation.
b. Mount elements transported to the objective area under Eighth Army control.
c. On "Y"-Day, seize and occupy beachheads at the head of SAGAMI BAY.
d. Destroy hostile forces wherever encountered.
e. Seize and secure the western shore of TOKYO BAY from the southern tip of the YOKOSUKA PENINSULA to YOKOHAMA (exclusive).
f. Protect the wost flank of the Landing Force.
g. Seize and secure the crossings of the TAMA GAMA. Drive armored elements vigorously inland to seize the KUMAGAYA-KOGA area. Block movement of hostilo reinforcements into the KANTO PIAIN and disrupt the enemy's rear. Be prepared to turn armor south against TOKYO.
h. Advance northward and eastwerd to seize YOKOHAHA, to assist in the seizure of TOKYO, and to complete the destmuction of hostile forces.
i. Initiate construction of air, naval and logistic facilities within the Eighth Army area at the earliest practicable date.

## 3. First Army

a. Prepare First Army elements for the operation.
b. Mount elements transported to the objective area under first Army control.
c. On "Y"-Day, seize and occupy beachheads in the KUJTKURI BEACH area.
d. Destroy hostile forces wherever encountered.
e. Turn necessery foxce westward and southmard to
clear the eastern shore of TOKYO BAY - SAGAMI BAY.
f. Seize and secure the mouth of the TONE GADA at the earliest practicable date for use as an unloading point and smail craft harbor. Protect the north flank of the Landing' Force.
g. Seize and secure the terrain corridor lying between CHIMBA and IMBA-iNUMA.
h. Contimue the advance westward to seize TOKYo and complete the destruction of hostile forces.
i. Initiate construction of air, naval and logistic facilities within the First Army area at the earliest practicable date.

## 4. Far Eest Air Forces (See Annex 3b(4)(a)5, Landbased Air Support)

a. Provide aerial photography and reconnaissance. as required.
b. In conjunction with other air forces, destroy or nevtralize hostile air, sea and ground elements capable of interfering with or limiting the success of the operation.
c. In coordination with Naval Air. Forces, execute preliminary air bomberdment missions within the objective area, reaching meximum intensity of this bombardment during the period "Y"-15 Day to "Y"-Day.
d. By air attack against critical points along hostile routes of communication between the TOKYO area and the remainder of HONSHU, limit to the greatest extent practicable hostile reinforcement capabilities into the objective area.
e. Provide land-besed air protection for naval forces as arranged with the Commander-in-Chief,

United States Pacific Fleet.
f. Be prepared to execute emergency air resupply missions as requested by the Landing Force Commander.
g. Promptly install required air garrisons in the objective area.
6. United States Army Forces Middle Pacific
a. Prepare and mount United States Army elements from the Middle Pacific, as directed, for CINCAFPAC.
b. Provide logistic support for United States Army Forces in the Middle Pacific.
7. United States Army Forces Western Pacific

Frovide logistic support for United States Army
Forces in the $\begin{aligned} & \text { inestern Pacific. }\end{aligned}$
8. Army Service Command "C"
a. Prepare Army Service Command "C" elements for the operation.
b. Mount elements transported to the objective area under Army Service Command "C" control.
c. Develop CORONET bases.
d. Provide logistic support in the objective area.
9. Naval Forces SMPA (for_CINCAC)

Prepare and mount, Naval and Marine elements from SPFA for the operation.
(b) United States Pacific Fleet (See Annex 3b(4) (b)).
(c) United States Strategic Air Force

Provide VHB strategic and general support for the operation.
(5) Coordination

Operations of the United States Army Forces in the Pacific,
the United States Pacific Fleet and the U.S. Army Strategic Air Force are coordinated as follows:

## (a) Command of Air Forces

Army Air Forces and Navy land-based air forces operate under the command of CINCAFPAC and CINCFAC, respectively, eycept that:

1. The United States Army Strategic Air Force operates as directed by the Joint Chiefs of Staff.
2. Marine air units, when assigned to operate "with major ground elements of the Fleet Marine Force under Army control, pass to the operational control of the Commanding General, Far East Air Forces.
3. When Army Air Forces are responsible for the air defense of an area or position, Marine units participating in such air defense pass to the operational control of the aporopriate Army Air Task Force Commander.
(b) Coordination of Air Forces
4. The following principles govern the general coordination of air forces under control of CINCAFPAC, CINCFAC and CG USASTAF prior to and during the conduct of "CORONET":
a. Prior to "Y"-8 and when the carriers of the U.S. Fleet are in position to attack obiectives in JAPAN.
i. The principal tasks of fast cerrier task forces during this period are to destroy enemy naval and air forces, shipoing and coastal objectives, protect sea communications in the Western Pacific, and to support other forces. These forces will
assume the primary responsibility for the destruction of enemy aircraft and airdrome installations north and east of the following line, hereafter referred to as the coordinating line (see Annex 3b(5)(b)): Railroad through NIIGATA-KITAKANTA-KORIYAMA-TAIRA-HIRAKATA; with particular reference to those which cannot be reached effectively by the Far East Air Forces or by the fighters of USASTAF. When the fast carrier task forces are operating south and vest of the coordinating line to accomplish their assigned naval tesks, they will operate against enemy air forces and airdrome installations in such a manner as to inflict maximum damage thereon and to ensure their own safety.
ii. The principal tasks of PEAF and Navy Air Forces, KYUSHU and RYUKYUS, during this period are to destroy hostile air forces within range, ground forces and installations in the Southern Japanese Archipelago, naval forces and shipping within range, and lines of communication contributing to maintenance of reinforcement of hostile forces in the KANTO PLAIN area of HONSHU. FEAF and Navy Air Forces, KYUSHU and RYUKYUS, will assume the primary responsibility for attack of hostile enemy aircreft and airdrome installations south and west of the coordinating line. Local coordination of FEAF, USASTAF - 17 -

AOP-SEGREP
and Navy Air Forces in their operations and selection of objectives to be attacked will be effected by local arrangement between the commanders of the three forces reprosented.
iii. The primary task of the USASTAF is the destruction of hostile strategic tergets. The forces of USASTAF will essume the primary responsibility for the destruction of strat-gic targets both east and west of the coordinating line.
iv. The Commander; $\qquad$ Fleet, or his Task Force Commanders; the Commanding General, Far East Aix Forces, or his Air Force Commanders; the Commanding General, United States Army Strategic Air Force, or his Air Force Commanders; and the Senior Naval Air Commonder at OKINAWA and on KYUSHU, will notify each other, CINCAFPAC, CJINCPAC and GOMGEN USASTAF of their strike intents as far in advance as is practiceble: This is perticularly important when elements of the Fleet Carrier Task Forces strike south or west of the coordinating Iine, when FPAF or Nevy ajr elements in KYUSHU and the RYUKYUS strike north or east of the coordinating line and when USASTAF strikes in either area.
v. In emergency, the air commanders indicated above may strike any hostile target. In this case or in case of change of plans of air attack on hostile objectives, these commanders shell intorm all air commanders
concerned as promptly as possible.
b. From "Y"-8 inclusive to an indefinite date later to be agreed upon by dispatch
i. The ___ Fleet will assume the primary responsibility for the destruction of enemy aircraft and airdrome installations north and east of the coordinating line.
ii. In addition to its planned operations mithin the objective area, FEAF will assume the primary responsibility for the destruction of enemy aircraft and airdrome installations outside the objective area and south and west of the coordinating line. Coordination of EEAF and Navy Air Forces, KYUSHU and RYUKYUS, in attacks on hostile objectives set forth will be as in sub-paragraph a above, CG FEAF will notify Commander Fifth Fleet when, because of weather or other reason, its counter air force mission cannot be performed.
iii. The Fleet will assume primary responsibility for air defense in the objective area, but will take such action as is required. cover targets outside the objective area in event that FIAF, because of weather or other reason, cannot perform its mission.
2. Operations of the Far East Air Forces within the
boundaries of the China Theater are coordinated by
CINCAFPAC with the Commanding General, China Theater.
3. Coordination within the Objective Area
a. Diring the amphibious phase of an operation,

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TEOP SEGREF
while CINCPAC is charged with rosponsibility for air operations within the objective area, landbased air elements operating in the objective area are controlled by CINCPAC through a commander designated by him. The instructions of this commander, wherever practicable, are transmitted to the appropriate land-based air echelon through an Army Air Controller who accompanies the naval air commander designated.
b. Similarly, anter land-based air forces are established in the objective area and responsibility for air operations within the objective area passes to CINCAFPAC, control of carrierbased air elements operating in the objective area is exercised by the Army Air Task Force Commander, HONSHU, wherever practicable through a Navy Air Controller at the objective area.
c. For initial delimitation of the objective area and tentative assignment, for plenning, of resm ponsibility for coordinetion of air operations within the objective area, see Annex $3 b(5)(b)$. Details of availability of land-besed and carrier-based air and of the duration of their respective operations within the objective area will be set forth in the coordinated plans of the Commander ___ Fleet and the Commanding General, Far Eest Air Forces.
(c) Control of Landing Forces Ashore

1. The Commander ___ Fleet controls the amphibious movement and landing through the Commander, Amphibious Forces Pacific Fleet, who, in turn,
controls the Amnhibious Force, Attack Force, and Group Commanders who are responsible for the ame phibious operations at their respective objectives.
2. Control of forces ashore passes to the Commander of each assault division (or separate Landing Force) after his arrival and establishment ashore, and upon his notification to the Commander of the corresponging Naval Attack Group that he is ready to assume control of his forces ashore. . The Commander of each assault division (or separate Landing Force) and the Commander of each Naval Attack Group promptly reports to his next senior ground or naval commander, respectively, the time he assumes or relinquishes control of forces ashore.
3. Control of forces ashore passes to each Corps Commander within his respective area of operation after his arrival and establishment ashore and upon notification to the Commander of the corresponding Navel. Attack Force that he is ready to assume control of his forces ashore. Each Corps Commander and corresponding Naval Attack Force Commender promptly reports to the appropriate Army Commander and Amphibious Force Commander, respectively:
a. The time each di"sion and separate Landing Force and its corresponding Naval Atteck Group Commander assumes or relinquishcs control of the Forces ashore.
b. The time he, himself, assumes or relinquishes control of forces ashore.
4. Control of forces ashore passes to each Army Commander within his respective area of onerations after his arrival and establishment ashore and upon - 21 -
notification to the Commander of the corresponding Amphibious Force that he is ready to assume control of his forces ashore. Each Army Commander ard the corresponding Amphibious Force Commander promptly reports to Commanding General ADVON AFPAC and COMPHIBSPAC, respectively:
a. The time each division (or separate Landing Force) and Corps and its corresponding Naval Attack Group Commander and Naval Attack Force Commander assumes or relinquishes control of the forces ashore.
b. The time he, himself, assumes or relinquishes control of forces ashore.
5. Division (or separate Landing Force), Corps and Army Commanders who heve assumed control of the forces ashore continue under control of the next senior Naval Commander until their next senior Army Commander assumes control of forces ashore.
6. Immediate control of forces ashore passes to the Commanding General ADVON AFPAC upon his announcement to COME HIBSPAC that he is ready to assume." control of the forces ashore. The Commanding General ADVON AFPAC and COMPHIBSDAC promptly report to CINCAFPAC, CINCPAC and the Commander ___ Fleet the time of assumption of control of forces ashore by the Commanding General ADVON AFPAC.
7. Nothing in this type procedure limits the two Commanders-in-Chief from exercising, under their general responsibilities, such controls as circumstances may necessitate.

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(d) Control of United States_Marine_Corps Ground Forces Control of U.S. Marine Ground Units forming parts of landing forces is exercised by the appropriate Army Commander in each instance.
(e) Coordination of Air Search

Responsibility for development and eyecution of the coordinated air search plan over water areas is vested in CIncpac.

CINCAFPAC provides such fields and operating facilities in areas under his control as are required to permit complete air coverage of appropriate areas.
(f) Air and Naval Operating Zones CINCPAC designates appropriate air and naval operating zones, informing CINCAFPAC of such dosignations.
(g) Topographical Intelligence

1. Primary responsibility for provision of mapping photography for the operation, and preparation of maps for the use of ground forces in the objective area, is vested in the Commender-in-Chief, United States Army Forces in the Pacific.
2. Primery responsibility for provision of necessary hydrographic surveys and mapping of beaches for use of amphibious forcs, for the operation, is vested in the Commander-in-Chief, United States Pacific Flect.
3. CINGAFPAC and CINCPAC continue to prepare such maps as are required for their respective Air Forces.

## 4. LOGYSTICS

a. General
(1) United States Army, army units of Allied nations, Marine and associated Neval forces assigned for the conduct of landing
operations under the control of the Commander-in-Chief, U.S. Army Forces Facific, will be staged, equipped and mounted out with prescribed equipment and supplies from the PHILIPPINES, RYUKYUS, MARIANAS, and HAWAIIAN ISLANDS, KYUSHU, and the UNITED STATES.
(2) Marine and Naval forces employed in support of this operation, not under the control of the Commander-in-Chief, U.S. Army Forces Pacific, will be supported as dirccted by the Commender-in-Chief, U.S. Pscific Fleet.
(3) U.S. Army Strategic Air Force will be supported logistically, in accordance with existing arrangements and directives.
b. Responsibility for Logistic Support
(1) The Commander-in-Chief, U.S. Army Forces Pacific, will be responsible for the logistic support of all U.S. Army Forces, army forces of Allied Nations and Marine and associated Naval forces placed under his operational control and employed in these operations (except the U.S. Stratogic Air Force).
(2) The Commander-in-Chief, U.S. Pacific Fleet, is to be responsible for the logistic support of all Marine and Naval forces not placed under the operational control of the Commander-inChief, U.S. Army Forces Pacific, employed to support this
 providing mounting-out supplies for Marine and associated Naval forces. which are to operate under the control of the Commander-in-Chief, U.S. Army Forces Pacific, during the operation.
(3) The Commander-in-Chief, U. S. Army Forces Pacific, will employ U'S. Army Service Commend "C" (USASCOMC) as a service command to render diroct logistic support to field armies in the objective area.
(4) The Commanding Generals of the Field Armies will be charged

## TOP =SECPET

initially with responsibility for logistic support of their respective commands. Anpropriate elements of USASCOM-C will be attached to Field Armies for the purpose of providing direct logistic support during early phases of operations in each Army area. At a date to be determined by this Ereadquerters, the responsibility for rendering direct logistic support in each Army area will be assumed by this Headquarters. At such time, the elements of USASCOMC attached to Field Armies will revert to that command, which thereafter will be responsible to this Headquarters for the rendering of direct logistic support in the Army area concerned. Target dates for relief of Field Army commanders from this responsibility and its assumption by this Headquarters will be the landing date in each Army area plus 30 days.
(5) The Commanding Generals, U.S. Army Forces Middle Pacific and Western Pacific will be responsible for reequipment of all units. staging in and to be mounted from their respective areas of responsibility: They will further be responsible for making available to all units to be mounted from their respoctive areas accompanying equipment and supplies as prescribed by this Headquarters. By arrangement with the War Department that agency is responsible for equipping and providing accompanying supplies as prescribed by this Headquarters for units moving directly from the U. S. to the objective.

## c. Resupply

Resupply, and the supply of the bulk of construction materials will be by direct shimment from the UNITED STATES, augmented as may be required from boses in the Pacific under the control of the Commander-in-Chief, U.S. Army Forces Pecific, and the Commender-in-Chief, U.S. Pacific Fleet.

## d. Evacuation and Hospitalization

(1) Evacuation of casualties by all services from the objective
area initially will be by Naval assault shipping, followed at the earliest practicable date by the employment of aircraft and hospital ships. Evacuation will be to ports and bases where bed credits will be established. For patients requiring prolonged hos~italization, evacuation direct to the United States from the objective area will be initiated as early as practicable.
(2) Fixed-bed hospital units will be established in objective areas at the earliest practicable date, functioning initially in existing buildings or under canvas. Fully prefabricated hospitals will be provided as rapidly as practicable for those hospital units functioning under canvas.

## e. Transportation

(1) The Commander-in-Chief, U.S. Pacific Fleet, is to provide Naval assault shipping for the transportation of assault and followup forces, with accompanying equipment and supplies from mounting areas to the objectives. Assault shipping is supplemented by heavy shipping as required.
(2) Replenishment supplies, replacement equipment, and construction materials will be transported direct from the UNITED STATES or bases in heavy shipping as arranged for by the Commender-inChief, U.S. Army Forces Pacific, and the Commander-in-Chief, U.S. Pacific Fleet, respectively.

## f. Gonstruction

(1) Construction in the objective area will be limited to provision of minimum essential operative facilitios.
(2) Imported materials and Engineer effort will not be expended for the construction of personnel housing except for hospitalizstion prior to "Y" $f 120$ Days.
(3) The Commander-in-Chief, U.S. Army Forces Pacific, and the Commander-in-Chief, U.S. Pacific Fleet, will each be responsible

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for the construction of Army and Naval Facilities and installations required for the support of the forces under their respective controls. The Commander-in-Chief, U.S. Pacific Fleet, is to provide to the Commander-in-Chief, U.S. Army Forces Pacific, those construction materials and Engineer construction effort required to construct facilities necessary for the support of Marine and associated Naval forces placed under the control of the Commander-in-Chief, U.S. Army Forces Pacific.
(4) Construction materials and Engineer construction effort (except for that specifically excluded in the paragraph next above) required to construct facilities and installations necessary for the support of the forces operating under their cuntrol will be provided by the Commander-in-Chief, U.S. Army Forces Pacific, and the Commander-in-Chief, U.S. Pacific Fleet, respectively. Construction forces available to either of the above commanders for the operation, which are in excess of the requirements of either of the owning services, will be made available for employment on projects of the other service.
(5) The commanding generals of Field Armies will initiate the construction and development of approved construction projects in their respective areas immediately following landing operations. They will continue construction on these projects until such time as the responsibility therefor is assumed by this Headquarters, or transferred to the Commander-in-Chief, U.S. Pacific Fleet, for those Naval projects which may be initiated at his specific request.

## g. Military Government

The Commander-in-Chief, U.S. Army Forces Pacific, employing Military Government agencies placed at his disposal, will control the civilian population in JAPAN to the extent and in the manner necessary to prevent interference with
the progress of militery operations in the objective area; to obtain maximum explottation of local means, including labor; and to implement, in areas under his control, the policy of the Government of the UNITED STATES with respect to the Japanese Population.
h. Local Resources

Maximum use will be made of aveilablo local rosouroos, including existing installations and labor. Allocation of these resources will be made initially by the commanding generals of the Field Armies until this responsibility is essumed by the Commander-in-Chief, United States Army Forces Pacific.
5. MISCELIANEOUS
a. Communications (See Annex 5a)
b. Military Government (See Annex 5b)

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## DISTRIBUTION LIST

## STAFF STUDY

OPERATICNS
"COROMET"
Commender-in-Chief ..... 1
Chief of Staff ..... 1
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G-4 ..... 1
Chief Signal Officer ..... 1
Chief Engineer ..... 1
Antiaircraft Officer ..... 1
Wer Department ..... 8
CIMCPAC ..... 4.
CG, U.S. Amy Forces Middle Pacific ..... 1
CG, Sixth Army ..... 1
CG, Eighth Army ..... 1
CG, Far East Air Forces ..... 1
CG, U.S. Army Forces, Testern Pacific ..... 1
CG, U.S. Army Strategic Air Force ..... 1
"CORONET"

I
$2 a$
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$3 b(3)(d) I$
$3 b(3)(d) I I$
$3 b(4)$
$3 b(4)(a) 5$
$3 b(4)(b)$
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$5 b$

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The objective Area and Coordina亡ion Line.

Basic Logistic Plan
Communications plan.
Military Government. (To be furnished later).


## G-2 ESTIMATE OF THE ENEMY SITUATION WITH RESPECT TO AN OPERATION AGAINST <br> THE TOKYO (KWANTO) PLAIN OF HONSHU

##  <br> 31 MAY 1945

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Bibliography: See "G-2 Estimate of the Enemy Situation (Abbreviated) With Respect to Operations Against Kyushu-Honshu, 24 March 19/45"; "G-2 Estimate of the Enemy Situation With Respect to an Operation Against Southern Kyushu, 25 April 1945"; "Monthly Summary of Enemy Dispositions No. 31, 31 May 1945", and subsequent issues; current "Daily Intelligence Summaries", this Headquarters; A.G.S. Terrain Studies Nos. 132, 134, (to follow); A.G.S. Terrain Handbooks on the Tokyo Plain (to follow). I. TERRAIN AND WEATHER:

1. Terrain:

ㄹ. General:
The Tokyo (Kwanto) Plain is an irregularly shaped lowland centered on Tokyo, measuring approximately 90 miles east to west and from 45 to 65 miles north to south. The Pacific shoreline forms its eastern boundary; to the south it is bordered by the mountains of the Chiba Peninsula, and the waters of Tokyo-wan (Bay) and Sagami-wan to the west and north it juts against the foothills of the mountain masses of central and Northern Honshu. One sixth of the entire Japanese population lives within the Plain; Tokyo and Yokohama are the principal cities but there are over 80 other cities of 10,000 or more population in the area (see Map Encl. 1).
b. Drainage: (see Map Encls. 1 and 3)

An understanding of the drainage system within the Plain is important due to the decisive influence it exerts on movement and hence on the planning of operations.

The Tone-gawa (river) flows southeast across the full width of the Plain to the center of the Pacific shoreline. Depths vary from a minimum of 5 feet in the western regions to 15 feet in the lower valley. 8 to 18 miles south of the Tone, the Ara-Kawa also flows southeast across the western half of the Plain, thence through Tokyo City into Tokyo-wan.

From the mountains about 20 miles west of Tokyo the Tama-gawa flows south-of-east across the southwestern portion of the Plain and into Tokyo-wan between Tokyo and Yokohama; the Sagami-gawa southward along the bordering western foothills to Sagami-wan. Depths of these rivers are

5 to 10 feet for distances of 8 to 15 miles upstream but decrease rapidly nearer the mountains.

Branching from the Tone in the center of the Plain, the Edogawa flows south and empties into Tokyo-wan just east of the city. Depth is approximately 15 feet throughout most of its course. The kinugawa flowing south through the center of the Plain from its northern extremity, joins the Tone 20 miles northeast of Tokyo.

Two large lakes spread across the northeastern portion of the Plain. Kita-ura (lake), $1 / 2$ to 2 miles wide, parallels the northeast coast for approximately 20 miles northward from the Tone-gawa at a distance of 2 to 3 miles inland, Approximately 5 miles farther inland Kasumiga-ura, 2 to 4 miles wide, spreads from the Tone to within 4 miles of the Abukuma Spur (southernmost spur of the northern mountains). In the eastern central area (northeast of Tokyo) is a cluster of 4 smaller lakes, each several hundred yards wide and from 2 to 10 miles long. All are close to the river except Imba-Numa (lake) which spreads across roughly half of the 15 mile wide east-west corridor between the Tone and Tokyo Bay.
c. Topography: (see Maps Encls. I and 3)

The floor of the Tokyo Plain falls generally into 2 terrain categories, i.e. river plains and terraces:

## (1) River Plains:

These are usually wide, level and often poorly drained. In addition to the river channel proper, they are cut by many canals and ditches and contain numerous ponds. The rivers are subject to floods during wet season (June-November); at such times the larger rivers may widen from several hundred yards to a mile on either side. Flooding is controlled by dykes; by destruction of these dykes broad additional areas may be artificially flooded to depths of 1 foot or more during periods of high water. By this means the flooded zones can be temporarily expanded to widths of 5 to 10 miles in the lower and central portions of the Tone Valley; 5 to 15 miles throughout the entire Edo-gawa Valley; and 2 to 5 miles in the valleys of several of the smaller streams north of the Tone or southwest of Tokyo. Little natural flooding occurs in
the area south of the Lone and east of the Edo-gawa, and the terrain does not lend itself to artificial flooding except that necessary to irrigate the ricefields.

River plains are practically uniformly planted in wet rice. River channels, canals and roads are frequently bordered by rows of trees and scattered patches of evergreen forest are found, particularly in the south. Fields are dotted with houses. Numerous roads traverse the river plains, often on embankments or fills.

Many of the road fills, dykes, and buildings provide extensive local observation over the low areas. Fills, dykes and canals are practically the only features providing cover. In most river plainss concealment is limited to rows of trees along the roads and river channels, occasional patches of forest and buildings.

Soil in the river plains is normally plastic clay, silt, and sand, except in the Tone Valley which is principally sand and gravel

In dry season, particularly during the winter months, some cross-country movement is practicable but may be hindered by canals, ponds, and intersecting streams. During late Spring, summer and early Fall movement is in general restricted to roads, dykes and embankments by floods and wet rice fields.
(2) Terraces:

These constitute over haif of the plain's:surface. They are extensive level or rolling areas rising 50 to 200 feet above the river plains and are normally well drained. The edges are formed by low escarpments which are usually gashed by closely spaced shallow valleys and gullies. In some areas, particularly the eastern regions, terraces rise sharply so as to approximate flat-topped hills.

In general, terraces are planted in dry crops interspersed with patches of wasteland; only small scattered ricefields are found on terraces. Narrow belts of woodland frequently follow the margins and in the eastern half of the plain, particularly south of the Tone river, there are considerable areas of woodland interspersed with cultivated and wasteland areas.

Although there are no commanding heights the higher

teriades provide some local observation. Cover is provided chiefly by the ravines and valleys which gash the margins; limited concealment by houses, rows of trees, and in some places (particularly in the eastern half) by intermittent wooded areas.

Soils of terraced areas are principally clay loams and
sandy loams.
In general the terraced terrain lends itself to easy cross-country movement on or off roads at all seasons.
(3) Abukuma Spur:

From the Abukuma Highlands bordering the northern mountains, a spur projects southward into the plain to within 4 miles of Kasumiga-ura. The spur varies from 4 to 10 miles in width; elevations range generally from 600 to 1700 feet with a few peaks rising above 2500 feet. The hills are generally forested but contain numerous small patches of grassy pasture land.
(4) Chiba Peninsula:

The major portion of this area is a rugged hill mass. In the northern half hills are low, usually not higher than 300 to 400 feet; in the southern half, elevations increase up to 1300 feet: Hills are generally forested; with broadleaf in areas adjacent to the plain, with evergreen oak in the southerly regions.

