

212
Secret

Register No. 352

Grand Joint Exercise
No. 4

Estimates, Plans

and

Orders

Commander Blue Force

21 December 1931

*Corrected:
28 Jan 1932*

*9 copies destroyed
10 Aug '32*

Naval War College

A16-3/(353)

**UNITED STATES FLEET
BATTLE FORCE
U. S. S. CALIFORNIA, FLAGSHIP**

16/dar(0)

SECRET

San Pedro, California,
21 January, 1932.

From: Commander Battle Force.
To : All Units, BLUE FORCE (Grand Joint Exercise Number Four).

Subject: Commander Blue Force Estimates, Plans and Orders, Grand Joint Exercise Number Four, dated 21 December, 1931.

Enclosure: (A) Annex 5-B—Demonstration Plan 2-B, Demonstration by Bombardment.
(B) Annex 6-B—Location of Marker Buoys at Landing Beaches.

1. Enclosures (A) and (B) are forwarded herewith for inclusion in Phase B of subject letter.

2. The following corrections are to be made as noted:

(a) Letter of transmittal:

Add file number "A16-3(5978)".

Paragraph 3, line four, after thirty-one add "and fourteen thirty-one".

(b) Table of contents:

Phase "B" add, "Annex 5-B— Demonstration Plan 2-B, Demonstration by Bombardment".

Phase "B" add, "Annex 6-B—Location of Marker Buoys at Landing Beaches".

(c) List of Blue Forces:

Delete "Preble".

(d) Operation Order No. 1-A:

Paragraph (c), line four after "Broome" add "Preble".

(e) Cover Sheet for Phase "B":

Add "Annex 5-B—Demonstration Plan 2-B (Demonstration by Bombardment)"
"Annex 6-B—Location of Marker Buoys at Landing Beaches".

(f) Operation Order No. 1-B:

Paragraph (a), line four after "Eleven" add "less Preble".

Paragraph 3(h) add:

"Plant Marker Buoys off beaches and in locations given in Annex 6-B".

Page 3, List of Annexes, add:

"Annex 5-B—Demonstration Plan 2-B, Demonstration by Bombardment".

"Annex 6-B—Location of Marker Buoys at Landing Beaches".

(g) Demonstration Plan No. 1-B:

Paragraph (b), line four after "Trevor" delete "and", after "Broome" add "Preble".

Paragraph 3(a), line six delete after "in" to "rate" and replace by "a locality embodied in a three thousand yard square in Area fifty-five DC the center of which is Square eighty-five;"

Paragraph 3(b), line six, delete after "district in" to "rate" in line seven and replace by "Area fifty-five FC, Square twenty-five, twenty-seven, thirty-seven, fifty-six, fifty-seven."

*CMH
29 Jan '32*

(h) Operation Plan Numbers 1-C, 2-C and 3-C:

Paragraph (b), line four after "Desdiv Eleven" add "less Preble". Add additional ships "Tern" "Partridge".

Paragraph 3(d), delete entire paragraph and substitute, "Submarine Force patrol against enemy submarines at distance of twenty to thirty miles from landing beaches".

(i) Operation Plan No. 1-D:

Paragraph (d) after "Trever" delete "and", after "Broome" add "Preble".

(j) Appendix 1-C:

Page three, line sixteen, Minelaying Submarines, Black, change "1" to "0".

R. H. LEIGH.

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SENIOR UMPIRE BLACK 3

L. E. DENFELD,
Lieut.-Comdr.,
Flag Secretary.

A-16(3)(5978)

UNITED STATES FLEET
BATTLE FORCE
U. S. S. CALIFORNIA, FLAGSHIP

SECRET

21 December, 1931.

From: Commander Battle Force, U. S. Fleet.

To : All Units, BLUE Force (Grand Joint Exercise No. 4.)

Subject: Commander BLUE Force Campaign Plan and Estimates of the Situation (Phases B and C) for conduct of the Joint Exercise.

Reference: (a) BLUE Statement of Problem for Grand Joint Exercise Number 4, to be held in HAWAII, 1932 (Joint Board No. 350) (Serial No. 491), issued by Chief of Naval Operations on 29 May, 1931.

1. The Campaign Plan and Estimates of the Situation (Phases B and C) are issued for compliance by the designated Task Force Commanders under the different Phases. Their supporting Estimates of the Situation, Plans and Orders, will be forwarded in time to reach addressees by 20 January, 1932.

2. The general object of this Grand Joint Exercise is to develop coordination and cooperation between the Army and Navy and to train the two Services in the joint operations involved in the attack of a defended area and in the joint operations involved in the defense of such an area. More specifically it is to determine the effectiveness of an air, surface and land attack against Hawaii and the adequacy of the air, surface, sub-surface, and land defenses of Hawaii to repel such an attack.

3. While it is the desire and intention that actual war operations and conditions be simulated as far as practicable, it is incumbent on all concerned that no undue risks be taken that will endanger the lives of personnel or animals, or hazard ships, planes and material. U. S. Fleet Confidential Letter eleven-thirty-one will govern, special attention being given to paragraph four.

and fourteen thirty-one

4. Attention is invited to the requirement of secrecy of the Campaign Plan and accompanying papers. Until the completion of the exercise special care will be taken to see that information in regard to the contemplated operations will reach only the BLUE Force. Before and after the operation is completed, the usual care required in the safeguard of secret information will be exercised.

5. Prior to the departure of the BLUE Force on 1 February, 1932, access to the Campaign Plan and accompanying papers will be accorded only to those officers of the BLUE Force whose immediate duties require a knowledge of its provisions, except that it will be made available to all officers of and above the rank of Lieutenant Commander. After the departure of the BLUE Force on 1 February all officers will be required to become familiar with the Campaign Plan for the purposes of instruction and stimulation of interest in the operation. Steps will also be taken to interest the enlisted men in this problem by informing them of its object and progress. An understanding of the Plan can best be had by first studying the Estimate of the Situation for Phase C and then the Estimate of the Situation for Phase B, both of which are included herewith as Appendices 1 and 2.

6. Reports on each phase of this exercise will be submitted in accordance with paragraph fifteen, U. S. Fleet Umpire Instructions. A critique of the Grand Joint Exercise will be held on the completion of the maneuvers at the time and place designated by the Commander in Chief, United States Fleet.

R. H. LEIGH.

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L. E. DENFELD,

Lieut.-Comdr.

Flag Secretary.

USS Calif.—12-15-31—400.

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BLUE FORCES

NAVY

CALIFORNIA—Force Flag

BATTLESHIPS

WEST VIRGINIA (F)

BatDiv 1
NEW YORK
OKLAHOMA

BatDiv 3
ARIZONA (F)
NEVADA
TENNESSEE

BatDiv 4
COLORADO
MARYLAND

OBSERVATION WING

VO-1 (6), VO-3 (9), VO-4 (9)

CRUISERS

CINCINNATI

CONCORD (F)

OMAHA

SCOUTING WING

VS-6S (6)

DESTROYERS

ALTAIR

DETROIT (F)

MELVILLE

2 VS

DesRon 2

LITCHFIELD (F)

DesDiv 4
DENT
RATHBURNE (F)
WATERS
TALBOT

DesDiv 5

DORSEY
ELLIOTT
LEA

DesDiv 6
AARON WARD (F)
BUCHANAN
CROWNINSHIELD

DesRon 4

DECATUR (F)

DesDiv 10
PERRY (F)
WASMUTH
ZANE

DesDiv 11

HULBERT
NOA
WM. B. PRESTON
~~PREBLE~~

DesDiv 16
ALDEN
PRUITT
SICARD

AIRCRAFT

SARATOGA (F)

LEXINGTON

GANNET

Squadrons

VF-1 (18 VF)	VS-2 (12 VS)
VF-6 (18 VF)	VT-2 (18 VT)
VF-2 (18 VF)	VS-3 (12 VS)
VF-5 (18 VF)	VT-1 (18 VT)

Plane Guards

HOVEY
CHANDLER

SOUTHARD
LONG

Minecraft—Aircraft

VP-1B (12 VP)
VP-4B (12 VP)
VP-6B (12 VP)
PELICAN

TRAIN SQUADRON TWO

ARGONNE (F)

MEDUSA
RELIEF
KINGFISHER
SONOMA
CUYAMA

BRANT
PARTRIDGE
TERN
NECHES

SUBMARINE DIVISION 12

**HOLLAND (F)
ORTOLAN**

ARGONAUT
BASS
BARRACUDA

BONITA
NARWHAL

EXPEDITIONARY FORCE

ARMY

MARINE CORPS

One infantry Division less, tank company and 155 mm. Howitzer regiment, (represented in part)
One regiment artillery (anti-aircraft).

One Division of Marines, represented by one battalion of infantry and one battery 75 mm. pack Howitzer.

TRANSPORTS

CONSTRUCTIVE VESSELS

HENDERSON

SAN MIHIEL
25 Naval Transports
3 Distilling Ships

4 Ammunition Ships

GRAND JOINT EXERCISE NO. 4.

Campaign Plan
No. 1.

BLUE FORCE,
U. S. S. California, Flagship,
SAN PEDRO,
21 December, 1931.

TASK ORGANIZATION.

(a) Army Forces, Major General Craig.

One Infantry Division, less Tank Company
and 155 mm Howitzer Regiment (represented in part).
One Regiment Artillery (anti-aircraft).
One Army Transport (St. Mihiel).

(b) Naval Forces, Admiral Leigh.

Battle Force, less Mine Squadron One.
Cruiser Division Three.
Submarine Division Twelve.
Train Squadron Two.
Air Units, Fleet Air Base, Pearl Harbor.
One Division of Marines (represented in part).
One Naval Transport (Henderson).
Constructive ships:
25 Naval Transports.
3 Distilling ships.
4 Ammunition ships.

1. The object of this Campaign is to recapture and hold OAHU and occupy such other islands as may be necessary to reestablish our control of HAWAIIAN Area.

The enemy (BLACK) holds OAHU with approximately eighteen thousand troops of all arms, and naval forces consisting of submarines, minelayers and minesweepers. Coast defenses are reported to be in good condition. No naval aviation is believed to be in HAWAIIAN Waters. After the defeat of the BLACK Atlantic Fleet the bulk of the BLACK Naval Forces which participated in the Attack on OAHU withdrew from that vicinity and retired to bases in the Eastern Atlantic.

The BLUE War and Navy Departments have directed the concentration of an Army Expeditionary Force at SAN PEDRO. The bulk of the BLUE Fleet is concentrated in the SAN PEDRO - SAN DIEGO Area.

Command of the BLUE joint force is vested initially in the Navy under the principle of Paramount Interest.

2. This force will conduct this campaign in four successive phases in accordance with the operation orders and operation plans issued herewith. These phases in chronological order are:

PHASE A. The preparation of all forces for departure from bases on one February, nineteen thirty-two, including the embarkation of the Expeditionary Force in proper order.

PHASE B. The safe conduct of the Expeditionary Force to the places for beginning the landings and attack, including the advance operations.

PHASE C. The attack on OAHU including the actual landings and the establishment of Beach heads.

PHASE D. The subsequent operations for the reestablishment of our control of the HAWAIIAN Area.

3. (x) Execute Phases A, B, C, D in accordance with detailed orders and plans issued by Task Force Commanders:
-

PHASE A

Embarkation of Expeditionary Force.

OPERATION ORDER NO. 1-A.

ANNEX 1-A (LIST OF TRANSPORTS)

PHASE A.

Operation Order
No. 1-A.

PREPARATION OF FORCES.

BLUE FORCE,
U. S. S. CALIFORNIA, Flagship,
SAN PEDRO, CALIFORNIA,
21 December, 1931.

TASK ORGANIZATION.

- (a) Battleships, Vice Admiral McNamee.
California..
Battleship Divisions Four, Three, One less Texas.
- (b) Cruisers, Rear Admiral Woodward.
Cruiser Division Three less Milwaukee.
- (c) Destroyers, Rear Admiral Kalbfus.
Detroit, Melville, Altair.
Destroyer Squadron Two less Roper Hale.
Destroyer Squadron Four less Trever Broome.
- (d) Aircraft, Rear Admiral Yarnell.
Carrier Division Two.
- (e) Submarines, Captain Friedell.
Submarine Division Twelve less Nautilus.
- (f) Train, Rear Admiral Hough.
Train Squadron Two less Arctic Pinola Algoma, plus Henderson San Mihiel Constructive Transports as listed in Annex 1-A, three Constructive distilling ships and four Constructive ammunition ships.
- (g) Fleet Air Base Detachment, Commander Tod.
Pelican.
Fleet Air Base, Pearl Harbor Squadrons.
- (h) Expeditionary Force, Major General Craig.
Army Third Division (represented in part).
Marine Division (represented in part).
 1. The War and Navy Departments have directed the concentration of the BLUE Naval Forces and Army Expeditionary Force in the SAN PEDRO-SAN DIEGO Area.
 2. This force will make all necessary preparations and be in all respects ready to sail from the SAN PEDRO-SAN DIEGO Area on one February in order to proceed to the HAWAIIAN Area for the purpose of recapturing and holding OAHU and to occupy such other islands as may be necessary to reestablish our control of that area.
 3. (a) Battleships train boats' crews for landing troops on beaches defended by the enemy. In cooperation with Expeditionary Force, train personnel in the operation of troop and artillery barges and in landing of animals in ships' boats and from minesweepers.
(d) Aircraft carry out special training requirements for employment of planes in landing operations. Despatch Gannet to proceed with Medusa in time to arrive HILO not later than sixteen hundred five February.
(g) Train allocate transports, ship space and tonnage to meet Expeditionary Force grouping of troops and unloading requirements. Assign Expeditionary Force Units and supplies to the transports and other ships. Supervise loading of transports. Despatch Medusa in time to arrive HILO not later than five February.
(h) Expeditionary Force in cooperation with Naval Forces train personnel in the landing of troops, animals, artillery and equipment. Divide the Army Third Division and Marine Division for assignment to transports in accordance with the tactical plan. Load troops and equipment on board ships in accordance with assignment of ships made by Commander Train.

(x) Each force be ready to sail on one February at hour designated by Task Force Commanders under Operation Order number One-B.

4. Obtain all logistic supplies through usual channels. All ships will fuel to capacity.
5. Task Force Commanders communicate direct with each other in all matters in which cooperation is necessary. Use usual communication channels. Commander BLUE Force in California with Battleships.

R. H. LEIGH
Admiral,
Commander Blue Force.

Annex 1-A; Lists of Constructive Vessels.

L. E. DENFELD,
Flag Secretary.

Annex 1-A

NAVY DEPARTMENT
Officer of Chief of Naval Operations
WASHINGTON

Op-12D-CD
(SC)A16-3(9)/ND14

24 November, 1931.

SECRET

From: Chief of Naval Operations.

To : Commander Battle Force,
Commanding General, Ninth Corps Area.

SUBJECT: Grand Joint Exercise Number Four.

Reference: (a) Grand Joint Exercise No. 4—Special Situation—Blue.
(b) Combatfor let. A16-3(5204) of 13 Nov. 1931 to CNO.

1. In reply to request made in paragraph 5 of reference (b), the following table of data is hereby supplied relative to the twenty-five transports mentioned in reference (a).

2. Attention is directed to the following explanatory notes which apply to the figures given:

- Notes
- (1) 25 ships have been designated, 18 of which are of the troop transport type and 7 of the animal transport type.
 - (2) The H. F. ALEXANDER, with a speed of 23 knots, has been designated primarily for use as the troop convoy flagship, with the intention of carrying but few troops or equipment, except staff units, special material, etc. as may be designated. This vessel to be equipped with high power radio and a catapult with two observation planes.
 - (3) The 18 troop transports, exclusive of the H. F. ALEXANDER, are capable of carrying 54,300 troops. The 7 animal transports are capable of carrying 3,350 animals.
 - (4) It is understood from information obtained from the Army and Marine Corps (Washington) that the Army division will have only 3,000 animals on this expedition, in lieu of the customary 6,000 which usually accompany a division unit, while the Marines will have no animals, in lieu of the usual division number of 994 animals. Hence, ships have been designated to handle at least 3,000 animals, and includes space for voyage water and forage. While it is not intended that the animal transports shall carry equipment or light cargo, there undoubtedly will be space in each one for a considerable amount, if desired.
 - (5) The troop transports have ample cargo space for the general impedimenta of the expedition.
 - (6) The minimum cruising speed is 14 knots. All vessels are oil burners, except the MINNEKAHDA which is a coal burner, and all have fuel capacity for a round trip.

W. R. SEXTON,
Acting.

Copy to:
CinC, U. S. Fleet.

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	Name of Ship	Gross Tons	Speed Knots	Troop Capacity	Cargo Capacity cubic feet
1	CITY OF HONOLULU	10,680	17	3,600	228,920
2	CITY OF LOS ANGELES	12,642	16.7	3,300	271,700
3	H. F. ALEXANDER	8,357	23	3,000	186,856
4	MATSONIA	9,402	15	3,000	424,590
5	MAUI	9,801	15	3,000	411,285
6	MINNEKAHDA	17,281	16.5	3,000	681,690
7	PRESIDENT ADAMS	10,516	14	3,000	483,870
8	PRESIDENT FILLMORE	15,575	14.5	4,200	458,798
9	PRESIDENT GARFIELD	10,495	14	3,000	483,870
10	PRESIDENT GRANT	14,119	16	3,000	530,011
11	PRESIDENT HARRISON	10,504	14	3,000	508,406
12	PRESIDENT HAYES	10,533	14	3,000	514,420
13	PRESIDENT JACKSON	14,123	16	3,000	416,446
14	PRESIDENT JEFFERSON	14,174	16.5	3,000	530,011
15	PRESIDENT JOHNSON	15,543	14.5	4,200	457,085
16	PRESIDENT MONROE	10,553	14	3,000	450,890
17	PRESIDENT POLK	10,500	14	3,000	483,870
18	PRESIDENT VAN BUREN	10,553	14	3,000	483,870
				Animal Capacity	
19	DOROTHY LUCKENBACH	8,536	14	500	
20	EDWARD LUCKENBACH	7,916	14	450	
21	W. A. LUCKENBACH	8,102	14	450	
22	HARRY LUCKENBACH	8,713	14	500	
23	J. L. LUCKENBACH	8,536	14	500	
24	JULIA LUCKENBACH	7,906	14	450	
25	LILLIAN LUCKENBACH	8,536	14	500	

ANNEX 1-A(2)

SECRET

NAVY DEPARTMENT
Office of Chief of Naval Operations
WASHINGTON

Op-12D-CD
(SC)A16/A9-3

10 December, 1931.

From: Chief of Naval Operations.
To : Commander, Battle Force.

Subject: Grand Joint Exercise No. 4.

- References: (a) Special Situation—Blue.
(b) CNO let. to CombatFor Op-12D-DC (SC) A16-3(9)/ND14 dated 24 Nov. 1931
(c) CombatFor let. to CNO A16-3(5583) dated 4 Dec. 1931.
(d) CNO Desp. 0010-0945 of December 1931 to ComBatFor.

1. The following is to confirm reference (d):

* * * * *

2. Details of the above distilling and ammunition ships are as follows:

<u>Distilling Ships</u>	<u>D.W.T.</u>	<u>Speed</u>
AXTELL J. BAYLESS	13261	11.5
COMET	14363	11.5
G. HARRISON SMITH	20000	11.2
<u>Ammunition Ships</u>		
ABANGAREZ	4600	12.5
ATENAS	4600	12.5
HEREDIA	4600	12.5
METAPAN	4600	12.5

3. In view of the fact that the approximate weight of the estimated ammunition supply is almost 14,000 tons, four ammunition ships have been designated in lieu of the two requested in reference (c).

4. Five of the original eighteen troop transports designated in reference (b) have been further designated as evacuation hospital ships and are to be considered equipped as such. This will necessarily reduce their outbound troop carrying capacity somewhat. In view, however, of the fact that the troop ships can accommodate 54,300 troops while the expedition consists of only 42,000 troops, the designated troop transports will be fully adequate.

W. R. SEXTON,
Acting.

PHASE B

Movement Overseas

OPERATION ORDER NO. 1-B.

ANNEX 1-B RADIO FREQUENCY ORGANIZATION.

ANNEX 2-B RENDEZVOUS POSITIONS.

ANNEX 3-B SUN AND MOON TABLES.

ANNEX 4-B DEMONSTRATION PLAN 1-B. (Demonstration in Force).

Annex 5-B Demonstration Plan 2-B (Demonstration by some personnel)

Annex 6-B Location of Marker Buoys at Landing Beaches

PHASE B

MOVEMENT OVERSEAS.

Operation Order
No. 1-B.

BLUE FORCE,
U. S. S. CALIFORNIA, Flagship,
San Pedro, California,
1 January, 1932.

Task Organization.

- (a) Expeditionary Force Escort, Vice Admiral McNamee.
California.
Battleship Divisions Four, Three.
Litchfield, Decatur, Elliot, Zane, Destroyer Divisions Four, Eleven and Sixteen less Broome.
 - (b) Expeditionary Force Convoy, Captain Mauldin.
HENDERSON (Representing actual and constructive troops transports).
ST. MIHIEL (Representing actual and constructive troop and animal transports).
CUYAMA (Representing actual oiler and constructive troop transports).
NECHES (Representing actual oiler and constructive troop transports).
MELVILLE (Representing constructive troop and animal transports).
 - (c) Train Escort, Rear Admiral Sellers.
Battleship Division One less TEXAS.
Dorsey, Lea.
 - (d) Train, Rear Admiral Hough.
ARGONNE, ALTAIR.
HOLLAND (Representing actual tender and constructive ammunition ships).
RELIEF (Representing actual and constructive hospital ships).
ORTOLAN, SONOMA.
 - (e) Advance Security Force, Rear Admiral Woodward.
Cruiser Division Three less MILWAUKEE.
Perry, Wasmuth.
 - (f) Lahaina Attack Force, Rear Admiral Kalbfus.
DETROIT.
BRANT, PARTRIDGE, TERN, KINGFISHER.
 - (g) Advance Raiding Force, Rear Admiral Yarnell.
Carrier Division Two less GANNET.
Destroyer Divisions Six and Twelve less Hale.
 - (h) Advance Observation Force, Captain Friedell.
Submarine Division Twelve less NAUTILUS HOLLAND ORTOLAN.
 - (i) Hilo Base Force, Captain Alexander.
MEDUSA (Representing actual repair and constructive distilling ships).
GANNET, PELICAN.
Fleet Air Base Aircraft.
1. BLUE Operation Plans for the establishment of beach heads on OAHU require all forces to be in designated positions for beginning the attack at minus two hours on eleven February.
There is no further news of the enemy.
 2. This Force will proceed by detachments, employing light forces in advance in the service of information and security, and all forces, exclusive of the Train and necessary escort, in creating diversions for harassing, confusing and damaging the enemy, in order to give safe conduct to the Expeditionary Force to the area for beginning landing operations.