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d. Road Net: (see Map Encl. 2)
(1) General:
Japan@se roads are classified as shown in the following
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table:
TABLE XI

|  | TABLE XI |  |  |
| :--- | :---: | :---: | :---: |
| Classification | Minimum <br> Width | Ruling Grade | Bridge Capacity |
| National Highways | 24 feet | 1 in 30 | 12 ton vehicles |
| Prefectural Roads | 18 feet | 1 in 25 | 6 ton vehicles |
| Municipal Roads | 18 feet | $-2--$ | Automobiles |
| Village Roads | 12 feet | ---- | ---- |

In general, Japanese roads are below American standards;
there is little uniformity and a low proportion of hard surfacing. How ever, within the Tokyo Plain density of population, concentration of industry, and military needs have brought about extensive improvement

and above-average maintenance. The National Highways and many of the roads in lower classifications have been widened to 3 or more lenes, and there is a larger proportion of hard surfacing, usually concrete; other important roads are surfaced with well-graded gravel. Practically all roads are of long standing and rest on firm, well-packed foundations; their weakness lies in the countless bridges (there are over 5000 in Tokyo alone) on which they cross the numerous rivers, small streams and canals, and the long embankments and fills on which they traverse the river plains. These defiles by their very nature are difficult to widen, easily destroyed, and once blocked would be very difficult if not impossible for vehicles to by-pass.
(2) Description:

Tokyo is the focal point of a converging road net which spreads throughout the plain like a gigantic spider web. Threelane, concrete surfaced National Highways, radiating fron the city to Mito (northeast corner of the plain), Utsonomiya (central northern border), Takasaki (northwestern extremity), Hachioji (central western border), Odowara (southwestern extremity) and Chiba (Chiba Peninsula) provide main lines of road communication across the plain to every outer region, except the central east coast which is served by two graded gravel prefectural roads and a similar extension of the Chiba Highway. Between each pair of National Highways, prefectural roads provide 1 to 3 alternate routes to the borders of the plain and numerous lateral connections. There is no area withing the plain as much as 10 miles in diameter and very few over 5 miles that cannot be entered. via two or more roads of at least secondary quality. In eddition to the roads; all areas have numerous narrow lanes primarily for foot or bicycle traffic; some of these can probably be traversed by jeeps.

Beyond the borders of the plain, 5 of the National Highways continue on outward to provide road comminication between the plain and northern, central, and southwestern Honshu and with the west coast; however, once the mountains are entered, alternate and lateral routes become few in number and widely spaced.

Main Highways:
Details of certain main highways are included in this
discussion because of their important bearing on reinforcement capabili-
ties from other parts of Honshu and indirectly, from other islands:
Nagoya-Tokyo (Tokkaido) Highway: National Highway. From Nagoya to Odawara, two-lane; graded gravel, closely following southern coast. Two-lane concrete across southwestern plain to Yokohama; widens to four-lane concrete, Yokohama to Tokyo. Most direct route of reinforcement from Nagoya area or via that point from southwestern Honshu. Crosses numerous rivers near their mouths on long bridges. A beachhead on the shores of Sagami-wan would cut this route; however, there are alternate routes farther north.

Kofu-Tokyo (Koshu) Highway: National Highway. Two-lane, gravel through mountain passes, Kofu to Hachicji. Enters plain at Hachioji, then continues 20 miles eastward to Tokyo via 2 parallel routes: Three-lane concrete and three-lane gravel. Direct route of reinforcement into western half of plain or Tokyo area from Kofu. Via lateral prefectural roads provides alternate or by-pass route from Nagoya and/or the southwest coast.

West Coast-Takasaki (Nakasenda) Highway: From the west coast and Nagoya a widely spaced net including several National Highways and prefectural roads converges on Takasaki at the extreme northwest corner of the plain; from Takasaki a three-lane, concrete surfaced National Highway runs southeast to Tokyo through level well-drained terrain. By this route and branching prefectural roads reinforcements from the west coast and/or Nagoya can be fed into the northern, central or southwest areas of the plain or into the immediate Tokyo area. North Honshu-Utsonomiya-Tokyo (Rikuu) Highway: The north Honshu road net converges on Shirakawa. From there a two-lane, gravel National Highway runs southward into the plain at its northermost extremity (Yaita), then via Utsonomiya and Koga to Tokyo. At Koga it widens to three-lane concrete and crosses the Tone on a critical bridge 800 yards long. Provides a well covered inland route by which reinforcements from Northern Honshu, the Sendai Plain or the northwest coast can be fed into the northern, central or western portions of the plain.

Sendai-Mito-Tokyo (Rikuzen Hama) Highway: National Highway. From Sendai to Mito, two-lane, graded gravel, closely following east coast Mitoto Tokyo; three-lane concrote via Ishioka, the narrow corridor between Kasumiga-urs and the Abukuma Spur and Tsuchiura. Reinforcements from the Sendai area and other parts of Northern Honshu can follow this route into the northeastern portion of the plain and, if not interrupted, into its central regions. A short advance inland from the northeastern coast will cut this route; however, the alternate inland route through Utsonomiya is equally accessible from Northern Honshu. Within the plain, use of this highway can be restricted by destruction of one or more of 3 important bridges, i.e. those over the Sakura-gawa, the Tone-gawa and the Edo-gawa.

Tokyo Choshi Highway: Two-lane gravel prefectural road. Follows levees and embankments alone south bank of the Tone to Choshi. Important as a possible route of reinforcement of eastern plain region between the Tone and the Chiba Peninsula; however, can be interrupted through destruction of bridges and fills by aerial bombing.

Tokyo-Chiba Highway: National Highway, four-lane concrete. 2 prefectural roads (gravel) branch off into the eastern coastal area. Gravel extensions also fan out from Chiba to the east coast to the southeast coast of the Peninsula and southward along the Tokyowan coast. These roads are likewise important as routes of reinforcement via Tokyo and Chiba to the eastern and southeastern regions, or as axes of inland advance from the east or southeast coasts.
e. Railroad Net: (see Map Encl. 2)
(1) General:

Like the roads, the railroad net of Honshu radiates from Tokyo. Vithin 25 milcs of the city the not is an exceedingly dense web of radial lines, with some transverse connections; outward to the limits of the plain it gradually thins out. Beyond the plain the main lines continue outward following aimost identically the same routes as the National Highways, and either directly, or through junction with local nets, provide through rail connection with all important areas of Honshu. These routes thus constitute important factors in the reinforcement potential; however, from the military viewpoint the railroad net is characterized by the same inherent weakness as the roads;i.e. the numerous critical (and often very long) bridges, both within and without the plain. In addition, beyond the plain the main lines pass through many tunnels. Most of the lines in the western half of the plain are electrified, and it is possible that destruction of power sources may hamper their employment to some extent.

Main lines are double tracked within the plain but with the exception of a few short stretches are all single tracked beyond its borders. Lateral and transverse lines are single track. Track gauge is 3 feet 6 inches except on the main line around the head of Tokyo-wan from Tokyo to Chiba which is 4 feet 6 inches.
(2) Main Lines:

Tokaido (southest Honshu)-Tokyo Route: At Kobe, the railroad net of southwestern Kysuhu converges into this line which runs via Nagoya and along the southern coast to Tokyo. Enters plain at Odawara (southwest corner). Power: Steam except lest 65 miles into Tokyo which is electric. Most direct rail route of reinforcenent from Nagoya and/or Southwost Honshu.

Southwest Honshu-Nagoya-Kofu-Tokyo Route: From the important rail center of Nagoya, this line follows inland valleys to Kofu in the central mountains, thence due east 70 miles to Tokyo. Enters plain at Hachioji about 30 miles west of Tokyo. Fower : Steam, Nagoya to Kofu; Kofu to Tokyo, electric. Alternate inland route of reinforcement from Nagoya and/or Southwest Honshu area; direct route from Kofu area and via cross-island connecting routes, from central west coast.

West Coast-Takasaki-Tokyo Route: From a rail system which parallels the entire west coast of Honshu, a line cuts south from Nagaoka through island valleys to Takasaki at the extreme northwest corner of the plain, thence 65 miles southeast across the west half of the plain to Tokyo. Power: Steam, except the last 20 miles into Tokyo which is electric. Route of reinforcement from west coast and/or direct from Takasaki area into western half of plain and Tokyo area.

North Honshu-Fukushima-Utsonomiva-Tokyo Route: Rail lines from Aomori, northwest coast cities, Sendai converge into this line. Fnters plain at Yaita near its northern extremity. Runs south across west half of plain via Utsonomiya and Koga to Tokyo. Power: Steam,
except last 40 miles from Koga to Tokyo which is electric. Inland route of reinforcement from Northern Honshu and northwest coast into northern or western portion of plain.

North Honshu-Sendai-Mito-Tokyo Route: From Aomori near the northern end of Honshu, line runs south through an inland valley to Sendai. From Sendai, it closely parallels the east coast to Mito at the northeast corner of the plain; thence southeast 65 miles across the plain to Tokyo. Power: Stean, except for a short stretch entering Tokyo.
(3) Lateral Lines Across the Tokyo Plain: It will be noted that with the exception of the Serdai-Mito-Tokyo route, all the incoming rail lines from distant areas of Honshu feed into the western half of the plain. The lateral and trensverse lines thus achieve importance both as routes of supply to troops defending the coastal areas and as routes of deployment for reinforcements arriving in the western plain or the Tokyo area.

Northern Area: From Takasaki a transverse, stean-powered line runs eastward along the northern foothills to Oyama, thence across the Abukuma Spur to Mito. It thus joins the west coast Takasaki, the north Honshu-Utsonomiya-Tokyo and the Sendai-Mito-Tokyo main routes.

Eastern Area: From Omiya ( 20 miles northwest of Tokyo), a steam line runs eastward via Datsukabe, crosses the Edo-gawa and thence to Abiko in the Tone valley. It then follows the south bank of the Tone $t$ o Choshi on the east coast. This line provides lateral connection across the, central plain between the West Coast-Takasaki, the North Honshu-Utsonomiya, (as well as its parallel alternate Tokyo-Nikko line), and the Sendai-Mito-Tokyo lines.

From Tokyo a main electric line runs along the head of Tokyo-wan to Chiba. 2 Steam-powered extensions reach the eastern coastal region; other extensions extend south, southeast, and southwest into the Chiba Peninsula.

Southwestern Area: Although the net generally converges on Tokyo through this region there are a few north-south laterals. One steam line skirts the entire western border of foothills from the shores of Sagami-wan to Takasaki and thus provides connection between the NagoyaTokyo, Kofu-Tokyo, and Hest Coast-Takasaki lines.

## f. Landing Beaches:

See Map and Chart Encl. 4.
g. Influence of Terrain on Operations:
(1) Kashima (North) Beach Inland: (see Maps Encls. 1,2,3,4)

If a deep inland advance be contemplated, landing must
be made in the northern 12 miles of this beach. Inland movement from landings farther south would be limited to a depth of 3 to 5 miles by Kita-ura and the Tone-gawa; however, 2 airfields could be secured by a landing about 15 miles north of Choshi (mouth of the Tone) and advance across this narrow area.

Troops landing on the northern 15 miles of Kashima Beach would be obliged to immediately climb steep bluffs 100 to 130 feet high which command the beach at a distance generally 200 feet or less from the water line. However, once established on the high ground a westward advance toward the Abukume Spur or the eastern entrance of the Ishioka-

Tsuchiura corridor would enjoy the advantages of level well-drained, terraced terrain, an ample net of axial and lateral secondary roads and easy cross-country movement. Rice areas are relatively small and scattered; in 2 stream valleys approximately 6 and 12 miles inland they form intermittent belts generally across the front, but the fields composing these belts are very narrow, from 50 to 300 yards wide. One airfield would be captured by an inland advance of only 2 to 3 miles and 2 more by an advance direct to Ishioka. Advance to any point on the line, Mito-: Ishioka would cut the main Sendai-Mito-Tokyo (Rikuzon Hama) highwey and railroad. Maneuver to the north would be restricted for the first 5 miles inland by Lake Henuma, but would be free thereafter.

Movement through the Ishioka-Tsuchiura corridor would encounter similar level dry terrain and except in the immediate vicinity of Ishioka a minimum of very small scattered ricafields. Approach to, and passage through, the 4 mile wide corridor would be effectively. dominated from the north by the high ground of the Abukuma Spur. However, if the Spur, or at least its southern portion, be captured, good observation would be secured over areas of subsequent advances, either southwest into the heart of the plain or to westward into its northern regions. Exit from the corridor is across the unfordable Sakura-gawa and a fairly broad belt of ricefields that cover its valley, and maneuver to the south is restricted by the northwest arm of Kasumigaura; however, passage of the corridor presumes possession of at least the southern portion of the Abukuma Spur, which would also dominate any defensive position along the Sakura-gawa.

Emerging from the corridor, a movement southwest toward Tokyo would enjoy relatively easy going for approximately 10 miles and could be made on a broed front. The three-lane concrete surfaced MitoTokyo highway forms the axis of an ample net of forward and lateral secondary roads. Ricefields generally from 4 intermittent belts across the front but the belts are narrow, mostly 100 to 200 yards wide, and broken by more numerous and wider intervals than those east of the corridor. To the east, maneuver is relatively free; however, to the west
it is progressively reștricted by the Kinu-gawa. This area contains 4 airfields, including 2 main bases.

For the next 4 miles of advance into the valley of the Tone-gawa, ricefields, though still small, increase in density and maneuver to both flanks becomes moro restricted by streans.

The Tone-gawa would be a definitely major obstacle at any season of the year. It is always unfordable. In wet soason its width expands to 2 to 3 miles by natural flooding; by breaking dykes the area from 6 to 8 miles north of the river can also be submerged to depths of 1 foot or more.

South of the Tone both forward movement and lateral maneuver would encounter increasing difficulty. 2 to 3 miles south of the Tone the mile-wide lake, Tega-numa, parallels the Tone on a front of 8 miles and there are several smaller lakes in the area. Units maneuvering to the west would enter the narrow angle between the Tone and the unfordable and even deeper Edo-gawa; their movement would be further restricted by a canal joining the two rivers. To the east, the W-shaped lake, Imba-numa, sprawls across half the area between the Tone and the head of Tokyo-wan. The Edo-gawa valley contains extensive ricefields; in wet season its width increases to 2 miles by natural floods, to nearly 10 miles if artificially flooded.

Advance to the Tone would deprive the Jap of its use as a possible route of reinforcement and/or supply for his forces in the Kujukuri Beach or Chiba areas. Extension south of the Tone would progressively deprive him of several, and eventually of all land routes to the same areas. However, as previously pointed out, he might then resort to overwater communication across Tokyo-wan. There are 3 airfields, including 1 main base between Tega-numa and the Edo-gawa, and 1 in the angle of Imba-numa.

It is estimated that after a beachhead five miles deep has been established the road net through the zone discussed above has the necessary capacity to maintain approximately 9 divisions until the advance enters the Ishilka Corridor; thereafter the capacity is suffi* cient to maintain only 3 divisions.
(2) Ku.jukuri (Center) Beach Inland: (see Maps Fncls. 1,2,3 H) If the landing be made in the central third of Kujukuri Beach, the first 8 miles of inland advance would be across a flat coastal plain, a large proportion of which is covered with ricefields. The area from 6 to 8 miles inland is practically a continuous broad belt of rice land, 1 to 3 miles wide. However, many roads lead inland through the rice area and routes through the fields are available if some bridging is accepted; also movement across this rice land will be less difficult than normally, due to the sandy condition of the soil. A 5 mile advance through this area would secure 2 to 4 airfields, dependent on the frontage of advance.

Behind the rice belt, the terrain rises to a high terraced area which extends nearly 30 miles to the Edo-gawa. In the first four miles of advance over this high ground troops and vehicles would encounter numerous steep slopes. These would be difficult in wet weather; in dry weather, although they would tend to channelize cross-country movement into the valleys and the gashes and gulleys leading on to the terraces, it is not believed they would present extreme difficulty.

From 12 miles inland the advance would enjoy flat to gently rolling terraced terrain. Rice fields are sufficiently narrow and scattered to present no great problem. At least 3 gravel surfaced prefectural roads traverse the area in the direction of Tckyo, and there are numerous other roads, bcth axial and lateral. Maneuver to the south would be relatively free; however, wide movements would be dominated by the Chiba Hills, and if directed intc the hills would find rugged going cross-country. Tc the north maneuver would encounter relatively dense rice coverage, but would be aided by a dense road net. About 20 miles inland the lake, Imba-numa would either force movements through the northern area to converge the the south, or channelize them into the very narrow corridor between the Lake and the Tone-gawa; however a gravel road and railroad traverse this corridor. 3 additional airfields lie in the path of advance from Central Kujukuri Beach to Chiba. Extension of the advance to the southwest along the west coast of the Chiba Peninsula
would encounter dense rice land, and if directed farther inland the rugged Chiba Hills. There are numerous prefectural roads in this area but in general the most extensive net runs perpendicular to the direction of advance. However, an advance into the western half of the Peninsula would tend to restrict the enemy's capability to reinforce and supply his forces in the Chiba area via Tokyoman.

West of the Iine Chiba-Imba-numa, the advance toward Tokyo would traverse level to gently rolling terraced terrain until it entered the valloy of the Edo-gawa. An excellent road net, including concrete and gravel surfaced highways would be available; in this area; the main net tends to converge on Tokyo, but there are many laterals. Only a few very small scettered rice fields would be encountered. However, except in its final approach to the Edo-gawa, the advance would be restricted to a front of approximately 15 miles botween Imb amuma and the head of Tokyo-wan.

The final approach to the Edo-gawa from this direction would be subject to the same difficulties discussed with respect to the southwest advance from Kashima Beach in par. I I g. (I) above. It is noteworthy, however, that the Edo-gawa would be the only stream over 5 feet deep oncountered throughout the full depth of advance, and no pert of the zone considered is subject to either natural or artificial flooding.

The road net from Kujukuri Beach has sufficient capacity for five miles inlard to maintain 10 to 12 divisions, and 9 divisions beyond that depth. After the port of Chibe is captured and placed in operation, maintenance capacity would be considerably increased.
(3) Chigasaki (South) Beach Inland: (see Maps Encls. $1,2,3,4$ )

A northward movement from the shore of Sagami-wan would traver se a north-south corridor approximately 22 miles wide between the bordering western mountains and the west shoro of Tokyo Bay.

The western half of the corridor is dominated by the foothills along the base of which flows the Sagami-gawa. In its southern valley this river is deep and in wet season floods to 1 mile width. Adjacent areas, 1 to 3 miles wide, can be artificially flooded to shallow
depth. This river thus forms a barrier to maneuver through or against the western foothills; on the other hand it also offers some protection to the west flank of a northward movement.

Movement toward Tokyo and/or the western plain region would have the use of an excollent road net of any number of axial and lateral roads and would be made largely over terraced terrain. For approximately 16 miles inland only smal scattered rice fields would be encountered.

Farther north, cross-country movement in the eastem half would face some difficulties; however, none are believed insurmountable. West of Yokohama the advance would enter a belt of high, gashed, terraces, often heavily wooded and edged by steep escarpnents which become cliffs in the Tokyo area. However, there are 2 or 3 level valley corridors leading into the Tokyo-Yokohama area. West of Kawasaki there is a 5 to 6 mile belt of large ricefields; however, the rice is of the terrace variety and roads and routes through the fields are numerous. Rivers across the front of advance are generally under 5 feet deep. However, the Tana-gawa which flcws into Tokyo-wan just south of Tokyo is deep and unfordable, particulerly in its lower valley. In wet season it widens to 1 mile by natural flooding and for a distance of approximately 10 miles from its mouth a shallow flooded area 10 to 5 miles wide can be artificially added to its width. This river and 2 or 3 others farther south afford the enemy successive potential lines of river defense.

Maneuver along the east flank of the corridor would be obliged to traverse the dense urban area of Yokohama-Kawasaki-Tokyo. The principal obstacle to a northward movement to the west of Tokyo would be the upper Tana-fowa, but once it is crossed movement becomes relatively free as far north as Kawagoe, where it would encounter the unfordable Ara-Kawa.

An advance of only 3 miles from the head of Sagami-wan would cut the main Tokkaido railroad and highway from Nagoya, however, a deep advance of approximately 25 miles would have to be made to cut all
the various alternate routes. Even then reinforcement from Nagoya is still possible by extremely long routes via Takasaki.

Two airfields, one of which is a main airbase, would be secured by an advance of only 3 miles from the beaches, another main base in the center of the corridor by extension to 8 miles, and there are 5 or 6 other fields scattered through the area west of Tokyo.

It is estimated that the road net inland from Chigasaki Beach has sufficient capacity to maintain a force of 15 divisions.
2. Weather:

See Chart Encl. 5.

## II. EST MAATE OF THE ENEMY SITUATION:

1. Forward Areas:
a- Ground Forces:

## (1) Trends:

The Japanese clearly understand that an amphibious assault on their home islands will be launched in the near future, as yet they are uncertain as to either time or direction of attack; their will to fight remains strong and they are exploiting whatever time remains available to prepare for an all-out sustained defense of their final Battle Pósition. Current plans and movements clearly emphasize their intention to strengthen the Empire garrison to formidable proportions without delay, irrespective of what becomes of their outer perimeter conquests.

Consequently all ground reinforcement of outlying areas from Empire sources is believed to have ceased. Formation of new Divisions and Independent Mixed Brigades within the Empire is being expedited. Although Manchuria has already been severly drained of first line troops, 4 more divisions have recently been withdrawn to the Empire. This latter action provides a measure of the urgency the Japanese attach to rapid completion of their plans; faced with potential entry into the war of the U.S.S.R. they realize that Manchuria also is likely to become a critical sector at any time, yet they have not hesitated to drain it, on the chance that they will be able to restore its strength by withdrawals from China. Meanwhile, remnants of their forces in the Philippines, the Ryrukyus, and the Bonins continue to fight bitter last-man delaying actions in the hope of gaining additional time.

High command structure is being re-aligned and strengthened. Empire forces have recently been regrouped under two General Army (Army Group) Commanders, each controlling three Area Armies. Tactical organization for battle is being improved by grouping Divisions and Brigades into Armies (Corps). Experienced field commanders are being assigned to Depot Divisiuns, both as a means of speeding their training and in order to facilitate their rapid activation into combat units.

Vigorous measures are being taken to implement the Japs' vast manpower reserve. The male civilian population over and above.
requirements of the actual armed forces is being formed into "Special Guard Units" and "Citizen Volunteer Units". It is significant that the rank of commanders in recruiting districts corresponding to commands of given size has been stepped-up one grade. This is probably pursuant to both intensified procurement for the actual armed forces, and the broad program of mobilization for at least limited service of all males able to bear arms.

Likely objective areas are being cleared for action. Non-combatants are being evacuated from critical areas. It is believed that efforts are being made to disperse war industries, where practicable, to the Asiatic mainland; and there have even been unconfirmed suggestions of preparations to move the Imperial family to Korea.

The Japanese have correctly, estimated the Tokyo Plain to be an ultimate, if not an initial invasion objective. Known activities there reflect the general trends noted above; it is evident that the defense plans now being placed in execution materially strengthen the area both in combat troops and defensive installations.

## (2) Command Structure:

The Tokyo Plain is a part of the area of responsibility of the Twelfth Area Army, Headquarters at Tokyo. Immediate tactical control of the mobile combat formations disposed in the Plain is vested in the Commander XXXVI Army (Corps), Headquarters at Chiba. By target date, it is probable that the increased number of divisions then disposed in the area will have resulted in the formation of at least one additional Army (Corps).
(3) Current Strength:

Overall ground strength in the Tokyo Plain is currently estimated at approximately 366,000 troops of all classes. Of these approximately $\mathbf{1 7 7 , 0 0 0}$ are classified as mobile combat, including:

4 Infantry Divisions
1 Armored Division plus 1 Tank Regiment
2 Depot Divisions
1 Unassigned Infantry Regiment
2 Corps Artillery Regiments
Fortress troops
2 Special Naval Landing Forces
Miscellaneous u/i combat units and partially trained Infantry and Artillery Regiments.

The remainder include Air-Ground personnel, Naval Base Forces, and Army Base and Service Troops.