3. (a) Expeditionary Force Escort proceed with the Expeditionary Force to the Hawaiian Area by a route to the southward of the regularly travelled steamer lanes and arrive off the southwestern coast of OAHU on the evening of ten February. Be prepared to carry out demonstration in force in accordance with Commander BLUE Force Demonstration Plan 1-B. Arrive by minus two hours eleven February in designated positions for beginning landing operations in accordance with the designated Operation Plan, Phase C.
- (b) Expeditionary Force Convoy proceed in company with Expeditionary Force Escort. Be prepared to carry out demonstration in force in accordance with Commander BLUE Force Demonstration Plan 1-B. Arrive by minus two hours eleven February in designated positions for beginning landing operations in accordance with the designated Operation Plan, Phase C.
- (c) Train Escort proceed with Train by a route to southward of regularly travelled steamer lanes so that Train will arrive at LAHAINA early morning eleven February. Battleships part company in time to arrive by minus two hours in designated positions for beginning landing operations on morning of eleven February.
- (d) Train proceed with Train Escort to LAHAINA arriving early morning eleven February.
- (e) Advance Security Force proceed to arrive HILO early morning seven February. Protect Base and ships. Assist LAHAINA Attack Force in securing base at LAHAINA on ten February and preparing it for occupancy. Escort HILO Base Force from HILO to LAHAINA. When directed by Commander LAHAINA Attack Force proceed to vicinity southwest coast of OAHU prepared for participation in demonstration in accordance with Commander BLUE Force Demonstration Plan 1-B, and thence to position for beginning landing operations at minus two hours eleven February as required by designated Operation Plan, Phase C. From arrival at HILO until shift of base to LAHAINA operate at discretion of Task Force Commander, in the service of information and security.
- (f) Lahaina Attack Force proceed to arrive LAHAINA early morning ten February. Assisted by the Advance Security Force secure a base at LAHAINA and free the approaches and anchorage area for arrival of HILO Base Force on afternoon of ten February, and Train on morning of eleven February. Despatch the Advance Security Force in time for it to be ready to take part in the demonstration off the southwest coast of OAHU on evening of ten February. Despatch DETROIT and all minesweepers in time for them to arrive at their stations for the landing operations at minus two hours on the morning of eleven February, as required by designated Operation Plan, Phase C.
- (g) Advance Raiding Force proceed to arrive in Hawaiian waters seven February and during forenoon that day make a surprise attack on OAHU, with the destruction of aircraft and damaging of their bases as primary objectives and the inflicting of casualties on troop concentrations and the damaging of communication centers, railroad junctions and gun emplacements as secondary objectives. During late afternoon of ten February be prepared to operate in demonstration off the southwest coast of OAHU in accordance with Commander BLUE Force Attack Plan 1-B. Arrive in position for beginning landing operations at minus two hours eleven February as required by designated Operation Plan, Phase C. Employ Fleet Air Base Airplanes at discretion of Force Commander. Between time of completion of attack on seven February and beginning of demonstration during late afternoon of ten February, operate at discretion of Task Force Commander.
- (h) Advance Observation Force proceed at best maintained cruising speed to Hawaiian Area. On arrival operate secretly in the service of information with the primary objective of observing off the shore of OAHU and reporting the conditions of and the situations at the beaches selected for landing of troops. Mine entrance to PEARL HARBOR.

(i) Hilo Base Force maintain base, employing Fleet Base Aircraft in service of information and security until arrival of Advance Raiding Force. Aircraft will then be operated under orders of Advance Raiding Force Commander. Shift Base from HILO to LAHAINA on ten February.

(x) Forces will sail from SAN PEDRO and SAN DIEGO on one February at times designated by and in accordance with sortie orders issued by Task Force Commanders. Units of the same task force sailing from SAN PEDRO and SAN DIEGO will rendezvous on two February in position and at time designated by Task Force Commanders.

Forces will remain outside of a five hundred mile circle from PEARL HARBOR until zero five hundred six February. Zone Time, until arrival within the circle of five hundred miles radius from PEARL HARBOR, then plus ten and one-half time.

4. Destroyers with Advance Raiding Force will be refueled by Carriers prior to arrival within five hundred miles of PEARL HARBOR. Destroyers with Expeditionary Force Escort will fuel from CUYAMA and NECHES when directed by Task Force Commander. Other destroyers will fuel as necessary from vessels designated by respective Task Force Commanders.
5. Radio communication will be reduced to a minimum consistent with carrying out prescribed operations. After arrival in Hawaiian Area information of value will be transmitted when success of operation will not be endangered.

Communications in accordance with BLUE Communication Plan, (Annex 1 to Campaign Plan No. 1 and Radio Frequency Organization (Annex 1-B)).

Rendezvous positions and reference points for reporting positions as in Annex 2-B.

Commander BLUE Force in CALIFORNIA with Expeditionary Force Escort.

R. H. LEIGH,
Admiral,
COMMANDER BLUE FORCE.

Annex 1-B, Radio Frequency Organization.

Annex 2-B, Reference Positions.

Annex 3-B, Sun and Moon table.

Annex 4-B, Demonstration Plan 1-B, Demonstration in Force.

ANNEX 1-B

Radio Frequency Organization

1. The object of this organization is to provide radio communication within the BLUE Force during Phase B.
2. This organization becomes effective at 0000, 2 February, 1932. It remains effective until superseded by Radio Frequency Organization for Phase C.
3. The frequency assignment follows:
 - (a) **Force Commander Frequencies:**
 - 215 kilocycles.
 - 4265 kilocycles and harmonics.

The Force Commander Frequencies will be guarded by the several Task Force Commanders for this phase, except as noted. In addition the high frequency channel will be guarded by the Advanced Observation Force (Submarines). The MEDUSA (Flagship, Hilo Base Force) is not equipped to transmit on high frequency. MEDUSA will therefore receive on the high frequency in use only, and receive and transmit on 215 kilocycles. Shift of frequency from 4265 kilocycles to a harmonic will be by order of the Force Commander. When 4265 kilocycles is in use, Commander BLUE Force will listen on 8530 kilocycles for five minutes beginning at the hour and half hour between 0600 and 1800 inclusive. Calls on 8530 kilocycles should be made at these times if operations have taken any Task Force outside the range of 4265 kilocycles from Force Flagship. These frequencies are for communication between Commander BLUE Force and his Task Force Commanders, between these Task Force Commanders, and to and from Submarines.

(b) **Task Force Frequencies:** The radio organization within each Task Force is left to the discretion of the Task Force Commander. Commander BLUE Force desires, however, that the organization conform to certain general principles outlined hereunder:

- (1) The organization should be as simple as practicable.
- (2) Frequencies within the 2000-3000 kilocycles band should be used, insofar as equipment permits. Within Expeditionary Force Convoy and Advanced Raiding Force it is suggested that this is possible if Task Force Commanders guard Destroyer Unit Frequency. To avoid conflict, the following Task Force Frequencies are assigned for use as necessary:
 - (A) **Expeditionary Force Escort:**
 - 2515 kilocycles.
 - (B) **Expeditionary Force Convoy:**
 - 405 kilocycles.

Note: HENDERSON not equipped to use frequencies between 2000 and 3000 kilocycles.

- (C) **Train Escort:**
 - 2405 kilocycles.
- (D) **Train:**
 - 2435 kilocycles.
- (E) **Advance Security Force:**
 - 2995 kilocycles.
- (F) **Lahaina Attack Force:**
 - 2385 kilocycles.
- (G) **Advance Raiding Force:**
 - 3035 kilocycles.
- (H) **Advance Observation Force:**
 - 4265 kilocycles and harmonics.
- (I) **Hilo Base Force:**
 - 575 kilocycles.

(c) **Unit Frequencies:** The Unit Frequencies assigned to units attached to each Task Force are available for assignment within that Force. This includes the frequencies assigned for working aircraft. Destroyer Squadron Four frequency is assigned to Expeditionary Force Convoy; Destroyer Squadron Two frequency to Advanced Raiding Force. The Force frequency assigned Hilo Base Force will be used by planes attached to this Force. Task Force Commanders should guard this patrol plane frequency during daylight hours (and during darkness if night patrols are made) from time Fleet Air Base planes are released for operation, to obtain information regarding BLACK forces without delay.

4. Commander Hilo Base Force establish communication with Commander Advance Security Force as directed by latter. When such communication is established, Commander Hilo Base Force discontinue guarding Force Commander Frequencies.

5. The orders for Phase B provide for a large number of Task Force Commanders and for operations over a considerable area. Flagships in intermediate positions should be alert to relay dispatches, if communication between more widely separated forces appears difficult.

R. H. LEIGH,
Admiral,
Commander BLUE Force.

(d) Task Force Frequencies: The radio organization within each Task Force is left to the discretion of the Task Force Commander. Commander BLUE Force desires, however, that the organization conform to certain general principles outlined hereunder:

(1) The organization should be as simple as practicable.
(2) Frequencies within the 3000-5000 kilocycles band should be used, insofar as equipment permits. Within Expeditionary Force Convoy and Advanced Raiding Force it is requested that this is possible. Task Force Commanders guard Destroyer Unit Frequency. To avoid conflict, the following Task Force frequencies are assigned for use as necessary:

- (A) Expeditionary Force Escort: 3515 kilocycles.
- (B) Expeditionary Force Convoy: 405 kilocycles.
- (C) Train Escort: 3105 kilocycles.
- (D) Train: 2475 kilocycles.
- (E) Advance Security Force: 3985 kilocycles.
- (F) Advance Attack Force: 3555 kilocycles.
- (G) Advance Raiding Force: 3015 kilocycles.
- (H) Advance Observation Force: 4525 kilocycles and harmonics.
- (I) Hilo Base Force: 575 kilocycles.

ANNEX 2-B.

REFERENCE POSITIONS

A	Latitude	30°00'N.,	Longitude	125°00'W.
B	Latitude	30°00'N.,	Longitude	130°00'W.
C	Latitude	25°00'N.,	Longitude	130°00'W.
D	Latitude	25°00'N.,	Longitude	135°00'W.
E	Latitude	25°00'N.,	Longitude	140°00'W.
F	Latitude	25°00'N.,	Longitude	145°00'W.
G	Latitude	20°00'N.,	Longitude	145°00'W.
H	Latitude	20°00'N.,	Longitude	150°00'W.
I	Latitude	20°00'N.,	Longitude	155°00'W.
J	Latitude	20°00'N.,	Longitude	160°00'W.

ANNEX 3-B

Honolulu

Plus ten and one half time.

Sunrise	Sunset	Date Feb.	Moonrise	Moonset	High Water		Low Water*	
0638	1754	5	0614	1723	0311	1509	1026	2035
0637	1754	6	0655	1819	0343	1547	1052	2116
0637	1755	7	0731	1912	0414	1628	1116	2156
0637	1755	8	0804	2003	0442	1709	1140	2238
0636	1756	9	0835	2053	0510	1753	1203	2324
0636	1756	10	0905	2141	0535	1843	—	1227
0635	1757	11	0935	2231	0557	1940	0017	1250
0635	1757	12	1007	2322	0611	2052	0130	1315
0634	1758	13	1042	—	—	2213	—	1347
0634	1758	14	1121	0015	—	2323	—	1430
0633	1759	15	1205	0110	—	—	—	1533
0633	1759	16	1255	0207	0016	—	—	1647
0632	1800	17	1351	0304	0100	1245	0904	1750
0631	1800	18	1452	0359	0137	1332	0916	1845
0631	1801	19	1557	0450	0213	1414	0935	1935
0630	1801	20	1701	0538	0247	1455	0957	2022
0629	1802	21	1805	0622	0324	1538	1021	2113
0629	1802	22	1908	0703	0356	1623	1046	2204
0628	1802	23	2010	0741	0431	1711	1112	2300
0627	1803	24	2112	0820	0504	1803	1141	—
0627	1803	25	2215	0859	0536	1902	0003	1209
0626	1804	26	2120	0941	0606	2012	0122	1240
0626	1804	27	—	1028	0626	2133	0319	1318
0625	1804	28	0025	1120	—	2254	—	1410

*Tides for WAIANAE BAY are + 10 minutes.

Daylight 40 minutes before time of Sunrise.

ANNEX 4-B

Demonstration Plan
No. 1-B

BLUE FORCE,
U. S. S. CALIFORNIA, Flagship,
SAN PEDRO,
21 December, 1931.

TASK ORGANIZATION.(a) Left Flank Attack Force, Rear Admiral Pringle.

Battleship Division Three.

Litchfield, Elliot, Destroyer Division Four.

St. Mihiel (representing actual and constructive transports).

Melville (representing constructive transports).

(b) Right Flank Attack Force, Vice Admiral McNamee.

Battleship Division Four plus California.

Cruiser Division Three less Milwaukee.

Decatur, Destroyer Divisions Ten, Eleven and Sixteen less Trever, ~~and~~ Broome, *Preble*

Henderson (representing actual and constructive transports).

Cuyama, Neches (representing constructive transports).

(c) Air Force, Rear Admiral Yarnell.

Carrier Division Two less Gannet.

Fleet Air Base Plane Squadrons.

Destroyer Divisions Six and Twelve less Hale.

1. This plan will become effective only if ordered by Commander Blue Force.

The object of the plan is to shield our intention of establishing beach heads on the north coast of OAHU on eleven February and to cause the enemy to withdraw troops, mobile artillery and submarines from that area, thereby increasing the prospect of a tactical surprise at the time of landing and decreasing the opposition at the landing beaches. An essential element of this plan is that the enemy be aware of our presence in force off the southwest coast of OAHU.

The scheme of the maneuver of the Expeditionary Force for this demonstration is to employ one combat unit of the 3rd Division, consisting of one infantry battalion, one battery of field artillery, and one platoon, cannon company; to land first two companies of infantry at BROWN'S CAMP and next the remainder of the combat unit at WAIANAE, destroy the enemy defensive position in the pocket just north of KAHE POINT, after which the two detachments will join and take up defensive positions in the vicinity WAIANAE.

Enemy submarines and patrol planes may be operating in this area. Enemy searchlights are capable of picking up ships at a maximum distance of twelve thousand yards off shore.

2. This force will make a demonstration in force off the southwestern coast of OAHU during late afternoon and evening of ten February in order to shield our intention of landing and establishing beach heads on the north coast of OAHU on the morning of eleven February.

3. (a) Left Flank Attack Force operate in area to northward and westward of line two hundred twentyfive degrees true from BARBERS POINT. Land constructive forces at Beaches O and N. Battleships and transports approach shoreline not closer than fourteen thousand yards prior to sunset and not closer than eleven thousand yards after dark. Battleships main battery objectives;—organized centers of resistance and artillery in grid squares ~~eighty-seven to eighty and seventy-six to seventy-three~~; rate of fire;—one shot per ship each twenty minutes. Use forward turrets to prevent damage to airplanes. Secondary battery objectives;—shoreline BROWN'S CAMP to WAIANAE; rate of fire;—one broadside salvo per ship each fifteen minutes. Battleships continue attack until twenty-two hundred, then proceed to area for beginning landing operations morning of eleven February. Transports with destroyer escort withdraw under cover of darkness when directed by Task Force Commander. They will either proceed independently to area for beginning landing operations on morning of eleven February or in company with Battleships at discretion of Task Force Commander.

*a locality embodied in a three thousand yard square in Area 55 DC
the center of which is square eighty five.*

(b) Right Flank Attack Force operate in area to eastward and southward of line two hundred twenty-five degrees true from BARBERS POINT. Battleships and transports approach shore line not closer than twenty-five thousand yards from FORT WEAVER prior to sunset and not closer than nineteen thousand yards after dark. Battleship main battery objective sixteen-inch battery at FORT WEAVER and organized center of resistance and artillery in EWA district in ~~grid squares ninety two to ninety six and seventy seven to seventy four~~; rate of fire;—one shot per ship each twenty minutes. Use forward turrets to prevent damage to airplanes.

Battleships continue attack until twenty-two hundred then proceed to area assigned to Left Flank Attack Force and attack and cover landings in that area until twenty-three hundred, following same instructions as given Left Flank Attack Force Commander; then proceed to area for beginning landing operations morning of eleven February.

Transport with destroyer escort withdraw under cover of darkness when directed by Task Force Commander. They will either proceed independently to area for beginning landing operations on morning of eleven February or in company with Battleships as directed by Task Force Commander.

Cruisers after dark approach as close as practicable keeping outside of effective searchlight range. Attack searchlight positions and beach defense gun positions as directed by Task Force Commander. Beginning twenty-three hundred separate sufficiently to cover both the areas assigned to the two Task Force Commanders. At midnight two cruisers proceed to positions for beginning landing operations on morning of eleven February. One cruiser at high speed continue intermittent bombardment of beach and leave as late as practicable for position for beginning landing operations on morning of eleven February.

(c) Air Force beginning noon ten February will screen protectively all task forces against enemy aircraft and submarines covering area between OAHU and Task Forces to distance of fifty miles ahead of the two Attack Forces. Repel enemy air attacks that may be made. Beginning as late as practicable make smoke screens with view to interfering with the fire of enemy long range guns. Air operations will be completed in time to permit airplanes to land aboard carriers before dark.

(x) Approach to OAHU will be made from the southward and to the westward of Longitude one hundred fifty-eight degrees unless lack of time or information concerning enemy forces makes this undesirable, in which case the approach will be left to the Right Flank Attack Force Commander. The intended noon position of the Attack Forces will be reported to Commander Air Force as soon as decided, and the two Attack Forces will separate for their demonstration positions when directed by the Senior Task Force Commander. The use of radio during demonstration will be so restricted that the enemy will not obtain information of our retirement by change in volume or strength of intercepted signals. Conserve forces and ammunition as far as practicable in conformity with the object of the plan. Plus ten and one half time.

4. -----
5. Commander BLUE Force in California with Right Flank Attack Force. Communication within Task Forces as for Phase C.

R. H. LEIGH,
ADMIRAL,
COMMANDER BLUE FORCE.

Area fifty five 7C, Square 25, 27, 37, 56, 57

ANNEX 5-B

Demonstration Plan
No. 2-B.

BLUE FORCE,
U. S. S. CALIFORNIA, Flagship,
SAN PEDRO,
21 January, 1932.

TASK ORGANIZATION.

- (a) Left Flank Attack Force, Rear Admiral Pringle.
Battleship Division Three.
Destroyer Division Four.
- (b) Right Flank Attack Force, Vice Admiral McNamee.
Battleship Division Four plus California.
Cruiser Division Three less Milwaukee.
Destroyer Division Eleven less Preble.
- (c) Expeditionary Force Escort, Captain Allen.
Decatur, Destroyer Divisions Ten and Sixteen less Trever, Broome.
Litchfield, Elliot, Destroyer Division Six less Hale.
- (d) Expeditionary Force Convoy, Captain Mauldin.
Henderson (Representing actual and constructive troop transports).
St. Mihiel (Representing actual and constructive troop and animal transports).
Cuyama (Representing constructive troop transports).
Neches (Representing constructive troop transports).
Melville (Representing constructive troop and animal transports).
1. This Plan will become effective when ordered by Commander BLUE Force. The object of the plan is to inflict damage and confuse the enemy so as to give added security to our forces during landing operations on north coast of OAHU on eleven February. No troops, actual or constructive, will be landed.
Enemy submarines and patrol planes may be operating in this area. Enemy searchlights are capable of picking up ships at a maximum distance of twelve thousand yards off shore.
 2. This force will make a bombardment demonstration off the southwestern coast of OAHU after dark on ten February, in order to inflict damage and confuse the enemy so as to give added security to our forces during landing on the north coast.
 3. (a) Left Flank Attack Force operate in area to northward and westward of line two hundred twenty-five degrees true from BARBER'S POINT. Approach shore line not closer than eleven thousand yards. Begin bombardment at twenty-one hundred. Main battery objectives: organized centers of resistance and artillery in a locality embodied in a three thousand yard square in Area fifty-five DC the center of which is Square eighty-five; rate of fire, one shot per ship each ten minutes. Use forward turrets to prevent damage to airplanes. Secondary battery objectives: shore line BROWN'S CAMP to WAIANAE; rate of fire, one broadside salvo per ship every fifteen minutes. Discontinue bombardment at twenty-two hundred and proceed to area for beginning landing operations morning of eleven February.
 - (b) Right Flank Attack Force operate in area to eastward and southward of line two hundred twenty-five degrees true from BARBER'S POINT. Approach shore line not closer than nineteen thousand yards from FORT WEAVER. Begin bombardment at twenty-one hundred. Main battery objectives: sixteen-inch battery at FORT WEAVER and organized center of resistance and artillery in EWA district in Area fifty-five FC, Squares twenty-five, twenty-seven, thirty-seven, forty-seven, fifty-six, fifty-seven; rate of fire, one shot per ship each fifteen minutes. Use forward turrets to prevent damage to airplanes. Continue bombardment until twenty-two hundred, then proceed to area assigned Left Flank Attack Force and bombard same objectives assigned that Force until twenty-three hundred, then proceed to area for beginning landing operations morning of eleven February. Cruisers approach shore line close as practicable keeping outside

of effective searchlight range. Begin bombardment at twenty-one hundred. Objectives: searchlight positions and beach defense gun positions. Beginning twenty-three hundred separate so as to cover areas assigned to both the Left Flank and Right Flank Attack Forces. At midnight discontinue bombardment and proceed to positions for beginning landing operations on morning of eleven February.