Mobile combat units, estimated strength and the propor-
tion of troops in each classification are listed in the following table:
TABLE I
ESTIMATED ENEMY TROOP STRENGTH, TOKYO PLAIN

| CLASSIFICATION | ESTIMATED STRENGTH | PRESENT <br> LOCATION | DATE |
| :---: | :---: | :---: | :---: |
| MOBILE COMBAT: |  |  |  |
| Field Units: |  |  |  |
| 1st Guards Division | 16,000 | Tokyo | 6/44 |
| 3rd Guards Division | 16,000 | Tokyo | 1/45 |
| 8lst Division | 16,000 | Utsunomiya | 7/44 |
| 93 rd Division | 16,000 | Chiba? | 4/45 |
| lst Armored Div (a) | 14,500 | Tochigi Prov? | 5/45 |
| 2nd Tank Regiment | 650 | Tsudanuma | 9/44 |
| 7th Guards Inf Reg't | 3,500 | Tokyo | 8/44 |
| 25th Med Arty Reg't | 1,200 | Tokyo | 4/43 |
| 1st Inf Mortar Reg't | 1,500 | Numata | 3/44 |
| Tokyo Bay Fortress | 3,200 | Yokosuka | 3/45 |
| Yokosuka Hry Arty Reg't | 1,550 | Yokosuka | 3/44 |
| Kure No. 101 SNLF | 1,000 | Tateyama | 4/44 |
| Sasebo No. 102 SNLF | 1,000 | Tateyama | 4/44 |
| Units in Training: |  |  |  |
| 2nd Guards Depot Division | 20,000 | Tokyo | 1/45 |
| 51 st Depot Division | 20,000 | Utsunomiya | 6/44 |
| 1st Inf Repl Unit | 3,100 | Kawasaki | 4/44 |
| 2nd Inf Repl Unit | 3,100 | Chiba | 4/44 |
| 8 th Med Arty Repl Reg't | 750 | Tokyo | $3 / 45$ |
| $18 t h$ Med Arty Repl Reg't | 750 | Chiba | $8 / 43$ |
| Yokosuka Hvy Arty Repl Reg't | 850 | Yokosuka | 3/44 |
| U/i Combat Units (b) | 36,850 |  |  |
| Total, Mobile Combat | 177,500 |  |  |
| NAVAL BASE TROOPS: |  |  |  |
| Yokosuka Guard Force | 800 | Tokyo Bay | 11/44 |
| Tateyama Guard Force | 1,000 | Tokyo Bay |  |
| Yokohama Guard Force | 1,000 | Tokyo Bay |  |
| Yokosuka Guard Force | 800 | Tokyo Bay | 11/44 |
| Yokosuka-Tokyo A/A Def Cmd | 10,000 | Tokyo Bay |  |
| U/i Naval Ground Units | 25,600 |  |  |
| Total, Naval Ground Units | 40,000 |  |  |
| AIR-GROUND PERSONNEL: |  |  |  |
|  | 49,000 (ci: |  |  |
| Navy | 55,000 (ct |  |  |
| Total, Air-Ground Personnel | 104,000 (c) |  |  |
| BASE AND SERVICE TROOPS: | 45,000 |  |  |
| AGGREGATE | 366,500 (c) |  |  |
| Recapitulation: |  |  |  |
| Mobile CombatNaval Ground Troops |  | 177,500 40,000 |  |
|  |  | 104,000 (c) |  |
| Base and Service |  | 45,000 |  |
| Aggregate |  | 366,500 (c) |  |

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(Table I, cont'd)
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(a) Indicated moving from Manchuria
(b) Computed on a pro-rata basis of units known to be on Honshu but whose exact location is unknown.
(c) Does not inciude flying personnel of Aviation Units
(4) Current Dispositions:

See Map Encl. 7.
(5) Estimated Strength as of Y-Day.
(a) Army and Navy Troops:

It is probable that overall strength in actual Army and Navy ground troops disposed in the Tokyo Plain in the Spring of 1946 may not greatly exceed current figures. This is die to the fact that the reinforcement program in this area is already far advanced, and to the anticipated withdrawal of a number of air tactical units now based in the Plain to more distant fields which will cause a considerable reduction in air-ground personnel. Greater significance however, attaches to changes in composition; it is expected that the proportion of mobile combat troops will be substantially greater.

Probable overall strength in full-fledged members of the military and naval services is estimated at approximately 370,000 to 390,000 troops of all classes. Probable mobile combat strength is estimated at 198,000 to 215,000.

The number of infantry divisions will have been increased from four to at least five and probably to six. The new divisions may be activated by the two Divisional Depots in the area during the intervening period; one or both may be brought in from Manchuria or elsewhere. In the event they are newly activated divisions, the depots will have begun the organization and training of 2 additional divisions. Some increase in Corps and Army Artillery is also expected.

There is no reason to anticipate an increase in overall naval ground strength; however, it is probable that the currently large proportion of $u / i$ Naval ground units includes additional SNLFs, and that the naval component of estimated mobile combat strength will also have been increased by their subsequent identification.

Base and service troops may also be expected to
increase somewhat, in proportion to the combat echelons they serve.
(b) Citizen Volunteer Units and Special Guards Units.

It must be remembered that the foregoing analysis treats only of organic units of the Army and Navy. However, in evaluating total Japanese power to resist invasion, some consideration must also be given to the large number of volunteer defense units which are already being formed throughout Japan. These units will be largely composed of partially trained reservists and by the Spring of 1946 should have developed limited defensive combat value of a purely local nature. It is possible that overall strength in this category in the Tokyo Plain might exceed 500,000 men by $Y$-Day. However, this figure is not to be taken as a true index to combat power; these men will be only lightly armed, widely dispersed in small groups and relatively immobile. Effectiveness against well-trained organized troops will be relatively low in defense; offensive capabilities practically nil. However their elimination will require expenditure of time and means and they will have considerable nuiaance value. They will enable the Japanese to fight short local delaying actions without sacrificing trained troops; and they will require us to commit additional forces to guarding lines of communications and to security missions. Also, being partially trained and equipped, they will furnish the Japanese with a widely distributed and readily available source of replacements by which the deterioration of combat divisions from wastage may be retarded.
(c) Estimated Strength, Al1 Combatant Personnel:

It is therefore estimated that by Y-Day, overall
enemy ground strength including all classes of combatant personnel will be approximately as listed in the following table:

TABLE II

| Classification | Probable Strength | Included Units |
| :---: | :---: | :---: |
| Mobile Combat | $\begin{aligned} & 198,000 \text { to } \\ & 213,000 \end{aligned}$ | Infantry Divisions: <br> lst Gds; 3rd Gds; 8lst: 93rd; $2 \mathrm{u} / \mathrm{i}$ <br> Divs; 2nd Gds Depot Div; 51st Depot Div. <br> Armored Units: <br> lst Arm'd Div; 2nd Tk Reg't. <br> Corps and Army Artillery: <br> 25年h Med Reg't; lst Inf Mortar Reg't; <br> Tokyo Hvy Arty Reg't; u/i Arty. <br> Naval Ground Units: <br> Kure 101 SNLF; Sasebo 102 SNLF; u/i SNLFs. <br> Miscellaneous: <br> 7th Gds Inf Reg't; 2 Inf Repl Reg'ts; <br> 3 Arty Repl. Reg'ts; u/i combat units. |
| Naval Base Troops (a) | 37,000 to 38,000 | Base Forces, Guard Forces, Barrack Units. and Miscellaneous. |
| Air-Ground <br> Personnel <br> (b) | 60,000 | Ground crews, overhead, and Service Echelons of tactical units; Airdrome Bns; Avn. Constr. Bns. |
| Base and Service Troops (c) | $\begin{array}{r} 55,000 \text { to } \\ 60,000 \end{array}$ | A/A; Engr; Med; Sig; Port and Shipping Units; Q.M.; M.P.: etc. |
| Aggregate, Army and Navy: | 350,000 to 371,000 |  |
| Civilian Volunteer Units (d) | $\begin{aligned} & 500,000 \text { to } \\ & 600,000 \end{aligned}$ | "Citizens' Volunteer Units"; "Special Defense Units". |
| Aggregate: | $\begin{array}{r} 850,000 \text { to } \\ 971,000 \end{array}$ | All classes of men under arms. |

(a) Esperience has shown that troops in this classification while, relatively immobile, usually have considerable combat value, particularly in defense.
(b) May be employed in closemin defense of airfields and/or in combat units as replacements.
(c) Normally of low combat value; however will usually fight when cornered and are often employed as replacements in combat units.
(d) Of limited cambat value for local defense, particularly suicidal delay and harassing missions. See Sec II, par. l.a.(5) (6) above.
(6) Probable Dispositions as of Y-Day (See Map Encl 8):

## (a) General:

Japanese dispositions in recent defensive actions
cannot be accepted as a guide to their deployment in the Tokyo Plain; rather, the mission and the terrain suggest the probable pattern. On the basis of current information, it is estimated that as of Y-Day, enemy dispositions in the Plain will be approximately as shown on Map Encl 8.

## (b) Beach Groups:

In the battles on the approaches to the Empire, the Japs have in general avoided the shorelines and organized their most forward positions well inland; however, these actions have been fought by limited forces striving for maximum delay and attrition on Allied forces. Therefore they have found it expedient to avoid the heavy initial losses which our heavy preparatory bombardments inflict on troops occupying the beaches, and to prolong resistance by forcing us to hunt them down and then to engage in costly attacks against positions of their own choosing.

On the other hand, in the Tokyo Plain the Jap will be conducting sustained defense on his main battle position and manpower will be exceedingly cheap. Although he will strive to conserve his best troops for employment in less costly inland defense and (he hopes) ultimately in counter-offensive action, he will be loath to relinquish the casualty producing capabilities of a strongly organized beach defense. For this suicidal yet potentially productive mission he will have available large numbers of his partially trained and equipped volunteer defense units. He will be quite willing to pay a large bonus in these inferior troops for whatever casualties they may be able to inflict on our assault waves during their period of maximum exposure.

In view of the great number of these units that will be available and their distribution through all parts of the Plain, it is probable that practically all the 190 miles of the plain's coast line except the.shores of Tokyo Bay will be occupied by at least a line of observation. Density will of course vary widely; critical beaches, e.g. Kashima, Kujukuri, and Sagami will be defended by substantial concentrations of reservists stiffencd by a leavening of regular troops; beaches of lesser importance by relatively thinner garrisons, and unlikely landing areas, c.g. the Southeastern Chiba coast, only by scattered observation posts.

If the Japanese fully exploit the time at their disposal, beach groups, particularly those occupying critical beaches, will enjoy every advantage field fortification can provide to increase and prolong their casualty producing powers. They will be well supplied
with automatic weapons and mortars, with ammunition for prolonged periods dumped on position. They will be well dug in, and pillboxes, blockhouses and other intrenchments will be carefully sited to enable them to cover the water approaches, the beaches, and routes leading inland with a heavy volume of closely integrated fires. Obstacles will be placed to channelize our advance into the best fields of fire and both beach areas and inland routes will be extensively sewn with land mines.

The shores of Tokyo Bay, including those of Uraga Strait and the southwestern coast of the Chiba Peninsula, will probably be defended by naval base defense troops and by the Army Yokosuke Fortress Unit.
(c) Holding Garrisons:

It is expected that the Japanese will have disposed 3 to 4 infantry divisions (depending on the total number available) in strongly organized defensive positions behind the eritical beaches and blocking the main routes into the heart of the Plain. Positions will be selected so as to place main lines of resistance as close to the beaches as practicable without exposure to our preparatory fires and with due regard for maximum exploitation of strong terrain.

Terrain factors, relative desirability of landing beaches, and geographical location of important objectives suggest the following as the most likely deployment of forvard divisions:

1 reinforced division in the Ahukuma Hills-Mito-Kasumiga-Ura (northeast) area, blocking the entrance to the Isioka-Tsuchiura corridor.

At least 1 reinforced division between the Tonegawa and the Chiba Hills (central eastern area) blocking the routes of advance from Kujukuri Beach toward the head of Tokyo Bay and the Tokyo City area.

At least 1 reinforced division behind the shoreline of Sagami-wan, between the west coast of Tokyo-wan and the western bordering mountains (southwest area), blocking the shortest corridor into the heart of the Plain.
(d) Reserves:

It is expected that in the initial deployment a
major portion of the mobile combat strength within the Plain will be held in mobile reserve. Forces thus employed will probably include:

2 to 3 infantry divisions
2 depot divisions

Part or all of the Armor
Miscellaneous smaller and/or u/i combat units
A portion of the reserve divisions may have been released to Armies (Corps) by the time of our assault; the remainder will be held in General Reserve under Area Army control.

Prior to our advance, the bulk of divisions and other units in reserve will probably be located west and north of the line Abakuma Spur-Mito Highway-Tokyo-Kofu highway. Within this area the larger units will probably be well dispersed to avoid bombing losses and for the same reason will avoid important urban areas, but will be located with easy access to the roadnets leading to possible areas of employment. In this connection, inland waterways must not be overlooked as possible routes of forward movement. The Tone, the Edo-gawa and several smaller rivers are navigable deep into the northern-central-western regions of the Plain and the Japanese are traditionally adept at movement by barges and river craft. This same factor may influence the degree of immobility which can be imposed upon the Japs by destruction of critical bridges over these wide streams. They will probably have foreseen this contingency and made provision to offset it by utulization of improvised ferries. Tokyo Bay, easily crossed in one night must also be considered a feasible route by which reserves may be shifted from the Chiba Peninsula and the area south of the Tone to the area west of Tokyo and vice versa.

Disposition of the Armor will depend on whether or not the Japanese have drawn any lessons from its abortive misuse on Luzon. If they have, they will probably hold the bulk in general reserve for concentrated emplyment; however, there may be a tendency to disperse it, at least partly, to Corps or even to smaller commands for use in local counterattacks. If they again depart from the principle of mass, it is believed likely that at least one Tank Regiment may be disposed in the area south of the Tone and east of the Edo-gawa; this area eastward to Kujukuri Beach provides good tank terrain and getting it across the Tone and/or the Edogawa would cease to be a problem.

The two partially trained Depot Divisions will probably continue training as long as possible, but their equipment will
be rushed to completion so as to render their activation a mere formality.
The SNLFs willprobably be disposed in the Chiba Peninsula for mobile employment.
(7) Fixed Coastal Defenses:

Insofar as known, only the head of Sagami-wan (southwest area), both shores of Uraga Strait (entrance to Tokyo Bay) and a small area near the extreme northeast corner of the Plain aro defended by heavy seacoast batteries. The heaviest concentration of fixed defenses lies astride the entrance to Tokyo Bay; approximately 40 guns of 9 to 16 caliber are believed to flank the $10-\mathrm{mile}$ wide Uraga Straits, and a large proportion of these can probably cover the northeast portion of Sagamiwan with their fire.

A considerable number of $A / A$ guns are located at intervals on or close behind practicelly all important beaches, usually in the vicinity of airfields; it is probable that these weapons are sited to permit them to fire alternate beach defense missions.

Locations of currently known seacoast and coastal A/A guns are shown on Map Encl 12.
b. Air Forces:
(1) Trends:

Current trends suggest that the Japanese are fully alive to the disastrous implications of their unenviable air situation. The heavy losses suffered during their vigorous initial reaction to our advance into the Ryukyus have reduced overall strength in first-line combat aircraft assigned to tactical units and based in the Empire to approxinately 2,400. The Japs realize that reconstitution of their air strength will be a race against time if it is to become an appreciable factor in the defense of the home islands.

Recent developments suggest that they have reverted to their former policy of conservation, insofar as combat aircraft and trained crews are concerned. Although they continue to support their delaying ground action in the Rynkyus with relatively heavy air attacks, the quality of these attacks has been sharply reduced. Attacking formations are now composed principally of obsolescent and training type planes
manned by relatively inexperienced pilots. By this means they hope to conserve their dwindling reserve of first-line planes and pilots for last ditch defense of the Empire while maintaining a show of vigorous air activity and, since these inferior aircraft are quite suitable for suicide missions, purchase occasional successes at minimum cost.

Despite conservation of their best aircraft and pilots and the assignment of the highest priorities to new aircraft construction, their efforts to rebuild air strength face formidable obstacles. B-29 and carrier strikes have already cut production rates almost in half and further reductions are anticipated. Estimates of average monthly production of combat aircraft for the remainder of 1945 range from 500 to 1000 per month, against probable monthly losses of 1000 to 1500 ; a net reduction in overall strength of approximately 500 aircraft per month. Therefore it is conservatively estimated that by target date the overall number of aircraft of any combat effectiveness available to the Japanese will be approximately 2500. This estimate includes aircraft in the following categories: First-line combat aircraft, obsolete or obsolescent combat models and advanced trainers; it does not include the elementary trainers (of which there may be as many as 3000 in the Empire), whose effectiveness in combat would be practically nil. This figure also assumes that the all-out reaction to, our assault on Kyushu will be short-live; should the Japs continue to make strong commitments beyond the time they realize their inability to prevont a landing, the overall figure may be correspondingly lower, and if their effort be greatly prolonged, their air capabilities against our Tokyo Plain operations may be reduced to guerrilla raiding.

The introduction of new and improved conventional aircraft types may be partly arrested by our strategic bombing. However, uso of the suicide-piloted rocket-plane BAKA may increase. Employment of ground-launched V-type weapons, similar to the German jet-propelled $V-1$, has not occurred to date; however, it is known that the Japanese are interested in these, and they may be introduced by the time of our invasions of the Empire proper.

The Japanese air crew training program has been disrupted and curtailed with both training aircraft and trainees now being committed directly into combat. After establishment of our land-based aircraft on Kyushu, rear areas with the security necessary for a balanced air-crew training program will be virtually non-existent. Increasing difficulty is being experienced in replacing, maintaining and servicing aircraft, with all air facility installations in Japan subject to increasing neutralization.
(2) Command Structure:

Overall strategic control of current offensive air operations is being exercised by the C-in-C of the Combined Fleet with tactical control under the First Mobile Base Air Force and SKY Air Forces in Kyushu. Some Army air elements are thus under temporary Naval tactical control. The buik of the Army Air Force is under the command of the General Air Command with headquarters in Tokyo. It is probable that with a further shifting to the defensive, increasing control will be exercjsed by the Army over Empire Air defense.
(3) Current Strength and Dispositions:

Overall strength in combat aircraft in tactical air units based within forward areas of the home islands is currently estimated at 2,215 planes of all types. Distribution by types and areas are set forth in the following table:

| Area | Bombers | Fighters | Pecce | Total |
| :---: | :---: | :---: | :---: | :---: |
| Central Honsnu (KobeOsaka area to Sendai area, both incl.): | 425 | 700 | 300 | 1,425 |
| Southwestern Honshu-Shikoku-Kyashu | 215 | 430 | 145 | 790 |
| Aggregate | 640 | 1,130 | 445 | 2,215 |

In addition to the above, it is estimated that some 4,000 aircraft, including, obsolete and obsolescent combat models in training units and advanced trainers are available within the Empire. In view of the fact that the enemy is now employing this class of materiel freely in suicide efforts, it is necessary to accord them limited consideration in any assessment of air combat power. The following table sets forth such an assessment:

TABLE IV

| Type of Aircraft |
| :--- |
| First-line combat aircraft (unlimited |
| employment) |
| Aircraft of Iimited effectiveness, <br> (principally suicide crash attacks) <br> Aggregate |

(4) Estimated Strength and Dispositions, Y-Dey:

It is estimated that by target date enemy air strength based within the forward areas of the home islands is unlikely to exceed 1,500 aircraft of all classes.

The principal mission of these aircraft will be to afford what protection they can to the vital Plain area; therefore the Japanese will desire to base them at maximum bombing range from our advanced bases insofar as compatiblewith employment on interception missions over Tokyo and adjecent areas. By this time our air forces operating from the Ryakyus and Kyushu should have rendered Kyushu, Southwestern Honshu and Shikoku fields untenable as main bases and the principal air centers within the Tokyo Plain will be under heavy neutralization; therefore it is expected that the bulk of aircraft in the forward area will probably be well dispersed and based on fields located in remote regions of the Plain, e.g. the Takasaki and Utsonomiya Valley along the central west coast and in other parts of central and north-central Honshu. (See Map Encl. 10).
(5) Airfields:

The number and distribution of airfields
in the Empire proper is set forth in the following table:
TABLE V

| Air Centers | Number of Fields |
| :--- | :---: |
| Southwestern Honshu | 40 |
| Kobe-Osaka | 15 |
| Nagoya | 23 |
| Tokyo Plain | 70 |
| Northern Honshu | 10 |
| Aggregate | 158 |

It is expected that by Spring of 1946, our air forces operating from Ryrukyus and Kyushu bases, together with very long range land-based bombers and carrier-based aircraft, will have established
effective air neutralization over the westerm Honshu, Kobe-Osaka, and Nagoya air centers and to a large extent over the bases within the Tokyo Plain. Although experience has proven that it is extremely difficult to maintain complete and permanent neutralization of a large air center, it is probable that enemy use of most of the fields included in the above listed centers will be limited to intermittent employnent as staging bases.

## c. Naval Forces:

(1) Trends:

Enemy fleet units in the Empire have remained in a more or less quiescent state since the abortive sortie of the lst Diversion Attack Force Suicide Attack Group (Yamato Group) on 6 April, and there is no evidence that further fleet operations are planned or impending. Recent photographs of Empire-based fleet units show a number of major units so elaborately camouflaged that they are not believed to be inmediately available for combat.
(2) Naval Strength in the Empire:

Gurrently estimated enemy naval strength in Empire
waters is set forth in the following table:

| Type: | TABLE VI |  |
| :--- | :--- | :--- |
| Battleships | Number: | Number Operational: |
| Converted Battleships (XCV-BB) | 2 | 1 |
| Aircraft Carriers (CV) | 2 | 2 |
| Aircraft Carriers (CVI) | 4 | 4 |
| Aircraft Carriers (CVE) | 2 | 2 |
| Heavy Cruisers | 2 | 2 |
| Light Cruisers | 3 | 3 |
| Destroyers | 2 | 2 |
| Destroyer Escorts. | 40 | 37 |
| Submarines | 83 | 8 |

Of the ships listed above as operational, three of the CV's were recently shown by photographs to be heavily camouflaged and are not believed to be ready for immediate action. The majority of the operational fleet units are currently located either at Kure (Inland Sea) or at Sasebo (Vestern Kyushu). Prior to Y-Day, Allied air attacks on these areas, continued mining operations in the Inland Sea and the approaches thereto, and our invasion of Southern Kyushu, which may prompt the Jap Naval High Command to launch "all out" surface suicide attacks against
the Kyushu Task Forces, will probably have resulted in either the destruction of these units or in their withdrawal to the upper reaches of the Yellow Sea or Sea of Japan. (See Map Encl 13).

## (3) Construction:

Recent aerial reconnaissance of Jap shipbuilding yards indicate that much of the new carrier construction program has been at least temporarily suspended. However, conversion of one of the two remaining battlships to an $X C V-B B$ (flight deck aft) apparently continues. Photographs on 28 April of this ship, believed to be the Haruna, show all turrets removed and the construction of a flight deck aft underway. Since it is generally believed that the short flight docks of the Ise and Hyaga have met with little success, comversion of the Haruna is hard to understand. It is possible, however, that the enemy has plans to use converted battleship carriers and also regular carriers as mobile bases from which to launch jet or rocket-propelled craft piloted by suicide personnel.

The status of the current carrier construction program is estimated to be as follows:

3 CV's - incomplete. Construction suspended. Heavily camouflaged
$2 / 3$ CVE's incomplete. Construction possibly suspended.

In addition to the carrier construction it is estimated that two heavy cruisers are being built. Also, numeroüs destroyers, submarines, and various types of escort vessels and mall craft are estimated to be under construction.

In view of the fact that Japanese shipyards will continue to be subjected to heavy air attacks, it is doubtful that all of the above-mentioned ships now under construction will ever be launched. However, even assuming that new construction is completed and that damaged vessels are repaired, Japan's over-all naval shipbuilding capabilities are still insufficient to enable her to alter the naval situation and her strength will still be totally inadequate for the defense of Honshu.
(4) Merchant Shipping Position:

As of 16 May, Japan was estimated to have $1,695,035$ tons
of steel vessels of 1,000 gross tons or over; with a reduction of 20 percent for lay-ups and repairs, the total serviceable shipping amounted to 1,356,028. When compared with the seven to eight million tons available early in the war, the present total tonnage appears to be inadequate. However, at that time the enemy was conducting military operations throughout the vast Central and South Pacific, whereas currently as the result of the Allied advance, Japans merchant shipping requirements have been reduced to the maintenance of traffic between the homeland, Korea, Manchuria, China and the Kuriles. These are relatively modest requirements and it is probable that the romaining merchant fleet is at present adequate to meet them. However, stepped up Allied air and submarine operations along enemy Yellow sea shipping routes have, and are expected to continue to exact a heavy toll of merchant shipping, and it is probable that the enemy merchant shipping position will soon become most critical.

Detailed analysis of the dapanese shipping position (in respect to steel vessels of 1000 grt or over) as of 16 May 1945 is set forth in the following table:

TABLE VII

| Tatal shipping available <br> 7 Dec 4l plus all sub- <br> sequent construction and <br> acquisitions through 16 <br> May l945 | No. of <br> ships | Average <br> Tonnage | Total <br> Tonnage |
| :--- | :--- | :--- | :--- |
| Total sinkings to 16 May <br> 1945 | 2,246 |  |  |
| Total shipping afloat on <br> 16 May1945 | 1,699 | 4,073 | $9,148,974$ |
| Minus 20\% repair factor <br> Tonnage Operable 16 May 1945 | 4,387 | $7,453,939$ |  |

As of 1 Febmuary 1945 it was estimated that the Japanese had a total of approximately 3,170 ships of 100 to 1000 grt with an aggregate tonnage of 735,000.

The smallest ships, those below 100 grt (which are not included in the foregoing table), are chiefly engaged in fishing, picketing and general cargo traffic. An approximate break-down as of $I$ February of vessels in this category follows:
Full-powered: About 2,500 ships 125,000 gross tons
Auxiliaries : About 7,000 ships 350,000 gross tons
Total 9, About 9,500 ships 475,000 gross tons

Sailing vessels without engines are estimated as follows:

built numbers of small wooden vessels in all the conquered southern territories. These, engaged chiefly in coastal and inter-island trade in those areas, are not included in the foregoing estimates.

## 2. Rear Areas: (See Map Encil 6).

## a. Ground Forces:

(1) Command Structure:

Mobile combat units in the areas Nagoya-Sendai (both inclusive) may be considered sufficiently accessible to constitute sources of reasonably immediate reinforcenent to the Tokyo Plain. These include: the remainder of the combat troops of the Twelfth Area Army; Combat Units of the Thirteenth Area Army (Headquarters, Nagoya); and that portion of the combat units of the Eleventh Area Army (Headquarters, Sendai) as are stationed in or south of the Sendai Plain.
(2) Current Strength and Dispositions:

Mobile combat strength in this included area is currently
estimated at 120,000 to 125,000 troops including:
2 Infantry Divisions
4 Depot Divisions
3 Independent, Infantry Battalions
1 Infantry Mortar Regiment
5 Artillery Replacement Regiments
Strength and dispositions of these units is listed in the following table:

TABIE VIII
ESTIMATED ENEMY TROOP STRENGTH, CENTRAL HONSHU (Less Tokyo Plain Area - TABLE I)

| CLASSIFICATION | ESTIMATED STRENGTH | PRESENT <br> LOCATION | DATE |
| :---: | :---: | :---: | :---: |
| MOBILE COMBAT: <br> Field Units |  |  |  |
|  |  |  |  |
| 72 nd Division | 16,000 | Sendai | 9/44 |
| 73 rd Division | 16,000 | Nagoya | 3/45 |
| 3rd Inf Mortar Reg't | 1,500 | Sabai City | 9/44 |
| 162nd Spec Garrison Bn | 800 | Nagoya | $3 / 44$ |
| 163 rd Spec Garrison Bn | 800 | Nagoya | $3 / 44$ |
| 164th Spec Garrison Bn | 800 | Nagoya | 3/44 |
| Unitssin Training: |  |  |  |
| 2nd Depot Division | 20,000 | Sendai |  |
| 3rd Depot Division | 20,000 | Nagoya |  |
| 52nd Depot Division | 20,000 | Kanazawa |  |
| U/i Depot Division | 20,000 | Nagano |  |
| lst Indep Mintn Arty Rp Unit | 800 | Takada |  |
| 2nd Med Arty Rp Unit | 875 | Mishima | 4/44 |
| 3rd Med Arty Rp Unit | 1,200 | Mishima | 3/44 |
| 17th Med Arty Rp Unit | 860 | Ishikawa | 3/44 |
| 18th Med Arty Rp Unit | 875 | Ishikawa | 3/44 |
| Total, Mobile Combat | 120,510 |  |  |

(3) Estimated Strength and Dispositions, Y-Day:

It is estimated that by Y-Day mobile combat strength in rear areas with respect to the Tokyo Plain will have increased to 188,000 to 205,000 troops and will include 6 to 7 infantry divisions, 5 Depot Divisions and additional artillery units. For general dispositions, see Map Encl. 9.
(4) Estimated Mobile Combat Strength and Dispositions in

Distant Areas of the Empire Proper:
In addition to the mobile combat units readily available to reinforce the Tokyo Plain, it is estimated that by Y-Day the Japanese will have 13 to 15 active infantry divisions (or division equivalents), 5 Depot Divisions, at least 3 Tank Regiments, additional artillery and miscellaneous smaller combat units disposed in more remote parts of the Empire (exclusive of Kyushu). A major portion of these units will probably be made available for employment in the Tokyo Plain as the action progresses, and eventually nearly all may be. In addition to the above, there will be 6 to 8 infantry divisions and 2 Depot Divisions in Kyushu, but in view of our earlier invasion of that island these units are unlikeIy to be available for reinforcement of the Tokyo Plain.

Probable dispositions of combat units as of $Y$-Day are shown on Map Encl. 9\%.

## b. Air Forces:

(1) Current Strength and Dispositions:

For purposes of this study and from an air viewpoint, rear areas are considered to include that portion of Honshu north of the Sendai area, Hokkaido, the Kuriles, Karafuto, Manchuria, the North China Coast and Korea.

Ovorall strength in combat aircraft, based in rear areas with respect to the Tokyo Plain, is currently estimated at 763 planes. Distribution by types and areas in which based aro set forth in the following table:

TABLE IX

| Area | Bombers | Fighters | Recce | Total |
| :---: | :---: | :---: | :---: | :---: |
| Northern Honshu (north of Scndai): | 10 | 15 | 20 | 45 |
| Hokkaido-Kurilos-Karafuto : | 36 | 52 | 54 | 142 |
| Manchuria-Korea : | 50 | 122 | 95 | 267 |
| China Const (north of Shanghai, incl) | 30 | 160 | 119 | 309 |
| Asgregate first-line planes | 126 | 349 | 288 | 763 |

(2) Estimated Strength, Spring of 1946:

It is expected that before Y-Day, and particularly following our invasion of Kyushu, the encray will have reduced his aircraft commitment in all areas distant from the Empire to mere token forces and will have drawn in all available aircraft; practically the entire remaining strength of the Japanese airforces will then be concentrated within his inner perimeter. Howover, by that time overall air strength will probably have been reduced by losses to approximately 2,000 to 2,500 aircraft of all classes, it is therefore estimated that after deducting the 1500 plancs which will probably be based in forward areas total rear area strength will not exceed 1000 planes of all classes.

It is expected that the bulk of these aircraft will be based in Manchuria, in the vicinity of Shanghai, and possibly in Northorn Korca. Due to the sevorc winter veather conditions of Northern Japan, it is unlikely that any appreciable number will be based in Hokkaido or more northerly areas (see Map Encl. 10).
(3) Airfields:

The airfield net is entirely adequate for basing and staging the maximum number of aircraft likely to be disposed in rear areas. Number and disposition of fields is shown in the following table:

TABLE X

| Air Centers | No. of Fields |
| :--- | :---: |
| Northern Honshu (north of Sendai) | 10 |
| Hokkaido-Kuriles-Karafuto | 50 |
| Manchuria-Korea | 100 |
| North China Coast (including Shanghai) | 10 |
|  | 190 |

## c. Naval Forces:

(1) Naval Strength Southwestern Area:

Currently the only major fleet units oporating outside of Empire waters are located in the Singapore-N.E.I. area where they are engaged in repair and in urgent troop transportation between Singapore and other wialayan or N.E.I. ports. The Southwestern Area Force is estimated to be composed of the following units:

$$
\begin{aligned}
\text { Heavy Cruisers }-3 & \begin{array}{l}
\text { (2 damaged, } 1 \text { possibly to complete } \\
\text { repairs in May) }
\end{array}
\end{aligned}
$$

It is possible that before the proposed operation the enemy will attempt to return these now more or less isolated fleet units to the Empire to bolster his strength there. However, there is no evidence that such a withdrawal is imminent,.. and the above ships may be retained in the Southwestern area to aid in troop movements incident to regrouping.

## III. CONCLUSIONS:

## 1. Enemy Capabilities:

a. Ground Defense and Reinforcement
b. Air Interception and Attack
c. Airborne Harassment
d. Naval Capabilities
a. Ground Defense and Reinforcement:
(1) Plan of Defense:

The Japanese probably accept that they cannot prevent our landing; therefore, it is expected that they will attempt to conduct an active defense within the plain.

Initially, they will strive to soften our assaulting forces by inflicting as many casualties as possible diring our overwater approach, our landing, and our advance through the beach zone. They will plan to check our inland advance through strongly organized defensive positions in depth blocking the inland approaches to the heart of the plain. Finally, if they succeed in halting our advance they will then attempt to destroy our forces ashore by powerful counter-offensives utilizing those defensive positions which are still intact as lines of departure or pivots of maneuver.

## (2) Initial Resistance:

During approach and landing our assault waves will be opposed by the fires of such coastal guns and beach groups as have escaped destruction during our preliminary bombardment, and by long range fires from artillery and mortars emplaced behind the beach defense zone. The offectiveness of these fires will depend upon the extent to which the enemyss fire plans have been dismupted; however, it is probable that some groups particularly those in the rear part of the beach defense zone will survive our bombardment and will continue to offer isolated resistance as our troops advance inland. These groups will be well dug in and will act principally by fire; in general, counter-attacks during the early phases will probably be limited to occasional small-scale "banzai" charges by very small units, principally at night. (See Map Encl. 8).

## (3) Defense of Inland Approaches:

As our advance clears the beach areas and approaches
the higher ground (terraced areas) in rear, organized defensive positions occupied by the forward Infantry Divisions will be encountered. Resistance will be determined and bitter and any penetration into the organized area will be met by prompt counter-attacks by local reserves of battalions and regiments. Division Reserves will counter-attack against larger penetrations or against attacking forces whose advance has been locally checked. If the Jap has disposed a portion of his tanks forward, small tank elements may be employed in conjunction with these counter-attacks, particularIy those delivered by division reserves.

In addition to the divisions disposed on theso defensive positions, the garrisons vill probably include large numbers of volunteer defense units. It is quite possible that the number employed in any division defense sector may be as great or greater then that of organic divisional troops. Volunteer Units will probably be disposed in the less critical sectors of the position; e.g. on extensions to flanks and rear and on fronts protected by formidable obstacles. A portion may be heda available to promptly replace losses in divisional units,

It is therefore estimated that by the time forwardmost battle positions are fully developed our forces will be opposed by enemy strength as follows:

In the northeastern area by 35,000 to 45,000 troops of all classes, including one (1) infantry division.

In the eastern area between the Tone-gawa and the Chiba Hills; by 40,000 to 50,000 troops of all classes including at least one (1) infantry division, and possibly by some additional snaller combat units including up to 1 tank regiment;

In the southwestern area by 45,000 to 60,000 troops of all classes including one (1) to two (2) infantry divisions, Fortress units, and possibly by additional smaller combat units including up to 1 tank regiment. (See Map Encl. 8).
(4) Reinforcement by Reserve Divisions:

Although the Japanese will plan to employ their large reserve in counter-offensive action, they will reinforce the forward defense areas with divisions initially held in Corps and General Reserve to the limit of available strength in order to halt our advances. At the same time, and possibly even earlier, they will move additional divisions from adjacent areas into the plan; throughout the action they will exert extreme efforts to constantly maintain their general reserve at initial
and, if possible, at greater levels in the hope of passing to the offensive at the earliest opportunity.

The number of resorve divisions committed in any one defense area will depend on several contingencies, i.e., the number and relative importance of areas under attack or threatened with attack; the weight and rapidity of our advance; and the terrain. Thus the northeastern area, most distant from the heart of the plain and backed by the strong terrain of the Abukma Spur-Ishioka Corridor-Lake region, will receive a much lower priority for reinforcement than the area south of the Tone-gawa. Retention of the southwestern area which affords the shortest route to Tokyo, possesses few formidable natural obstacles, and contains the most highly developed air centers, may bo considered paramount to denying us access to the good tank terrain north of Tokyo-wan which is backed by the unfordable and easily flooded Edo-gawa.

Rates of arrival of reinforcing divisions will likewise vary with the degree of interdiction of land and water routes from the heart of the plain to the forward defenses. In view of the dense road-net and the adeptness of the Japanese at employing water communications, it iss doubtful that anything approaching $75 \%$ interdiction can be achieved.

Based on the assumption that a limited number of routes of communication remain availeble to the onemy, it is likely that the pattern of reinforcement by reserve divisions might be approximately as follows:

Northeast Area:
I division within 24 to 48 hours after development of main position.

## Central Eastern Area:

1 division within 24 to 48 hours after contact with main position. Additional divisions at an approximate rate of one each 2 to 3 days thereafter until a total of 3 to 4 divisions plus non-divisional troops are deployed in the area.

Southwestern Area:
1 division within 24 to 48 hours after landing additional divisions at an approximate rate of one each 24 to 48 hours therafter until 4 to 5 plus non-divisional troops are deployed in the area.

It is probable that the Japanese will desire to retain the bulk of their armor in general reserve as long as possibile inthe hope of ultimately employing it to spearhead their planned decisive counteroffensive. However, our superiority in this arm will probably force its
early committment, particularly on the southwestern front. (see Map Encl 8).
(5) Reinforcement from Other Areas:

The Japanese may begin reinforcing the Tokyo Plain with divisions from adjacent areas as soon as they are convinced of our destination; they will certainly do so no later than the time of our initial landing. As divisions initially in reserve within the plain are committed the reinforcement rate from sources outside the plain will be stepped-up to the limit of their capabilities. As the NagoyamSendai area is drained, divisions from more distant areas of Honshu and Hokkaido will probably be wholly or partially side-slipped to replace them; however, as the situation becomes more critical these replacing divisions and eventually those still garrisoning more distant areas will also be brought in to reinforce the plain. Thus approximately 15 to 24 divisions (including previously active divisions and divisions called out of depots, regerdless if their state of training) could be brought in while still continuing to garrison other important areas with minimum forces, and if all areas outside the plain be totally stripped of mobile combat troops, the number would be approximately 27 to 30.

The rate at which these divisions could arrive will be limited by the capacity of the relatively thin net of main roads and railroads leading into the plain and by our success in interdicting or destroying these routes. Capacities of reinforcement routes are set forth in the following table:

TABLE XII

| Route | Capacity |
| :---: | :---: |
| Tokaiddo RR and Hwy ) | 2/3 Div per day |
| Nagoya-Kofu RR and Hwy ) |  |
| West Coast-Takasaki RR and Hwy North Honshu-Utsonomiya $R R$ and Hwy | 1/4 Div per day <br> 1/4 Div per day |
| Sendai-Mito RR and Hwy | 1/5 Div per day |
| Supplementary roads | 1/3 Div per day |
| Aggregate | 1-7/10 Div per dayis |

It is expected that by target date all these routes will have suffered extensive damage including destruction of numerous critical bridges, tunnels and other defiles. The Tokkaido and Sendai-mito routes are also subject to interdiction by naval gunfire. It is therefore estimated that overall reinforcement capacity will have fallen
to not more than (1) division per day by target date and that as the campaign progresses it will be still further reduced, particularly after the enemy air forces cease to be an important factor. An advance of 25 miles into the southwestern area will further restrict movement from the Nagoya area.

It must also be noted that since these routes proceed from widely divergent areas of Honshu the overall capacity of (1) division per day is not in terms of complete divisions but in piecemeal fractions of (2) to (4) different divisions. Therefore on the assumption that the enemy initiates reinforcement of the plain by Y-Day and continues it to the extent of his capabilities until his available strengtin is exhausted, it is estimated that the optimum probable volume of reinforcement by complete divisions will be approximately 4 divisions per week for the first 3 weeks and about 2 divisions per week thereafter.

It is also believed that as soon as the enemy perceives our superiority in armor he will expedite reinforcement by the 2 to 3 tank regiments still disposed outside the plain and will promptizy clear those routes necessary to their most expeditious movement.

On this basis it is estimated that the total number of divisions likely to become available for employment within the plain during the period $Y$-Day to $Y \nmid 30$ inclusive, will be approximately as set forth in the following table:

TABLE XIII

| During Period | Inf Divs | Armd Divs (or equivalent) |
| :---: | :---: | :---: |
| $Y$ to $Y \not+2$ | 9 to 10 | 1-1/3 |
| $Y \neq 3$ to $Y \neq 5$ | 11 to 12 | $1-1 / 3$ |
| $Y \neq 6$ to $Y \neq 9$ | 12 to 13 | 1-2/3 |
| $Y \neq 10$ to $Y \nmid 12$ | 13 to 14 | 2 |
| $Y \neq 13$ to $Y \neq 16$ | 15 to 16 | 2 |
| $Y f 17$ to $Y \neq 19$ | 17 to 18 | 2 |
| $Y \neq 20$ to $Y \neq 23$ | 19 to 20 | 2 |
| $Y \neq 24$ to $Y \neq 26$ | 20 to 21 | 2 |
| $Y \neq 27$ to $Y \neq 30$ | 21 to 22 | 2 |

After $Y \nleftarrow 30$, reinforcement could probably continue
at the rate of about 2 divisions (or division equivalents) per week until a total of 36 to 40 infantry divisions and the equivalent of 2 to $2-1 / 3$ armored divisions (in divisions and Independent Tank Regiments) had been employed piecemeal against our forces. However, it is believed that by
$\mathbf{Y} \neq 30$, some of the divisions employed in the earlier phases will have been reduced by wastage to remnant status and others which have wholly or partially maintained their strength by volunteer replacements will be at very low fighting efficiency.

It is expected that prior to target date our air and sea control will be sufficiently effective to restrict further troop movement from the Asiatic Mainland to a negligible scale, and possibly to entirely prevent it. Therefore, interim entry into the war of the U.S.S.R. would not affect reinforcement capabilities. (see Maps Encls 2 and 9).

## b. Ai. Irterception and Attack:

There is little likelihood that the enemy will be in doubt as to the destination of our convoys once they are detected. It is to be expected that he will commit the full power of all his remeining air forces in a final, all-out effort which, though built up gradually, will continue with unremitting violence until practically his entire remaining air strength has been expended.

Prior to the time our convoys converging on Tokyo are discovered, the existing pattern of enemy air activity will probably be limited to attempted interception of strikes against the vital areas of Central Honshu, principally the Tokyo Plain, by aircraft based in forward areas; and to sporadic hit-and-run raids against our Kyushu installations and our shipping in northern waters. These latter attacks will be executed principally by small sorties composed of trainers and other second line aircraft, staged through gouthwest Honshu, Shikoku, or Korea-Northern Kyushu fields, on suicide missions.

The initial result of discovery of our amphibious movement is likely to be an intensification of the last described activity and an increasing diversion of weight against the Tokyo-bound convoys. Sorties will probably increase in both strength and frequency as the objective is approached. During this period, some first-Iine planes may be committed; however, it is considered probable that suicide crash attacks by secondline aircraft will continue to be most habitual method of attack.

At this time, and particularly during the final stages of
approach, the Japanese may attempt to open the way for their suicide fanatics by diversionary tactics. First-line aircraft may attempt to draw off portions of our aix cover by demonstrations and feints with or without becoming seriously engaged, and thereby open gaps in our air cover through which the suicide planes may slip and approach our convoys closely enough to launch their crash attacks.

It is probable that air attacks will frequently be coordinated with surface attacks by assault demolition boats; and that both these craft and submarines may also be employed to divert air cover and expose our vessels to plane crashes.

If the suicide-piloted rocket plana (BAKA) proves effective, it will probably be extensively employed during these operations. Launching will probably be from medium bombers during all phases of approach and possibly from naval vessels (see par II I. c.(3) above). It is believed that the Japanese are experimenting with launching these weapons from ground-launching stations, and this method may be used as our convoys arrive close-in. Maximum employment will probably be reached just prior to landing and continue at the then possible peak until the bulk of the enemy's forward area aircraft are destroyed and any shore launching stations within range have been destroyed or overrun.

At some time during the approach, most probably in its latter stages and after they have verified the direction and magnitude of our movement, it may be expected that the Japanese will abandon all conservatism and will commit everything they have in desperate efforts to prevent our landings.

All remaining aircraft of whatever classification based in forward areas will then be progressively committed in a bitter air counter-offensive which will probably include both mass attacks and frequent small sorties. In addition to $c$ onventional forms of air attack, suicide crashes will then be freely launched by any type of plane against favorable targets.

It is probable that the Japanese will already have initiated strenuous efforts to reinforce Honshu with aircraft from the rear areas, staging through Hokkaido-Northern Honshu or through Korea-Southwest Honshu
(and/or Northern Kyushu). If not, they will probably do so as the main air attack begins. However, due to heavy Allied pressure on their forward area air facilities and to mounting combat and non-combat wastage as the reaction is intensified, it is doubtful that the number of aircraft available for immediate non-staged employment against our attacking forces will ever exceed the original forward area strength of approximately 1500. Of these a still lesser proportion, probably not more than $40 \%$ will be ready for combat any one time.

Following our landing, the enemy will continue his maximum air effort relentlessly; particularly against shipping and shore installations, replacing his losses progressively with aircraft from rear areas. However, as our beachheads are consolidated and he is convinced of his failure it is possible that he may temporarily reduce his scale of effort in order to concentrate his full remaining strength for a final desperate effort to be launched in conjunction with a major ground countermoffensive. In the event he adopts this course of action, pressure would be maintained during the luil; he would continue to commit considerable numbers of aircraft in frequent small sorties, but these would be predominantly secondline planes favoring suicide tactics against targets of opportunity.

Whether or not a lull occurs, the main air effort may be expected to be of short duration. As the rear areas are drained of their limited reserve of aircraft, attacks will necessarily diminish in both weight and frequency. It has been estimated that should the eneny continue to press strong attacks relentlessly, his entire air strength will be exhausted within 10 to 15 days after the maximum effort begins. However, it is more likely that after his main force is destroyed, he will still be able to maintain some minor scale of air activity for a prolonged period; delayed arrivals from rear areas, damaged planes repaired and returned to duty, and scrapings from remote areas may provide means for continued aerial reconnaissance, intermittent small harassing raids, (principally at night) and occasional suicide tuns launched from remote fields.

It is also possible that when convinced of his ultimate
failure, the enemy may discontinue his maximum effort somewhere short
of complete destruction, and basing a few hundred planes on obscure fields and landing grounds resort to prolonged guerrilla harassment by small sorties against favorable and lightly protected targets, e.g. lightly escorted vessels and/or those carrying low A/A protection.

In the event that the U.S.S.R. has entered the war, the number of aircraft that may be available in rear areas will be considerably re-. duced, and the period of maximum effort correspondingly shortened.

## c. Airborne Harassment:

Japanese airborne forces have recently been reduced to a single Raiding (Parachute) Brigade and this force may be further reduced by losses during interim operations. Attacks in strength will probably be limited to the earlier phases, due to the fact that thereafter the Jap airforces will be unable to mount any substantial effort; however, sporadic parachute attacks by small suicide groups with the principal mission of destroying parked aircraft, fuel dumps, communications centers, etc., may continue for a prolonged period.

## d. Naval Gapabilities:

It is believed that by target date the Jap fleet will have been largely destroyed or neutralized during previous operations. However, should the High Command, contrary to our expectations, decide upon a policy of extreme caution and withdraw the fleet to a safe area without opposing our previous landings, it is estimated that the fleet strength will be approximately as given in par l.c.(3). If such a fleet exists at this time it will most probably be located in the vicinity of Northern Honshu, from which area surface suicide attacks could be launched against Allied forces operating off Southeastèrn Honshu. Such attacks would probably meet with little more success than did the recent attempt by the Yamato Suicide Group. Even though it is assumed that the Jap fleet will have been completely defeated or neutralized at the time of the Kyushu operation, there is a possibility that a few heavy units may have escaped destruction and be operational at this time. These units, however, will be of no sustained value and should be quickly eliminated if they attempt to engage the Allied forces.

The Jap Navy will probably depend primarily on its shore - 43 -
based aircraft, submarines, and small surface craft to protect the Tokyo area from amphibious attack. The enemy submarine force will remain a serious threat to Allied operations against Japan. Although to date the Japanese have achieved little success with their submarines, it is probable that offensive submarine activity will reach a high level when an invasion force approaches Japan proper. Currently, the enemy has approximetely 60 submarines concentrated in the Empire-Nansei Shoto-Formosa waters and this number may be increased as the result of tine recall to the Empire of those subs now on patrol in distant waters for the defense of the Empire. A new unit called "Kaiten" has been recently noted in connection with submarine activity. The "Kaiten" is a type of one-man suicide 24 inch torpedo with a 37 inch outer diameter housing for the operator betwoen the air flask and war head. This weapon is known to have been used in the Iwo Jima area in March and also in the Nansei Shotos (results unknown). Midget submarine activity is also to be expected.

Regarded as a highly inportant "secret weapon" by the Jap Army is the so-called "Suicide Boat", better named an Assault Demolition boat. These craft have been used against the Allied surface vessels in the Philippines and in the Nansei Shotos and can be expected to play an important part in the Japanese strategy to repel Allied landings on Japan proper. The Navy will probably be able to muster some 750 to 1000 small combatant surface craft for the defense of the Tokyo area ( 650 were reported in the Okinawa area). These craft will attempt to launch attacks against Allied transports approaching the landing beaches, particularly during darkness and periods of low visibility.

The water approaches to the various landing beaches in the Tokyo area are not too readily mineable. Sagami Bay has an average depth of 500 to 600 fathoms. The straits between $O$ Shima and Suno Saki are approximately 800 fathoms in depth, while the straits between $O$ Shima and Tsumoki Saki have an average dopth of about 350 fathoms. Tidal currents in Sagami Bay and through the straits are quite strong. Therefore it is probable that a task foree entering the area would encounter no considerable minefields. The landing beaches between the mouth of the Sagami River and the town of Misaki, at the tip of the Uraga Peninsula, have - 44 -
suitable gradients for mining to an average distance of 4 miles from the shore. The sea approaches to the beaches along the Chiba Peninsula are variable in depth. The beaches along this coast from Tateyama to Katsuura Bay have mineable gradients to an average distance of about 5 miles from the shore. From Katsuura Bay northward the loo-fathom curve extends seaward for an average distance of some 20 miles offering a very favorable mineable shelf. Inshore currents in this area aro irregular and not too strong. There are indications at the present time that Tokyo Bay and Uraga Straits are mined. The existence of mines in the remainder of the area is unknown; however, it is probable that inshore mines are planted along all favorable landing beaches of this entire area.

Entry into the war of the U.S.S.R. would not appreciably alter neval capebilites.

## 2. Relative Probabilities:

a. Ground Dofense and Reinforcement:
(1) Plan of Defense:

Tho Japenese will roalize that they cannot prevent our landing and will plan to conduct an active defense within the plain.
(2) Static Defense During Approach and Landing:

The enemy will strive to soften our assaulting waves by the fire of dug-in beach groups composed principally of volunteex defense units, and by long-range fires of artillory and mortars emplaced in rear of the beaches.
(3) Defense of Inland Approaches:

After clearing the beach zones, our advancing forces
will encounter strongly organized defensive positions blocking the approaches to the heart of the plain; the most important sectors will be occupied by Army divisions, the less critical areas by relatively immobile but numerous volunteer defense units. Resistance will be determined and bitter; any penetration of the organized areas will be met by prompt and vicious counterattacks by local reserves, possibly accompanied by small tank units. By the time these forward positions are fully developed, our attacking forces may be opposed: In the northeastern area by 35,000 to 45,000 troops of all classes including 1 infantry division; in the - 45 -
central eastern area by 40,000 to 50,000 , including 1 to 2 infantry divisions (or division equivalents) and part or all of 1 tank regiment; in the southwestern area by 45,000 to 60,000, including 1 to 2 infantry divisions and part of all of 1 tank regiment.
(4) Reinforcement by Rescrve Divisions:

Initially the major portion of mobile combat strength will be heid in reserve in the hope of ultimately passing to the counteroffensive. However, forward defense areas will be reinforced with reserve divisions to the limit of available strength in order to halt our advance; these will be replaced in reserve by divisions brought in from other areas. Assuming considerable but not $100 \%$ interdiction of routes, forward defense areas might be reinforced as follows: Northeast Area, by 1 division within 24 to 48 hours after the battle position is fully developed; Central Eastern Area, by $I$ division within 24 to 48 hours after contact with the battle position and by 1 division each 2 to 3 days thereafter until 3 to 4 divisions (plus non-divisional troops) are deployed on the position; Southwestern Area, by 1 division each 24 to 48 hours after landing, until 4 to 5 (plus non-divisional troops) are deployed in the area.
(5) Employment of Armored Units:

The enemy will desire to hold the bulk of his armor in reserve to spearhead his planned counter-offensive; however, our superiority may force its early and possibly its piecémeal, commitment.
(6) Reinforcement from Other Areas:

Reinforcement from extra-plain sources may begin prior to landing; it will certainly begin no later than landing. For this purpose 6 to 7 active divisions and 5 partially trained divisions still in depots will be available within 140 miles, and 11 to 13 active divisions and 5 depot divisions in more distant parts of the Empire. Assuming reasonable success in interdiction of 5 ma in road and railroad routes, the probable rate of arrival should not exceed approximately 4 divisions per week for the first 3 weeks following landing and 2 divisions per week therafter. If this rate be maintained, 21 to 22 infantry divisions and the equivalent of 2 armored divisions could be employed piecemeal within

30 days; however, by that time some of the origianl divisions wald be reduced to remnant status or to very low combat efficiency. Assuming that the enemy is willing to totally strip all other areas of the Empire except Kyushu of combat troops, 36 to 40 infantry divisions and the equivalent of $2-1 / 3$ armored divisions could be eventually employed. By Y-Day our expanded air and sea control will preclude further reinforcement from the Asiatic mainland.