(c) Expeditionary Force Escort proceed with Expeditionary Force Convoy as anti-submarine screen.

(d) Expeditionary Force Convoy proceed to positions for beginning landing operations on morning of eleven February making as wide a detour to westward of OAHU as time and speed permit.

(x) Approach within maximum range of shore defense sixteen-inch guns will not be made until after dark. Prior to dark the Expeditionary Force Escort and the Expeditionary Force Convoy will be formed so that separation into task forces can be made without confusion when directed by Commander Expeditionary Force Escort. Approach to OAHU will be made from the southward and to the westward of longitude one hundred fifty-eight degrees unless lack of time or information concerning enemy forces makes this undesirable, in which case the approach will be as directed by the Right Flank Attack Force Commander. The intended noon position of the Attack Forces will be reported to Commander Advance Raiding Force as soon as decided so that Destroyer Division SIX may be detached to join Expeditionary Force Escort. The use of radio during demonstration will be so restricted that the enemy will not obtain information of our retirement by change in volume or strength of intercepted signals. Conserve ammunition so far as practicable in conformity with the object of the Plan. Zone plus ten and one-half time.

4. -----

5. Communication between Task Forces as in Phase B, except Commander BLUE Force will also guard two six five five kilocycles to work Commander Expeditionary Force Escort. Left Flank Attack Force guard two three three five kilocycles, Expeditionary Force Escort guard two six five five kilocycles, Expeditionary Force Convoy guard four zero five kilocycles, Right Flank Attack Force as ordered by Task Force Commander. Commander Expeditionary Force Escort guard four zero five kilocycles to work Commander Expeditionary Force Convoy, but visual will be used instead of this frequency except in most urgent cases.

Commander BLUE Force in California with Right Flank Attack Force.

R. H. LEIGH,
ADMIRAL,
COMMANDER BLUE FORCE.

L. E. DENFELD,
Lieut.-Comdr.,
Flag Secretary.

ANNEX 6-B

Buoy Location

<u>Beach</u>	<u>Latitude</u>	<u>Longitude</u>
A	21°-40'-28"	157°-54'-48"
B	21 -41 -20	157 -55 -18
C	21 -43 -42	157 -59 -24
D	21 -43 -18	158 -01 -30
E	21 -41 -42	158 -03 -48
F	21 -39 -18	158 -05 -06
J	21 -36 -12	158 -10 -06
K	21 -36 -18	158 -11 -48
L	21 -31 -45	158 -14 -39
M	21 -27 -26	158 -13 -40
N	21 -26 -42	158 -12 -36

Priority should be given to the laying of marker buoys at Beaches, A, D, J, K, L, M and N. These are the beaches at which actual troops are scheduled to be landed under the several plans.

PHASE C

Landing and Attack

OPERATION PLAN NO. 1-C, PREFERRED ATTACK PLAN.

ANNEX 1-C LOCATION OF BEACHES.

ANNEX 2-C RADIO FREQUENCY ORGANIZATION.

ANNEX 3-C GUNNERY INSTRUCTIONS.

OPERATION PLAN NO. 2-C, FIRST ALTERNATIVE ATTACK PLAN.

OPERATION PLAN NO. 3-C, SECOND ALTERNATIVE ATTACK PLAN.

Operation Plan
No. 1-C.

PREFERRED PLAN (PLAN 1)

BLUE FORCE,
U. S. S. CALIFORNIA, Flagship,
SAN PEDRO,
21 December, 1931.

TASK ORGANIZATION.

- (a) Left Flank Attack Force, Rear Admiral Pringle.
 Battleship Division Three.
 Detroit.
 Litchfield, Elliot, Desdiv Four.
 Kingfisher, Brant.
 St. Mihiel (representing actual troop and constructive troop and animal transports.)
 Melville (representing constructive troop and animal transports.)
- (b) Right Flank Attack Force, Vice Admiral McNamee.
 Battleship Divisions Four, One less Texas plus California.
 Cruiser Division Three less Milwaukee.
 Decatur, Desdiv Six less Hale, Desdiv Ten less Trever, Desdiv Eleven, Desdiv Sixteen less Broome. *additional ships Tern and Partridge.*
 Henderson (representing actual and constructive troop transports.)
 Cuyama and Neches (representing constructive troop transports.)
- (c) Air Force, Rear Admiral Yarnell.
 Aircraft, Battle Force, less Gannet.
 Fleet Air Base Plane Squadrons.
 Desdiv Twelve.
- (d) Submarine Force, Captain Friedell.
 Submarine Division Twelve less Nautilus Holland Ortolan.
- (e) Train, Rear Admiral Hough.
 Argonne, Altair, Relief.
 Medusa (representing 1 actual repair, and 3 constructive distilling ships.)
 Holland (representing 1 submarine tender and 4 constructive ammunition ships.)
 Sonoma, Gannet, Pelican, Ortolan.
 Dorsey, Lea.
1. The object of the plan is in cooperation with the Army to establish beach heads on the Island of OAHU from which further operations may be conducted for the capture of that Island.
 The scheme of the maneuver of the Expeditionary Forces for this Plan is to force an entrance into the Central Plateau via WAIAMEA and trails to the southward, to occupy a line that will flank the enemy defensive system south of HALEIWA, and thence to advance by flanking action to the southward and westward in the direction of WAHIAWA, thereby forcing the evacuation of the HALEIWA Area.
 BLUE will have established a secondary base at HILO from which place the Fleet Air Base Planes have been operating in the Service of Information and Security. BLUE light forces will have been previously refueled to capacity, and will have carried out the operations required by Operation Order No. 1-B.
 This Plan becomes effective on the designation of zero hour, which will be the time of landing the first wave on the beach.
 2. This Force will land the BLUE Expeditionary Force simultaneously at daylight to the eastward and westward of KAHUKU POINT in order to establish beach heads from which further operations may be conducted for the capture of OAHU.
 3. (a) Left Flank Attack Force will land actual forces at Beach A, and constructive forces at Beaches A and B; will clear these landing beaches of obstacles and enemy forces; will prevent effective action by hostile troops that may be to the northward and southward; will employ the main battery guns of battleships in assisting the battleships of the Right Flank Attack Force to bombard the fortifications to the southward of HALEIWA.

(b) Right Flank Attack Force will land actual forces at Beach D and constructive forces at Beaches C, D and E; will clear these landing beaches of obstacles and enemy forces; will prevent effective action by hostile troops that may be to the northward and westward; will keep Beaches F, G, H, I, J and K under fire; will employ main battery guns of battleships on enemy fortifications to southward of HALEIWA.

(c) Air Force will employ all available aircraft in reconnaissance, denial of hostile observation, the laying of smoke screens, in attacks by light bombers and machine guns on the actual landing beaches and against assembled reserves and marching troop columns, in bombing of selected targets in battle reconnaissance service to the BLUE Expeditionary Force. Air operations in support of each landing will conform to plans arranged in conference between Commanders of Right Flank Attack Force, Left Flank Attack Force and Air Force.

(d) Submarine Force will take station off Beaches A, B, C, D and E as close inshore as practicable, reconnoiter unobserved, and report to Left Flank Attack Force Commander and Right Flank Attack Force Commander the results of observations especially with respect to feasibility of safe landings at the points indicated. They will, by a pre-arranged system of visual signalling, visible only off shore, indicate to the Attack forces the exact location of these beaches.

(e) Train maintain base at LAHAINA ROADS. Be prepared to render assistance to damaged vessels, to transport and care for wounded personnel, and to furnish usual Train service.

(x) Exact location of beaches are as given in Annex I. All forces will be in designated positions for beginning the attack at minus two hours. Plus ten and one half time. Daylight is forty minutes before sunrise. Forces will observe the special requirements as set forth in paragraphs ten and eleven of the statement of Joint Exercise Number Four. No undue risks will be taken.

4. Logistic requirements will be furnished by the Train.
5. Communications in accordance with Blue Communication Plan, (Annex 1 to Campaign Plan No. 1, and Radio Frequency Organization (Annex 2-C).) Commander Blue Force in California with Right Flank Attack Force.

R. H. LEIGH,
ADMIRAL,
COMMANDER BLUE FORCE.

- Annexes 1-C Location of Beaches.
2-C Radio Frequency Organization.
3-C Gunnery Instructions.

(d) Submarine Force patrol against enemy submarines at distance of twenty to thirty miles from landing beaches.

Annex 1-C

Latitude and Longitude of proposed landings, Island of Oahu,
for use in
Grand Joint Exercise No. 4

SECRET

A—LAT.	21° 39' 27"	LONG.	157° 55' 54"	Green
B—LAT.	21 40 20	LONG.	157 56 20	Yellow
C—LAT.	21 42 51	LONG.	157 59 11	Yellow
D—LAT.	21 41 57	LONG.	158 00 45	Green
E—LAT.	21 40 56	LONG.	158 02 28	Yellow
F—LAT.	21 38 35	LONG.	158 04 02	Yellow
G—LAT.	21 35 55	LONG.	158 06 20	Blue
H—LAT.	21 35 30	LONG.	158 07 04	Blue
I—LAT.	21 35 10	LONG.	158 08 12	Yellow
J—LAT.	21 34 58	LONG.	158 10 06	Green
K—LAT.	21 35 04	LONG.	158 11 48	Green
L—LAT.	21 31 45	LONG.	158 13 57	Blue
M—LAT.	21 27 48	LONG.	158 12 40	Green
N—LAT.	21 26 55	LONG.	158 11 36	Blue
O—LAT.	21 21 00	LONG.	158 07 54	Yellow
P—LAT.	21 18 57	LONG.	158 07 16	Green
Q—LAT.	21 18 05	LONG.	158 06 42	Yellow
R—LAT.	21 16 24	LONG.	157 42 42	Blue
S—LAT.	21 16 27	LONG.	157 42 00	Blue
T—LAT.	21 18 50	LONG.	157 39 42	Yellow
U—LAT.	21 19 20	LONG.	157 40 24	Blue

Blue: Excellent in normal weather.

Green: Good in normal weather.

Yellow: Practicable in favorable weather.

ANNEX 2-C

Radio Frequency Organization

1. The object of this organization is to provide radio communication between Commander BLUE Force and his Task Force Commanders, within each Task Force, and between Task Forces and forces landed, during Phase C (landing operations).

2. This plan will become effective with Operation Plan 1-C, or upon signal. It remains effective until superseded by Radio Frequency Organization for Phase D.

3. The frequency assignment follows:

(a) **Force Commander Frequencies:**

215 kilocycles.

4265 kilocycles and harmonics.

The Force Commander Frequencies will be guarded by the several Task Force Commanders for this phase, and by all BLUE submarines. Shift of frequency from 4265 kilocycles to a harmonic will be by order of the Force Commander. These frequencies are for communication between Commander BLUE Force and his Task Force Commanders, between these Task Force Commanders, and to and from submarines.

(b) **Task Force Frequencies:** The radio organization within each Task Force is left to the discretion of the Task Force Commander. It is desired, however, that the organization conform to certain general principles outlined hereunder:

(1) The organization should be as simple as practicable.

(2) Frequencies above 2000 kilocycles only should be used, insofar as equipment available permits. The use of intermediate frequencies during early stages of Phase C, enabling BLACK tracking unit to obtain a fix, will defeat our chance of obtaining tactical surprise in landing on Northeast Coast. To avoid conflict the following Task Force frequencies are assigned, for use as necessary:

Left Flank Attack Force:

405 kilocycles.

2685 kilocycles.

Right Flank Attack Force:

465 kilocycles.

2515 kilocycles.

Air Force:

3035 kilocycles.

Submarine Force:

4265 kilocycles.

Train:

435 kilocycles.

2435 kilocycles.

(c) **Unit Frequencies:** The Unit Frequencies regularly assigned to units attached to each Task Force are available for assignment within that Force. This includes the frequencies assigned for working aircraft. Destroyer Squadron Two frequency is assigned to Left Flank Attack Force; Destroyer Squadron Four frequency is assigned to Right Flank Attack Force.

(d) **Landing Force Frequencies:**

(1) Communication must be maintained between forces afloat and forces landed to transmit orders and information regarding supporting fire and for necessary orders regarding the landing operations. Commanders of Left Flank and Right Flank Attack Forces are charged with maintaining these communications.

(2) In consultation with Army, it has been decided that the following is necessary:

Communication maintained with the first wave enroute to each actual landing by mounting field set in one boat, for fire control orders, information, etc.

Communication maintained with each Beach by means of field set on Beach, for fire control orders and necessary communications with Beachmaster.

Communication maintained with each Regimental Headquarters (one Army and one Marine), for transmission of fire control orders and other necessary communication.

(3) A commissioned officer must be detailed as liaison officer for each actual landing. This officer is to translate Army requests regarding supporting fire, etc., into dispatches in Naval form and terms. The enlisted personnel attached to each unit should be entirely competent to handle the equipment and maintain communications. The liaison officer should have ample gunnery experience to carry out his mission. A liaison officer is required in first wave, at Beach set until Regimental Headquarters are established, and thereafter at these Headquarters. The same officer may be used.

(4) Duplicate equipment is required for each Regimental Headquarters unit, so that the spare set may be set up in a new advanced Headquarters ready for use as soon as occupied.

(5) Upon establishment of BLUE Expeditionary Force Headquarters on shore, communication will be with these Headquarters as outlined in Annex 1-D.

(6) Landing Force frequencies are assigned:

Left Flank Attack Force:

2915 kilocycles.

Right Flank Attack Force:

2955 kilocycles.

**R. H. LEIGH ,
Admiral,
Commander BLUE Force.**

GUNNERY INSTRUCTIONS

1. In connection with the formulation of detailed plans for Naval gun-fire support of landing operations, it is necessary to define applicable Army artillery terminology to make for mutual understanding and cooperation.
2. **Location of gun-fire objectives.** The coordinates of gun-fire objectives ashore on the Island of OAHU, in the Naval support of landings on that Island, will be given by the grid system, using the Special Uniform Grid System map forwarded by Commander Battle Force Confidential file A16-3 (5828), of 18 December, 1931.
3. **Definitions.** The following paragraphs define artillery fire terms used by the Army and which probably will be used by the latter in calling for gun-fire support from Naval forces:-

A **Concentration** is fire placed in a zone or area.

The greater part of fire required of Naval forces will be of this type.

A **Barrage** is fire placed on a line.

In effecting concentrations the following information is required by the firing vessel(s):

- (a) The location of the area.

This will be designated by the grid system of coordinates.

- (b) The Tactical object of the fire.

1. Intensity of fire.

(a) **Destruction** fire indicates fire concentrated on a materiel object, which it is desired to damage physically to such an extent that it is rendered useless.

(b) **Neutralization** indicates fire of great intensity on personnel, with the object of causing severe losses, preventing movement or action, and in general, of destroying the combat efficiency of enemy personnel.

(c) **Harassing** fire is of the same general nature as (b) above, but of less intensity. The object is, by inflicting losses or by the threat of losses, to disturb the rest of enemy troops, curtail movement, and in general, lower morale.

For Tactical results of fire, the following terms are used:

1. **Counterbattery**—This is fire on enemy artillery. It may be to destroy, to neutralize or to harass.
2. **Interdiction**—This is fire on points or areas which it is desired to prevent the enemy from using. Fire of sufficient intensity to neutralize any troops in the area is put down at irregular intervals, the threat of losses being relied upon to curtail movement or activity during lulls.
3. **Retaliation**—This is fire of any sort, executed in retaliation for enemy fire placed on friendly troops.
4. **Counter preparation**—This is fire placed on a probable enemy assembly area, to neutralize troops forming for attack.

- (c) The time of fire.

This time may be planned in advance, or given by rocket or other signal, or by request by radio. The time for ceasing fire, when necessary, may be given by any of the above methods.

- (d) The ammunition allotted.

The ammunition allotment is under control of the Task Force Commander. He will prescribe the rate of fire, and the ammunition to be expended after giving consideration to the importance of the target, the nature of the fire desired, and the limited supply of ammunition available on board ship. Every effort should be made to conserve ammunition consistent with the results to be attained.

Operation Plan
No. 2-C

FIRST ALTERNATIVE ATTACK PLAN (Plan 2)

BLUE FORCE,
U. S. S. CALIFORNIA, Flagship,
SAN PEDRO,
21 December, 1931.

TASK ORGANIZATION.

- (a) Left Flank Attack Force, Rear Admiral Pringle.
Battleship Division Three.
Detroit.
Litchfield, Elliot, Desdiv Four.
Kingfisher, Brant.
St. Mihiel (representing actual troop and constructive troop and animal transports.)
Melville (representing constructive troop and animal transports.)
- (b) Right Flank Attack Force, Vice Admiral McNamee.
Battleship Divisions Four, One less Texas plus California.
Cruiser Division Three less Milwaukee.
Decatur, Desdiv Six less Hale, Desdiv Ten less Trever, Desdiv Eleven, Desdiv Sixteen less Broome. *additional ships Fern, Partridge*
Henderson (representing actual and constructive troop transports.)
Cuyama and Neches (representing constructive troop transports.) *less Preble*
- (c) Air Force, Rear Admiral Yarnell.
Aircraft, Battle Force, less Gannet.
Fleet Air Base Plane Squadrons.
Desdiv Twelve.
- (d) Submarine Force, Captain Friedell.
Submarine Division Twelve less Nautilus Holland Ortolan.
- (e) Train, Rear Admiral Hough.
Argonne, Altair, Relief.
Medusa (representing 1 actual repair, and 3 constructive distilling ships.)
Holland (representing 1 submarine tender and 4 constructive ammunition ships.)
Sonoma, Gannet, Pelican, Ortolan.
Dorsey, Lea.
- The object of the plan is in cooperation with the Army to establish beach heads on the Island of OAHU from which further operations may be conducted for the capture of that Island.
The scheme of the maneuver of the Expeditionary Forces for this Plan is to force the enemy to take up defensive lines which can be enfiladed by fire from BLUE Fleet, and then by advancing the left flank to the southward and westward force the evacuation of the HALEIWA Area. To employ the troops on the right flank in forcing the withdrawal and when hostile retrograde movements are noted, to pursue with view of destroying enemy forces in this area.
BLUE will have established a secondary base at HILO from which place the Fleet Air Base Planes have been operating in the Service of Information and Security. BLUE light forces will have been previously refueled to capacity, and will have carried out the operations required by Operation Order No. 1-B.
This Plan becomes effective on the designation of zero hour, which will be the time of landing the first wave on the beach.
 - This force will land the BLUE Expeditionary Force simultaneously at daylight to the westward of KAHUKU POINT and in the KAWAIHAPI-MOKULEIA Area.

3. (a) Left Flank Attack Force will land actual forces at Beach D, and after Beach F has been secured by troops landed at Beach D, will land constructive troops at Beaches E and F; will clear Beaches D, E, and F of obstacles and enemy forces; will prevent effective action by hostile troops that may be to the northward and southward; will employ main battery guns of battleships in assisting the battleships of the Right Flank Attack Force to bombard the fortifications to the southward of HALEIWA.

(b) Right Flank Attack Force will land constructive forces at Beach K, and actual and constructive forces at Beaches J and K after Beach J has been secured by the troops landed at Beach K; will clear the landing beaches at J and K of obstacles and enemy forces; will prevent effective action by hostile troops that may be to the eastward and westward; will keep Beaches G, H, and I under fire; will employ main battery guns of battleships on enemy fortifications to southward of HALEIWA.

(c) Air Force will employ all available aircraft in reconnaissance, denial of hostile observation, the laying of smoke screens, in attacks by light bombers and machine guns on actual landing beaches and against assembled reserves and marching troop columns, in bombing of selected targets in the defense area, in anti-submarine operations, and in battle reconnaissance service to the Blue Expeditionary Force.

Air operations in support of each landing will conform to plans arranged in conference between Commanders of Right Flank Attack Force, Left Flank Attack Force and Air Force.

(d) Submarine Force will take station off Beaches D, E, F, K, and J as close inshore as practicable, reconnoiter unobserved, and report to Left Flank Attack Force Commander and Right Flank Attack Force Commander the results of observations, especially with respect to feasibility of safe landings at the points indicated. They will by a pre-arranged system of visual signalling, visible only off shore, indicate to the Attack forces the exact location of these beaches.

(e) Train maintain base at LAHAINA ROADS. Be prepared to render assistance to damaged vessels, to transport and care for wounded personnel, and to furnish usual Train service.

(x) Exact location of beaches are as given in Annex I. All forces will be in designated positions for beginning the attack at minus two hours. Plus ten and one half time. Daylight is forty minutes before sunrise. Forces will observe the special requirements as set forth in paragraphs ten and eleven of the statement of Joint Exercise Number Four. No undue risks will be taken.

4. Logistic requirements will be furnished by the Train.
5. Communications in accordance with Blue Communication Plan, (Annex 1 to Campaign Plan No. 1, and Radio Frequency organization (Annex 2-C).) Commander Blue Force in California with Right Flank Attack Force.

R. H. LEIGH ,
ADMIRAL,
COMMANDER BLUE FORCE.

- Annexes 1-C Location of Beaches.
2-C Radio Frequency Organization.
3-C Gunnery Instructions.

(d) Submarine Force patrol against enemy submarines at distance of 20 to 30 miles from landing beaches.

Operation Plan **SECOND ALTERNATIVE ATTACK PLAN (Plan 3)**
 No. 3-C

BLUE FORCE,
 U. S. S. CALIFORNIA, Flagship,
 SAN PEDRO,
 21 December, 1931.

TASK ORGANIZATION.