## b. Air Interception and Attack:

(1) Suicide Attacks Against Our Convoys:

Suicide attacks against our approaching convoys will begin as soon as the enemy is convinced of their destination and will increase in frequency and violence as they converge on the Tokyo Plain. Attacks will be executed principally by second-line aircraft; however, formations of first-line planes may attempt to divert our air cover by demonstrations and feints in order to open gaps through which the suicide planes may approach our vessels. Air attacks may be coordanated with surface attacks by assault demolition boats, and with submarine activity. Extensive use of suicide-piloted rocket planes (BAKA) is anticipated.
(2) All-out Air Attack to Prevent Landing:

At some time during the approach, probably during its final stages, the enemy will commit his entire available forward area air strength in a desperate effort to prevent our landing. This effort will include massed air attacks and numerous small sorties flown by both first and second-line aircraft of all types. Plenes in any category will attempt suicide crashes against any remunerative target. At this time if not sooner all available aircraft in rear areas will be called in to participate in the defense. Employment of suicide-piloted rocket planes will reach maximum intensity during finel approach to our objectives.

## (3) Continued Air Attacks Following Landing:

After our landing the eneny will continue his all-out eir effort until his air strength is exhausted. A slight reduction in scale of air effort may occur as our beachheads are consolidated; however, pressure will be maintained by frequent small sorties favoring suicide tactics. In the event the enemy continues to press his attacks
relentlessly, it is unlikely that the period of maximum effort will exceed 10 to 15 days. Interim entry into the war by the U.S.S.R. would shorten this period. By the time the bulk of his air forces will have been destroyed and his air capabilities reduced to guerrilla raiding and sporadic suicide attacks; however these activities may continue for a prolonged period.
c. Airborne Harassment:

After landing, small-scale parachute attacks against our line of communications and installations ashore may occur. After destruction of the bulk of the Jap air forces, these attacks would be by very small groups, but might continue for a prolonged period.
d. Naval Capabilities:
(1) Possible Suicidal Surface Attacks:

In the event that any heavy units still remain afloat, they may be committed in suicidal sorties. They will be of no sustained value and should be quickly eliminated.
(2) Intensified Offensive Submarine Activity:

Offensive submarine activity, including attacks by
large and midget subs and one-man suicide torpedoes may reech a high level at any stage of the operation.
(3) Maximum Employment of Asseult Demolition Boats:

Extensive use of Assault Demolition Boats (suicide boats) particulerly during hours of darkness and after our vessels arrive close inshore is expected.
(4) Extensive Gining of Water Approaches:

It is expected that waters of all favorable landing
beaches will be extensively mined.





TOP SECDETI

(See Mag mache. 4n herewith)

| Beach Araa Illo. | Leupth | Description | Approacies | Surf, Smell and Tide | Terrain Inizud |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | Or rail, 21 miles, aut tnos segre it s by large atreans: <br> rast, 1 mile <br> B. Center, 6 miles <br> M. Center, 11 milos <br> 7. 3 miles | 150-200 feet wide, saxd wid pabbles, suall gravel areas. 7 Fim excopt man streain moutes. Io esioce $\theta$ sioplon 10 in rest, milier in eest. Bak sine e relatively fict. Dividing streew and lifge streac on east bounciry rould costruct la terel mox 0 . ment. | 3 mall iskands and several surle a rocks obstruct gist inll. <br> Bottom sloje gentle to mill, steapaing to mestmerd. <br> 30 foot lines $702-900$ yis of fishare. in eest half; 450-900 yds in west it lif; cle er in fer siart stretciass. <br> 18 foct line: Cenereally inif itey betreen 30 foct line and shrye. 7 niles mest from senter suitabl for krgo IN at all tiides; remindar far small LC only, | Fairly wide surf belt. Heary in sumine, lif:ter in riinter. Midail rane 48 fost. | Fast half ; Pine cha bait $\mathbb{C}$ gad tills: cultivated phan in beyod. liest half: Lor hills corered nith orange grotes, brush, and moods at tijin 300 yds; Moksaido RR amd Eny, telegrewic bud porer lines frallel beach 1 to 2 miles infaud. Roar. <br>  and Sccami-gawa. lieny roads $k$ ad inlani from exst half. Lirfeld 3 mi.s s inand from Bast and. Coast defeasse guns tuiplaced near bead. |
| 2. | Saries of axall bead os divided by rocky headlends. | Largoly bating beeim es, | Bestricted by rocks, Suit able for small LC crly axcept at extrexp rest pos sibly suit able for brge in at higa watar only | $\square$ | Cocstal rad to Yokohams. Hilly ares. Yochususe Mayal Base beyond hillis. Coast dieferse gun emplacemen ts to south. |
| 3. | 3 matll beades: <br> Gee eda-ran, 6 mitis $s$ <br> Kur hacza-man, 1,100 yds. Otsu-vian, 2600 ydes. | Kenedo-man, sand; others saiad aud gravel. | Restricted by rociss and ahoals, Kenedamen suitable fec large Io at all tides; ahers for gralild only, |  | Yokosuke Naval Rese at Nill exd of Utsu-men. Rea ds to Yokonoma, May coast dorense ist tellations south d Kaneda-ran and benind Kurihawa-man, |
| 4 | Nurercus sma 1 beades | Sand and E b ble. | Bottom sheites gently to searard, Geenerally suit able la mall LC it high rater cmly. |  | Coastal raid end RR near shrere. Nortiern islif, Elaty rising low bad far five niles innan. South ern baif, lorliud namoryer adid hgely rice End. |
| 5. | 3 Beaches: Wiorth; 2.8 miles Centers 2.9 mikes 8outh 3.7 minle s |  gentle il ope; cut by 3 streams, Center: Crevel and rocks; we to 80 it mile firmi mal erate slope. sout Mr Mr send; 150-200 it wide; miderate alope; at by fordable stresing. Tidal strip ary at lor tide and 200 to 300 feet mile borders each beach. Center and south beacies on oppes ite st tres of trinsulà 1 to 2 miles rido. | North: Cikar; 30 ft line 1 mile offshare in ar th to 500 y ds in suth. Center: clieer to 13 frot line, rify seattered ree is incices. 30 ft line $700-1000$ yds fistre. South: Scattered raks, reafs, and islets. 30 ft , line 500 (esst) to 1000 yds (rast) affis ore. Cenerally suitabis far madl Lis at hath nater only excet ill end suuti bead for la rge LC Et, idigh meter, | North: Wich erate strff in mider, light in sumer. Center: Surf ganeral ly licit. South: Surf general ly hoary. Tidal range, 3 fost. | North and sutu beacies bocier rice plaius 1 to 2 ziles deen, Rise and la dills beiain ceuter beea. 400 foot moded hills beiin rive erea, Cosste fr from Chiba trans east fron no til beact. Coastail raid from Ccibe loop peninsula to womect all beadins, Navà seaplene station betreen nartn end conter beacicas. |
| 6. | Series of small beecies, |  | In south sicilve very gentily, Suitable far smalid in spots. Otherrises poor tor. all LC, |  |  sholf, Rice fields in south half, FootLitlls behind shelf. |
| 7. | Overall: 35 miles, Brolen by streams into 9 segrents 3 to 4 miles long ezcept rarthermost 7.2 miles long. | 200 to 600 it will 9 . sand Fim la shace throughout. Backsbore soitt near streans, Dy iding gtrears are 75 to 150 it wiide and 5 to 10 ft deep. | Cle ar to: 30 ft 1ine. 30 ft line 3.5 miles of fahore in terth; 2000 yds in center; 2.44 miles in sulth. 18 ft line 1200 to 1400 yds offsher e. Bottom sloje 1 in 200. Small LD woud Pobebiv eround d fshor s. | Surf faim te ary in sumarn, ligiter in minter, Outer line of brecters 200 to 300 ft © f fshore inner line closo to sincre, Titial range; 3 to 4 feet. | Sacsed by broad'lor plain, cpprex imately 8 miles wide end largely planted in ries. Strampy in south, numarous youis to ner th. heny settlements and viliages in plain. Entensive inlecid and letera rad net. Way y road tirrough ricefiell s on erbankmeits, 5 airrialds at 6 to 8 mile interYels, 2 to 6 wilies inlanh. thine moods Ereas neer strears, "Behind jiain, undad terraces rese 150 to 200 feet. zage of terraces gasted by many revines and gullies. |


| Beach <br> Area Nc: | Length | Descritition; | 4 tpprac coses: | Surf, Svell and Tide: | Terrain Inlands |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 8. | Overall: 45 miles. | Northern 15 miles, 200 ft . wide or less; center 200 to 300 ft Tidej Suuth, 400 ft riee. artirely sand. Firm foreshore share soft neer strecis. Badk shore level in soutin, ends ageingt bluffs in north, cut by gwall fordeble streams only. - 1 canal 5 miles south of Kossimo pould be an obstacle to lateral movewent. | Cleer to 30 ft line exceit far rocks 900 yds dishare at extreie north and south end and mreos 4 iriles from south end, 30 ft line 1200 to 2000 yds offsibers; 1att line 350 to 1100 yde cofshora, Bottoin slope 1 in 150. small id rould probably ground offshore. | Surf eeneraily yary; heariest in sumer. <br> Sereral lines of breakers, Tidai rence 3 to 4 ft . | Narth 15 mile s: Bluffs 100 to 130 feet high viithin 200 feet of beach. Iny crop on terraced land benind bluffs. 1 airfield on bluff at nor th and of Kita-ura. Fen exits frou beach onto bluffs in $n r$ thern 12 miles; good latenal and inlanà road net on top of bluffs, Rerther south, bluff benis aray from becin; 1300 ydes from beach in south, Lrea betreen bead end bluff partiy in rice (in south) and pine woods. birfis lix 2 and 4 miles inlend soutio of Teshivre, Nunerous inland end laterel roeds. Toue river and Kitä-ura (lake) paraliel southerm 30 miles of beach at 1 to 5 ziles inland. Road bridge across lake et <br>  north end. |
| 9. | Creerall: 7.8 miles. Gut into 2 neariy equal segments by amall stream | 150 feet ride. Sand. Forsshore generally firm; backshore sumerinat soft. Diride ing stream belisved fordable. | Small proecting rook isiet 1100 yas off shore, t mile from south end. Reef ertebds 1 mile off south end. 30 ft line 1 mille of fiscore excent for 1.5 miles south of dividine strecia phere it is relatively close in, Suitahle for small LC at ell tides. | Surfe eliays present. Very deary in stmer. mines break rvar Tidide belt. Tidal range, 3 to 4 feet. | Niorth ond: Kuji-gama flows perellel tc beaci for 1 mile before emptying into sea, Sendei-Iokjo dubble treck RR crosses oridge 1450 yds iniand. Tiomith of Kinji neer worth end. wasegt near its onds beach is bacied by 350 yd mide strip of tind blom sand dunes. In northern helf geatle vacded slopes alternating with rice fields rise inlend to rolling rooded hills. Betind southorn half sandy slopes rise to a cently rolling end parily manshy plateau. zehind southermost iufif-mile a belt of ricefiedds 100 yds wide directly betind beach buts against e 100 ft bluff. dirfield 1 mile inlend from south and; City of Wito 6 miles inlend. Eroept at north wa south ends fer structures in boach erea. Rocds and trails in all directions. |

## 

## 1. GJGR: I

Maren is the transitional period between the ary winter months and tie wet sumer montis. The weathei is particularly unpleasant; temperatures are around freezine and are frequently
 $35^{\circ}-40^{\circ}$ in the iorning to $55^{\circ}-60^{\circ}$ in wid-afternoon.. Prosts occur at inland glaces but are rare along the oosst. Relstive humidity is mocierately hich, averacing about 70\%.

## 2. NOTMTMTCH

In march most of the rea has lese tian 14 reiny days, yieldine a total of $4-5$ inches of rainfeli. Yeax to véx variation in rainfell is nomally slikht but very dry or verv wet conaitions are possible in abnormal yeazs. Snowiall can be expecteg once every week or two. The cicincteristically licht snowralj melts quickly.

3: TDS
Tind speeds are usually modervte. Hortherly vinds of centle breeze or lighter forces (less then l 3iaph) prevail most Of the time et the rew locetions for vinich dete are availeble. Fowever, at exposed places winds of moderate to strone breeze force (13 to 31 mph) are very frequent.
4. TYIHOUTS AMD GILS

In an avexege year, aoolit one tyanoun a year pasces over or near Southern Eonshu durine the three montis of pebruery, Marci, or mpil: The possibility of winds epadechine hurricane vsloctties this month axe slicht.

## 5. SLCUTPESS

cloud coverage averefse $1 / 10$ or asore on doout $30 \%$ of the days in early maruh and about $50 \%$ of tio days in lote maroh and april. Diumnal variation is slicit ank irgecular.

## 6. VISITLIS

Weiriniry is bevally good throughout this region, with the excoption of a few localities. Along most of the coast, fog which reduces visibility below $5 / 8$ mile cen be expected on two days or less in tarch.

The tinfluence of ses and surf in large scale landing opservions bes been definca as follors:

Weve tolents



heso deninitions axe assumod to epply both to lencing eratt
operetons and to unloeding rom ships.
SURMAY
The follothe sumerizetions or vevther stetistics indicete the monthly variation in wave conditions in the three costal areas:

AREA I
(Mito to Choshi)
 Possible (waves $3^{\prime \prime}-6^{\prime}$ ) $34 \% 31 \% 28 \% 20 \% 22 \% 18 \% 14 \% 15 \% 20 \% ~ 26 \% ~ 30 \% ~ 34 \%$


AREA II
(Choshi to Katsuura)
I F M A M J I
Favorable (waves 0-3') $49 \%$ 50\% 51\% $49 \% 63 \% 73 \% 79 \% 77 \% 61 \% ~ 50 \% ~ 48 \% ~ 45 \%$ Possible (waves $3^{\prime}-6^{\prime}$ ) $39 \% 41 \%$ $32 \% 29 \% 21 \% 18 \% 14 \% 15 \% 20 \% 26 \% 30 \% 34 \%$
 AREA III
(Katsuura to Sagera)
 Favorable (waves $0-3$ () $54 \%$ 54\% $53 \% 61 \% 65 \% 70 \% 70 \% 68 \% 66 \% ~ 58 \% ~ 60 \% ~ 57 \% ~$

2ossible (waves $3^{\prime \prime}-6^{\prime}$ )
Unfavorable (waves 6')
$37 \% \quad 30 \% 34 \% 25 \% 21, \ldots 13 \% 20 \% 17 \% 19 \% 20 \% 30 \% 32 \%$
 COMLUSIGS

In order to shoose the months nost suiteble for gmphibious operations in this area, assumptions must be inado with regard to the relative importance of typhoon risk, surf, and foc. It is assumed here:
(a) that foe is the factor of least importance but is undesirable
(b) that the frequency of unfavorable surf conditions is next in imortance ror detemmine the calculate, risk
(c) that the reriod or maximum typhoon frecuency is the period of createst risk.

Based on theso assumptions the followine wonclusions are earam:
(a) The most favorable Lonths for amphibious operations are hay, June, July, and Aucust. it this time, surf conditions have improved with the advance of sumer and tite typhoon risk, althoueh present, has not developed to a maximum. Pog gonäitions are at a maxinua durint. these months but are still of relatively low frecuency.
(b) The least favorable months are september, octobur, and lovember. it this tine, the typhoon risk is at a maximum end the ap? Aproach of winter causes harked increase in tie surf.
(c) During the reluainine whths (December, January,

February, inarch, and hpril), worst suri conditions preveil but typhoon ris is ut a Lininum as is the risk of foc.

A Suesested Table for issessine the Influence of See end Surf on Lares Scele mphioious Operations

Meves
0-3 foet Iittle or no influence on amplibious operations.
3-4 feet
ICV's and othor smaller craft heve difficulty. Sone are broached. Operations of iur's sna LuT's are slowod but not
scriously hampired. Nate or unlouaine ocroo over tho reach is reduced about one-nelf. LuVa's inc otier smaller orext are striousíy hemp:rid. Tany are broanhed and sowo are sunk. LuI's and Lsis
 cargo over the side.

6-7 feet
All anphibious operations are seriously hampered and truré is ounsidurable loss of smalier craft. sa'is's are seriousl hampered in hendifite men and careo over the side.
UVEr 7 fe日t Laree soale ampinbious operations are impracticable. Hévy losses occur in the surf area.
 5)
(a) Ienaing operations and Subsocutnt Unloeding iotivity. $\therefore$ psriod of $4-7$ days of good sea conditions for en amphibious operation can be roxecast by the inmy and pavy asatiner services, and timing of the opexátion shoula be initiated on these rorecasts.

Frecuent sexiods or poor surf concitions Lasting $2-3$ days will ocour during March anä mpril ană every ad̄antage that can bu Eained from shelterca beaches or artificial harbors should be considered.
(b) Gneral Affect of Olimate on Gruund operations. "ather will bs extrenely variable, tempuratures varying from pleasant to quite unpleasant cold wet periods. Frequent periods of inclement weaticr (cool, rainy, low overcast clouds) will occur, but 48 -hour rorecasts in this area are cuite reliable and forecestine service to taotioal ground contiedaecs shoula frove aqvantageous in plannine the employment of the eround units, especialiy in regerd to the expeotancy of close air support and mobility of arrorod units.






ENEMY AIRFIELDS
TOKYO-NAGOYA AREA, HONSHU, JAPAN
31 Mey 1945


| Map Index No. | Name |  |  | Hardstanding Capacity | Type |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | No. of | $\begin{aligned} & \text { ength } \\ & t \text { (ft) } \end{aligned}$ |  |  |
| 75 | Tateyama |  |  | - | SS |
| 59 | Toko | 2 | 3800 | Unlimited | L.G |
| 41 | Tokorozawa | L/ $\Lambda$ | 6000 | Unlimited | $A D$ |
| 67 | Tomioka |  |  | - | SS |
| 40 | Toyooka | L/A | 5800 | Unlimited | AD |
| 11 | Tsukuba | 3 | 2200 | Unlinited | $A D$ |
| 21 | Tsukuba West | L/A | 6000 | Unlimited | AD |
| 2 | Utsunomiya - | 1 | 5000 | Unlimited | $A D$ |
| 3 | Utsunomiya So. | L/A | 6100 | Unlimited | AD |
| 50 | Yachimata | L/A | 6000 | Unlimited | AD |
| 29 | Yatabe | I/A | 5600 | Unlimited | $A B$ |
| 64 | Yokohama |  |  | -- | SS |
| 69 | Yokosuka | 2 | 3920 | 330 | AB |
| 70 | Yokosuka |  |  | -- | SS |
| 46 | Yokota | 2 | 6500 | 340 | $A B$ |
| 57 | Yomiuri | 1 | 1640 | -- | $\%$ |

AB AIRBiSE Major bases for combat and/or training units with hangars and permanent buildings; facilities for rear echelon maintenance and often with major supply Depot; includes aircraft plant fields.

AD AIRDROME-Permanent bases for combat and/or training units; facilities for lst and 2nd echelon maintenance; may function as satellites of airbases, as forward combat bases or as staging fields.

LG LANDING GROUND-Operational but not used as permanent bases for combat units; limited facilities for fueling and minor repairs; function largely as staging fields or as satellites of airbases and airdromes.
SS SEAPLANE STiTION-Fully equipped seaplane facility

* INACTIVE AIRFIEID-Airfields no longer teneble by the enemy or abandoned for any reason; includes decoy fields
I/A-Landing Area or entire airfield hard surfaced with no well defined runways. Length given for L/A runway is the dimension of the longest side of the airfield.



(q) (غ) $9 \varepsilon$ xam

INDEX
ESTIMTE OR TROOR RAUIRDLUMS


peormatis
$-T-$






| CASTER FORCE "Y"-Da. ${ }^{\text {V }}$ ASSELULT | TOTALS |  |  | ASSAULT ECHELON |  |  | FOLION-UP ECHESCOS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Personnel | Vehicles | Total Tons | Personnel | Vehicles | Total Tons | Personrel | Vehicles | Total Tons |
| 3 Engr Comb Bn | 1,911 | 579 | 2,955 | 1,900 | 570 | 2,900 | 11 | 9 | 55 |
| 1 Haint Co | 191 | 72 | 356 | 186 | 69 | 349 | 5 | 3 | 7 |
| 1. Tread Bridga Co | 138 | 24 | 1;037 | 130 | 79 | 1,000 | $\delta$ | 5 | 37 |
| 1 Tech Intell Tm | 9 | 4 | 14 | 9 | 4 | 24 | - | - | - |
| 2 IS.SCCS (ii) | 1,004 | 168 | 644 | 1,004 | 168 | 644 | - | - | - |
|  | 151 | 27 | 132 | 146 | 23 | 120 | 5 | 4 | 12 |
| 2 Bn 155 Horm (m) | 1,030 | 302 | 2,004 | 82 | 226 | 2,020 | 206 | 76 | 784 |
| 1.En 155 (uan (ia) | 513 | 249 | 1,258 | 415 | 120 | 889 | 98 | . 29 | 369 |
| $10 \mathrm{bos.an}$ | 446 | 113 | 521 | 357 | 85 | 4.03 | 39 | 28 | 138 |
| 9 Prd himerfo matim | 36 | 2.8 | 18 | 36 | İ | . 18 | . | $\cdots$ | $\cdots$ |
| 1 Sis En Coyp | 780 | 286 | 83 | 709 | 273 | 836 | 71 | 13 | 47 |
| C.Eltary Goxt Unitis (Fotjimed) | 2,000 | 200 | 3,000 | 2,000 | 300 | 3,000 | - | - | $\square$ |
| Initial Overstrengtu A Replacemont | 24,000 | $\cdots$ | - | 24,000 | $\cdots$ | ... | - | - | - |
|  |  |  |  |  |  |  |  |  |  |
| HCTAL EASER COITAT MTMAM | 191,669 | 33,506 | 279,662 | 153,782 | $23.980^{\circ}$ | 194,658 | 37,887 | 9,526 | 84,9,4 | CTAL EAGTRY COI DAT MTMAY

## $\frac{-4 .}{4+2+8+8}$

|  | TMOLS Vehicles | Total Tons |
| :---: | :---: | :---: |
|  | 33,506 | 279,662 |
| :-.ess $30 \%$ vehiclee, corr ied on $Y+30$ ] if (t) |  |  |
|  |  |  |
|  |  |  |
| iess potal ui "inl units, carried on $1+5301$ lift) |  |  |
|  |  |  |








































| EFSTERS FCRCE UNIMS MY"/-30 ASSALLT | Personnel | TOTALS <br> Vehicles. | Total Tons | Fersonnel | IT ECHELON Vehicles | Total Tons | FCLLOW-UP Personnel Vehicles | Total Tons |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  <br> 9 Fwd Lircraft CuntI Th | 36 | 15 | 18 | 36 | 18 | 18 | - - | 1 |
| Miflitary Govt (wat) | 1,500 | 150 | 2,250 | 1,500 | 150 | 2,250 | - - | - |
| Initial Ovarstren th \& Replacement | 12,000 | - | - | 12,000 | - | - |  | - |
| TOTAL EASTEHN CCMBEJ' MY! -30" (Less j\% vehicjes carried on "Y/-60" | $\begin{gathered} 65,637 \\ \text { Iift }) \end{gathered}$ | 9,562 | 76,611 | 56,026 | $\begin{aligned} & 7,277 \\ & 2,183 \end{aligned}$ | $\begin{array}{r} 59,298 \\ 8,549 \end{array}$ | 9,611 $\quad 2,285$ | 7,313 |
|  |  |  |  | 56,026 | 5,094 | 50,749 | , |  |
| Plus mastril PMRCE "Y Dhy Veicles (30\%) |  |  |  |  | 7,1\% | 21,852 |  |  |
|  |  |  |  | 16,672 | 5,210 | 48,468 |  |  |
|  | . | : |  | 72,698 | 17,498 | 121,069 |  |  |
|  |  |  |  |  |  |  | 9,611 2,285 | 7,313 |

## 4






































## PART VI















GROUND CORBAT FORCES

|  | GROUND COMBAT FORCES |  |  | SERVICE FORCES |  |  |  | AIR PORCES |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| "Y" DAY.. (EAST).. | 153,782 | 16,786 | 173,086 | 73.177 | 13,994 | 120;135 |  | 14,367 | 3,485 | 24,102 |
| "Y゙" DAY..(VEST):. | 203,434 | 23,141 | 275,143 | 88,656 | 13,661 | 110,196 |  | 8,914 | 2,248 | 14,446 |
| "Y -30 " .. (EAST) | 72,698 | 17,498 | 121,069 | 89,385 | -14,440 | 130,503 |  | 6,955 | 1,157 | 9,378. |
| "Y/30" .. (WEST) | 74,528 | 20,761 | 129,158 | 141,145 | 20,809 | 203,765 |  | 13,106 | 2,899 | 21,539 ${ }^{\circ}$ |
| AFPAC RESERVE.... | 56,797 | 7,478 | 63,485 | 17.389 | 2,606 | 22,421 |  | - | - | - |
| SHORT T/A-KYusfor | - | \% | , | 22,657 | 6,527 | 51,577 |  | 58,345 | 14,939 | 87,543 |
| "Y/60 Rmir Ech... | 76,311 | 21,401 | 127.499 | - | 16,381 | 48,699 |  | - | 2,303 | 7,543 |
| totals | 637.550 | 107,065 | 889,440 | 432,409 | 88,418 | 687,296 | AIR LIFT |  | 27.031. | 164,551 |


| Toral comitymir |  |  |  |
| :---: | :---: | :---: | :---: |
| Ground coimat. | .0.0637,550 | 107,065 | 889,440 |
| SERVICE...... | . . 432,109 | 88,418 | 687,296 |
| AIR FORCES. | -0.115,205 | 27,031 | 164,551 |
| TOTAL..... | .1,171,646 | 222,514 | 741,023 |









$1$







## $=1$





EWCaPTHLLATIO
AMFEIBIOTS LTET VS ASSANLT SEIPDIG



" $y+15$ "
(WITH ASSAULT ECHELON)


ANNEX $3 \mathrm{~b}(3)(d)$ I!
"CORONET"

AIR GARRISON

$.14+60^{\circ}$



ANNEX 4

|  | QPERATTON - PCORONET: |
| :---: | :---: |
| PRSFACE TO | SUMMARY OF PPPESENTATION |
| Andex 4 | OF LOGISTIC SUPPORT GIVEN |
|  | TO CINCAFPAC 16 JULY 1945 |
|  | LaND GINCPAC 21. |
| ANIEX 4APPENDIX | BASIC LOGISTIC PLAN |
|  | A CORONET BASE DEVELOPitient |
|  | B ATPHIBIOUS AND HELVY CARGO $d$ SHIPPING REOUIPENENTS |
|  |  |
|  | BULK P®TROIEUM FLCILITIES |
|  | E PORT İND BGSE DEVEIOPMENT |
|  | F CONSTRUGTION MATERIAL RE, gUIREIENTS |
|  | G CONSOLIDATED CONSTRUCTION $\mathrm{CH} / \mathrm{RT}$ |
|  | H GRTIFICIAL HARBOR |

## PRIEPACE TO ANNEX 4

## SUMMARY OF PRESENTATTON OF LOGISTIC SUPPORT GIVEN TO CINCAFPAC 16 JULY 1945 GND CINCPAC 21 JUTT 1945

Is Considering necessary means to be available, an analysis cf the logistic support required for COROR T OPERATION inaiceties that the critical controlling factors are:
a. Discharge of cargo from resupply ships off the beaches.
b. Unloading cargo at the beaches. -
c. Dispersal of cargo from the beaches.
d. Distribution of, supplies to troops forward of the disporsal dreas.
2. It is noted that no ponis are available initially for this operation. Inclosure Ne. 1 shows the beaches which have been under consideration and the logistic support capacities of each in terms of fuily supported divisions at 1,000 deadweight tons ( 2240 Ibs ) per day per division, and without regard to planned employment. It also shows the percentage of the time off-shore conditions pernit cargo handing operations at each beach. By utilizing all engberer special brigades and similar units available in the Faciric, surficient semice effort can be provided to organize the beeches Ior the peak loads required to compensate for the unfeverable offmshore conditions.
3. Unfinl discharging of casgo shipping in TOKYO WAN is possible, cargo import will be limited by the deferral of all construction exsept that essential to the success of the operation.
4. At SAGAMP WHN there is a partially protected anchorage. Sea conditions permit resupply operations over the beach 75 percent of the time, Inlend, there are suitable storage areas and access roans for the dispersal and storage of cargo and a suitable road
net for forward distribution of supplies to the combat troops. Considering all these factors, it is estimated that a maximum of 14 divisions can be supported over the beach at SAGAMI WAN.
5. The KUJUKURI HAMA is an exposed beach. Off-shore conditions permit operations 50 percent of the time. Again, there are suitable storage areas inland and an adequate road net for the dispersal and storage of cargo and forward distribution of supplies to the using troops. It is estimated that a maximum of 12 divisions can be supported over the KUJUKURI HAMA.
6. The beach at KUJI is also an exposed beach. Sea conditions will permit operations 45 percent of the time. The storage areas intand and the road net are suitable for the dispersal, storage and forward distribution, of supplies. It is estimated that a maximum of 6 divisions can be supported from the KUJI beach. (Note: It is not planned to use this beach).
7. It is planned to use the lower portion of TONE GANA for unloading lighterage and for a small craft harbor in rough weather.
8. In addition to the small craft harbor on the TONE GANA, an artifieial harbor is to be installed on KUJUKURI HAMA to protect small craft in rough weather and to provide fixed facilities for unloading Liberty ships. This is an insurance measure, as the operation can be supported without the use of such a harbor, necessary, under average weather conditions. Details, and design of such an artificial harbox are given in Annex 4 , Appendix $H$.
I. GENERAL

1. This operation consists of a major amphibious assault by Task Forces under control of the Commander-in-Chief, U. S. ARAY FORCES PACIFIC with the objective of landing forces on the SAGAII WAN and KUJUKURI beaches in the TOKYO (KANTO) plain area of Central HONSHO for the purpose of destroying hostile forces, occupying the TOKYO plain, and forcing the unconditional surrender of JAPAN.
2. Army, Marine and associated Naval, and United Nationa forces under the control of the Commander-in-Chief UNITED STATES ARMY FORCES, PACIFIC, for these operations are mounted with accompanying supplies and equipment from bases and stations in WESTERN PACIFIC and MIDDLE PACIFIC Ocean Areas, and from the Zone of Interior Following assault landings these forces are supported by resupply shipping from the Zone of Interior augmented as required from bases as indicated hereinafter.
3. Forces of the Naval Service not under the control of the Commander-in-Chief, U. S. ARMY FORCES, PACIFIC, are mounted and supported as directed by the Commander-inaChief, U. S. PACIFIC FLEET.
4. U. S. ARMY STRATEGIC AIR FORCES are supported logistically in accordance with current and future arrangements and Joint Chiefs of Staff directives.
5. The beaches on SAGAMI WAN and at KUJUKURI, are developed aa navigation heads only, until suitable ports in TOKYO WAN are

captured and become operative. Construction of facilities on these beaches and inland is held to the minimum necessary for the support of the operations of the ground combat and air forcese An artificial harbor is established on the KUJUKURI beach.
by the Navy (Appendix G). Stockages of supplies at navigation heads will be limited to $30 \mathrm{D} / \mathrm{s}$ for the forces being supported therefrom.
6. After occupation of suitable areas in the TOKYO WAN, bases will be developed with minimum construction. Augmentation of naval and air facilities are developed as required. Additianal railroad and highway nets are rehabilitated to the extent necessary for the logistio support of the forces employed, and for the control of civilian population.
7. Logistically the operation has three distinct phases or time periods.
a. From $Y$ Day until TOKYO WAN is oaptured and ports thereon become operative: During this period logistic oupport will, because of limitations of beach and clearance capacities, be limited to providing support for combat operations of ground combat forces, minimum operating facilities for air forces, fixedbed hoepitalization prescribed for the beach head areas, a minimum temporary-type navigation head, and operational, awhadministrative facilities essential to effective functioning for a limited period.
b. Fron the time purts on TOKYO Whn become capable of rocciving and clearing the major proportion of tomages nocossary to support all forces in the cbjective area until $Y$ f 150 days: During this period operations of ground combat and air forces will bo supported, ports and bascs on TOKYO WhN will be developed, air operating facilitics and fixed bed hospitalization completed,
rail and highway ncts rchabilitatcd, and proscribcd installations and administrativc facilitics cstablishcd. Except for hospitalization. the construction of personnel housing is deferred until the third phase.
c. From $Y \not \subset 150$ days forwards Following $Y \not \subset 150$ days, operations of ground combat and air forces will be supported, all authorized projects will be brought to a state of completion, and the construction of personnel housing in accordance with prescribed standards will be authorized for initiation and completione
8. Forces to be emplcyed in these operations under the control of the Commander-in-Chief, U. S. ARMY FORCES, PACIFIC, consist of U. S. Army Ground and Air Forces, Marine and associated Naval forces placed under his control by the Commander-inmChief. U. S. PACIFIC FLEET, and forces of the United Nations placed under his control by direction of higher authority. Where hereinafter the term "AFPAC Forces" is used or employed, it will be understood to refer to all elements, as indioated above of the combined forces employed under the ountrol of the Commander-in-Chief, U. S. ARMI FORCES. FACIFIC.

## II. RESPONSIBILITIES

1. The Commender-in-Chief, U. S. APHY FORGES, PACIFIC, is responsible for the logistic support of all Army, Diarine and asscoiated Naval, and United Nations forces, (AFPAC Forces) employed under his control in this operation. Where certain equipment and supplies for elements of these forces not organic to the United States Army are, by agreement, to be provided by responsible agencies or commanders not under the control of the Commander-in-Chief, U. S. ARMY FORCES, PECIFIC, such equipment and supplies are provided in amounts and at times, and by methods as determined and prescribed by the Commandermin-Chief, U. S.

ARMI FORCES, PACIFIC.
2. The Commander-in-Chief, U. S. FhCIFIC FLEPT, continucs the logistic support missions for which he is now responsibla or as may be later required for all Naval scrvices under his ocmend, and in addition is, by agreement, to be responsible for the logistic missions specifically indicated herein, exeept for Marine and associoted Haval forces under the operational control of the Commander-in-Chicf, U. S. ARIY FORCES, PliCIFIC. For Marine and assciated Maval forces, a part of frphc Foroes, the Commander-in-Chief. U. S. PACIFIC FIEET, provides necessary equipment and acoompanying supplies, and additionelly mekes availabla Class II, IV and $V$ supplies and shipping therefor for the resupply of these forces while employed in these operations. This resupply shipping is moved to AFPAC regulating stations in accordance with schedules coordinated with this headquarters.
3. The Comanding General, FAR EAST AIR FORCES, oontinues the legistio support missions for which he is now responsible, or as may be later assigned, for all forces under his command, and in addition is responsible for logistic missions specifically indicated herein.
4. The Commanding Generals U. S. ARHY FORCES, MIDDLE and WESTERI PACIFIC, continue the logistic support missions for which they are now responsible, or as may be later assigned, for all frmy forces in their respective areas, and in addition for the logistio inissions specifioally indioated hergin.
5. The Commanding Generals of furmies are sesponsible for the logistic support of their commands at all times, except as modified hereinafter. In addition, they are responsible for rendering direct logistic support to all 4 fPisc Forces, not attached to
them, but employed within their respective frmy areas in the objective, until such time as this responsibility is transferrod by direction of this headquarters.
6. The U.S. ARMY SERVIGE COMMIND C (short title UShSCOM-C) is organized with headquarters, base, service, and construction troops sufficient to render logistic support to combat forces, and accomplish approved projeot construction in the objective areas. The Gomanding General, US\&SCOM-C, is responsible for rendering direct logistic support to AFPAC Forces as follows:
a. Initially adequate service troops of USASCOA-C are attached to frmies to perform the functions of direct logistic support during the early phases of the operation in each brmy objective area, during which period hrmy Commanders are rasponsible for direct logistic support of all hFphC Forces within their respeotive areas.
b. Upon direction of this headquarters, the responsibility for rendering direct logistic support in each Army objective area is transferred from Army Commanders to the Comanding General. USASCOM-C, at whioh time the service troops of USASCON-C attached to Armies, in acoordance with paragraph a, above, will revert to the control of the Comanding Gencral, USLSCOR-C. The target date for the transfer of this responsibility for rendering direct logistic support in each area is the initial landing date in each area plus 20 days.
7. The Commanding Gencral, U. S. ARMY FORCES, TESTERN PACIFIC, is responsible for planining for and procurement of means to provide logistio support for AFPAC Forces employed in these operations, including the procurement, loading and sailing of cargo transportation required for the transport of equipment,

1
supplies and materials to accomplish this objective, except Glasses II, IV and V for Marine and associated Neval forces, Air force technical supplies and air ammunition and materiel peculiar to attached United Nations forces, but including transportation of Air Force technical supplies and air ammunition. The responsibility of the Commanding General, U. S. ARMI FORCES WESTERN PAGIFIC, will terminate upon the arrival of cargo shipping transporting equipment, supplies, and materials at AFPAC Regulating Stations, or other ports in accordance with approved schedules and directives of this headquarters, where such shipping will upon arrival come under the control of the Commanding General, USASCOM-C. In executing the above responsibilities, he will exercise maximum coordination with. Commander-in-Chief, U. S. PACIFIC FLEET, the Commanding Generals, FAR EAST AIR FORCES, ARMIES and USASCOM-C.

8, The Comnanding General, FAR EAST EIR FORCES, is responsible for planning for and procurement of all materiel peculiar to the Air Forces required to provide logistic support for the U. S. ARMY AIR FORCES and attached afr forces except for equipment and supplies used and provided exclusively by these attached forces, and loading of the heavy shipping in Zone of Interior provided and moved by the Commanding General, U. S. ARMY FORCES, THESTERN PACIFIC, to accomplish this objective。 In executing the above. responsibilities, he will exereise maximum coordination with Commander-in-Chief, U.S. PACIFIC FLEET; Commanding Generals, ARMIES, U. S. ARMI FORCES WESTERN PACIFIC, and USASCOM-C.
9. The Commanding General, U. S. $A R M Y$ SERVICE COMMAND C is responsible for planning for and execution of direct logistic support of AFPAC Forces in the objective area, including the establishment of ports, bases, and installations, and construction
of projects approved and directed by this headquarters. He is responsible for movement of cargo shipping transporting equipment, supplies, and materials as provided by the Commanding General, U. S. $A R M Y$ FORCES, TIESTERN PACIFIC; in accordance with paragraph 7, above, from AFPAC Regulating Stations, or other points where it comes under his control, to the objective area following approved schedules and directives of this heedquarters, and its receipt and discharge thereat. In planning for the execution of the above, he will exercise maximum coordination with the Commanding General, U. S. GRMY FORGES, YESTERN PACIFTG.
III. SUPPLY.

1. a. The Commanding Generals, FiAR EAST. $\triangle$ IR FORCES, U.S. ARMI FORCES WESTERN P/4CIFIC, and U. S. ARMY FORCES MIDDIE PACIFIC, stock at appropriate bases sufficient supplies to accompany all Lurmy forces employed in the operation for which they are responsible for mounting, as indicated below. Additionally, planned levels of supply to be accumulated in objective area at a uniform rate starting at $\mathrm{X} \nLeftarrow 60$ are as shown below.

| CLASSES | $\begin{aligned} & \text { TROOPS IWINDING } \\ & Y+29 \\ & \hline \end{aligned}$ | TROOPS I\&NDING LFTER Y + 29 | PLANNED ULT IMATE LEVEIS OF SUPPLY IN OBJECTIVE |
| :---: | :---: | :---: | :---: |
| Class I - B-type | $10 \mathrm{D} / \mathrm{S}$ | $20 \mathrm{D} / \mathrm{S})$ | $45 \mathrm{D} / \mathrm{S}$ |
| Emergency types | $20 \mathrm{D} / \mathrm{S}$ | $10 \mathrm{D} / \mathrm{s}$ ) |  |
| - Mater | Minimam of 2 gal per individual in unit transportation | Ls prescribed by unit |  |
| Class II and IV (less construction materials) | $30 \mathrm{D} / \mathrm{s}$ | $30 \mathrm{D} / \mathrm{s}$ | $45 \mathrm{D} / \mathrm{s}$ |


c. Chemical warfare protective equipment and clothing will be introduced into the objective area as follows:
(1) All units are equipped with authorized

TO \& E organization equipment.
(2) Troops arriving in the objective area in $Y$ Day
assault echelons will take:
(a) On the individual:

1 suit protective underwear
2 prs protective socks
1 pr protective gloves

- 8-

(b) In unit equipment:

1 complete suit protective clothing (2 layer).
(3) Troops arriving in the objective area subsequent to the assault echelons:

No individual protective olothing accompanies units.
(4) Loaded on resupply shipping available for, immediate movement to the objective area on or after $Y$ Day for the entire force:

I extra suit protective clothing ( 2 layer)
1 extra suit protective underwear
2 extra pairs protective socks
15,000 field impregnation sets MI

## 2. Resupply.

a. Resupply will be direct from the Zone of Interior and the utilization of maximum possible quantities of supplies from bases in the lindale Pacific and Western Pacific Areas. Determination of the loading of all ships indicated herein is under the general supervision of this headquarters. Complete data on the loadings of all pre-loaded ships, including those tailored ships loaded for selective discharge will be commanicated to Army Commanders for their concurrence or recommended changes by Commanding General, U. S. ARIM FORCES WESTERN PACIFIC. Requisitions for additional Class II and IV supplies may be submitted by Ary Commanders provided they are items which the Army Comanders feel are not included in adequate quantities in pre-loaded resupply ships. These latter supplies are delivered in special loaded ships. Resupply is accomplished as "AUTOLATIC SUPPLY" for the first 90 days by the employment of preloaded, balanced and solid loaded ships as follows:
(1) Type A-30 D/S of Classes I, II, III and IV supplies of all services for 25,000 strergth

Contains $750,000 \mathrm{~B}$ rations, 125,000 emergency rations and 750,000 accessory packs; a balanced W苗ockage of Class III (less motor gasoline and Diesel fuel); 3 medical maintenance umits plus supplemental expendables; spare parts, cleaning and preserving materials, and miscellaneous expendable items of all services, including Information and Education and Red Cross supplies.
(2) Type B - Solid loaded $18 \mathrm{D} / \mathrm{S}$ Quartermaster Class I supplies for 100,000.
(3) Type C - Solid loeded with $30 \mathrm{D} / \mathrm{S}$ of Class III supplies for 30,000 (rhis ship to be employed only during eerly pheses or until bulk shore storage is in operation).
(4) Type D - Solid loaded with 30 D/S Class III supplies for 175,000. (This type ship to be employed after distribution from bulk shore storage is in operation. Contains petroleum products not stiored in bulk installations).
(5) Type E - Balance loaded with $30 \mathrm{D} / \mathrm{S}$ of Class II and IV Quartermaster, Signal, Miedical, Chemical Warfare. Information and Eduaetion, and Red Cross supplies for $100,000$.
(6) Type F.- Solid loaded with balanced load of ammunition for all onlibers of weapons of U. S. hrmy combat elements of the force.
(7) Type G - Solid loaded with all types of ammunition required, based on estimnted rates.of expenditures, to maintain an adequate ammanition supply.
(8) Air Force Teohnical and Ammunition - Balance loaded ships containing fir Forces technical supplies and ammunition loaded to meet phased requirements for Air Forces to be established in the objective area.
(9) Engineer, Ordnance (Clnssos II and IV) and Signal In addition to the above specific type loads, engineer, ordnance (Clesses II and IV) and signal supplies and materials will be lifted in ships with tailored loads to meet phased requirements for those services.
(10) Marine and associated Naval Forces - Additional ships of similar type loads designed to support Narine forces are employed. These ships are designated with the appropriate type letter as above with the suffix "R" added to identify the ships designated for hinrine and assoointed Neval forces.

## b. Reserve Supplies.

(1) Floating Reserves - The Commanding General, U. S. ARITY FORCES WESTERN PAGIFIC suhedules ship sailings with sufficient lead time so that there is availeble at the iFPAC Regulating station, in addition to current requirements, floating reserves during periods as follows:


Type A:
Type C:
Type $\mathrm{D}:$

12 ships
4 ships
None

6 ships
None
2 ships

| Type $G:$ | 4 ship | 2 ships |
| :---: | :---: | :---: |
| Air Forces TS and | ships | 2 ships |
| Lir Forces Solid AV | 3 ships | 2 ships |
| Signal, Olass IV: | 1 ship | None |
| Engineer, Class IV: | 5 deys ${ }^{\prime}$ estimated consumption | None |

Toxic Chemioals for

| Air Forces | 2 ships | 2 ships |
| :--- | :--- | :--- |
| Ground Forces | $I$ ship | 1 ship |

(a) The Commanding General, USASCOin C distributes to the objective area or to bases as directed by this headquarters the floating reserves on hand at $Y$ f 90 days.
(2) Emergency reserves.
(a) The Commander-in-Chief, PLCIFIC OCENI AREL* is to earmark supplies in the amounts and locations as indicated below, these supplies to be held available to meet emereency requirements as determined and directed by this headquarters:

1. At SATPAN:

Army Suppliesz

| Class I | $\begin{aligned} & 30 \mathrm{D} / \mathrm{S} \\ & \text { for } \\ & 200,000 \end{aligned}$ |
| :---: | :---: |
| Class II and IV (Less construction and aviation): | D/S for: |

4 Divisions
$18^{\prime \prime}$ How Bn
2. Med Tk Bns

2 J/.sco's
2 Med Ens
5 Engr Bons (C)

```
            1 lif& Bn (G) (Mbl)
            2. LAL Bns (G) (SNI)
            2 AAA Bns (AN) (SM)
            2 1.55 mm Gun Bns (CH) (SM)
            2 155 mm Gun Bns (FH)
            2 155 mm How Bns
            Class III (Less avia-
                                    tion): 30 D/S for
                                    100,000
            Class IIIA - 1,000,000 gals and
                sssociated lubricants, drummed
                        and packaged.
                Class V:
            15 U/F for one Division
            20 U/F for one 155 mm Gun Bn
            15 U/F for one 155 mm How Bn
            5 U/F for one Tank Bn
            15 U/F for one fwht Gun Bn
                    10 U/F for one Chem Wpns Co
2. lat GULMi:
                    For Nerine Corps units:
                    Class II and IV (less construc-
                        tion and aviation) }30\textrm{D}/\textrm{s}\mathrm{ for:
                    2 Divisions
                    2 LAL Bns
                    2 155 mm Gun Bns
                    2 155 mm How Bns
2 JLSCO's
                    Class V:
                    15 U/F for one Division
                    20 U/F for one 155 mm Gun Bn
                    15U/F for one 155 mm How Bn
                        5U/F for one ALA Bn
10 U/F for one Chem Wpas Co
Class III: 30: D/S for
                                    100,000 men
Class IIIf: 1,000,000 gals
                                    with assooiated
                                    lubricants.
```

(b) The Commanding General. U. S. IARMT FORCES WESTERN PAGIFIC, will provide emergency reserves, to be released only by direction
of this headquarters, as follows:

1. Earmark from current stockages in PHILIPPINES, the following : $\begin{array}{ll}\text { Class I: } \quad & 30 \mathrm{D} / \mathrm{S} \text { for: } \\ 200,000\end{array}$

Class II and IV (less
construction materials) $30 \mathrm{D} / \mathrm{s}$ for:
I 240 How Bn
$18^{\prime \prime}$ How Bn
1 TD Bn
1 Amphib Tk Bn
1 Lumphib Tractor Bn
2155 mm How Bns
1 Chem Mortar Bn
4 Engr Combat Bns
$2 \mathrm{~J} / \mathrm{SCO}^{\prime} \mathrm{s}$
Class V: $5 \mathrm{U} / \mathrm{F}$ for one 240 How Bn
5 U/r. for one $8^{\prime \prime}$ How Bn
2. Energency reserves for air resupply from KYUSHU :
Thirty days supply for 40,000 strength
(less petroleum products, artillery
ammunition, and bombs) for amergency
shipment by air and whole blood supply
as later detemined and as arranged
with cincpac.
(c) Resupply vessels are scheduled to arrive in objective area ports or beaches based upon the capacity of the ports and beaches "of each area to discherge, and in sufficient number to meet the daily requirements for supplies for all olasses. Partial discharge of ships to meet operational demands is permitted during the first 45 days of the operation.
(d) The Comander-in-Chief, U. S. FiCIFIC FIEET, is to procure all Merine and Navel Class II, IV and V (ground ammunition) supplies and construction materials required
exolusively for Marine and associated Naval forces and for focilities required for their support, and load in shipping provided by him. These supplies are moved in accordance with schedules approved by this headquarters and upon arrival at AFPAC Regulating Station will come under the control of the Comnanding Generals, Field Armies or the Commanding General, USASCOM-C, as appropriate.
(e) All resupply shipping will move to $A F P L_{-}$ Regulating stations under the control of this headquarters. hiovement forward of Regulating Stations is controlled by the Army Commanders until the responsibility for rendering logistic support is transferred from Army Commanders by direction of this headquarters; thereafter by the Commending General, USASCOM-C.insofar as determining the number and type of resupply ships to be moved into the objective area to meet operational demands are concerned.
(f) The Commanding General, U. S. ARNX FORCES WESTERN PACIFIC is responsible for the proaurement of all supplies including supplies and materials required for the support of Military Government organizations functioning in the objective area including food, medical suppiies and other items required for the relief of civilian population, liberated nationals and United Nations prisoners of war,
and for transportation of the foregoing supplies to lafPaC Regulating Stations in accordance with schedules to be prescribed by this headquarters.
(g) The Commanding General, U. S. ILRMY FORCES WESTERN PACIFIC:

1. Provides water purification equipment in excess of organization $T / O \& E s$ and SLOEs as may be required by the Commending Generals, Field larmies.
2. Arranges for replacement vehicles to arrive in the objective area after I f 60 in single-unit pack (Sup) for assembly in the objective area by service forces there.
(h) The Commander-in-Chief, U. S. PicIFIC FLEET, is toz
3. Provide fresh water to hrmy forces in the objective aree from water distillation ships to the extent available in quantities as required to meet the needs of such water requirements until adequate water supply is developed in the objective area.
4. Provides the services of the necessary YOG barges at OKIMLWh for use of the Commanding Generals Field hrmies or Commanding General, USLSCOM-C, as appropriate, for transporting and
maintaining floating supplies of petroleum products: in the objective area.
5. Provides materials for the construction of facilities required for the support of the Marine and associated Naval forces While these forces are under the operational control of the Comander-in-Chief; U. S. ARNY FORCES, PACTFIC.

4, Provides the Army Commanders with pontoon string assemblies in the objective areas in quantities as subsequentily specifically determined, within the Iimits of availability。
3. Bulk and packaged petroleum supplies are provided as follows: a. Accompanying supplies of petroleum products are provided by the Commander-in-Chief, PACIFIC FIEET, for U. S. Army Forces mourted, from bases under the control of the Commanding General, U. So ARME TORCES MIDDIE PACIFIC, and for Marine and ássociated Naval forces mounting from bases under the control of Commander-in*Chief, PASIFIC FLED'R; and Commander-in-Chief, PACIFIC OCFAN AREA, and for all elements of the U. S. 'PACIFIC FLEET in accordance with existing proceciures.
b. Accompanying supplies of petroleum products for forces mounting from the PHIIIPPINES, KYUSHU and RYUKYUS are furnished by the Gommanding General, U. S. ARMY FORCES WESTERN PAGIPIC, in accordance with existing procedures.
c. Resuppiy.