- (a) **Left Flank Attack Force**, Rear Admiral Pringle.
 Battleship Division Three.
 Detroit.
 Litchfield, Elliot, Desdiv Four.
 Kingfisher, Brant.
 St. Mihiel (representing actual troop and constructive troop and animal transports.)
 Melville (representing constructive troop and animal transports.)
- (b) **Right Flank Attack Force**, Vice Admiral McNamee.
 Battleship Divisions Four, One less Texas plus California.
 Cruiser Division Three less Milwaukee.
 Decatur, Desdiv Six less Hale, Desdiv Ten less Trever, Desdiv Eleven, Desdiv Sixteen less Broome. *additional ships term Partridge*
 Henderson (representing actual and constructive troop transports.)
 Cuyama and Neches (representing constructive troop transports.)
- (c) **Air Force**, Rear Admiral Yarnell.
 Aircraft, Battle Force, less Gannet.
 Fleet Air Base Plane Squadrons.
 Desdiv Twelve.
- (d) **Submarine Force**, Captain Friedell.
 Submarine Division Twelve less Nautilus Holland Ortolan.
- (e) **Train**, Rear Admiral Hough.
 Argonne, Altair Relief.
 Medusa (representing 1 actual repair, and 3 constructive distilling ships.)
 Holland (representing 1 submarine tender and 4 constructive ammunition ships.)
 Sonoma, Gannet, Pelican, Ortolan.
 Dorsey, Lea.
- The object of the plan is in cooperation with the Army to establish beach heads on the Island of OAHU from which further operations may be conducted for the capture of that Island.
 The scheme of the maneuver of the Expeditionary Forces in this Plan will be to establish a beach head in the WAIANAE Pocket and force a passage through the defile north of BROWN'S CAMP to an attacking position between BROWN'S CAMP and BARBERS POINT. Then to launch an attack to capture the PUU PALAILAI and positions to the southward thereby forcing the evacuation of the EWA Sector.
 BLUE will have established a secondary base at HILO from which place the Fleet Air Base Planes have been operating in the Service of Information and Security. BLUE light forces will have been previously refueled to capacity, and will have carried out the operations required by Operation Order No. 1-B.
 This Plan becomes effective on the designation of zero hour, which will be the time of landing the first wave on the beach.
 - This force will land the BLUE Expeditionary Force simultaneously at daylight at MAKUA, MAKAHA and WAIANAE.

3. (a) Left Flank Attack Force will land constructive forces at Beach L and actual and constructive troops at Beaches L and M after Beach M has been secured by the troops landed at Beach L; will clear Beach L of obstacles and enemy forces; will prevent effective action by hostile troops that may be to the northward and southward; will employ main battery guns of battleships against hostile gun positions that may be located to the eastward of KOLEKOLE PASS.

(b) Right Flank Attack Force will land actual and constructive troops at Beach N after that beach has been secured by the troops landed at Beach L; will clear Beaches M and N of obstacles and enemy forces; will prevent effective action by hostile troops that may be to the northward and southward; will employ main battery guns of battleships first against hostile gun positions that may be located to the eastward of KOLEKOLE PASS and then on enemy fortifications in the EWA sector and on the two sixteen-inch guns in FORT WEAVER.

(c) Air Force will employ all available aircraft in reconnaissance, denial of hostile observation, the laying of smoke screens, in attacks by light bombers and machine guns on the actual landing beaches and against assembled reserves and marching troop columns, in bombing of selected targets in the defense area, in anti-submarine operations, and in battle reconnaissance service to the BLUE Expeditionary Force. Air operations in support of each landing will conform to plans arranged in conference between Commanders of Right Flank Attack Force, Left Flank Attack Force and Air Force.

(d) Submarine Force will take station off Beaches L, M, N, and at positions to southward of KAENA POINT and northward of BROWN'S CAMP as close inshore as practicable, reconnoiter unobserved, and report to Left Flank Attack Force Commander and Right Flank Attack Force Commander the results of observations especially with respect to feasibility of safe landings at the points indicated. They will by a pre-arranged system of visual signalling, visible only off shore, indicate to the Attack forces the exact location of these beaches.

(e) Train maintain base at LAHAINA ROADS. Be prepared to render assistance to damaged vessels, to transport and care for wounded personnel, and to furnish usual Train service.

(x) Exact location of beaches are as given in Annex I. All forces will be in designated positions for beginning the attack at minus two hours. Plus ten and one half time. Daylight is forty minutes before sunrise. Forces will observe the special requirements as set forth in paragraphs ten and eleven of the statement of Joint Exercise Number Four. No undue risks will be taken.

4. Logistic requirements will be furnished by the Train.

5. Communications in accordance with BLUE Communication Plan, (Annex 1 to Campaign Plan No. 1, and Radio Frequency organization (Annex 2-C).)
Commander Blue Force in California with Right Flank Attack Force.

R. H. LEIGH,
ADMIRAL,
COMMANDER BLUE FORCE.

Annexes 1-C Location of Beaches.

2-C Radio Frequency Organization.

3-C Gunnery Instructions.

(d) Submarine Force patrol against enemy submarines at distance of 20 to 30 miles from landing beaches.

PHASE D

Subsequent Operations

OPERATION ORDER NO. 1-D.

ANNEX 1-D, RADIO FREQUENCY ORGANIZATION.

PHASE D.
Operation Plan
No. 1-D

SUBSEQUENT OPERATIONS
BLUE FLEET,
U. S. S. CALIFORNIA, Flagship.
SAN PEDRO,
21 December, 1931.

TASK ORGANIZATION

(a) Battleships, Vice Admiral McNamee.

California
Batdivs Four, Three and One less Texas.
Desdivs Four and Five less Roper.

(b) Aircraft, Rear Admiral Yarnell.

Cardiv Two less Gannet.
Desdiv Twelve.

(c) Control Force, Rear Admiral Kalbfus.

Detroit
Crudiv Three less Milwaukee.
Desdiv Six less Hale.
Subdiv Twelve less Nautilus Holland and Ortolan.

(d) Base Force, Rear Admiral Hough.

Trainron Two less Arctic Pinola and Algorma.
Desron Four less Trever ~~and~~ Broome. *Preble*
Altair, Melville, Holland, Ortolan, Gannet, Henderson, St. Mihiel, all constructive vessels.
VP-1, VP-4, VP-6, Pelican.

1. The object of this plan is to reestablish our control of the HAWAIIAN Area and becomes operative when ordered and after the establishment of beachheads on the Island of OAHU.
2. This force will support the Expeditionary Force in its operations for the capture of OAHU, will gain and maintain command of the air and sea, and provide for safe conduct of transports and supply ship convoys through the Fleet Transportation Zone in order to reestablish our control of the HAWAIIAN Area.
3. (a) Battleships support the Expeditionary Force by gun fire at times and places required in accordance with the requests of the Commanding General.
(b) Aircraft support the Expeditionary Force at times and places required in accordance with requests of the Commanding General. Search out and destroy all enemy aircraft. Maintain patrol in service of information and security at maximum distance off OAHU commensurate with safety.
(c) Control Force search out and destroy all enemy vessels. Keep sea lanes open.
(d) Base Force maintain base at LAHAINA. As soon as situation warrants establish secondary base at WAIALUA-WAIMEA, and at other points on OAHU as required by Expeditionary Force. Despatch convoys of empty troopships and supply ships with destroyer escorts and plane protection through Fleet Transportation Zone and provide incoming convoys with destroyer escorts and plane protection.
(x) Until the situation becomes stabilized the unit or ships listed under the Task Organization will be subject to change. Any Task Force Commander will transfer units to any other Task Force on request of respective Task Commanders when such units can be spared. Commander-in-Chief, BLUE Fleet, will be informed of all such transfers. When units required by a Task Force Commander cannot be furnished from any other Task Force, request for forces shall be made to Commander-in-Chief, BLUE Fleet. As the detailed operations of the various Task Forces must of necessity depend on the situation as it exists and unfolds itself after the beachheads are established, Task Force Commanders will use their initiative in directing the operations, keeping in mind the general plan as stated in paragraph two. Plus ten and one half time.

4. Task Force Commanders will arrange direct with Commander Base Force for all logistic requirements.
5. The Fleet Transportation Zone extends for a distance of two hundred miles off shore from all islands between HAWAII and NIHUA inclusive.
Commander-in-Chief, BLUE Fleet, in California with Battleships. Communication Plan in accordance with Annex 1-D, Radio Frequency Organization.

R. H. LEIGH,
Admiral
Commander-in-Chief, BLUE Fleet.

ANNEX 1-D, RADIO FREQUENCY ORGANIZATION.

1. The object of this plan is to reestablish our control of the HAWAIIAN Area and the...
 2. This force will support the Expeditionary Force in its operations for the...
 (a) Battleships support the Expeditionary Force by...
 (b) Aircraft support the Expeditionary Force at times and...
 (c) Control Force...
 (d) Base Force...
 (e) ...
 (f) ...
 (g) ...
 (h) ...
 (i) ...
 (j) ...
 (k) ...
 (l) ...
 (m) ...
 (n) ...
 (o) ...
 (p) ...
 (q) ...
 (r) ...
 (s) ...
 (t) ...
 (u) ...
 (v) ...
 (w) ...
 (x) ...
 (y) ...
 (z) ...

ANNEX 1-D

Radio Frequency Organization

1. The object of this organization is to provide radio communication between Commander-in-Chief, BLUE Fleet and his Task Force Commanders, within each Task Force, and between BLUE Fleet and Forces ashore during Phase D (operations subsequent to landing).

2. This plan will become effective with Operation Plan 1-D, or upon signal.

3. The frequency assignment follows:

(a) **Fleet Commander Frequencies:**

215 kilocycles.

4265 kilocycles and harmonics.

The Fleet Commander Frequencies will be guarded by the several Task Force Commanders for this phase. Shift of frequency from 4265 kilocycles to a harmonic will be by order of the Fleet Commander. These frequencies are for communication between Commander-in-Chief, BLUE Fleet, and his Task Force Commanders, and between these Task Force Commanders.

(b) **Task Force Frequencies:** The radio organization within each Task Force is left to the discretion of the Task Force Commander. It is desired, however, that the organization conform to certain general principles outlined hereunder:

(1) The organization should be as simple as practicable.

(2) Frequencies above 2000 kilocycles only should be used, insofar as equipment available permits. To avoid conflict the following Task Force Frequencies are assigned, for use as necessary .

(A) **Battleships:**

2515 kilocycles.

465 kilocycles.

(B) **Aircraft:**

3035 kilocycles.

(C) **Control Force:**

405 kilocycles.

2685 kilocycles.

(D) **Base Force:**

435 kilocycles.

2435 kilocycles.

(c) **Unit Frequencies:** The unit frequencies regularly assigned to units attached to each Task Force are available for assignment within that Force. This includes the frequencies assigned for working aircraft. Destroyer Squadron Two frequency is assigned to Commander BATTLESHIPS. Commander CONTROL FORCE is authorized to communicate with submarines on 4265 kilocycles, if desired.

4. Commander Base Force maintain communication with Beachmasters at both Beaches using:

2915 kilocycles.

This will necessitate station at Beach D (Beach J if Plan II or Beach N if Plan III is effective) shifting frequency.

5. Commander Battleships maintain communication with Commanding General BLUE Expeditionary Force using:

2955 kilocycles.

During establishment of BLUE Expeditionary Force Headquarters on shore, Naval liaison units attached to Army and Marine Regimental Headquarters transfer spare transmitters to BLUE Expeditionary Force Headquarters and establish communication with Commander Battleships using 2955 kilocycles. Upon landing of Commanding General BLUE Expeditionary Force, Naval Liaison units transfer to his headquarters and thereafter communication will be between BLUE Expeditionary Force Headquarters and Commander Battleships.

R. H. LEIGH,
Admiral,
Commander-in-Chief, BLUE Fleet.

Zone Time until arrival within the circle of five hundred miles radius from PEARL HARBOR, then plus ten and one half time.

4. Logistic requirements will be met as provided for in the Operation Orders and Operation Plans for Phases A, B, C, and D.
5. In order to insure secrecy of this Campaign Plan the provisions of paragraph 4 of the forwarding letter shall be strictly followed. Communications in accordance with Blue Communication Plan, Annex 1, and Radio Frequency Organizations, Annex 1-B, Annex 2-C and Annex 1-D.

Commander BLUE Force in California with Battleships.

R. H. LEIGH,
ADMIRAL,
COMMANDER BLUE FORCE.

Annex 1—Blue Communication Plan and Letter of Instructions.

SECRET

GRAND JOINT EXERCISE NO. 4.

COMMUNICATIONS

TABLE OF CONTENTS:

Blue Communication Plan.
Blue Addenda to Communication Plan—Letter of Instructions.
~~Blue Secret Radio Calls.~~
~~Blue Secret Visual Calls.~~
Blue Recognition Signals.
Blue Night Submarine Warning Signals.
Blue Emergency Identification Signals.
Blue Special Submarine Visual Signals.
Blue Observers and Umpires Radio Calls.
Blue Orders for Universal Position Grid and Aircraft Position Grid.
Blue Distribution List of Publications.

ANNEX NO. 1

COMMUNICATION PLAN

1. The object of this plan is to provide for Communications within BLUE Force during Grand Joint Army and Navy Exercise No. 4.
2. This plan becomes effective at 0000, 2 February, 1932, plus eight time.
3. The radio frequency organizations for the several phases of the exercise are appended to the operation plans or orders therefor.
4. Radio will be placed on a Problem status within BLUE Force at 0000, 2 February, zone plus eight time and BLUE FLEET Secret Radio Calls and BLUE Radio Frequency Organization, Phase B, will become effective. Commander Battle Force will discontinue communication with Radio San Francisco at this time, and no messages will be relayed to shore stations thereafter unless of exceptionally urgent nature. Traffic addressed vessels of BLUE Force and not relating to the Problem will be delivered by Intercept method (San Diego - Honolulu Schedule). The Chief of Naval Operations has been requested to augment these schedules.
5. Commander Battleships will detail ship to guard Distress Frequency during the exercise, if possible a ship in company with CALIFORNIA. Any SOS's or emergency calls will be immediately reported to Commander BLUE Force by visual and he will direct necessary action.
6. All traffic concerning the problem will be placed in the appropriate BLUE code and ciphers provided. A distribution list of all BLUE Code and Signal Publications is appended.
7. Strict radio silence is not contemplated. However, radio will only be used as necessary. No transmission will be made unless:
 - (a) There is on hand a message released for transmission.
 - (b) To receipt for a message.

From 0000, 2 February, radio will not be used for other than Problem traffic except in cases of a very urgent nature. Communications between Task Forces and to Commander BLUE Force on high frequency is authorized whenever in the opinion of the Task Force Commander such communication is necessary. BLACK has an efficient radio tracking unit for intermediate frequencies and it may be assumed that he will obtain a fix of any intermediate frequency transmission. The intermediate frequency channel (215 KCS) between Commander Blue and Task Force Commanders should not therefore be used except when communication on high frequency has failed and the importance of the dispatch justifies its use.

8. Umpire messages within each Force should be forwarded by visual and relayed by Task Force Commanders on 4265 kilocycles. No restrictions are placed on transmission of Umpire messages by high frequency. Commander BLUE Force will maintain communication with Chief Umpire on high frequency.

9. In use of visual, attention is invited to the long range at which high powered signal searchlights can be read during daylight under certain conditions. Low powered lights and semaphore will be utilized whenever possible. Care in this may easily prevent a trailing submarine, for example, reading a dispatch ordering a change of course during darkness.

10. When equipment is available, a radio direction finder watch should be established within each Task Force. Important information obtained should be forwarded.

11. The following instructions from the Chief of Naval Operations are quoted:

"10. In connection with handling information and communications during this problem, it is considered desirable to study and develop Army cooperation in Intelligence work including the following features:

(a) Methods employed and the organization required not only in flagships but in individual vessels for the collection, evaluating, plotting, and keeping up to date information of enemy forces, to assist the commands concerned in a continuous appreciation of developments and in making a running estimate of the situation".

12. Commander BLUE Force will organize a radio intelligence intercept unit on the CALIFORNIA in conjunction with the Decrypting Board mentioned in the Letter of Instructions appended.

13. Commander BLUE Force will order change of frequency from 4265 to 8530 kcs or from 8530 kcs to 4265 kcs by means of the following signals:

Signal

ZYX—

ZYQ—

Meaning

Shift from 4265 to 8530 kcs.

Shift from 8530 to 4265 kcs.

14. All shore radio stations will be instructed that BLUE and BLACK normal peace time calls are emergency calls and are to be answered.

15. Commander Battleships will detail ship to guard 355 kilocycles during the exercise, if possible a ship in company with CALIFORNIA. This frequency is an alternate channel for communication with Chief Umpire Navy (Cincus). The guardship will answer all calls from the Chief Umpire Navy and relay messages received via visual. The guardship will not answer other calls or communicate with other stations on 355 KCS but will forward any traffic intercepted or broadcasted.

ADDENDA TO COMMUNICATION PLAN

SECRET

Letter of Instructions—Communications

- Reference: (a) CNO conf. file Op-12S-CD(SC)A16-3(9) of 2 Dec., 1929, on Joint Overseas Expeditions.
(b) CinC BLUE Fleet Brief of Estimate of Situation, Plans and Orders, Grand Joint Exercise No. 4.
(c) CinC BLUE Fleet Communication Plan, Grand Joint Exercise No. 4.
(d) Immediate Superior—Operation Order and Communication Plan.
(e) Notes on use of Codes and Ciphers—CSP 457.
(f) Ciphers, Codes, Calls and Devices issued.
(g) Communication Instructions 1929.
(h) War Instructions, Section IX, X and Article 1100-1103.
(i) U. S. Fleet Umpire Instructions.

1. Commander BLUE Fleet considers that a thorough preparation by preliminary study of and sufficient drills in the secret calls, recognition signals, and ciphers of Grand Joint Exercise No. 4 is necessary to attain completely the mission. The value and importance of radio security is strongly emphasized. In a review of comments relating to past Fleet Problems and Joint Exercises, in practically all cases, ships used at one phase or another peace time calls and transmitted dispatches in clear. Such violation jeopardizes the success of the Plans and Orders. It is directed that all officers responsible for communications in the BLUE Fleet become thoroughly familiar with the references above, and by instruction acquaint their communication personnel with the parts of the references pertaining to their respective duties. In order to stimulate interest and insure an intelligent understanding of the general features of the Exercise, Communication Officers should outline to enlisted personnel, after sailing, the salient features of the Plan.

RADIO SILENCE

2. (a) Communication personnel shall become thoroughly familiar with the procedure in that part of reference (g) pertaining to Radio Silence. All radio operators should be instructed to make an immediate report to their Radio Officer of anything intercepted and all violation of instructions by BLUE Units. Report such discrepancies by visual to Commander BLUE Fleet.

PLAIN LANGUAGE

- (b) Plain language shall not be used except in extreme emergency or when directed. Contact code and signal ciphers shall be used as furnished. If time may be saved it is permissible when Fleet action is imminent for Senior Air Observers to use plain language.

CODES, CIPHERS & DEVICES

- (c) Distribution list of Codes, Ciphers and other BLUE Fleet Communication Publications together with specific instructions relative to their use will be issued separately.
- (1) Check all of reference (f) received with special allowance list.
 - (2) Communication officer instruct coding boards in use of reference (f).
 - (3) After sailing on Grand Joint Exercise No. 4 hold buzzer drills with secret radio calls and codes and ciphers issued.
 - (4) Inform all radio personnel of special call signs for umpires and the special umpire cipher. Radio bearings of transmissions following radio calls containing any of these call signs will not be taken. Attention is called to Article 16 of reference (i).
 - (5) A thorough test of H.C.M. and H.C.M. cipher is desired. The Navy Department has made this the subject of special distribution.
 - (6) The Universal Position Grid and Aviation Position Grid shall be used as directed.
 - (7) The Tentative Aircraft Signal Book as designated and issued shall be used throughout the Exercise.

RECOGNITION SIGNALS

- (d) Recognition signals continue in many respects to be unsatisfactory. It is of paramount importance that the entire bridge personnel know thoroughly the system in effect for the Exercise. Drills should be conducted aboard so that every man can handle recognition signals and handle them accurately. Extreme care should be taken not to divulge recognition signals unnecessarily, but once suspicion has been aroused there should be no hesitancy upon the part of the personnel to determine a friend or enemy. It is well to remember that the one who challenges is **always** suspicious of the one challenged.

VISUAL

- (e) It is essential that all visual traffic be cleared before sunset. Night visual signals are prohibited except in most urgent cases. In urgent cases so screen the blinker tube that the message will be barely readable by ships addressed. It will be standard practice while cruising to arrange during daylight by visual, for all changes of course and speed that are contemplated to take place during the night, and to execute such changes without signals at prearranged times. Navigational lights when turned on in emergency shall be dimmed.

DECRYPTING BOARD

- (f) (1) A decrypting board will be assembled on board the flagship of Commander BLUE Fleet in compliance with instructions from the Department. This does not preclude work by officers interested and Commander BLUE Fleet will be pleased to receive, after the Exercise, any pertinent cryptanalytical data or observations made.
- (2) The Chief of Naval Operations directs "The contents of the coded communications of the BLACK Forces shall, however, be inviolate throughout the continuance of the Problem. Therefore, any information obtained through decryption of intercepted messages must not be disclosed by the decryptors to anyone until the Problem has been concluded, when it shall be used (in the Critique) to show what effect this information could have had in changing the conduct of the Exercise".

WAR INSTRUCTIONS

- (g) Section IX, X and Articles 1100-1103 of War Instructions are particularly applicable to Communication personnel. These instructions shall be carefully studied and their importance impressed upon the signal forces in the BLUE Fleet.
3. Vigilance at all times together with a thorough knowledge of the references set forth above should insure success from the viewpoint of Communications.

SPECIAL SUBMARINE VISUAL SIGNALS - PHASE C.