The Gommander-in-Chief, U. S. ARMY FORCES PACIFIC, is responsible for the resupply of all petroleum products to and within

## penteminiul

the objective area for all forces, except FLEET forces (including elements of attached United Nations fleets), that are normally supplied by Naval service squadrons or divisions. During the amphibious phases of the operation, Commander-in-Chief, U. S. ARMY FORCES PACIFIC, loads shuttle tankers at KYUSHU or ather areas as requested by COMPHIBSPAC to meet requirements of Commander-in-Chief. U. S. ARMY FORCES PACIFIC in the objective area., After the amphibious phases, comnander-inChief, U. S. ARIY FORCES PACIFIC (Sub-Area Petrojeun Officer, CORONET) will call forward shuttle tonkérs as required. Resupply of packaged petroleum products to those forces for which Commender-in-Chief, U. S. IARAY FORCES PhCIFIC is responsible for supply is effected by Commanding General, U. S. ARMI FORCES mestern Pacific.
d. Supply of petroleum products in the objective area is accomplished as follows:
(1) Initially by druns and packeged produots acoompanying troops in assault echelons rollowed by floating supply in petroleum barges containing Avgas, Mogas and automotive Diesel fuel.
(2) Each barge is equipped with the necessary materials to establish pipelines ashore, surge tanks, and devices for delivering petroleum products to tenk trucks and drums. Barges are refilled by tankers.
(3) Prompt initiation of construction of shore storage installations wisin necessary tanker disoharge
, lines permits early delivery of products direot from tankers. Existing facilities to be used tc the maximum practicable extent.
(4) By resupply ships from the $U \cdot S$. carrying'

二 18 -
packaged products.
3. Commander-in-Chief, U. S. ARVIY FORCES PACIFIC, and Commander-in-Chief, PAGIFIC FLEET, provide such tankers as are necessary for shuttle service and floating storage. Commander-in-Chief, PACIFIC FLEET, is responsible for the operation and movement of these tankers as requested by Commander-in-Chief; U. S. ARMY FORCES PACIFIC. Commander-in-Chief, U. S. ARAY FORCES PACIFIC, controls the movement of certain specified small, tankers and barges in the objective area for the purpose of distributing products from shuttle tankers and from commercinl tankers.
f: Commanding General, U. S. ARMY FORCES THESTERN

## PACIFIC:

(1) Fabricates in advance and provides to Army Commanders assemblies for filling gasoline drums and cans in the field and/or roadside convoy refueling, togethcr with necessary pipeline and booster pumps to permit the construction of bulk petroleum products distribution systems.

## IV E EVACUATION．

1．Evacuation from the objective areas，initially，is by suitably－equipped and surgically－staffed surface vessels． Hospital shìps，APHs，converted APAs，and APAs are utilized；茵的 more serious type of cases being evacuated in the hospital ships as practicable．In emergency，small naval assault craft or heavy cargo shipping are utilized，but due to the limited facilities abcard these vessels，patients are not carried further than the KYUSHU area on these types of vessel．Air evacuation is established from the objective area at the earliest practicable dates Evacuation is to ports and rear bases Where bed credits have been established．Evacuation from the objective areas．direct to the zone of interior is initiated as soon as practicable。

> 2. Responsibility for evacuation is as follows:
> a. Army commanders are responsible for the initial
treatment and evacuation of all casualties in their respective areas．
b．The Army commanders or Commanding General， USASCOM－G，as appropriate，are in their respective objective areas，responsible for the evacuation from Army installations to hospitals，beaches，or air strips，as appropriate．
c．Overwater evacuation by surface craft is by Commander－in－Chief，U．S．Pacific Fleet．
d．Commanding General，Far East Air Forces，is responsible for air evacuation except by ATC as indicated in paragraph 7 below．
e．Secondary evacuation from rear bases to the zone of interior is the responsibility of the Commanding Generals，
U. S. Arny Forces, Middle Pacific and Western Pacific, within their respective areas. Full use is made of the available ATC air lift for secondary evacuation to the Zone of Interior. Hospital ships are also used for secondary evacuation to the Zone of Interior.
f. The respective commanders designated above are responsible that transportation facilities evacuating casualties have adequate medical equipment, personnel and supplies to care for patients enroute,
3. Commanding General, USASCOMI-C, is responsible for the early establishment of fixed hospitals in the objective areas, and the reception and hospitalization of casualties evacuated thereto from mobile hospitals of the combat forces. Full use is made of existing buildings, in order to expedite this probram.
4. Geneva-protected hospital ships in support of this operation are under the operational control of the Comnander-in-Chief, U. S. Pacific Fleet. Initially, these ships evacuate patients to ports and bases in the Pacific where bed credits have been established. When direct evacuation to the Zone of Interior has been established, they may be utilized for such evacuation as determined by this headquarters,
5. The Commanding General, Far East Air Forces, employs troop carrier planes for the evacuation of casualties from the objective areas to bases at KYUSHU, OKINATA, and the PHIIIPPINES. He also makes available for evacuation purposes, liaison squadrons supplemented by helicopter planes for use in the forward objective areas.
6. Commander-in-Chief, U. S. Pacific Fleet, provides
surgically-staffed LSTs for use off the landing beaches in the objective area during.the assault phase of the operationg. These vessels are equipped to provide emergency treatment and primary essential surgery. Patients are classified according to the seriousness of their injuries and transferred to other vessels for definitive treatment and for further evacuation.
7. This headquarters arranges with the Commanding General, Pacific Division, ATC, for evacuation of patients by air to the more distant hospitals and bases in the Pacific Ocean Area and to the Zone of Interior.
8. Salvageable material is not evacuated from the objective areas to bases in the rear. Repairable material is reoonditioned in the objective areas with fourth and fifth echelon maintenance units provided for that purpose, and returned to combat organizations. Material which cannot be made combat serviceable is utilized to meet the requirements of military government or otherwise disposed of as directed by this headquarters. Captured material, surplus to the needs of combat forces and Military Government agencies, is assembled and held for later disposition as directed by this headquarters.
9. Prisoners of war are confined in the objective areas. Evacuation from the objective areas is by direction of this headquarters only.
10. Civilian casualties are not evacuated from the o objective areas.
V. HOSPITAIIZATION.

1. During the early phases of operations and prior to the establishment of fixed hospitals in the objective areas,
minor casualties are hospitalized in mobile-type hospitals assigned to the Task Forces. Casualties requiring prolonged treatment within the period of $Y$ to $Y ; 90$ are hospitalized in fixed hospitals established in the WESTERN PACIFIC, MIDDLE PACIFIC and KYUSHU Areas and similar hospitals as they become established in the objective areas.
2. Reception and hospitalization of patients evacuated from objective areas to MIDDLE PACIFIC, TESTERN PACIFIC and KYUSHU Areas are the responsibility of the commanders of those areas.
3. a. The Commanding Generals, TPSTERN and NIDDIE PACIFIC Areas, make available, by prior clearing of hospital beds in respective areas, the necessary bed credits to Y 90 , as follows:

| TTESTERN PACIFIC Area | Y-Day | 10,000 |
| :---: | :---: | :---: |
|  | Y 610 | 15,000 additional. |
| MIDDIE PACIFIC Area | Y-Day | 4,000 |
|  | $Y \neq 7$ | 6,000 additional |
| MYUSHU Area | Y-Day | 10,000 |

4. In order to reduce evacuation from objective areas. fixed-type hospital units, station and general hospitals, designated for this operation, are established there in accordance with phases prescribed in Appendix " $\mathrm{B}^{4 \prime}$, pages one and two. Initially, these units function in existing buildings or under canvas, with essential prefabricated buildings. The Commanding General, USASCOM-C, is responsible for establishing 45,000 fixed hospital beds in the objective areas. The Commanding General, USASCOM-C, provides complete prefabricated construction (temperate-climate type) for 100 percent of total
hospital beds bofore 15 October 1946.
5. Calling forward of Military Government civilian hospital units to their respective areas is the responsibility of the Army commanders or the Commandins General, USASCOM-C, as appropriate.
6. The maximum uso, consistont with the minimum noeds of the civilian population ${ }^{\text {fis }}$ is made of existing civilian hospitals and other suitable buildings for hospitalization of casualties. VI. TRANSPORTATION.
7. Naval assaiult shipping is employed for necossary concontration of troops and transportation of assault and follow-up elements, with accompanying supplies, forward from mounting areas to the objective areas, augmentod by hoavy shipping as required.
8. Estimate of troops, equipment, and cargo, including maintonanco, construction materials, and supplies for the Military Government moved into the objective area, is included in Appendix B.
9. The Commander-in-Chief, U. S. Pacific Fleet, is to be responsible for the following:
a. Provision of over-water transportation for troops and accompanying supplies emplayed in these operations, at timos and to places as previously arranged with Arny commanders and with this headquarters.
b. The control of movement incident to necessary socurity of all shipping operating in direct support of thoso oporations, including Geneva-protected hospital ships.
c. Provisions of amphibious and other craft for lighterage purposes, including use for discharge of Army shipping in the objoctive areas.
d. Movement of slow convoys of harbor craft barges and other slow moving vessels and tankers to objective area, prior to or coincident with planned first arrival of heavy shipping.
e. Harbor clearance and harbor development to the high water mark of all harbor arcas in the target areas, including all dredging oporations and construction of complete artificial harbor, but excluding construction of piers, wharves, jetties, and other harbor installations for Army ports except as part of artificial harbor.
f. Provision, in conjunction with Commandar-inChief, U. S. Army Forces, Pacific, of tho necessary number of dredges required for development work in the objective area.
10. The loading of troops and equipment for movement by Naval assault shipping is the responsibility of Army commanders or the Commander-in-Chief, USASCOM-C. The loading of cargo shipping employed for the movement of troops and equipment is the responsibility of the Commanding Generals, U. S. Army Forces, Middle and Nestern Pacific, at all ports and bases under their respective control. Tho loading of troop units and equipment from Zone of Interior ports is arranged by Com-mander-in-Chief, U. S. Army Forces, Pecific; with appropriato agencies.
11. The Commanding Goneral, U. S. Army Forces, Tiestern Pacific, is responsible for the following:
a. Coordination of loading of cargo ships with the appropriate commanders of $2 l l$ agencies responsible for loading support shipping to assure compliance with the general procedure outlined above and with detailed plans to be later perfected and provided to appropriate agencies.
b. Loading shipping with type loads as indicated in paragraph 2 a of Section III, above, to provido support for the forces until $Y \neq 90$ days.
c. Provision of floating reserve ships as indicatod in paragraph 2 b (1) of Section III above.
d. Arranging for all trans-Pacific shipping moving supplies and equipment in support of these operations to be sailed to the AFPAC Regulating Station, in accordance with schedules as approved by this headquarters.
e. Provision of lighterage facilities required in the objective area, taking into consiceration lighterage furnished by the Commander-in-Chief, U. S. PAGIFIC FLEFT.
f. brranging for the assembly, at a forward point to be designated later, of harbor craft required for later movement to the objective area and provision of necessary personnel to man and care for such craft.
g. Provision of additional cargo shipping, both small and heavy type, from that under his control, for special loadings and to meet unforseen or emergency requirements for such shipping in support of this operation.
h. Providing and loading the following barges in apw propriate numbers:
(1) Reefer barges
(2) Spare part barges, specially stocked with Bngineer, ordnance, signal and marine repaix spare parts in such manner that stocks are readily accessible.
(3) Barges (1) and (2) above are loaded in the United States and moved to the objective area via later determined barge assembly points.
12. The Commanding General, FAR EAST AIR FCRCES, is responsible for the following:
a. Operation of troop transport groups in the service of evacuating casualties from the objective area to KYUSHU or OKINATA by air.
b. Transportation by air to the objective area of emergency supplies as required by Army Commanders and as directed by this headquarters.
c. Provision of L-5.ambulance evaquation planes for evacuation of casualties from formard areas and on formard flight for movement of light-weight spare parts or critically needed light-weight supplies to appropriate artillery liaison plane landing strips.
13. In order to regulate flow of shipping into the objective port areas, regulating and control stations are established at locations to be designated by this headquarters. Ships are called forwayd from the Regulating Station by the Commanding Genexals, Armiea or USASCOM-C as appropriate and as directed by this headquartiers. Determination as to corroy sailings from the ASPAC Regulating Station are in accordance with schedules premarranged between this headquartear and the commander-in-Chief, U. S. PACIFIC FLEET.
14. a. In those ports in the objective areas developed and operated exclusively by either the Army or the Navy, the Commander-in-Chief, U. S. ARMI FORCES, PACIFIC, or the Commander-in-Chief, U. S. PACIFIC FLFHT for their respective ports exercise complete and independent control over shipping arriving therein.
b. Ports where facilities are established by both the Army and the Navy, each for its own use, but which are so located that there must be in common employment of roadsteads, harbor
waters, and port clearance facilities are controlled as follows: The Commander-in-Chief, U. S. ARMY FORCES, PACIFIC, exercises general control of the regulation and flow of Army and Navy shipping to avoid confusion in ports and of port clearance facilities. The Commander-in-Chief, U. S. PACIFIC FLEET, schedules arrivals of Naval shipping, based upon his ability to discharge and clear cargos through the Naval port facilities and the joint port clearance facilities coordinating such schedules with Commander-in-Chief, U. S. GRMY FORCES, PACIFIC. c. Common ports where port and port clearance facilities as established or as may be established must be used jointly by both sorvices are operated as follows: Commander-in-Chief, U. S. ARMY FORCES, FACIFIC, exercises control, determining in advance the overall amount of shipping for both the Arny and Navy which can be received and cleared through the joint port and port clearance facilities. The Commander-in-Chief, U. S. PACIFIC FLBHT, submits in advance his requirements for import tonnage in such ports to the Commander-in-Chicf, U. S. ARMX FORCES, PAGIFIG, who, based upon similar requirements for import tonnage to meet Army requirements, determines the amount of shipping that can be received for each service during each 15-day period for each port falling under this classificatior
d. The classification of ports in $b$ and $c$ above is made at a later date, based upon final fetermination of facilities to be established and operated in the objective area by the Army and. the Navy.

## 9. Shipping designators:

TOKYO
YOKOHAMA
Others

BULL EV IL

To be announced later.
10. To assist in port clearance by minimizing motor traffic on roads to the greatest extent possible, the maximum use is made of railways and rolling stock that is captured within the operation areas, and that witich can berapidy rohabilitated without the introduction of major railroad equipment tonnages.

## VII. CONSTRUCTION

I. General information for facilities established in the objective area is shown in Appendix A. Detailed information of Air Field Construction, Petroleum Bulk Facilitiess Port and Base Construction, and phased construction tomages are shown in Appendices $C, D, E$ and $F$ respectively.
2. Construction is limited to the provision of minimum essential operational facilities. During the first 60 days of the operation, while combat forces are supported over the beaches, development of facilities thereat are limited to the establishment of airdromes, communications, navigation heads, temporary cargo unloading facilities, construction of essential roads, cargo disposal areas, and rehabilitation of vitally needed railroads.
3. When bases on TOKYO WAN become operative, minimum essential operative port and base facilities required for support of combat forces are provided. Personnel housing is deferred to $Y$ f 150, Separate plans are made for the provision of personnel housing to be constructed subsequent to Y.f 150.
4. The Commander-in-Chief, U. S. PECIFTC FLEET, constructs in the objective area facilities determined by him as required for the support of Naval forces not under the operational control of the Commander-in-Chief, U. S. ARMY FORCES, PAGIFIC.
5. The Commanding General, USASCOM "C" determines the requirements for each of the interested agencies, formulates tentative layout plans for the development of objective area sitos for suomission to this headquarters for approvalo After review, coordination and approval of these layout plans, by this headquarters, the 0ommanding General, USASCOM-C, is responsible for the completion of detailed planning and construction of approved facilitios initiated by the Army Commanders.
6. Aruy Commanders employing construction forces mado available to them initiate construction of port, base and air facilities. CommanderminmChief, U, S. PACIFIC FIEET, or the Commending General; USASCOM-C upon relieving Arny Commanders of logistic responsibility, as appropriate, continues construction of approved projocts. Emphasis is placed on restoration of port facilities to operative sonditions at the earliest possible dato.
7. Lanc aness required in the objective area fox instajlations of prot, base and operating facilities for Army, Nivy and Ate installations, are allocated by this headquarters as follows:
a. The Commander-in-Chief, U. S. PACTFIC FIEET advises this headquarters at the earliest: peractical date of the areas desired for the installation of Naval facilitios*
b. The Commanding Generals of eech Army, the FAR EASTHRN AIR FORCES and USASCOMMC advise this headquarters by Y- 1.50 of the areas desired for instatiation of required facilities in the objective area.
c. At the earliest practical date following receipt of stated requirements, information of tentative allocations
will be disseminated to all interested commanders by this headquarters.
d. Army Commanders initiate allocation of areas in their respective areas conforming as closely as possible to the preliminary allocations made by this headquarters. Changes in allocation which may be nocessary because of configuration of terrain or for other cogent rosons mey be made by Army Commanders, and such adjustments are reportod to this headquarters on appropriate maps.
e. Upon transfer of responsibility for rendering logistic support of aroas by direction of this hoadquartors from Army Commanders to the Commanding General USASCOM-C, the letter commander allocates areas as indicatod in paragraph ca above.
VIII. HALL

1. Commanding Gonorals U. S. ARMIY FORCES MIDDLE PACIFIC and TESTERN PACNTC arrange for collection of mal from staging and mounting areas immodiateiy follewing the emiarkation of troopa ther Gfrom and for the prompt redirection of all mail for units enroute to the objective area and for forwarding to the objective area.
2. Distribution of main in tire objoctive araa is initiated at the earliest possible date, and is accomplished in accorcance with existing regulations. Mail distribution in the objectivo area is established by $Y \not \subset 30$ days.
'IX. REPLACBMENTS
Army Air, Ground, Scrvice, Marino and associated Naval, and United Nations forces replacements are established in the objective area.

## X. MISGELIANEOUS

1. Maximum use is made of available local installations and civilian and prisoner of war labor.
2. The Comanding Generals, FAR EAST AIR FORCES, U. S. ARIN FORCES FESTERN PACIFIC and USASCOM-C, submit to this headquarters not later than $Y$ - 180, arrangements for accomplishment of the foregoing logistic missions including plans and specifications for base installations in tho objective area roquired by themfor support of the forces employed in this operation.
3. The Commanding Gencrals, FAR EAST AIR FORCES, U. S. ARMY FORCES MESTERN PACIFIC and USASCOM-C, or thoir representatives, are propared at any time after Y - 180 to brief: representatives of this headquarters or headquarters of major forces employed in this operation concerning the proposed method of rendering logistic support and the current status of implementation thercof for any or all objective areas.
4. Tho Commanding Generals FAR EAST GIR FOROHS, U. S. $4 R M Y$ FORCES UESTERN PACIFIC, mako available, upon call of the Commanding Gonorals, $\operatorname{sRM}$ mss, staff reprosentativos to assist in planning the initiation of construction for the objective areas. a. This headquarters is responsible for coordination of logistic planning for this operation. It specifies the time and place representatives of the warious supporting agencies report for this purpose.

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| :---: | :---: | :---: | :---: | :---: |


(1) Earbor

> untificial titabos
> (nsyy construction)
(a) rort or besch cesity required (Dimpay)

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20,000
4,000

(3) Fixu Fort Ficilitiss
(4) Fitrciveran Storage
(5) Hocis Construction, Juprovenenta :adid uaintenance
(6) Reilrocis
(7) Prisoner of har and pndesireble Fersons Detention Camps for stringth of:
artificiad fucory b2 Ligater Jetties: by
Liguter Jettics: 32
(Tomic River)
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to be colustructio by hars

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| :---: | :---: |
| in Giss: 200,000 bols | IT Cos; 185,000 bbis |
| DiFs 75,000 061s | ides $10,000 \mathrm{bbis}$ |
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OFRRIICN • COROM



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| For period entiliga, | Y 125 | $y+x$ | x +45 | Y +60 | $y+75$ | Y +90 | $y+120$ | Y +150 | Y +180 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| grisguig (hici Naty Service but incl 4 NCB$)$ |  |  |  |  |  |  |  |  |  |
| Assault Crait | 400330 | 42000 | 469003 | 18000 | 76311 |  |  |  |  |
| $\begin{aligned} & \text { Replacements (Assault } \\ & \text { Craft) } \end{aligned}$ | 52000 |  | $24000$ |  |  |  |  |  |  |
| Lintome | 4889 |  | 8693 |  |  |  |  |  |  |
| Cargo crait |  |  |  |  | 24112 | 8188 |  |  |  |
| Total | 547225 | 48000 | 501696 | 18000 | 100423 | 8188 |  |  |  |
| Cumulative Total | 54725 | 589225 | 1090851 | 406851 | 1209274 | 1217462 | 1217462 | 1217462 | 1217462 |
| TOMEGS (DIN) (Bacl liavel Cons) |  |  |  |  |  |  |  |  |  |

## Amph Lift

| Org Equip (incl 30 days |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| maint) | 639008 | 70000 | 701502 | 3420 | 183471 |
| Enger A \& P stores ( b ) | 10635 | 8432 | 1526 ? | 7717 | 6065 |
| Mil Cor't Supplies |  |  |  |  |  |
| Sub-total | 649643 | 78432 | 716769 | 4839 | 189536 |

## Cangolitit

| Org Equig (incl 30 days maint) | 3700(10) | 4000(11) |  |  | 25483(18) | 9333(7) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Maint (lese mam) |  | 117800(20) | $214600(36)$ | $218400(37)$ | 328200(53) | 320000(59) | 640000(107) | $640000(107)$ | 480000(80) |
| Ammunition |  |  |  |  |  |  |  |  |  |
| cround Forces | $67500(12)$ | $67500(12)$ | 117500(20) | 117500(20) | $117500(20)$ | 117500(20) | $320750(52)$ | $310750(52)$ |  |
| Lir Forcee |  | 44709(3) | 5984(1) | $22688(4)$ | 5984(1) | $20243(4)$ | $17993(3)$ | 17093(3) |  |
| Lir Force Teot Supplies |  | $6995(1)$ | 3980(1) | $6463(1)$ | 3875 (2) | 1481(0). | 1.010 (a) | $700(\mathrm{a})$ | 700(a) |
| Construction Material | 50244 (12) | $97309(16)$ | $114341(19)$ | 105913(18) | 82528(14) | 786466 (13) | $2274333(38)$ | $218057(36)$ | 126156(22) |
| mere 1 \& P Stores | $31905(5)$ | $24998(4)$ | $45803(8)$ | 23153(4) | 18155(3) |  |  |  |  |
| wil Cor't Supplies |  | 9450(2) | $22300(4)$ | $36200(6)$ | 38850(6) | $32350(5)$ | $7.600(12)$ | $66000(11)$ | $67800(11)$ |
| Sab-total | 186749(39) | $379761.69)$ | $524508(89)$ | $530377(90)$ | $61015(116)$ | 579553(102) | 1267886(212) | 1252600(209) | $674656(113)$ |
| acmeams |  |  |  |  |  |  |  |  |  |
| Amph | 649643 | 78482 | 716769 | 4897 | 189536 |  |  |  |  |
| Careo (d) | 186749(39) | 379761 (69) | 524508 (89) | $530177(90)$ | $610115(116)$ | $579553(102)$ | 1267886(212) | 1252600(209) | $674656(13)$ |
| Iotal | 836992 | 458193 | 1241277 | 57244 | 798646 | 580558 | 1267886 | 1252600 | 674656 |
| crature |  |  |  |  |  |  |  |  |  |
| luph | 649938 | 726970 | 1449139 | 1484976 | 167412 | 1674512 | 167412 | 167512 | 1674512 |
| Dargo | 186749(39) | $568210(100)$ | 1098778(197) | $1623035(288)$ | $2233250(403)$ | $28127095(505)$ | 4080589(717) | $53932189(926)$ | $6007845(1039)$ |
| Iotal | 834687 | 1294580 | 2535857 | 3208011 | 3907662 | 448725 | 5755101 | 7007701 | 768235 ? |

NOIES: (a) Represents tomage to be 11 ted but to be loadad on vessels carnying maintenanco or other supplies,

- (b) Engineer $\perp$ and $P$ stores whion must Eccompeny coubat troops in amphbibious lift.