- Reference:
- (a) Phase C, Operation Plan 1-C, Paragraph 3(d), Preferred Plan (Plan #1).
 - (b) Phase C, Operation Plan 2-C, Paragraph 3(d), First Alternate Attack Plan.
 - (c) Phase C, Operation Plan 3-C, Paragraph 3(d), Second Alternate Attack Plan.

1. The special system of visual signals as required by references (a), (b), and (c), is set forth as follows:

- (a) Use a white light, preferably a blinker tube, visible only off shore.
- (b) Flash designating letter of beach as follows:
 - (1) Three times in quick succession.
 - (2) Pause five seconds.
 - (3) Three times in quick succession.
 - (4) Pause five seconds.
 - (5) Three times in quick succession.
 - (6) Pause five minutes.
 - (7) Repeat process.
- (c) The three signals in each series should be made as follows:
 - (1) First on a line normal to the general direction of the shore line.
 - (2) Second on a line ten degrees to the right of the normal.
 - (3) Third on a line ten degrees to the left of the normal.

EXAMPLE: Submarine assumed off Beach C:

- (A) Submarine flashes on blinker tube to seaward on line normal to general shore line CCC.
- (B) Pause five seconds.
- (C) Train tube ten degrees right of normal and flash CCC.
- (D) Pause five seconds.
- (E) Train tube ten degrees left of normal and flash CCC.
- (F) Pause five minutes.
- (G) Repeat process.

2. If additional recognition signals are desired by the Commander Left Flank or Right Flank Attack Force, they will arrange direct with Commander Submarines.

BLUE UMPIRE AND OBSERVER RADIO CALLS

The Commander in Chief, United States Fleet, has designated Umpire and Observer calls as follows:

Chief Observer and Umpire..... COU
 BLUE Fleet Observer..... BLO
 BLUE Fleet Umpire..... ULB

SECRET

RECOGNITION SIGNALS

The special blinker gun and instructions therefor (CSP 532 and CSP 533) will be used for recognition signals during Grand Joint Exercise No. 4. All vessels of the BLUE FLEET not equipped with CSP 532 will use Emergency Identification Signals prescribed for the day when challenging or replying to a challenge.

Plugs will be used as follows:

	1st Challenge	1st Reply	2nd Challenge	2nd Reply
5- 6 February	Plug 5	Plug 1	Plug 3	Plug 2
6- 7 February	Plug 4	Plug 5	Plug 1	Plug 3
7- 8 February	Plug 3	Plug 2	Plug 4	Plug 5
8- 9 February	Plug 2	Plug 1	Plug 5	Plug 4
9-10 February	Plug 1	Plug 3	Plug 2	Plug 5
10-11 February	Plug 4	Plug 1	Plug 2	Plug 3
11-12 February	Plug 5	Plug 4	Plug 1	Plug 2
12-13 February	Plug 3	Plug 5	Plug 2	Plug 4
13-14 February	Plug 2	Plug 4	Plug 3	Plug 5

The gun should be so adjusted that an interval of approximately two seconds will occur between the flashing lights.

It is suggested that discretion be used in connection with this recognition device inasmuch as the enemy, with comparative ease, may simulate the signals made. A too promiscuous use of the special blinker gun would give the enemy a very good chance to employ screened red, green and white lights to good purpose.

Distribution of CSP 532 and CSP 533 will be made as follows:

- 1 to each BB,
- 1 to each DD,
- 1 to each CL

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GRAND JOINT EXERCISE NO. 4.

INSTRUCTIONS FOR USE OF UNIVERSAL POSITION GRID
NO. 1 AND AVIATION GRID POSITION NO. 1

1. Universal Position Grid No. 1 and Aviation Grid Position No. 1 are authorized for use during Grand Joint Army and Navy Exercise No. 4.

2. Universal Position Grid No. 1 will be used with Contact Code No. 1 for reporting contacts. The following initial points and charts are assigned for this purpose:

(A) Chart HO 527

Place center of squares P M at Lat. 25° N.
N F Long. 155° W.

(B) Chart CS 4102

Place bottom edge of grid Lat. 20°
at junction of squares T & Z at Long. $158^{\circ} 30'$ W.

Chart B will be used when positions are within area covered by grid on this chart. At other times use Chart A. Sufficient knowledge of the area of operations of various Task Forces will exist to prevent confusion.

3. Aviation Grid Position No. 1 may be used within each Task Force as directed by Task Force Commander except planes of Pearl Harbor Air Squadrons will not use the grid but will give enemy position in contact code by latitude and longitude.

BLUE

GRAND JOINT EXERCISE NO. 4.

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DISTRIBUTION LIST OF PUBLICATIONS

REG. NO. -----

1. The distribution list of Registered Publications hereinunder set forth for use during Grand Joint Exercise No. 4 is published in order that Unit Commanders and vessels of the BLUE Fleet may know the exact distribution of all publications within the BLUE Fleet. Thorough familiarity with and judicious use of this list should be aids to BLUE Commanders and vessels in selecting the proper code or cipher to be used.

2. The following publications will be used during both Grand Joint Exercise No. 4 and U. S. Fleet Problem XIII:-

BLUE Contact Code.
BLUE Signal Cipher.
BLUE General Cipher.
BLUE Umpires' Cipher.
BLUE Aircraft Signal Book.
BLUE Combatant Ships' Cipher.
CSP 534, 537, 538, 539, 540 and 543.

CSP 537 has already been issued to the BLUE Fleet.

3. The following publications bearing CSP numbers are to be reported to the Chief of Naval Operations (Registered Publication Section) in the usual manner:-

CSP 534, 538, 539, 540 and 543.

Publications not bearing CSP numbers will be accounted for to the officer issuing them (Commander in Chief, U. S. Fleet, or Commander Battle Force, as the case may be).

4. To avoid difficulties in distribution, Commander Submarine Division 12 will retain, for use in U. S. Fleet Problem XIII, the copies of CSP 534, 539 and 540 issued him for use in Grand Joint Exercise No. 4. He will return the copy of CSP 543 to Commander Battle Force immediately upon completion of Grand Joint Exercise No. 4.

5. The Commanding Officer, U. S. S. HENDERSON and the Commander BLUE Expeditionary Force will return to Commander Battle Force all BLUE publications upon completion of Grand Joint Exercise No. 4.

6. The BLUE Merchant Vessels' Cipher is also issued to commanders that will be in the BLUE Fleet during Fleet Problem XIII. **WARNING**-Blue Merchant Vessels' Cipher (Tablet Cipher No. 5) is for use during U. S. Fleet Problem XIII **ONLY** and is not to be used during Grand Joint Exercise No. 4.

7. BLUE Combatant Ships' Cipher will be destroyed by burning on order from Commander Battle Force and report of destruction made to him.

8. On notification, the following publications will be returned to Commander Battle Force, after completion of Fleet Problem XIII:-

BLUE Contact Code.
BLUE Signal Cipher.
BLUE Merchant Vessels' Cipher (Tablet Cipher No. 5).
BLUE Umpires' Cipher (Tablet Cipher No. 3).
BLUE General Cipher (Tablet Cipher No. 1).

9. Other publications issued to vessels of the BLUE Fleet, after completion of Fleet Problem XIII, will be retained by their holders and used as directed by the Commander in Chief, U. S. Fleet. Publications issued to vessels not in the U. S. Fleet will be returned to Commander Battle Force.

10. All vessels and units of the BLUE Fleet, except indicated vessels, (see note), will destroy the following publications by burning on the completion of Grand Joint Exercise No. 4 and report destruction to Commander Battle Force:-

BLUE Secret Radio Calls—Grand Joint Exercise No. 4.
BLUE Recognition Signals—Grand Joint Exercise No. 4.
BLUE Emergency Identification Signals—Grand Joint Exercise No. 4.
BLUE Night Submarine Warning Signals—Grand Joint Exercise No. 4.
BLUE Secret Visual Calls—Grand Joint Exercise No. 4.
BLUE Distribution List of Publications—Grand Joint Exercise No. 4.

NOTE:- The following vessels, on completion of Grand Joint Exercise No. 4, will turn in all BLUE Publications, except as noted in paragraph 4 above:-

- Comsubdiv 12,
- U. S. S. HOLLAND.
- U. S. S. ORTOLAN.
- U. S. S. BASS.
- U. S. S. BARRACUDA.
- U. S. S. BONITA.
- U. S. S. NARWHAL.
- U. S. S. LEXINGTON.
- U. S. S. GANNET.

GRAND JOINT EXERCISE NO. 4.

DISTRIBUTION LIST OF BLUE FLEET PUBLICATIONS

SHIP, UNIT or FORCE COMMANDER	CSP 534, 539, 540, 543 (HCM & Instructions)	Blue Combatant Ships' Cipher	Blue General Cipher (Tablet Cipher No. 1)	Blue Aircraft Signal Book.	Blue Contact Code (Contact Code No. 1)	Blue Signal Cipher (Signal Cipher No. 1)	Blue Umpires' Cipher (Tablet Cipher No. 3)	Universal Position Grid No. 1.	Aircraft Position Grid No. 1.	Blue Recognition Signals	Blue Secret Radio Calls	Blue Night Submarine Warning Signals	Blue Emergency Identifica- tion Signals.	Blue Secret Visual Calls
Combatfor	2	2	6	X	6	5	6	2	2	X	6	3	3	3
Combatships	1	2	6	X	6	4	6	1	1	X	6	2	2	3
Combatdiv 1	1	2	4	X	4	4	4	1	1	X	6	2	2	3
Combatdiv 3	1	2	6	X	6	4	6	1	1	X	6	2	2	3
Comdesbatfor	1	2	6	X	6	4	6	1	1	X	6	2	2	3
Comairbatfor	1	2	6	X	6	4	6	1	2	X	6	2	2	3
Combasefor	1	2	6	X	6	4	6	1	2	X	6	2	2	3
Comsubdiv 12	1	2	6	X	6	4	6	1	1	X	6	2	2	3
Comcrudiv 3	1	2	6	X	6	4	6	1	1	X	6	2	2	3
Comdesron 2	1	2	4	X	4	2	4		1	X	6	2	2	2
Comdesron 4	1	2	4	X	4	2	4		1	X	6	2	2	2
Each Comdesdiv		2	2		2	1	2			X	6	2	2	2
Com. General Blue Army	1		6		6		6			X	4	2	2	2
Com. General Marine Division										X	2	2	2	2
Each Battleship		1	2	X	2	3	2	1	1	X	4	2	2	2
Each Cruiser		1	2	X	2	3	2	1	1	X	4	2	2	2
Each Destroyer		1	2	X	2	2	2	1	1	X	4	2	2	2
Each Submarine		1	2	X	2	2	2	1	1	X	4	2	2	2
ALTAIR		1	2	X	2	3	2	1	1	X	4	2	2	2
ARGONNE		1	2	X	2	2	2	1	1	X	4	2	2	2
BRANT			2	X	2	2	2	1	1	X	4	2	2	2
CUYAMA			2	X	2	2	2	1	1	X	4	2	2	2
GANNET		1	2	X	2	2	2	1	1	X	4	2	2	2
HENDERSON	1	1	4	X	4	3	4	1	1	X	4	2	2	2
HOLLAND		1	2	X	2	3	2	1	1	X	4	2	2	2
KINGFISHER			2	X	2	2	2	1	1	X	4	2	2	2
LEXINGTON		1	4	X	4	3	4	1	2	X	4	2	2	2
MEDUSA	1	1	2	X	2	2	2	1	1	X	4	2	2	2
MELVILLE		1	2	X	2	3	2	1	1	X	4	2	2	2
NECHES			2	X	2	2	2	1	1	X	4	2	2	2
ORTOLAN		1	2	X	2	2	2	1	1	X	4	2	2	2
PARTRIDGE			2	X	2	2	2	1	1	X	4	2	2	2

GRAND JOINT EXERCISE NO. 4.

DISTRIBUTION LIST OF BLUE FLEET PUBLICATIONS

SHIP, UNIT or FORCE COMMANDER	CSP 534, 539, 540, 543 (HCM & Instructions)	Blue Combatant Ships' Cipher	Blue General Cipher (Tablet Cipher No. 1)	Blue Aircraft Signal Book.	Blue Contact Code (Contact Code No. 1)	Blue Signal Cipher (Signal Cipher No. 1)	Blue Umpires' Cipher (Tablet Cipher No. 3)	Universal Position Grid No. 1.	Aircraft Position Grid No. 1.	Blue Recognition Signals	Blue Secret Radio Calls	Blue Night Submarine Warning Signals	Blue Emergency Identifica- tion Signals.	Blue Secret Visual Calls
PELICAN		1	2	X	2	2	2	1	1	X	4	2	2	2
RELIEF			2	X	2	2	2	1	1	X	4	2	2	2
SARATOGA		1	2	X	2	3	2	1	2	X	4	2	2	2
SAN MIHEL			2	X	2	2	2	1	1	X	4	2	2	2
SONOMA			2	X	2	2	2	1	1	X	4	2	2	2
TERN			2	X	2	2	2	1	1	X	4	2	2	2
C.O. Observation Wing			1	X	1		1		1	X	2			
C.O. Each Airsquad			1	X	1		1		1	X	2			
Each VO				X	1				1		1			
Each VS				X	1				1		1			
Each VP				X	1				1		1			
Each VT				X	1				1		1			
Each VJ				X	1				1		1			

NOTE: "X" under BLUE Aircraft Signal Book and BLUE Recognition Signals indicates that ships and units so marked will be equipped with those publications. Exact distribution is pending.

BLUE

EMERGENCY IDENTIFICATION SIGNALS

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GRAND JOINT EXERCISE NO. 4.

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All vessels and units of the BLUE Fleet will become familiar with CSP 484.

Emergency Identification Signals are not to be confused with Recognition Signals. The former are used only as a preliminary signal of identity, and should be followed immediately with the regular recognition signal of the day in order to establish identity beyond question.

When submarines are submerged and use these Emergency Identification Signals, ten seconds or more may elapse between the appearance of the first and second colors.

Emergency Identification Signals consist of the following-

For daylight—colored smokes.

For night—colored lights.

Discretion in the use of signals listed below is directed in view of the fact that their use in the sight of the enemy informs him of our Emergency Identification Signal of the day.

DAY		NIGHT	
6 February	BLACK	5- 6 February	RED and WHITE
7 February	RED	6- 7 February	RED
8 February	BLACK and RED	7- 8 February	RED and GREEN
9 February	BLACK	8- 9 February	WHITE and GREEN
10 February	RED and BLACK	9-10 February	GREEN
11 February	BLACK	10-11 February	WHITE and GREEN
12 February	RED	11-12 February	GREEN
13 February	RED and BLACK	12-13 February	RED and WHITE
		13-14 February	WHITE and GREEN

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GRAND JOINT EXERCISE NO. 4.

NIGHT SUBMARINE EMERGENCY WARNING SIGNALS

The following table gives the Night Submarine Emergency Warning Signals to be used by Destroyers and Cruisers during Grand Joint Exercise No. 4.

If Submarine is sighted to STARBOARD—Use lights on Starboard Yard Arm.

If Submarine is sighted to PORT —Use lights on Port Yard Arm.

PORT YARD ARM			DATE	STARBOARD YARD ARM		
Outboard	Middle	Inboard	Night Of	Inboard	Middle	Outboard
	RED		5- 6 February	GREEN		WHITE
WHITE	RED		6- 7 February	GREEN	RED	
WHITE		GREEN	7- 8 February		RED	
		GREEN	8- 9 February		RED	WHITE
	RED		9-10 February	GREEN		
	RED	GREEN	10-11 February	GREEN		WHITE
WHITE		GREEN	11-12 February		RED	
		GREEN	12-13 February		RED	WHITE
WHITE	RED		13-14 February	GREEN	RED	

APPENDICES

Appendix No. 1-C, Estimate of Situation, Phase "C"

Appendix No. 2-B, Estimate of Situation, Phase "B"

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APPENDIX 1-C

Grand Joint Exercise No. 4

BLUE

Phase C—The Landing and Attack

A. Directive

1. The Commander in Chief, BLUE Fleet, has received the following message from the BLUE Navy Department:

"BLACK HOLDS OAHU WITH APPROXIMATELY EIGHTEEN THOUSAND TROOPS OF ALL ARMS, AND NAVAL FORCES CONSISTING OF SUBMARINES, MINE LAYERS AND MINE SWEEPERS. COAST DEFENSES ARE REPORTED TO BE IN GOOD CONDITION. NO NAVAL AVIATION IS BELIEVED TO BE IN HAWAIIAN WATERS.

"RECAPTURE AND HOLD OAHU AND OCCUPY SUCH OTHER ISLANDS AS MAY BE NECESSARY TO REESTABLISH OUR CONTROL OF HAWAIIAN AREA (SIG) CHIEF OF NAVAL OPERATIONS."

2. The second paragraph of this message is the **JOINT MISSION** of the Army and Navy Forces.

3. The Navy has been designated as the Service having paramount interest. The Commander, Battle Force, has been designated as the Commander in Chief of the BLUE Fleet, and the Commander of the Ninth Corps Area has been designated as the Commander of BLUE Army Expeditionary Force.

4. Authorization has been given for the detail by each service of officers to the Staff of the Commander of the other Service.

5. The BLUE forces assigned are:

(a) ARMY

One infantry division, less tank company and 155mm howitzer regiment, (represented in part).

One regiment of artillery (anti-aircraft), (represented in part).

One division of marines (represented in part).

(b) NAVAL

Battleship Divisions, 1, 3, 4.

One light cruiser division.

Destroyers, Battle Force.

Aircraft, Battle Force.

Submarine Division TWELVE.

Train Squadron TWO, plus one Naval transport and one Army transport.

Air Units, Fleet Air Base, Pearl Harbor.

Constructive vessels: 25 Transports, 3 Distilling ships, 4 Ammunition ships.

The constructive strength of the Army forces is 42,000 men.

6. All of the above forces have been assembled at San Pedro, California, which place has been designated as the port of embarkation.

7. The main BLACK Fleet is in the eastern Atlantic. No BLACK Naval or Army forces, other than those mentioned in the Chief of Naval Operations despatch, are believed to be in the vicinity of the theater of operations.

PHASES

1. The operations to be carried out in order to accomplish the Joint Army and Navy Mission must be divided into phases in order that the missions of the various Army and Navy forces may be determined, and orderly planning done. The phases of this operation are the same as for any normal campaign where the joint forces are to be used to capture and hold a designated objective. These phases chronologically are:

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- I. The determination of the Forces to be employed.
(This has already been done by higher authority).
- II. Concentration areas and ports of embarkation.
(This has already been done by higher authority).
- III. The embarkation of the Expeditionary Force, including the orderly loading of the transports with troops, animals, artillery and impedimenta.
- IV. The safe conduct of the Expeditionary Force to the place or places for landing for the attack.
- V. The landing and attack.
- VI. The subsequent operations necessary for capturing and holding the area and establishing control.

2. For the accomplishment of each of these phases which have not been completed there must be a mission assigned in order that the estimates of the situations required for the formulation of detailed operating plans may be made. These missions which will be assigned to the various Task Force Commanders—either of the Army or Navy or both—can only be determined by the Naval Commander having paramount interest after making a broad estimate of the situation which will result in the production of a general operating plan. In order to make this Operating Plan, the Naval Commander must first determine the Mission of the BLUE Naval Forces.

I. Derivation of Mission

1. The Navy Department has assigned an Army and Navy Joint Mission which is here repeated:
To recapture and hold Oahu and occupy such other islands as may be necessary to re-establish our control of the Hawaiian Area.

2. It is apparent that in this Joint Mission is found the purpose of all the operations which are to be undertaken by the military and naval forces engaged. It is also apparent that the recapture and holding of Oahu entails a more or less protracted campaign composed of the various phases which are here set forth under the heading of Directive. The four phases still left for the accomplishment of the joint forces are:

- (a) The embarkation of the expeditionary force in proper order.
- (b) The safe conduct of the expeditionary force to place or places for landing.
- (c) The landing and attack, i.e., the securing of beach heads, for the further operations necessary for completing the capture and holding of Oahu.
- (d) The further operations necessary after the landing is accomplished.

3. It is evident from this statement of the phases that the plans for the accomplishment of all of them are dependent on the plans made for Phase (c), i.e., the actual landing and establishing of the troops on shore. That is, the plans for phases (a) and (b) will depend on the plans for the landing and attack and cannot intelligently be made until after the landing and attack plans are made, but must eventually be made as a part of the campaign involved in the landing and attack. It is also evident that the detailed plans for the movement of the troops on shore necessary for the capture of the island after they have landed and are beyond the range of the Navy guns, depend on the plans made for the landing and establishing of the troops in beach heads, and on the outcome of the actual operations undertaken. These latter plans are purely military and will not involve the Naval forces other than possibly aircraft, and must, therefore, be made by the Expeditionary Force Commander.

4. We conclude from the above that the immediate task before the BLUE Naval Commander is to land and establish on Oahu, in beach heads, the expeditionary force. On the plans made for the accomplishment of this task will depend the subsidiary plans for the proper loading of the transports and their safe conduct to the point or points for landing. This task cannot be accomplished by the naval forces alone but requires the cooperation of the Commander of the Expeditionary Force (Army). We therefore state the BLUE Naval Commander's MISSION to be:

In cooperation with the Army to establish the BLUE Expeditionary Force in beach heads on the island of Oahu from which further operations may be conducted for the recapture and holding of that island.

II. Brief of Relative Strength of Opposing Forces

Recapitulation by types

Naval Forces

BLUE	Type	BLACK
9	Battleships	0
4	Light Cruisers	0
2	Aircraft Carriers	0
26	Destroyers (including plane guards)	0
0	Minelayers	1
0	Light minelayers	4 (DD type)
6	Minesweeper-layers	4
1	Submarine Rescue Vessel	0
3	Cruiser submarines	0
1	Fleet submarines	0
1	Minelaying submarines	1
0	S-class submarines	19
0	Gunboats	1
1	Hospital ship	0
1	Repair ship	0
2	Destroyer tenders	0
2	Submarine tenders	1
2 (25 constructive)	Transports	0
1	Ocean Tugs	3
4	(Constructive) Ammunition Ships	0
3	(Constructive) Distilling Ships	0
2	Fuel ships	0
	Aircraft	

BLUE	Type	BLACK
76	VF (Pursuit)	47
71	VO-VS (Observation-Attack)	39
36	VT (Bombardment)	15
36 (Shore based)	VP	—
3	Miscellaneous	11
222		112

Troops

- BLUE**
- 1 Army infantry Division (less Tank Company and 155 mm. Regiment).
 - 1 Regiment artillery, anti-aircraft, Naval.
 - 1 Division of Marines.