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GPEMTOL - "CORNETM
TSTUM (Cont/d)




MSTRN UREM (Cont' ${ }^{2}$ )

| Completion Date | Iocation | TLituctil (301s) |  |  |  | PIPTMNS |  |  |  | Resisrks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | WCiS | Hiocas | inf | Rillot | Lras | 20045 | Nilf | Rivice |  |
| $x+60$ to $Y \neq 75$ | CHOSiI TERTHLCL <br> inlani points. Kusituld | 55000 | 85000 | 45000 | 20000 |  | 60 |  |  | $6^{64}$ Mogas pipeline froin HOPOOSEL to KLHHL . Construction of 4 lateral liogas pipelines, druir fill points, and swall tanks as required. |
| $x+750 x+90$ |  inland points. | 85000 | 110000 | 55000 | 25000 |  |  |  |  | Constructiou of lateral Mocas pipelimes, dran fill points, and snail tanks as required. |
| Y +90 to $Y+105$ | CEOSFII TETINLIL <br> inland points. |  | 140000 | 70000 | 35000 |  |  |  |  | Construction of $4^{*}$ Lateral Mogas pipelines, drum fill poirts, and stall tanks as required. |
|  | TOML | 171000 | 185000 | 70000 | 35000 |  |  |  |  |  |
|  | Graid Tomic | 232000 | 385000 | 145000 | 70000 |  |  |  |  |  |



appendix C
appendix D

|  | - 50 RT | -Sİt | OTIUA | BASEDEVACC....T |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Liberty Ship Serths | Ligiter <br> Hiers | WT \& LOT Landing | Touporary Storase (. B Bq Ft ) Ien 50, 000 2en |  | Hospital | Caiss | Headuartars | Rouds | Railipads |
|  |  |  |  | Open | Covored | Stuge II Stage IIi | $\begin{gathered} \% \\ \text { Conyiteieù } \end{gathered}$ | iis $\mathrm{Sl}_{1} \mathrm{Ft}$ | $\begin{gathered} \% \\ \text { avapletod } \end{gathered}$ | $\begin{gathered} \% \\ \text { copleter } \\ \hline \end{gathered}$ |
| Ojjective | ? | 10 | as roquired | 8830 | 50 | 24.500 | $\begin{aligned} & \text { Ci,000 Fi and Civiitian } \\ & \text { Interness, } 473,000 \\ & \text { cearrisonin } \end{aligned}$ | 590 | 493 tii inprova 130 mi a a | $\begin{gathered} 39 \mathrm{j} \\ 20 \text { nii sein } \end{gathered}$ |
| $x+3$ | 2 | 4 | 4s Roquired | 250 | - | - - - |  |  | 3 | - |
| $y^{1}+30$ | 3 | 6 | As Required | 750 | 50 | - - |  |  | 7 | 2 |
| Y +45 | 7 | 10 | 48 Kicquirec | 3050 | 150 | 1,500 |  |  | 13 | 9 |
| $y+60$ | 7 | 10 | * Mequired | 3250 | 300 | 3,000 |  |  | 26 | 19 |
| $i+75$ | 7 | 10 | ${ }_{\text {as }} \mathrm{s}$ Requir 6 d | 8250 | 350 | $2,000 \%$ | 1 | 45 | 37 | 30 |
| $x+x$ | 7 | 10 | is fuguirea | 320 | 350 | 7,000 | 2 | 280 | 50 | 40 |
| $y+120$ | 7 | 10 | - Requirirad | 830 | 230 | 4,000 | 34 | 290 | 72 | 64 |
| $x+150$ | 7 | 10 | As Requirad | 820 | 550 | $4,000,4,000$ | 75 | 590 | 8 | 86 |
| Y +180 | 7 | 10 | Ls Recuired | 8850 | 330 | - $+18,000$ | 100 | 590 | 100 | 100 |
| I +195 | 7 | 10 | 4s Reguired | 8950 | - 350 | - $0^{4}$ 2,500 | 103 | 350 | 100 | 100 |

WULi: Tigures do tof fracude rebabilitation of existing
struotures mid Lacilities ozeept where so stated;

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airfields
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Page 3 of 3 pages

SUMIRE OP:

## COMSTRUCTICN WATLRIALS REQUIEETENS

(DTTT)

|  | ENCITEER | SIGTGL | TOTAL |
| :---: | :---: | :---: | :---: |
| MESTMRN AREA | 669115 | 29930 | 699045 |
| EHSTERN AREA | 347056 | 20373 | 367429 |
| total | 1016171 | 50303 | 1066474 |
| PHGSES REGUIRETEYTS |  |  |  |
| FERIOD | ENGINEER | SIGNAL | TOTAL |
| $\mathrm{Y}-\mathrm{Y}$ f 15 | 36577 | 9660 | 46237 |
| $\mathrm{Y} \nmid=5-\mathrm{Y} \leqslant 30$ | 815.6 | 7233 | 88749 |
| Y ¢ $30-\mathrm{Y} \div 45$ | - 88862 | 12639 | 201501 |
| $\mathrm{Y} \neq 45-\mathrm{y}+60$ | 84552 | 12795. | 97347 |
| Y:60-Y:75 | 73.62 | 7226 | 80388 |
| $\mathrm{Y} \nmid 75-\mathrm{Y} \nmid 80$ | 758.16 | 750 | 76566 |
| $\mathrm{Y} \nmid 90-\mathrm{Y} \nmid 105$ | 93256 |  | 93256 |
| $\mathrm{Y} \nmid 105-\mathrm{Y} \nmid 120$ | 129897 |  | 129897 |
| $\mathrm{Y} \nmid 120-\mathrm{Y} \nmid 150$ | 213057 |  | 218057 |
| $\mathrm{Y} \nrightarrow 150-\mathrm{Y} \nmid 180$ | 120046 |  | 126046 |
| $\mathrm{Y} \nmid 180-\mathrm{Y} \nmid 195$ | -8230 | --- | - 84.30 |
| TOTAL | 1016171 | 50303 | 1066474 |

APPENDIX F SMHEX 4

Page 1 oniy.

GNNEX 4
"CORONET"
ARTIFTCTAL HARBCR

## I. RESPONS IBIITITY:

The preparation, construction, transportation to the objective area, installation and maintenance is tire responsibility of the Navy.

## II. CONCEFT:

1. Purpose. Protected harbors are required where major forces must be supported and supplied for considerable period over beaches subject to sevele storms. Such storms interfere with or interfupt unloading operations, and may cause so much damage to landing craft ard installations as to cxipple operȧions for long periods after the storm has ended, possibly endangering the beachhead. frtificial Harbors are designed to permit complete construction in advance of the component units, so that installation at the beacihead can be made in a few days.
2. Effest of Uaves on un? oadins. Experience on other beachieads has demonstrated that the rate of cargo discharge to shore ofer urprotected beaches varies with sea and sweil conditions approximately as shown in Table l. This table neglects any subsequent delay due to storm damage. Table 1

| Height of Vave | Relative unzo |
| :---: | ---: |
| 3 feet or under | 100 |
| $3-4$ feet | 75 |
| $4-5$ feet | 50 |
| $5-6$ feet | 25 |
| 6 feet and ovex | 0 |

3. Facilities. Basic requirements' include piers or wharves for unloading, directly to motor transport, cargo from Liberty ships, AK's and comparable cargo vessels, and troops with equipment from assault shipping; moorings for anchorage of additional vessels of these categories, from Which cargo can be unloaded to LCT's, lighters, rhino ferries, DUKW's, and other amphibious vehicles; landing stages at which LĆT's and barges can discharge; landing hards, pierheads or causeways at which LST's can discharge directly to the beach; and tanker moorings with submarine discharge lines to shore. Clear lanes should be assigned for passage of DUKW!s and other amphibious vehicles from ship to shore.
4. Operation. It is envisioned that the facilities within the protected harbor can be utilized at 90 percent of capacity and that the facilities outside the harbor can be utilized at 60 percent of capacity. On a basis of equal division of capacity, this assumption would require provision of facilities within the harbor based on capacity for handling two-thirds volume, which at 90 percent efficiency would actually handle 60 percent of the traffic. Facilities for transferring cargo from ships at anchor outside the harbor to the beach and for landing cargo and motor transport from LST's would have a. capacity of two-thirds total requirements; and at 60 percent effectiveness would handle 40 percent of the traffic. Such a division is based on the fact that facilities provided on the exposed beach are continued in service, during favorable weather after the harbor is completed, using the harbor as a shelter for LCT's, LCM's, barges and other craft during unfavorable weather.
III. REQUIREIEETS:

5. Cango Volume - Eastern Forces Daily Av by periods

| Y to $\mathrm{Y} \nmid 15$ | 10,268 | Limited பo |
| :---: | :---: | :---: |
| $Y \neq 15$ to $Y \neq 30$ | 11,450 |  |
|  |  | 12,000 |
| $Y \neq 30$ to $Y \neq 45$ | 15,290 | DiT per |
|  |  | day by |
| $Y \nleftarrow 45$ to $Y \neq 60$ | 15,060 | deferral |
| $Y \notin 60$ to $Y \notin 75$ | 16,145 | consturuc- |
| $\mathrm{Y} \neq 75$ to $\mathrm{Y} \nleftarrow 90$ | 15,335 | ashore. |

3. Protected Harbor Requirements. It is envisioned that a considerable proportion of total cargo in-put can be handled during periods of good weather over assault causeways and over the beach outside the protected harbor, provided the harbor could be used as a reffuge for small craft during storms. In addition, it is apparent that during periods of unfavorable weather, when unloading operations are stopped outside the harbor, unloading can be carried on within the harbor and cargo vital to the
success of the combat forces ashore can be landed without interruption.

It is determined, therefore, that the capacity of the harbor, can be about 60 percent of the total operational requirements for the whole area and be entirely feasible with respect to the construction and installation effort involved. In terms of tonnage and shipping this means that facilities will be provided within the harbof to unload 8 - 9,000 DWT per day, and moorings and berths for not less than 18 liberty ships.
4. Intend Clearanoes. A major consideration in the selection of the site for the Artificial Harbor is the adequacy of inland clearances. Tables showing the inland clearances of the two sites under consideration, IIOKA and KATAKAI, are presented under Section IV Paragraph 4.
IV. SITE CONDITIONS:

1. Location. The Artificial Harbor will be located on KUJUKURI HaMA. The exact location has not been determined pending more accurate information on hydrographic, beach and inshore terrain conditions, For planning purposes, studies have been carried out in connection with the two sites considered to possess the greatest advantages:
a. IIOKA at the northeast extromity of KUJUKURI Hamia and
b. KATAKAI, 22 miles southwest of IIOKA near the center of KUJUKURI HAMA.

For whatever site as may be selected, the number of components and the general arrangement of the artificial harbor will remain substantially the same.
2. Hydrography, KUJUKURI HAMA is a crescert shaped beach 34 miles long between TOTO--SAKI and IIOKA. Except at the ends the beach is apparently free of rocks and runnels. However; 2 sand bars; which will restrict lighterage to high water periods, appear to extend the entire length of the beach. Soundings are shown on $\mathrm{H}, \mathrm{O}_{2}$ chart Misc. IOOIO-31. The bottom is indicated as fine sand and the beach gradient as varying between one in 150 and one in 300 . The tidal range is about 5 feet during, spring tides, Littoral currents are believed to be moderate, approximetely I knot, normally toward the southyest.
3. Meteorology.
a. Winds are generally offshore from December to February, with Northwest winds prevailing; variable in March, April, October and November, with North and Northeast winds prevailing; and onshore from May to Sepptember. Wind velocities are at a maximum from November to March, with monthly means from 12 to 16 knots Gales ( 54 knots) are recorded in 3 to 8 percent of observations.
bo Trphoong, occur with mean frequency in days per month as follows:


|  | $J$ | $F$ | $M$ | $A$ | $M$ | $J$ | $J$ | $A$ | $S$ | 0 | $N$ | $D$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Favorable | 90 | 85 | 81 | 87 | 90 | 92 | 91 | 89 | 91 | 90 | 87 | 93 |
| Unfavorable | 10 | 15 | 19 | 13 | 10 | 8 | 9 | 11 | 9 | 10 | 13 | 7 |

Observations indicate that waves over 3 feet, which will at least impede operations, will occur about 49 percent of the time in March and 51 percent in April.
d. During the months of December, January, February, March and Aprilg the worst surf conditions prevail but typhoon risk and fog are at a minimum.
e. In addition to the sca and swell which will approach normal to the beach the greater part of the time, swolls 6 feet high will occur from 3 to 5 percont of the time from the southwest, from 3 to 6 percent from the south and from 2 to 7 percent of the time from tho southeast botwoen March and tugust inclusive, and seas 5 feet high vill ocour 5 to 9 pocent of the time from the southeast during those months. Duo to refraction, sca and swell in the open ocean approaching from the southwost or south will bo swung so as to approach the harbor locations from the south or southeast. Similarly waves approaching from the north or northeast wili be svrung to approach the beach from an easterly and, even, southeasteriy direction.
4. Site Potentialities and Inland clearances. Two sites on KUJUKURI HAMA are under consideration as having the best potentialities: IIOKA and KATAKAI。
a. IIOKA is located at the northeast extremity of KUJUKURI HAMA; It is situated on a bight formed by the Eastward projection of the CHOSHI promontory. It is sheltered by highiland from the north and northeasterly winds which prevail during March and Eapril. It has the disadvantages of a flat gradient between the beach and the 6 fathom line, about one to 275, and limited inland clearance from the beach, due to the escarpments to the north and east which force all
traffic over a single highwy leading westward.
b. KATAKAI is Iocated noar the center of KUJUKURI HAMA, 22 milos south of ITOKA. It is exposed to the full sweep of the Pacific Ocean from the northeast to the southwest, However, the beach gradient appears to be steeper and the 6 fathom line closer to the shore than at any other point along the beach. This site has the advantage of good lateral and inland distribution of inbound traffic。
c. Inland clearance. The estimated maximum clearance of the two aiternate sites is compared as follows:

|  | IIOKA | KATAKAI |
| :---: | :---: | :---: |
| Y to Y 1 | 2000 DTHT | 2000 DWT |
| $Y \not \subset 16$ to $Y \neq 30$ | 5500 | *8500 |
| Y ¢ 31 to Y ¢ 45 | $6500^{\circ}$ | 9500 |
| Y 146 to $Y$ f 60 | 10500 | 12000 |
| $Y \nleftarrow 61$ to Y ¢ 75 | 12000 | 13500 |
| Y f 75 to Y ¢ 90 | 13500 | 13500 |

V. LAYOUT OF THE HEPBOR:

1. Genera1. Basic requirements for the harbor were set forth in Section III. The layout show on Inclosure 1 is considered the maximum feasible with respect to the construction and logistic requirements involved, particularly the towing and time implications. The scope and arrangements of the facilities are tentative and subject to modifications as may later be imposed by operational requiroments, determination of the final site, and additional study.

## 2. Breakwaters.

a. An outer breakwater, parallel to the beach and 6500 feet distant therefrom in 40 feet depth of water at 20:
high tide, is indicated as 10,500 fect long overail. It will be composed of 50 steel caissons, ballasted with concrete, sunk, then filled with water and evontually filled with sand for increased stability.
b. Side breekwaters are provided to protect the piers from waves oblique to the beach. These broakwaters will be composed of sunken ships. Closure to the boach is not considered necessary. If found desirable, it is believed that it can be built up with hulks, damaged landing crafis wrecked tanks and other heavy items, or built up as a mole. Model studies now underway are expected to give reILable data on the need for closures to tho beach and for possible improvoments in form or alignment.
3. Oponings. Side openings have been provided as the principal ship adits and exits. These openings have been made 600 feet wide and havo been located in about 34 foet of water at low tide, Cencer opening has been omitted as unnecessary and undesirable。
4. Mooring Trots, A trot of twelvo bow and stern moorings has been indicatod inside and parallel to the outer breakwater. These trots aro located 250 feet from the inner face of the breakwater to provide ready access to both sides of the ships and to provide clearanco for possible displacement of the caissons tomard the beach.
5. Pierheads. Four pierheada are indicated, each containing four berthse Thesc pierhoads with their interconnections and approaches, are of Navy pontoon type, floating,
with moorings independent of the ships' moorings. The latter are lald out so that each ship is secured to four buoys and can be held off the piers under gale conditions. Floating cameis are provided as fenders between ship and piero Each pair of berths is a $12 \times 72$ pontoon structure. This size has been adopted at the request of the office of the Ghief of Engineexs, after a detailed study of unloading and truck operations.
6. Pier Approaches. Pontoon causeways foux pontoons wide have been indicated. This provides a Iiberal two-lane access. Considexation was given to making these causeways five pontoons wide, to minimize traffic blocks due to breakdowns and dropped cargo. This alternative was rejected as unessential and to reduce pontoon requirements,
7. LCT Blisicers, Eight blisiers of navy pontoons, $5 \times 12$, are indicated on one side of each approach piera LCT's and smallor landing craft come alongsido the causeway and head on to the blister, for discherge of cargo. LCVP's can come alongside tho blister for discharge of porsonnel.
8. IET Berths. Three pontoon wharvos have been indicated for multiple ISI landings. It has been contemplated that standard $2 \times 30$ assault causemays mould be side-carried, launched and used in the initial phasos of tho landings and thet they would bo reassembled, to the extont necessary, to form theso wharves. Pending more accurato determination of inshore beach gradients, it is impossible to prodict the probable length of the approach causeways. Indications are that they may have to be about 1,000 feet long. These wharves can also be used for discharging pontoon barges.
9. Iignter Piers. Sixty-two lighter piers are to be constructed by the Army within the Artificial Harbor:
VI. TNSTALIATION:

Lupproximately 10 days of favorable weather will be required to install the Lrtificial Harbor as shown on Inclosure 1. iffer recornaissance of the site, operations can probably commence on $Y \not \subset 2$ day, and provided meather held should be completed by $Y$ f 12 day, by filling caissons with watero Filling with sand would require 5-24 inch dredges, and take about 30 additional days, It is estimated that this type of caisson breakwater would withstand seas as follows:

Caissons - open to the sea - Waves up to 12 feet
Caissons - filled with water - waves up to 20 feet
Caissons - filled with sand - vaves up to 30 feet.


GENERAL HEADQULRTERS
UNITED STATES ARAY FORCES, PACIFIC

 Staff Study "CORONET"

1. DIREGTIVE:

This plan covers the signal communications for the operations of United States Army and correlated Naval Forces in the Pacific to occupy the TOKYO - YOKOHAMA, and KAN TO PLATNS AREA, and to effect the unconditional. surrender of JAPAN.
2. ASSUMPIIONS:
a. (1) That normal command, administrative, and liaison communications will be functioning between the communications zones Of CINCAFPAC and CINCPAC, and to headquarters of theaters and major suppoxing forces not directly participating in "CORONET".
(2) That normal signal communication systems required fer ceoperative action potween CIICAFPAC, CINCPAC, and the STRATEGIC AIR FORCES will be functioning throughout "CORONET".
b. That in the initial stages of the operation the following headquarters will be established and operating as follows:

CTMCAFPAC - MANIIA
ADVON GHQ AFPAC - SAGANI WAN area, HONSHU
UNITED STATES ARMY STRATEGIC AIR FORCE - GUAM
EIGHTH U. S. ARIY - SAGAMI WAN area, HONGHU
Rear Echelon - LEYTE
FIRST U. S. $A R M Y$ - KOJIKURI BEACH area, HONSHU
Rear Echelon - LUZON.
ARNY SERVICE CCMMAND "C" - SAGAMI WAN area, HONSHU
Rear Echelon - LUZON
FAR EAST AIR FORCES - - LUZON
בLTH AIR FORCE - KUNNING


ARHY FORCES MIDDLE PACIFIC - OAHU
ARMY FORCES WESTERN PACIFIC - LUZON
68TH ARTMY AIRWAYS COMAUNICATIONS SYSTEM GROUP - MANILA
c. (1) That Naval Forces will install, operate, and maintain all naval communication facilities unless otherwise directed; this will include installation, operation, and maintenance of all wire facilities within Naval and Narine establishments, including airfields.
(2) CINCPAC will install, operate, and maintain at ADVON GHQ AFPAC in the objective area the signal communication facilities required for the reception and transmission of orders, information, and intelligence between ADVON GHQ AFPAC in the objective area, and the appropriate headquarters and clements of CINCPAC.
(3) That CINCPAC will provide such signal communication facilities and personnel at $A D V O N$ GHQ AFPAC in the objective area, as may be required to keep CINCAFPAC promptly informed of all matters affecting the progress of the naval phases of the operation.
(4) That CINCPAC will provide such surface craft as may be required for a safehand courier boat service between the respective Army Headquarters ashore and ADVON GFIQ AFPAC afloat and/or ashore.
d. That the UNITRD STATES ARAY STRATEGIC AIR FORCE will install, operate, and maintain at ADVON GHQ AFPAC'in the objective area, the signal communication facilities required for the reception and transmission of information and intelligence, and for liaison purposes for coordinated action between ADVON GHQ AFPAC in the objective area, and the appropriate headquarters and elements of UNITED STATES ARMY STRATEGIC AIR FORCE.
e. That JAPANESE military and civil communications will be completely destroyed prior to or during the landing and subsequent operations.
f. That plans will be completed under the provisions of paragraph 3b (5) of the staff study to which this is an Annex whereby adequate communications for cooperative action between all forces will be assured.
g. That tho 68TH ARMY AIRW\&YS COMNUNICATIONS SYSTEN GROUP will establish such ARNIY AIRWAYS COMMUNCETION facilities and radio and radar navigational aids as may be required in the objective area.
3. OPERATIONS:
a. See Charts.
(1) Appendix 5a, Principal Channels of Signal Communication.
(2) Appendix 5b, Principal Tactical Channels of Radio Communication.
(3) Appendix 5c, Wire Facilities for AFPAC
b. General;
(1) In general, signal communication facilities for "CORONET" will provide channels of communication between Headquarters, CINCAFPAC, ADVON GHQ FFPAC, CINCPAC, UNITED STATES ARNY STRATEGIC AIR FORCE, FIRST U. S. ARMY, JIGHTH U. S. ARNY, FAR EAST AIR FORCES, ARMY SERVICE COMMAND "C", USAFWESPAC, USAFMIDPAC, GHQ RESERVE, and the designated elenents of the initial occupational forces.
(2) The FIRST U. S. ARITY, ETGHTH U. S. ARNIY, FAR EAST AIR FORCES, and ARMY SEPVICE COMUAND "C" wrill install, operate, and maintain the signal communications required for the reception and transmission of orders, information, and intelligence between their respective headquarters axd $\triangle D V O W$ aHO AFPAC in the SAGAMI WAN axea, HONSHU, and GHQ AFPAC at MANILA.
(3) Safehand air courier service will be provided to areas as designated.
c Tasks:
(1) ADVON GHQ AFPAC will insure the provision of signal communication facilitios required to accomplish the tasks assigned in the Staff Study to which this is an Annex, and in addition, will insure the provision of integrated inter-communication sy-* stem between Air, Ground, and Naval Forces in the objective area for intelligence, supply point, liaison, line of communi-
cation, defense, fighter control, and aircraft warning purposes as may be necessary.
(2) The FIRST U. S. ARAY and EIGHTH U. S. ARMY will insure tho provision of signal communcation facilities required to accomplish the Tasks assignod to them in the Staff Study to which this is an Annex, and in addition, will within their respoctive zones of action:
(a) Insure an integrated communication system between Air, Ground, and Naval Forces for such aircraft warning, air support, fighter control, intelligence, liaison, supply point, line of communication, railway and military government purposes as may be necessary.
(b) Assist the Commanding Officer, $68 T H$ ARMX AIRWAYS COMMUNICATIONS SYSTEM GROUP in the establishment of such ARNY ATRWAYS COMMUNICATION facilities and radio and radar navigational aids as may be required by the FAR EAST AIR FORCES.
(c) Be prepared to render the Naval Forces necessary assistance in the initial establishment of naval communications.

## (3) THE FAR ESST ATF FORCES:

(a) Provides the signal communications, aircraft warning services, and air navigational facilities required to accomplish the tasks assigned in the Staff Study to which this is an Annex, and in addition, will insure the provision of signal communcation facilities required for:
I. Air operational intelligence, air command, and liaison purposes with the UWITRD STATES ARMY STRATEGIC AIR FORCE, ILTH AIR FORCE, and Air Units of CINCPAC.
2. Air Force purposes in the cooperative action between land-based and carrier-based aircraft and with other appropriate elements of the Air Forces of CINCAFPAC
and Air and Naval Forces of CINCPAC.
(b) Provides maximum possible assistance to the several Army Comanders, in their respective areas of control, in the construction of the communication facilities required by paragraphs $3 b(4)(a) 2 i$ and $3 i$ of the Staff Study to which this is an Aninex.
(4) THE ARHY SERVICE CONMIND "C":

Provides the signal communcation facilities required to accomplish the tasks assigned in the Staff Study to which this is an Annex, and in addition:
(a) Will be prepared to take over from the Armies the installation, operation, and maintenance of rear area communication facilities including those required under the provisions of paragraphs $3 b(4)(a) \underline{2}$ i and 3 i of the staff Study to which this is an Annex.
(b) Those communication facilities required by ADVON GHQ AFPEC for communications with:

1. AFWESPAC.
2. AFMDDPAC.

3 WAR DEPARTAIENT.
4. Other theater headquarters as may be operating at the time.
(c) Those communcation facilities required for:

1. The operation of so much of the railway system as may be passed to its control by ADVON GHQ AFPAC for operational, administrative, arid supply purposes, both civil and military.
2. Rehabilitation of such civil communication systems in the area as may be required for Military Government purposes.
3. Pross purposes.
4. Such ship-shore communications in the objective area as may be required, and not provided by the Navy. 5. Friendly intercept purposes.
(5) THE U. S. ARMY FORCES MIDDLE PACIFIC:

Will insure the provision of signal communication facilities required to accomplish the tasks assigned in the Staff Study to which this is an Annex, and $\overrightarrow{f o r}$ communication between its headquartors and GHQ AFPAC in MANILA.
(6) THE U. S. APRIY FORCES WESTERN PACIFIC:

Will insure the provision of signal communication facilities required to accomplish the tasks assigned in the staff
 communication facilities required by CINCAFPAC for communications between MANILA, the RYUKYUS, the objective area, and the GHQ Reserve.

## 4. LOGISTICS:

a. Signal supply, In gomorat, will be firom the ITNTTED STATES, supply establishments in the objective area, and by WESPAC.
b. FAR EAST AIR FORCES provides the signal supplies and equipment for FAR EAST AIR FORCES technical purposes in accordance with existing directives. (See letter dated 18 September $794^{\prime}$ from rommanding General., Army Forces in the Far East to Commending General, Fifth Air Force, Subject: "Signal Corps Supplies".)

- 5. PLANS:
a. GENERAL HEADQUARTERS, UNITED STATES ARMY FORCES PACIFIC will prepare and issue the following:
(1) Necessary Signal Operation Instructions and Standing Signal $\because$ Instructions.
(2) A Signal Communications Order which will allocate tasks for the provision of an integrated signal communications system in the objective area, and in the bases to be established therein.

b. FIRST U. S. ARIMY, EIGHTH U. S. ARMY, FAR EAST AIR FORCES, and ARMY SERVICE COMLAND "C" will prepare and submit to this headquarters communications plans and requests for signal supplies, equipment, and personnel to accomplish the tasks enumerated in paragraph $3 c$ above, on or prior to datos specified in relevant instructions from this headquarters.
c. Central Bureau and Section 22 will submit their respective plans for radio intelligence, and radio and radar countermoasures to this headquarters by dates to be specified by the Ghief Signal Officer.
d. Plans and directives for coordination of radio frequencies and call signs anong forces concerned will be issued by this headquarters at an appropriate time.







[^0]:    * Equivalent" Hardstands incuide Stariard Hardstands ard Service sprons expressed in tems of Standand Haristaxds