Total Force -----42,000

- BLACK**
- 2 Infantry brigades.
 - 3 Field Artillery Regiments (2 Rgts. 75 mm. and 1 Rgt. 55 mm)
 - 1 Regiment Engineers.
 - 6 Batteries for manning fixed coast defenses.
 - 2 Batteries railway artillery (8-12" mortars).
 - 6 Batteries tractor drawn artillery (155 G.P.F. and 12,240 mm Howitzer).
 - 1 Regiment AA artillery.
 - 1 Chemical Company with large reserve of toxic and non toxic gas.
 - 2 Infantry regiments (Territorials).

Total Force -----18,000

Relative Strength

Strength Factors

BLUE

1. Numerical superiority in troops.
2. Sufficient strength of naval types to protect convoy, enroute, from attack by surface vessels and by air.
3. Great superiority in major calibre fire on selected fixed shore defenses.
4. Great mobility.
5. General superiority of naval types permits division of force and selection of more than one landing point, or permits feints.
6. Offensive role.
7. High morale of personnel.
8. Secure lines of communications, with ease of replacements.
9. Certainty as to time and place of attack.
10. Considerable superiority in numbers in all types of aircraft.
11. Ability to conduct protracted patrol and scouting operations on the sea.
12. Extended use of smoke tactics.

BLACK

1. Advantage of position.
2. Total land force of 18,000 men, 15,000 of which are seasoned troops, modernly armed and equipped. Possessed of highest morale.
3. Sufficient net work of roads.
4. Land defenses adequate.
5. Advantage of interior lines of communication.
6. Sufficient logistics for six months.
7. Superiority in submarines.
8. Topographical features, combined with prevailing winds, and coral reefs, limit number of suitable landing beaches.
9. A powerful and complete system of fixed coast defenses plus mobile artillery.
10. All probable landing beaches and offshore approaches thereto heavily mined, and entanglements emplaced.
11. Possession of several well equipped air bases and emergency fields.
12. Ordnance and bomb carrying features of attack and bombardment planes superior to corresponding BLUE types.

Factors of Weakness

BLUE

1. Slow speed of convoy.
2. Lack of DD's for submarine defense.
3. Lack of suitable harbors for anchorages for disembarkation of troops and equipage.
4. General unsuitability of flat trajectory naval gunfire against shore defenses.
5. Lack of adequate bases nearby from which to operate.
6. Lack of available beaches for landing.
7. Vulnerability of BLUE ships to high angle gun fire.
8. Lack of minesweepers.
9. Unsuitability of small boats for landing through surf.
10. Improbability of approaching selected landing beaches without early detection.
11. Dependence upon good weather conditions for landing operations.
12. Necessity for fueling DD's at sea.
13. Insufficiency of naval artillery to adequately cover landing on broad front.
14. Difficulty in control of fire from moving gun platforms.
15. Vulnerability of aircraft carriers with consequent necessity of keeping them at considerable distance from shore.
16. Necessity of operating aircraft from combatant ships with possibility of interference with other activities.

BLACK

1. Inferiority in naval types with which to contest control of the sea.
2. Lack of aircraft suitable for overseas scouting .
3. Proximity of coast railroads to shore line.
4. Service control lines for communications susceptible to interruption from naval gunfire and bombs.
5. Location of fixed defenses known to BLUE.
6. Field of operations limited.
7. General scheme of defense known to BLUE.
8. Inferiority of troops (numerically).
9. Number of troops insufficient to man all fixed defenses.
10. Necessity of maintaining reserve troops, in central location.
11. No supporting forces available.
12. Limited naval types for scouting operations.
13. Necessity for basing airforce in Oahu during landing operations due to distance of air fields on other islands.
14. Non-availability of replacement aircraft.
15. Great inferiority in numbers of aircraft.

III. Enemy's Probable Intentions

ENEMY'S MISSION. In so far as the Enemy operations against our forces are concerned we must assume that he is aware of the preparation of BLUE Expeditionary Force and that he will assume that this expedition will be aimed against him for the purpose of recapturing Oahu. Therefore the joint mission of the BLACK Army and Navy will undoubtedly be:

**To hold Oahu in order to maintain BLACK control
of the Hawaiian Area.**

In the holding of Oahu the paramount interest will rest with the BLACK military forces. The Commander of these forces will know, as do we, that holding Oahu involves the maintaining of the Pearl Harbor Naval Base and the city of Honolulu. Pearl Harbor and Honolulu cannot be captured without landing of enemy forces on the Island of Oahu from which further operations can be conducted. Therefore BLACK in order to hold Oahu, must first prevent BLUE from establishing beach heads on the Island. BLACK military forces might possibly be able to do this, but the BLACK Commander has certain naval forces consisting of submarines, minelayers, and aircraft available which if properly used can be of great assistance. Therefore the BLACK Military Commander will take as the Mission of the Army forces:

**In cooperation with the Navy to prevent BLUE
from establishing beach heads on the Island of
Oahu from which further operations may be
conducted for capturing Pearl Harbor and Hono-
lulu, in order to hold Oahu.**

In estimating the enemy's most probable courses of action under this Mission it is necessary carefully to consider the conclusions as to relative strength as stated in the summarized form heretofore set forth.

We can judge from the above that the enemy has the following courses of action open to him:

- (a) To concentrate all his defensive mobile land forces in the vicinity of the one or more beaches on which he considers the enemy must establish beach heads in order to carry out further operations for capturing the island.
- (b) To hold his main defensive mobile land forces in a central position and use the positive system of coast defense for repelling landings at the places where information indicates they will take place.
- (c) To employ the naval forces either:
 - (1) Entirely in the service of information and security,
 - (2) Entirely in frustrating enemy landing operations,
 - (3) In a combination of (1) and (2).

Course (a) would be of immense advantage to BLACK if he could feel **certain** of the places BLUE will choose for landing. It is doubtful if he will feel sufficient certainty to justify having his forces concentrated in areas which may not be the landing places and from which it would be difficult to move them in time to the places where required. He has not sufficient forces to adequately man all possible or probable landing areas to repel BLUE major landing operations at any one of the areas open to BLUE, keeping fixed defenses manned. **It seems probable, however, that he will, prior to the arrival of BLUE, have all likely landing places, of which there are only a few, prepared with barbed wire entanglements, land mines, machine gun emplacements and trenches, and have strong forces entrenched at the most likely landing places.**

Course (b) has the advantage of keeping his forces concentrated with the means of transportation at hand to move them quickly to the point or points where they may be required. It has the disadvantage of possibly requiring a movement of the troops and mobile artillery after the attack has developed instead of being on the spot when it does develop. It may make a large part of his force subject to surprise attack by aircraft. However, this can be overcome to some extent by keeping secret the exact location of the concentration and by employment of camouflage. Another disadvantage in this course of action is the necessity for early information of the enemy, and of accurate information after contact, as to his movements, with an intelligent interpretation of his intentions.

In view of these disadvantages it is believed that his most probable course of action will be to keep only a portion of his forces concentrated in a central position.

We must conclude from the above that the enemy will resort to a combination of courses (a) and (b), being in continuous readiness to repel landings at the most likely places and keeping a portion of his force in reserve in a central position ready to move to the point most needed.

For the employment of this course of action BLACK should obtain information of the approach of the BLUE Forces and maintain contact with them after once established. Whatever his estimate of the sustained maximum speed of the BLUE Force, he should make certain of locating it outside of its 12 hour dark zone from Oahu. This on the assumption that BLUE will most probably commence landing operations at daylight. Assuming the maximum speed of BLUE to be 12 knots, BLACK, in order to make contact, would have to cover all avenues of approach at a distance of from 140 to 150 miles from Oahu.

The only forces BLACK has available for this purpose are aircraft, submarines, and light minelayers. We know that adequately to cover the area with aircraft would require many more planes than BLACK has available for this purpose, and would greatly diminish his air defense when most needed. It seems doubtful that BLACK will be willing to employ the necessary number of aircraft for operations so far off shore from Oahu and it is considered extremely unlikely that BLACK will elect to base aircraft at other fields than those on Oahu. However, the four seaplanes available may be employed in distant scouting. This view is based on the difficulties raised by the distances involved and the lack of adequate communication facilities. It is believed that BLACK's air effort will be concentrated (a) on attack by bombs on our transports and by guns on our troops during landing, and (b) on locating and damaging our aircraft carriers with heavy bombs as soon as that can be undertaken without resort to an extensive air scouting operation. It is unlikely that in the interest of economy of forces he will seek air engagements other than those forced upon him in carrying out these projects.

His four light minelayers, if used in scouting operations, would be sacrificed to BLUE's light vessels of high speed and greater gun power. They can better serve BLACK if used to lay floating mines at night across the anticipated line of advance, avoiding contact in the meantime in the most probable landing areas.

This leaves the submarines as the only available means for obtaining this early information. BLACK in determining whether or not to use them for this purpose must weigh this employment against the possible opportunities to use them offensively-defensively against the BLUE Naval forces, and transports. By placing submarines 60 miles apart on a station patrol 150 miles from Oahu, Black can cover all approaches to that Island which may be made during daylight hours. Should the BLACK submarines in this position sight BLUE Forces they could track them and give the information to the BLACK Commander. It is also probable that they would be able to effect at least a partial concentration prior to the completion of the BLUE landing efforts.

Should the BLUE Forces not pass through the BLACK submarine line during daylight hours it would still be possible for a contact to be made during the dark hours. However, to insure detection of BLUE Forces under these conditions it would seem desirable for BLACK to maintain an air patrol during daylight hours at a distance not greater than 50 miles from Oahu.

It therefore seems probable, or at least highly possible, that BLACK will employ in the service of information his submarines for distance scouting off shore and his air forces for comparatively close-in search. This employment of BLACK submarines, or at least part of them, would not prevent them from reaching attack positions at the landing points during the landing operations.

From the foregoing it would seem that the most probable intention of the Enemy is to prepare all probable landing places for defense by the erection of barbed wire entanglements, laying of mines, establishing machine gun pill boxes and entrenchments to be continuously strongly entrenched in the most likely landing places; and then to use the positive system of coast defense by keeping the reserve mobile troops and artillery in a hidden central position ready to move to the endangered points and make concentrated attacks on information gained by submarines at a distance of about 150 miles off shore, and by aircraft patrolling at a distance not greater than 50 miles from Oahu, and then to employ submarines and aircraft in cooperation with the land defenses in repelling BLACK Forces at the points of landing.

IV. COURSES OF ACTION OPEN TO US.

Our own Mission as previously stated is:

In cooperation with the Army to establish the BLUE Expeditionary Force in beach head(s) on the Island of Oahu from which further operations may be conducted for the recapture and holding of that Island.

Our task as here set forth requires the landing of the troops, horses, artillery and impedimenta in one or more places and the clearing of sufficient area in the vicinity of the landing to permit of organization of the forces and preparation for further movement. It is apparent that we must first select the place or places for the landings and then determine on the operations necessary for effecting the landing(s) and establishing the troops ashore. The first essential in selecting the landings is that the beach head(s) to be established be in such place(s) that the purpose of our Mission may later be fulfilled. We must therefore establish the beach head(s) in the place(s) from which the further operations will permit the troops to capture Oahu.

This leads to the determination of what is necessary to attain in order to capture Oahu. As has been previously set forth the vital part of Oahu is on the southern side of the Island where are situated the Pearl Harbor Naval Base and the City of Honolulu, on the only adequate harbors in the Island, both of which are strongly defended by fixed artillery. It is at this location that the vital business of the Island is conducted and this is the only location which, if captured, will result in the immediate collapse of the entire Island defenses. Therefore, in order to capture Oahu it is essential that we take possession of the Pearl Harbor-Honolulu area.

From this conclusion the corollary follows that the beach head(s) to be established must be in such place(s) that the following operations will lead to the downfall and capture of the Pearl Harbor-Honolulu Area.

Since tactical consideration governing the employment of the troops on shore is paramount, final decision as to the landing area of Army forces, its breadth, beaches to be used, and order of landing of Army forces, will be made by the Army Commander from among those areas and beaches that the Navy Commander states are practicable so far as Naval considerations are concerned.

The foregoing necessitates a study of the geographical, geological, hydrographic and defense features of OAHU in order to determine where landings can be effected that would permit of the necessary future operations.

The results of an extended detail study are summarized:

Before proceeding to a discussion of the various beaches, it should be noted that two 16-inch guns mounted at Fort Weaver, with a range of 50,000 yards, cover all approaches to the Island, at a distance of from 25 miles off the south coast to 2 miles off KAHUKU Point.

- (a) **EAST SIDE**, from MAKAPUU POINT to KAHUKU POINT, 30 miles—windward side of Island. Cut off from Pearl Harbor—Honolulu area by the KOOLAU Range. Only outlets: Road over NAUUANU PALI: newly completed road skirting the shore at MAKAPUU POINT; railroad and road skirting the shore around northern end; trail over mountain range starting from near LAIE.

Barrier reef along entire coast with breaks at intervals. Practicable to land through these breaks in the reef in places and under conditions as follows:

Excellent in normal weather: KANEOHE Bay, KAILUA Bay, WAIMANALO Bay.

Good in Normal weather: LAIE Bay, east side of MOKAPU Peninsular.

Practicable in favorable weather: North of LAIE Bay, KAHANA Bay, north side MOKAPU Peninsular, north side MAKAPUU Point.

No artificial defenses.

Conclusion. Not suitable for major landing operations except (a) at KANEOHE Bay and (b) possibly at LAIE Bay and to the northward in conjunction with operations that may be carried out on north side of island. Probably not much resistance be met with landing operations on this side of island.

(b) **NORTH SIDE**, from KAHUKU POINT to KAENA POINT, 20 miles. In middle of coast line is HALEIWA-WAIALUA Area, low land from which the ascent to the central plateau is gradual. Valley at coast extends about four miles to eastward and five miles to westward. Roads lead direct to Schofield Barracks and on to Pearl Harbor-Honolulu district. Railroad extends entire length of north coast, close to shore line except at KAHUKU POINT where it is about one mile inland. Near eastern and western ends, the railroad passes on narrow shelves between steep cliffs and the sea. Breakers and reefs are intermittent along this entire side. Practicable to land in places and under conditions as follows:

Excellent in normal weather: WAIALU Bay; KAIKA Bay.

Good in normal weather: Small indentation to eastward of WAIALEE; between WAIALU and KAIKA Bays; at KAWAIHAPAI; MOKULEIA, to eastward of MOKULEIA and at JAHU.

Practicable in favorable weather: Western side of KAHUKU POINT; WAIMEA Bay and coast line to northeastward and southwestward of that Bay; to eastward and westward of KAWAIHAPAI.

Artificial defenses as follows, ranges from PUENA Point:

6 batteries	75 mm guns—	4 to 6 miles
2 batteries	155 mm guns—	4 to 6 miles
1 battery	12" mortars—	6 to 7 miles
2 batteries	G.P.F.'s—	8 to 10 miles.

Conclusions. Suitable for major landings and establishment of beach heads on a broad front of nine miles in normal weather. Batteries installed indicate that BLACK considers this area suitable for enemy landing operations that would give opportunity for advancing on the Pearl Harbor-Honolulu Area. Therefore we may expect to find BLACK prepared to meet landings in this area with a very stubborn defense, centered at the beach head about three miles to the southeast of WAIALUA.

(c) **WEST SIDE**, from KAENA POINT to BARBERS POINT, 20 miles. Lee side of the Island—Exposed to southerly winds during a kona. From KAENA POINT to BROWN'S CAMP cut off from the Pearl Harbor-Honolulu Area by the WAIANAE Range which is impassable. Only outlets from this area are at northern and southern ends where railroad runs on narrow shelves between mountains and sea. To southward of BROWN'S CAMP is four mile stretch of comparative low land with railroad and roads leading to Pearl Harbor-Honolulu.

Artificial water supply to this area can be denied by enemy at Schofield Barracks.

In normal weather nearly entire coast on this side is suitable for landing. Practicable landings under conditions as follows:

Excellent in normal weather: WAIANAE Bay.

Good in normal weather: Nearly entire coast within limits of portion isolated by the WAIANAE Range; small stretch to northward of BARBERS POINT.

Practicable in favorable weather: At BARBERS POINT; at BROWN'S CAMP and stretch of two miles to southward.

Artificial defenses as follows, ranges from BARBERS POINT; (do not extend north of WAIANAE):

7 batteries	75 mm guns	1 to 5 miles
1 battery	155 mm guns	2 to 6 miles
3 batteries	G.P.F.'s	7 to 10 miles
2 R.R. Mortars		7 to 8 miles

Conclusions: Not suitable for major operations owing to isolation of portion to northward of BROWN'S CAMP, the very strong defenses to southward and eastward of BROWN'S CAMP, and the necessity to transport water for troops. In view of practicability of landing at WAIANAE and to northwest, out of range of fixed defense guns to eastward of BROWN'S CAMP, the area might be used for diversion or for actual attempt at establishing beach head, if for any reasons landings at other places become impracticable.

- (d) **SOUTH SIDE**, from BARBERS POINT to MAKAPUU POINT, approximately 30 miles. In center the Pearl Harbor-Honolulu Area with their two harbors. Reefs and beaches along entire side with breaks in reef at Pearl Harbor, KALIHI, and Honolulu. The greatest part of the Coast Artillery defenses consisting of guns and mortars of calibers from 75 mm to 16 inch concentrated in this area, covering sea approaches to distance of 15 miles from Pearl Harbor.

Landing places under various conditions as follows:

Excellent in normal weather: Entrances to Pearl Harbor, KALIHI and Honolulu harbor; WAIKIKI Beach; western part of MAUNAULAU Bay and west side KOKO Head.

Good in normal weather: Short stretch to westward of entrance to Pearl Harbor; north-central part of MAUNAULAU Bay.

Practicable in favorable weather: Most of coast to westward of Pearl Harbor; stretch between Honolulu entrance and WAIKIKI; Diamond Head.

Conclusion. While this side is nearest to the Pearl Harbor-Honolulu area, in view of the strong defenses, landings here are impracticable until after protracted preliminary operations. Feints in MAUNAULAU Bay and in vicinity of BARBERS POINT might be of advantage in holding some troops that might otherwise be better employed.

- (e) In any case, a landing as soon after daylight as possible will afford the enemy the minimum of favorable opportunity to inflict damage to ships and troops during the embarkation of troops, their passage to the beaches and their landing on shore.

To summarize:

From an extended study of the coastal conditions and probable defense strength to be met at the various suitable and possible places for landings, the conclusion has been reached, after joint conferences between the Navy Staff and the Army Staff, that in order to secure the suitable beach head to the south of WAIALUA-HALEIWA from which further operations may be conducted for the capture of the island, involving the attack and destruction of the artillery defenses of that beach head, and at the same time employ what may be a tactical surprise, the major landing should be made simultaneously to the west and to the east of KAHUKU POINT, if weather conditions are suitable at the time. If it be found impracticable to land to the east of KAHUKU POINT at LAIE Bay and vicinity, then in any circumstances, weather permitting, landings should be made to the west of KAHUKU POINT and simultaneously in the vicinity of KAWAIHAPAI and MOKULEIA. Should weather conditions and other reasons not now foreseen make both of the above plans impracticable, landings should be made on the west side of the Island, first at MAKUA Beach, and when the force there landed has secured MAKAHA and WAINEA, then further landings at MAKUA, MAKAHA, and WAIANAE. It is further concluded that the actual landings will be made as soon after daylight as practicable.

Each of these plans will require landings in at least two places simultaneously, followed by landings in other places. It therefore is logical to divide the Expeditionary Force in two parts in such manner that the organization will be best suited to carry out the preferred plan, and adapt the alternative plans to suit this organization.

In consideration of the foregoing estimate the Commander in Chief makes the **Decision:**

To land the BLUE Expeditionary Force simultaneously, at daylight, (preferred) to the eastward and westward of KAHUKU POINT; (1st alternative) to westward of KAHUKU POINT and in the KAWAIHAPI-MOKULEIA Area; (2nd alternative) at MAKUA and in MAKAHA-WAIANAE Area, in order to establish beach heads from which further operations may be conducted for the capture of Oahu.

Plan I

It is now necessary first to determine what operations are required to carry out the preferred plan (Plan I) and then to formulate the tasks that will embody these operations in order that the Command Organization, Co-ordinating Measures, Logistic Support, and other special provisions may be determined.

CONSIDERATION OF LANDING PLACES.

In order to land the forces there must be a clear understanding of the exact places as nearly as practicable where the boats are to disembark the troops, horses and impedimenta.

The available beaches have been considered and have been designated as follows:

Beach A—Laie Bay,
Lat. $21^{\circ} 39' 27''$; Long. $157^{\circ} 55' 54''$.

Beach B—2500 yards north of Laie Bay,
Lat. $21^{\circ} 40' 20''$; Long. $157^{\circ} 56' 20''$.

Beach C—At Kahuken Point (West Side),
Lat. $21^{\circ} 42' 51''$; Long. $157^{\circ} 59' 11''$.

Beach D—3000 yards southwest of Kahuken Point,
Lat. $21^{\circ} 41' 57''$; Long. $158^{\circ} 00' 45''$.

Beach E—2000 yards southwest of Waialeale,
Lat. $21^{\circ} 40' 56''$; Long. $158^{\circ} 02' 28''$.

The total number of troops (actual and theoretical) to be landed is 42,000, of which number about 1300 are actual officers and men. The actual troops are about equally divided between regular Army and Marines. There are approximately 100 actual horses and mules to be landed. The animals are with the Army troops. For simultaneous landings to be effected, the actual and constructive troops will be divided into two parts as determined by the Commanding General of the BLUE Expeditionary Force, with actual Army troops and actual Marine troops forming the nucleus of each part, namely the 3rd Division and the Marine Division. According to agreement with the Commanding General, the 3rd Division, actual troops, will be landed at Beach A and constructive troops at Beaches A and B; the Marine Division, actual troops, will be landed at Beach D and constructive troops at Beaches C, D and E. We therefore make the

Auxiliary Decisions:

(a) To divide the Expeditionary Force into two parts, as determined by the Commanding General, one having the 3rd Division as the nucleus around which one part will be organized, and the other having the Marine Division as the nucleus around which the other part will be organized;

(b) To land the actual Army troops at Beach A and the constructive troops of the 3rd Division at Beaches A and B; to land the actual Marine troops at Beach D and the constructive troops of the Marine Division at beaches C, D, and E.

In order to land the troops, horses and impedimenta it will be necessary to employ all available means. This will include the boats carried on the battleships and the minesweepers accompanying the expedition. The necessity of employing the battleship boats introduces an artificiality that must be accepted, and probably will require these ships to lower their boats and send them to the transports prior to taking up their gunfire support position.

CONSIDERATION OF GUNFIRE SUPPORT.

For gunfire support we have nine battleships, four cruisers, and twenty-six destroyers less the number required to accompany the Carriers as plane guards and those required to accompany such of the train vessels as are designated to establish a base. These two collateral duties will require a total of six destroyers leaving only twenty available for gunfire. However, we must not overlook the fact that the battleships and transports will be operating in areas where enemy submarines will undoubtedly be present and that therefore some destroyers must be employed in anti-submarine duty.

In order to deceive the enemy and at the same time to inflict casualties, gunfire should be directed not only at the beaches where landings are to take place, but at other beaches where landings are practicable. It will also be necessary to employ the main batteries of battleships on the enemy fortifications to the southward of Haleiwa. Steps should also be taken to prevent, by naval gunfire, any enemy troop movements to the northward and eastward.

After a consideration of all of the above factors it is decided that the gunfire support for the Army Detachment will be provided by three battleships, one light cruiser and six destroyers. These latter will be assigned this task force to give gunfire support and act as anti-submarine screen as directed by the Task Force Commander. As during the training period, Commander Battleship Division Three has worked with the Army, it is logical that this officer should be placed in command of this Task Force, and the three battleships of his command form the nucleus of the gunfire support for the 3rd Division. Of the four cruisers available, the DETROIT, flagship of the Destroyers, Battle Force, being a single unit will operate with this Task Force, and the Commander Destroyers will be second in command. The six destroyers for this group will be designated by Commander Destroyers, Battle Force.

The other six battleships, three cruisers and fourteen destroyers will be assigned with the Marine Detachment. As Commander Battleships is with these battleships, the Task Force will be under his command, with Commander Battleship Division One as second in command. This task force in addition to clearing the landing beaches at C, D and E will be employed to keep the beaches designated as F, G, H, I, J, and K under fire in order to deceive the enemy, inflict casualties and prevent troop movements to the northward and eastward.

As provision must be made for sweeping operations and all possible facilities made available for the landing of troops, animals and equipment, two minesweepers should be added to each of these forces.

We can now make the additional **Auxiliary Decisions**.

- (c) To provide gunfire support for the landing operations by dividing the available combatant ships (less Carriers and Submarines) into two task groups, each composed of Battleships, Cruisers, Destroyers and Minesweepers.
- (d) To place Rear Admiral Pringle in command of the Task Group to accompany the 3rd Division and assign to this group Battleship Division Three, DETROIT, six destroyers, and two minesweepers.
- (e) To direct this Task Group to clear the landing beaches of enemy at A and B; to prevent effective action by hostile troops that may be to the northward and southward, and then to employ the main battery guns in assisting the other battleships to bombard the enemy fortifications to the southward of HALEIWA.
- (f) To place Vice Admiral McNamee in command of the Task Group to accompany the Marine Detachment and assign to this group Battleship Division Four, Battleship Division One less TEXAS plus CALIFORNIA, Cruiser Division Three less MILWAUKEE, fourteen destroyers, and two minesweepers.
- (g) To direct this Task Group to clear the landing beaches of enemy at C, D and E, to prevent effective action by hostile troops that may be to the northward and westward, to keep beaches F, G, H, I, J, and K under fire, and to employ main batteries of battleships on enemy fortifications south of HALEIWA.
- (h) To detail four destroyers to act as plane guards and two destroyers to accompany the train.

CONSIDERATION OF AIRCRAFT EMPLOYMENT.

The air forces available are those on the Carriers and those normally operating from the Fleet Air Base, Pearl Harbor but which have been assigned to the BLUE Force for this problem.

There are many uses for aircraft during the landing operations, and irrespective of what their employment may have been during the preliminary phases it is essential that the full air strength be made available while the landing operations are going on. These operations of the aircraft require reconnaissance beginning at daylight on the day of landing, the denial of hostile observation of the northern half of Oahu on the day of landing, the laying of smoke screens in support of landings, attacks by light bombers and machine guns on the actual landing beaches and against assembled reserves and marching troop columns, bombing of selected targets in the defensive area, in anti-submarine operations, and gunfire control. Until the Expeditionary Force planes are set up and ready for use, Naval planes will be required for battle reconnaissance with the 3rd Division and the Marine Division.

We have available for all these operations the planes carried on the battleships and cruisers, the plane squadrons on the carriers, and the planes of the Fleet Air Base.

The planes on battleships and cruisers will be required for gunfire observation and therefore should remain as part of the gunfire support Task Forces. The operations required of the planes attached to the carriers and those of the Fleet Air Base which will have been temporarily based at Hilo are varied and many. While they could be divided between the different Task Forces, and the control of their operations left to the various Task Force Commanders, it would be very difficult under such conditions to assure proper objectives and to avoid confusion and duplication of effort. It is considered that in the interests of simplicity and conservation of forces, these planes will operate much more efficiently if under one Command, which Command, with a clear understanding of all the requirements, can direct the operations of the planes in accordance with the plans and requests of the other Task Force Commanders.

Accordingly we make the following **Auxiliary Decisions**:

- (i) To have all planes on battleships and cruisers operate with their ships' respective Task Forces for gunfire observation.
- (j) To assign the carrier planes and Fleet Air based planes to one Task Force under Command of Rear Admiral Yarnell.
- (k) To direct Commander Aircraft to employ all available aircraft in reconnaissance, denial of hostile observation, the laying of smoke screens, attacks by light bombers and machine guns on the actual landing beaches, against assembled reserves and marching troop columns, bombing of selected targets in the defensive areas and in anti-submarine operations, in conformity with the plans of the two Task Force Commanders in charge of the landings, and to furnish the 3rd Division and Marine Division planes for battle reconnaissance.

CONSIDERATION OF SUBMARINE OPERATIONS.

Prior to the zero hour set for the beginning of landing operations, the submarines will have been operating in the service of information and security. As there will be enemy submarines operating against our forces just prior to and during the landing operations, it is important that our own submarines keep clear of our forces in order that we may, without reservation, take offensive action against any submarines encountered.

It will be very important for the Commanders of the Task Forces to have accurate information of the beaches where landings are to be made with respect to defensive measures that are visible, and especially with respect to the practicability of landing at the selected points. Under the conditions of this exercise this latter information is most important in view of the provision that no undue risks to personnel be taken. It is also most desirable in the interests of peace time safety, that our submarines should not operate in the same areas with the enemy submarines which will undoubtedly be engaged in off shore operations against our battleships and transports.

During the day preceding the actual landing operations the submarines will have been employed in close-in-shore reconnaissance from Kaena Point to Kahava Bay with instructions to avoid detection. By dark of the night on which landings are to occur they should take station as close in shore as practicable off the landing beaches at A, B, C, D, and E with directions to obtain information as to the feasibility of actual landings and to indicate by prearranged off shore signals with the Task Force Commanders the exact location of the landing beaches. Accordingly the following **Auxiliary Decision** is made:

- (1) To retain the submarines in one task force under command of Captain Friedell and direct them to take station off beaches A, B, C, D and E to report conditions and to indicate by a prearranged system of signalling visible only off shore, the exact location of these beaches.

CONSIDERATION OF AUXILIARY VESSEL EMPLOYMENT.

Having completed the consideration of the operations of the combatant units the employment of the auxiliary vessels must now be determined. The actual troop transports, ST. MIHIEL and HENDERSON, will of course be with the task organization in charge of the respective landing operations, as will the constructive troop transports. The statement of the problem requires a vessel of the train to represent constructive transports at all points where purely constructive landings are made. As there will be three landings of this nature, there must be three auxiliaries detailed for these assignments. These vessels will be determined after consideration of the employment required of the auxiliaries as a whole.

The auxiliary vessels (exclusive of transports and constructive ships) that will accompany the expedition are the destroyer tenders MELVILLE and ALTAIR, the submarine tenders HOLLAND and ORTOLAN, Train Squadron Two vessels ARGONNE, RELIEF, CUYAMA, NECHES, four minesweepers, and one tug. The planes from the Fleet Air Base, together with the PELICAN, have been established at Hilo in accordance with orders of the Blue Navy Department. In order to furnish these planes the necessary train service, the MEDUSA and GANNET will have been moved to Hilo. To afford the Hilo Detachment additional protection against enemy submarines and possible contact with the OGLALA and the four light minelayers of the Black Force, two destroyers and two minesweepers are required.

Hilo is too far away for these planes to operate from during the actual landings. It therefore becomes necessary to establish a base closer to Oahu. The only danger to the Base Force in establishing such a base is from submarines, aircraft and the mine force. This latter is minimized as the gunfire of the train vessels with the destroyer escort is greater than that of the mine force. On the day of landing, the enemy submarines and aircraft will be engaged in repelling the landings. It is therefore practicable and reasonably safe for the base to be moved nearer to Oahu so long as it is not done prematurely. The most suitable place for this base, in fact the only suitable place, is at Lahaina. It will therefore be necessary to have previously directed the Commander of the Base Force to establish the base at Lahaina not later than dark of the day prior to the actual landing operations. The base being established at Lahaina, the requirements for protection during the landing operations will be only sufficient to guard against attack from the mine force and possibly by submarines.

The three vessels to represent the constructive transports should be those having sufficient speed and at the same time, in so far as practicable, having the least gunfire, in order not to weaken any more than necessary the gunfire strength of the Train. Accordingly, two of these vessels will be the CUYAMA and NECHES and the third the MELVILLE. One tug and two destroyers will remain with the train.

In considering the available minesweepers, it will be necessary to engage in sweeping operations with all forces that will operate in possible or probable mine fields. There are three such forces, namely, two charged with landing operations and one with the establishment of a base. The PELICAN and GANNET will have been assigned to the base at Hilo and are suitable for sweeping operations with the train. The remaining four minesweepers are accordingly available for assignment with the two forces charged with the landing of troops.

The Train should be prepared to furnish usual base facilities required for vessels engaged in operations of this nature against an enemy force. They include sufficient reserve ammunition, hospital facilities and means for transportation of sick and wounded to a nearby base hospital, provisions and equipment, water supply for men and animals. The officer in command of the Train should be the Commander Base Force, Rear Admiral Hough.

The following auxiliary decisions are made:

- (m) To place Rear Admiral Hough in command of the Train and direct him to establish a secondary base at LAHAINA ROADS on the evening before the actual landing operations take place.
- (n) To leave with the Train two destroyers for defensive purposes, plus one tug.
- (o) To detach from the Train four minesweepers for service with the two forces charged with landing troops and equipment.
- (p) To detach from the Train to represent constructive transports, the CUYAMA, NECHES and MELVILLE.
- (q) To detach the Fleet based aircraft and attach them to the task group under Rear Admiral Yarnell.
- (r) To direct Commander of the Train to be prepared to evacuate wounded personnel from the landing beaches.
- (s) To direct Commander of the Train to be prepared to furnish logistic support and other services as required by forces in actual engagement with the enemy.

Plan II

In case it is found impracticable to carry out Plan I, it will be necessary to have an alternative plan. We have decided on two such general plans the first of which is:

To land the BLUE Expeditionary Force simultaneously at daylight to the westward of KAHUKU POINT and in the KAWAIHAPI-MOKULEIA Area.

In our consideration of the courses of action open to us we concluded it would be logical to divide the Expeditionary Force in such manner that the organization will be best suited to carry out the preferred plan (Plan I) and adapt the alternative plans to suit this organization. It is therefore necessary to determine what changes must be made in the operations and the task group organization in order to meet the requirements of Plan II.

CONSIDERATION OF PLACES OF LANDING.

The available beaches for landing in accordance with Plan II have been considered, and in agreement with the Commanding General have been decided on as follows:

Beach D—same as in Plan I.
Beach E—same as in Plan I.
Beach F—WAIMEA Bay—Lat. 21-38-35; Long. 158-04-02.
Beach J—MOKULEIA—Lat. 21-34-58; Long. 158-10-06.
Beach K—KAWAIHAPAI—Lat. 21-35-04; Long. 158-11-48.

The 3rd Division actual troops will land at Beach D and after Beach F has been secured by troops landed at D, constructive troops will be landed at Beaches E and F.

The Marine Detachment actual troops will land at Beach J after this beach has been secured by constructive troops landed at Beach K.

The following Auxiliary Decisions are made:

- (a) To divide the Expeditionary Force in two parts—the same as for Plan I.
- (b) To land actual Army troops at Beach D which troops will secure beach F. When Beach F is secured to land constructive troops at Beaches E and F. To land constructive Marine troops at Beach K, which troops will secure Beach J. When Beach J is secured, to land actual and constructive troops at Beach J and continue the landing of constructive troops at Beach K.

CONSIDERATION OF GUN FIRE SUPPORT.

The same ships will be available for gun fire support. The same objectives hold as in Plan I except that Beaches A and B will not have to be covered by gun fire and beaches J and K must be kept under fire, not solely for the purpose of creating a diversion, but to clear these beaches for the landing of troops. Instead of making a reassignment of vessels to Task Forces to meet this change in gun fire support, it would cause less confusion and be more simple of execution to leave the Task Force organization as decided on for Plan I and designate the gun fire objectives to meet this plan.

We therefore make the following Auxiliary Decisions:

- (c) To provide gun fire support by dividing available ships in two task groups—the same as for Plan I.
- (d) To place Rear Admiral Pringle and Vice Admiral McNamee in command of these groups with the same assignment of ships.
- (e) To direct the Task Group under Rear Admiral Pringle to clear the landing beaches of enemy at Beaches D, E, and F; to prevent effective action by hostile troops that may be to the northward and southward; to employ the main battery guns of battleships in assisting other battleships to bombard the fortifications to the southward of HALEIWA.
- (f) To direct the Task Group under Vice Admiral McNamee to clear the landing beaches at J and K, to prevent effective action by hostile troops that may be to the eastward and westward, to keep beaches G, H, and I under fire, and to employ main battery guns of battleships on enemy fortifications to southward of HALEIWA.

CONSIDERATION OF AIRCRAFT EMPLOYMENT.

This is the same as for Plan I, there being no necessity to make any changes in so far as the general plan of their employment is concerned.

CONSIDERATION OF SUBMARINE OPERATIONS.

This is the same as for Plan I the only difference being the beaches which the submarines will observe and indicate the locations. This necessitates the substitution of beaches D, E, F, K, and J for beaches A, B, C, D, and E.

CONSIDERATION OF AUXILIARY EMPLOYMENT.

This is the same as for Plan I and requires no change in the Task Force or its operations.

PLAN III.

Plan III will be the second alternative plan. This, in general, is:

To land the BLUE Expeditionary Force simultaneously at daylight at MAKUA and in the MAKAHA-WAIANAE Area.

In agreement with the Commanding General landings will be made at the following beaches:

Beach L—MAKUA—Lat. 21-31-45; Long. 158-13-57.

Beach M—MAKAHA—Lat. 21-27-48; Long. 158-12-40.

Beach N—WAIANAE—Lat. 21-26-55; Long. 158-11-36.

The 3rd Division, constructive troops will land at Beach L, and secure Beaches M and N. After these beaches have been secured actual and constructive troops will be landed at Beaches L and M.

The Marine Detachment actual troops will land at Beach N after that beach has been secured by constructive Army troops landed at Beach L. Actual and constructive troops will then be landed at Beaches M and N.

The following Auxiliary Decisions are made:

- (a) To divide the Expeditionary Force in two parts—the same as for Plan I.
- (b) To land constructive Army Troops at Beach L and secure Beaches M and N, after which actual and constructive troops will be landed at Beaches L and M. To land actual Marine Troops at Beach N after that Beach has been secured by Army troops landed at Beach L. Then to land actual and constructive troops at Beaches M and N.

CONSIDERATION OF GUN FIRE SUPPORT.

The same ships will be available for Gun Fire support. Although the conditions under this Plan are quite different from those under Plans I and II as only three beaches, those at L, M and N will have to be cleared of obstacles and enemy troops, the organization of the attack forces will remain the same. The necessary adjustments as to objectives being made in order to conform to the Expeditionary Force Field Orders. In consideration of these orders the following Auxiliary Decisions are made:

- (c) To provide gun fire support by dividing available ships in two task groups—the same as for Plans I and II.
- (d) To place Rear Admiral Pringle and Vice Admiral McNamee in command of these groups with the same assignment of ships.
- (e) To direct the Task Group under Rear Admiral Pringle to clear the landing beaches of obstructions and of the enemy at Beach L; to prevent effective action by hostile troops that may be to the northward and southward; to employ the main battery guns of battleships against hostile Howitzers and G.P.F.'s that may be located to eastward of KOLEKOLE PASS.
- (f) To direct the Task Group under Vice Admiral McNamee to clear the landing beaches of obstructions and of enemy at Beaches M and N; to prevent effective action by hostile troops that may be to the northward and southward; to employ main battery guns of battleships against enemy fortifications in the EWA section and against the 16-inch guns located in Fort Weaver.

CONSIDERATION OF AIRCRAFT EMPLOYMENT.

This is the same as for Plans I and II.

CONSIDERATION OF SUBMARINE OPERATIONS.

This is the same as for Plans I and II, except only three beaches—L, M, and N need be observed and the locations indicated. The other two submarines will be stationed to the northward and southward respectively of MAKUA and WAIANAE to report and obstruct any troop movements that may be made to the southward of KAENA point and to the northward of BROWN'S CAMP.

CONSIDERATION OF AUXILIARY VESSEL EMPLOYMENT.

This is the same as for Plans I and II and requires no change in the Task Force or its operations.

GRAND JOINT EXERCISE NO. 4.

BLUE

PHASE B

The safe escort of the Expeditionary Force to the Landing Area.

ESTIMATE OF THE SITUATION.

I. Derivation of Mission.

In estimating the situation under the Mission of the Commander-in-Chief of the BLUE Fleet to establish the BLUE Expeditionary Force in beach heads on the Island of OAHU, the decision was reached:

"To land the BLUE Expeditionary Force simultaneously at daylight, (preferred) to the eastward and westward of KAHUKU POINT; (1st alternative) to westward of KAHUKU POINT and in the KAWAIHAPI-KOKULEIA Area; (2nd alternative) at MAKUA and in the MAKAHA-WAIANAE Area."

This general plan for landing operations having been determined, the ability to carry out this plan becomes the purpose of the operations that must immediately precede it.

It is apparent that in order to land the Expeditionary Force, the transports must arrive in positions from which landing operations may begin. If the BLUE Navy had complete control of the sea, and if no opposition were to be met at the landing places this would be a very simple matter. But this is not the case as the enemy has mine layers, submarines and aircraft which are capable of operating at sea, and has strong fixed defenses and mobile defenses on shore capable of covering all the most likely landing places. To the Navy belongs the responsibility for the safety of the transports and to protect them as far as possible from attack by enemy forces. It is therefore clear that our TASK is to escort the Expeditionary Force and give it the best protection possible. We therefore state THE MISSION for this Phase:

To give safe conduct to the Expeditionary Force to the Area for beginning landing operations, in order that it may be landed simultaneously at daylight in accordance with the pre-determined landing plans.

II. Relative Strength of opposing Forces.

This was thoroughly considered in the estimate of the BLUE Commander-in-Chief for the landing operations and requires no further consideration here, as the same forces and same strength factors are applicable. It is well to stress, however, the great strength factor BLUE has in having control of the sea excepting in the immediate vicinity of the HAWAIIAN ISLANDS, where the enemy sea forces are comparatively weak. This situation should be taken advantage of to the utmost.

III. Enemy's Probable Intentions.

These were also thoroughly considered in the estimate previously referred to and apply equally for the situation now under consideration. The summary of these most probable intentions is restated here for reference.

"It would seem that the most probable intention of the enemy is to prepare all probable landing places for defense by the erection of barbed wire entanglements, laying of mines, establishing machine gun pill boxes and entrenchments, to be continuously strongly entrenched in the most likely landing places; and then to use the positive system of coast defense by keeping the reserve mobile troops and artillery in a hidden central position ready to move to the endangered points and make concentrated attacks on information gained by submarines at a distance of about 150 miles off shore, and by aircraft patrolling at a distance not greater than 50 miles from OAHU, and then to employ submarines and aircraft in cooperation with the land defenses in repelling BLUE Forces at the points of landing."

Since this conclusion was reached, a new element has entered in the decision of the Commander-in-Chief of the U. S. Fleet, in accordance with instructions in the Statement of the Problem, to designate HILO as the secret point to which the Air Units, Fleet Air Base, Pearl Harbor, are to be moved and held immobile until released by the Chief Umpire for operations with the BLUE Forces. While constructively the basing of this Air Unit at HILO is a secret, actually the enemy will know its whereabouts. We must conclude, however, that in so far as operations by the enemy against this force are concerned, and the releasing of the planes for operations by us is concerned, the Umpire will give equal opportunities to both sides.

As the planes based at HILO will have no protection other than that which can be given by themselves, and as they must also protect the three tenders with them, it seems probable that if the enemy estimates it is practicable to make a raid on this Base and return to OAHU prior to the arrival of the BLUE EXPEDITIONARY FORCE, such course of action may be undertaken, and consequently must be guarded against.

IV. Courses of Action Open to Us.

The task of our Mission is to give safe conduct to the Expeditionary Force to the area for beginning landing operations. An analysis of this task indicates that the convoy must be protected throughout its passage, that a base or bases must be established, and that preliminary operations against the enemy forces might result in increased safety. In fact our task includes every kind of operation which will enhance the safety of the Expeditionary Force so that when it arrives in the Area for commencing the actual landing operations the losses will have been held to a minimum and the Force will thereby be in all respects ready to carry out its Mission for the next Phase.

From this analysis we may consider the following courses of action open to us:

- (a) To conduct the Expeditionary Force, Combatant Forces and Train in one body to the area from which landings are to take place.
- (b) To conduct the Expeditionary Force and Train with at least sufficient combatant strength to insure its safety and to employ a part or parts of the forces in advance operations.

Course (a), to conduct the Expeditionary Force, Combatant Forces and Train in one body has the advantage of concentration and simplicity. It would insure the safe conduct of the expedition to the desired area, but it would not entirely fulfill the purpose in bringing it to this area, in that no operations for weakening the enemy prior to the undertaking of landing operations will have been undertaken. It also has the advantage of having all our anti-submarine and anti-air strength together.

This procedure would be an advantage if it afforded the opportunity for making a strategic or tactical surprise. Neither of these seem practicable in view of the advance information which the enemy must have in regard to this attack, and the facilities he has with aircraft and submarines for detecting the presence of an expedition of this size while still some distance off shore.

The disadvantages in this course are that it fails to take any measures towards confusing and harassing the enemy, and inflicting damage on him prior to the actual landing operations. This latter is of great importance as in view of the isolation of OAHU it is impracticable for the enemy to make replacements of personnel and material.

Other disadvantages in this course are that we would deprive ourselves of gaining information through reconnoitering and scouting, which information might be of great importance; and there could be no advance operations for the establishment of a base or bases which might be essential.

Course (b), to conduct the Expeditionary Force with at least sufficient combatant strength to insure safety and to employ a part or parts of the forces in advance, will enable the carrying out of a number of operations which would lead to the security of the expedition, the gaining of advance information that might be of great importance, the opportunity to establish a base or bases, and to protect our already established temporary base at HILO, to create diversions for confusing the enemy as to our objectives, and for the purpose of doing damage to defenses and inflicting casualties to enemy personnel. Any or all of these operations would increase the safety of our expedition and of subsequent operations and therefore would be of direct advantage.

The only disadvantages in this course of action are the liability to losses of combatant ships and aircraft prior to the time for commencing landing operations; the tiring of personnel, and the larger fuel consumption, thereby increasing the logistic requirements.

V. The Decision.

A careful consideration of the advantages and disadvantages of the two courses of action lead to the conclusion that the benefits to be gained by having advanced operations greatly exceed the disadvantages, and that by giving proper consideration to the conservation of forces and to the necessity of having the personnel in good physical and mental condition at the time of the landing operations, that procedure should be adopted.

We therefore make **THE DECISION:**

To proceed by detachments, employing light forces in advance in the service of information and security, and all forces, exclusive of the Train and necessary escort, in creating diversions for harrassing, confusing and damaging the enemy, in order to give safe conduct to The Expeditionary Force to the area for beginning landing operations.

VI. Auxiliary Decisions.

Prior to determining the details of the operations necessary for carrying out our Decision it is desirable to make a summary of the distances to various points with which we are concerned and the length of time required to reach these points at the speed of our slowest ship.

The distances given in the following table are those of the great circle between the points indicated:

	Pearl Harbor	Lahaina	Hilo	To 500 mile circle
SAN DIEGO	2280	2200	2130	1780
SAN PEDRO	2230	2150	2080	1730

CONSIDERATIONS OF TIME FOR ARRIVAL OF TRAIN AT LAHAINA.

The maximum sustained speed of our slowest ship, the ALTAIR, is 9.5 knots. At that speed it would take 240 hours to reach PEARL HARBOR, and 232 hours to reach LAHAINA. It is apparent therefore that the ALTAIR and such vessels as may accompany her will require from 9½ to 10 days to reach the vicinity of OAHU provided the great circle route is followed. As the usually travelled steamer route is over the great circle it would not be desirable for any of our ships to follow it. Such route as would be taken would be a little farther and the elapsed time lengthened accordingly. However owing to the difference in longitude between SAN PEDRO-SAN DIEGO and OAHU, 2½ hours in time will be gained.

In order to allow a safety factor we should consider ten days as the period for the ALTAIR and such vessels as may accompany her, to make the passage from SAN DIEGO to LAHAINA, which is the place we previously decided on for establishing our base.

The ships of the expedition cannot depart from the SAN PEDRO-SAN DIEGO Area prior to 1 February. Therefore unless the ALTAIR is left behind, the base at LAHAINA cannot be reached until 11 February.

If the time element were of great importance with reference to the exact day on which actual landing operations should begin, there would be justification in leaving the ALTAIR behind to make the best of her way to LAHAINA. But no such emergency exists as our plans for the landing operations are such that they can be made effective for any day, and no advantage accrues to the enemy by any delay on our part in initiating the attack. However, as determined in our estimate for the landing operations, the attack should be made concurrent with the arrival of our train at LAHAINA, in order to prevent the enemy from carrying out operations against it. We therefore make the following **AUXILIARY DECISIONS:**

- (a) To have such vessels as are necessary for maintaining a base at LAHAINA arrive there as early as practicable on the morning of eleven February.
- (b) To begin landing operations for the establishment of beach heads on OAHU on the morning of eleven February.

The vessels necessary for maintaining the base at LAHAINA will be determined after consideration is given to other operations that may be decided on.

CONSIDERATIONS OF PROCEDURE FOR EXPEDITIONARY FORCE.

It having been decided to begin landing operations on the morning of 11 February, we should before determining the employment of the light forces in the service of information and security and in creating diversions, etc., determine on the procedure of the Expeditionary Force, as it is on this procedure that the other operations must be based.

The Expeditionary Force, in order to be properly safeguarded until arrival in the area for commencing landing operations, should be accompanied by battleships and destroyers. Such destroyers as may accompany this Task Force should be refuelled prior to arrival in the HAWAIIAN Area in order that they will be ready for carrying out any tasks that may be assigned. This is an important consideration as it necessitates the presence of oilers, and the maintained speed of the oilers will, in consequence, be a factor in determining whether or not the Expeditionary Force with its escort will be available for employment in preliminary operations. Our two oilers, the NECHES and CUYAMA, are capable of maintaining a speed of over 12 knots. All of the transports are capable of more than this speed. The distance from SAN DIEGO to PEARL HARBOR by the most direct route is 2280 miles. At 12 knots this distance would be negotiated in 7 days and 22 hours. On the assumption that the expedition will sail from SAN PEDRO-SAN DIEGO Area at 0900 on 1 February, it could, at 12 knots, and allowing for the 2½ hours in time gained owing to change in longitude, arrive off OAHU at 0430 on 9 February. As the actual landing operations are to take place at daylight on 11 February, this allows 48 hours leeway which may be employed in detours, refuelling, and in making any diversions or demonstrations that may seem desirable. As it is undesirable to have the transports in the HAWAIIAN Area for a long period prior to the landing operations there will be no necessity for using speeds higher than 12 knots, but in order to allow for delays and detours a speed of not less than 12 knots should be maintained. All destroyers can easily maintain a speed of 12 knots.

We have a division of two battleships, the NEW YORK and OKLAHOMA, which cannot maintain speeds between 11 and 15 knots. Therefore these two battleships cannot accompany the Expeditionary Force if any preliminary operations are undertaken, and other plans must be made for them.

Can the Expeditionary Force with its escort be used to advantage in making a diversion or demonstration prior to the actual landing which is scheduled by our auxiliary decision just made to take place at daylight on 11 February?

The only objects of any diversion are to harass and damage the enemy, and to confuse him as to our exact objectives, so as to cause him to make troop movements or to change his defense plans in a manner which will accrue to our benefit at the time of actual landing. To accomplish these objects any diversion that is made must give the appearance of being an actual landing and must be on a large enough scale to give the enemy real concern. In other words in order to make the demonstration effective we must appear in force at the selected position.

The decision to make our actual landings on the north coast at daylight gives us the opportunity to effect a tactical surprise. Any diversion we make should increase our chances for effecting this surprise.

After considering the various places where demonstrations might be made, and taking into consideration their probable effects on the enemy and the different time elements involved, it appears practicable to make a demonstration in force in the southwest corner of the Island of OAHU beginning shortly before dusk on the evening of 10 February, to prolong the demonstration well into the night, and by gradually withdrawing all our forces under cover of darkness have them in position for carrying out the actual landings on the north side of the island on the morning of 11 February in accordance with our approved plans. In order to make this demonstration as realistic as possible the entire Expeditionary Force and all types of combatant ships should take part, if practicable, in the greatest numbers consistent with the other operations which this estimate may show as being necessary. The exact numbers of these combatant ships need not be determined at this time, but will be decided after consideration is given to other operations that are necessary or desirable.

We therefore make the **AUXILIARY DECISIONS:**

- (c) To proceed with the entire Expeditionary Force accompanied by seven battleships, a number of destroyers and two oilers, to the HAWAIIAN Area by a route well to the southward of the regularly travelled steamer lanes and arrive off the southwestern coast of OAHU on the evening of ten February.

- (d) To refuel the destroyers accompanying this force from the oilers prior to dark on eight February.
- (e) To make a demonstration in force on the evening of 10 February in the vicinity of the southwest corner of OAHU, employing the entire Expeditionary Force and all available combatant vessels.

The detailed plans for this demonstration will be made as the result of a separate estimate.

In determining the operations of the various types of ships not already considered, we must keep in mind the desirability of having as many of them as practicable present at this demonstration.

CONSIDERATION OF EMPLOYMENT OF REMAINING BATTLESHIPS.

We have decided, owing to speed considerations, that the NEW YORK and OKLAHOMA will not accompany the Expeditionary Force. These two ships should maintain a speed of less than 11 knots. It is desirable that all other vessels of the force excepting those with the Train and with the Expeditionary Force should maintain a speed greater than 12 knots. While we have control of the sea, we should not feel over confident that the enemy may not have one or more raiders which might attack our Train should opportunity arise. This possibly can be guarded against by having our two 11 knot battleships accompany the Train. This precludes them from taking part in the demonstration on the evening of ten February, but will permit them, by leaving the Train on the forenoon of ten February and steaming at 15 knots, to arrive at their designated position for beginning landing operations on the morning of 11 February.

Accordingly the **AUXILIARY DECISION** is made:

- (f) To have the NEW YORK and OKLAHOMA accompany the Train until forenoon of ten February and then proceed direct to designated position for commencing landing operations on the morning of eleven February.

CONSIDERATIONS OF PROTECTION OF TENDERS BASED AT HILO.

At HILO we will have the Fleet Air Base Planes with the MEDUSA and the minesweepers GANNET and PELICAN, acting as tenders. These ships and the planes will have arrived at HILO on 5 February and will be in a non-combatant and immobile status until released by the Chief Umpire. We do not now know when this will be, but can judge it may occur at any time after 0500 on 6 February. The danger to these planes and ships lies in the possibility of a raid made on them either by enemy planes or by the OGLALA, the ITASCA, and the four light minelayers, or by both air and surface ships. Such a raid on them prior to the time they are released from the state of immobility is beyond our power to prevent. Should a raid be made on them after their release from the state of immobility and prior to the earliest time any of our combatant forces can arrive at HILO, they will have to defend themselves as best as they can. Should a raid be made on them after we are able to protect them with our combatant vessels, and we fail to furnish such protection, we would be derelict in our duty. The most suitable type of ships for protecting the ships and planes are cruisers and destroyers in conjunction with such protection the planes themselves can give.

By the requirements of the statement of the problem, all of our forces must be outside of a circle radius 500 miles at 0500 6 February. The distance from SAN PEDRO to the nearest point on this circle is 1730 miles. The cruisers and destroyers can sail from SAN PEDRO at any time after 0000 on 1 February. Allowing for the two hours gain in Time owing to change in Longitude the elapsed time between 0000 1 February and 0500 6 February is 127 hours. This will require a speed of only 13.6 knots, which can easily be accomplished. As the vessels assigned this duty will later have the task of seizing a base at LAHAINA, and other operations, three cruisers and two destroyers will be required for this purpose.

The distance from SAN PEDRO to HILO is 2080 miles. It is therefore practicable for the cruisers and destroyers to arrive at HILO on early morning of 7 February and still be outside the 500 mile limiting circle at 0500 on 6 February as required by the statement of the problem.

It being apparent that this detail of cruisers and two destroyers is a necessity we make the **AUXILIARY DECISION**:

- (g) To direct three cruisers and two destroyers to arrive at HILO early morning seven February to protect the force at that place.

As the destroyers will have no opportunity to refuel prior to arrival at HILO and as even then their fueling must be deferred until this can be done from the MEDUSA or the cruisers, long radius destroyers should be detailed for this duty.

CONSIDERATION OF EMPLOYMENT OF AIRCRAFT BASED AT HILO.

The aircraft based at HILO are capable of assisting in the defense of the vessels at that place by patrolling against enemy submarines, and for offensive action against the OGLALA, ITASCA and light mine layers should they be located. They can be used in the service of information, but this use will be somewhat limited owing to superior strength of the enemy air forces. In view of the better knowledge of the immediate situation had by the senior officer present at HILO, the operation of these planes should be left to him. However, after the arrival of the Carriers in the theater of operations, the employment of such of these planes as are not required for base defense should be under the direction of the Commander Aircraft in order that there may be unity of command and duplication of effort thereby avoided. We therefore make the **AUXILIARY DECISION:**

- (h) To have the Fleet Air Base planes operate in the service of information and security under the direction of the Senior Officer Present at HILO until the arrival of the Carriers in the theater of operations after which such of these planes as are not required for defense of the bases will operate as directed by Commander Aircraft.

CONSIDERATION OF PROCEDURE FOR TRAIN.

Having decided to have such vessels as are necessary for maintaining the base at LAHAINA arrive there on 11 February and have them accompanied by two battleships until necessary for them to depart in order to arrive at their attack positions in time, it becomes necessary before determining what advance offensive operations are practicable for the light forces, to ascertain which, if any, of these light forces are necessary to protect the train.

The auxiliary vessels of the Train belonging to the BLUE Force are as follows:

- (a) **At HILO Base:**
 - MEDUSA—Repair Ship.
 - GANNET, PELICAN—Aircraft tenders.
- (b) **With Expeditionary Force and accompanying battleships:**
 - MELVILLE—Destroyer tender (constructive transports).
 - NECHES, CUYAMA—Oilers (constructive transports).
- (c) **The Train:** At present not assigned to Task Groups.
 - ARGONNE—Base Force Flagship.
 - ALTAIR—Destroyer tender.
 - HOLLAND, ORTOLAN—Submarine Tenders.
 - RELIEF—Hospital ship.
 - BRANT, PARTRIDGE, KINGFISHER, TERN—Minesweepers.
 - SONOMA—Tug.

Protection has been provided for the vessels listed under (a) and (b) and we must now assign protection for the remaining vessels of the Train, particularly for the four larger vessels, after the departure, on 10 February, of their accompanying battleships. A cruiser is desirable but not essential. The question of such an assignment will be decided after consideration is given to other cruiser requirements. It will be necessary to have at least two destroyers for anti-submarine protection and to augment the gunfire of Train vessels. These two destroyers should be sufficient to protect the Train after the departure of the battleships, should no cruiser be available.

The problem of protection for the vessels listed under (a) above, must deal with the necessity for the detachment, prior to the arrival of the Train at its base, of the four minesweepers, at such a time as will enable them to arrive at their stations off the landing beaches when required for landing operations.

By somewhat earlier detachment from the Train than would otherwise be necessary, if the only object was to reach the landing beaches in time, these four minesweepers can be used to secure the base at LAHAINA and free its approaches and anchorage area of mines. Thus when the base at HILO is shifted to LAHAINA on 10 February, the operations necessary before the HILO detachment can anchor at LAHAINA would be undertaken by these four minesweepers, provided they arrive at LAHAINA so as to begin operations early enough on 10 February. The GANNET and PELICAN cannot be used to prepare the base at LAHAINA, owing to the services required of them with the HILO planes, which cannot leave that base until daylight on 10 February. If it is practicable the four minesweepers of the Train will perform this task, before proceeding to the landing beaches.

Under the consideration of the time for arrival of the Train at LAHAINA we found that a speed of 9.5 knots would require approximately 9½ days. It is therefore entirely feasible to have the four minesweepers proceed so as to arrive at LAHAINA early morning of 10 February, sweep the approaches and anchorage, and then reach their stations in time for the landing operations on the morning of 11 February. While these sweepers could proceed unescorted, prudence requires that they be accompanied by at least one combatant ship. A destroyer or destroyers might be employed, but as such a detail would weaken our already weak anti-submarine strength, this is not desirable. One of the cruisers would be well suited for this detail and this is decided on. We now state the following **AUXILIARY DECISIONS**:

- (i) To detail two destroyers to accompany the Train to LAHAINA.
- (j) To send four minesweepers accompanied by a cruiser in advance of the train to arrive at LAHAINA early morning 10 February.
- (k) To direct the cruiser escort and four minesweepers of the Train to secure the base at LAHAINA and free the approaches and anchorage area of mines on the morning of 10 February.
- (l) To direct the Train and accompanying escort to arrive at the base at LAHAINA on the morning of 11 February.

CONSIDERATION OF SHIFTING OF BASE FROM HILO TO LAHAINA.

In order that the Fleet Air Base planes may be available for service during the landing operations beginning early on the morning of 11 February it is essential that they be based nearer to Oahu than HILO. The only suitable place for this base is at LAHAINA where we have already decided to have four minesweepers with a cruiser escort arrive on morning of 10 February and our Train vessels arrive there on the morning of 11 February. This necessitates the base being moved from HILO to LAHAINA, a distance of 110 miles, on 10 February. This is a simple matter for the planes, as they can take off at any time in the forenoon of 10 February, carry out any operations that may be desired, and arrive at LAHAINA before dark and after the tenders have arrived. The MEDUSA, the GANNET and PELICAN, should be escorted from HILO. We have three cruisers, and two destroyers operating from HILO available for this purpose. They are also available later for assisting the other cruiser and minesweepers due on 10 February in securing the base at LAHAINA. We accordingly make the following **Auxiliary Decisions**:

- (m) To shift the base from HILO to LAHAINA on 10 February.
- (n) To direct the cruisers and destroyers at HILO to escort the HILO Base Force to LAHAINA and to assist in securing the base at LAHAINA on 10 February, prepare it for occupancy by the Fleet Air Base planes on the afternoon of 10 February and by the Train vessels on the morning of 11 February.
- (o) To direct the senior officer present to despatch three cruisers in time for them to take part in the demonstration off the southwest coast of OAHU on evening of 10 February and to despatch the fourth cruiser and all minesweepers in time for them to arrive at their station for the landing operations scheduled for the morning of 11 February.

CONSIDERATION OF EMPLOYMENT OF CRUISERS.

The situation presented in this problem requires the employment of the cruisers in a somewhat different manner than is normal. We have found it necessary in our consideration of the employment of other types to assign all of our cruisers to convoy duty and in the establishment and protection of bases.

The three cruisers to be sent in advance to HILO should all belong to the same unit which is Cruiser Division Three. The Commander of this division will become the senior officer present at HILO and will be in charge of operations from time of arrival until his ships are assigned under a senior Task Group Commander. The chief employment of these cruisers during this period should be in the protection of the base, and in the service of information, especially with respect to the establishment of the new base at LAHAINA. Offensive operations should be taken against the enemy mine force should opportunity occur. The commander of these cruisers being on the scene of action should be the best judge of what operations not specified in his orders should be undertaken, and these will be left to his judgement.

The DETROIT, flagship of the destroyers, will of necessity have to be assigned as the escort of the minesweepers. As the destroyers will be split up for operations under other Task Force Commanders this temporary detachment of Commander Destroyers from the other vessels of his command will permit a flag officer being assigned to the important duty of seizing and getting ready for occupancy the base at LAHAINA.

Accordingly the **AUXILIARY DECISIONS** are made:

- (p) To assign Cruiser Division Three to the base at HILO; to direct the Commander of this division to protect the base, to escort the HILO Base Force to LAHAINA and to assist in the seizing and preparation for occupancy of the base at LAHAINA; and to leave other operations to his judgement.
- (q) To assign the DETROIT as the escort for the four minesweepers and place Commander Destroyers in charge of the seizure and preparation for occupancy of the base at LAHAINA.

CONSIDERATION OF EMPLOYMENT OF CARRIERS.

In our two carriers with their high speed and great airplane strength we possess an asset for advanced operations, and possibilities for tactical surprise that should be used to the utmost advantage.

Under our consideration of the protection that should be afforded our train vessels based at HILO we found that a maintained speed of only 13.6 knots was necessary in order to have a ship leave SAN PEDRO at 0000 on 1 February and arrive at the 500 mile limiting circle at 0500 on 6 February. This the carriers can easily do. However, the carriers cannot operate their planes unless destroyer plane guards are present. Nor should they operate in waters where enemy submarines are known to be present without an adequate anti-submarine screen. It will therefore be necessary to send destroyers with the Carriers and the least number that can fulfill the requirements is eight. If we conclude to employ the Carriers in these advance operations and send the destroyers along with them, the destroyers will have to be refuelled from the Carriers in order that they may be ready for any assigned duty. We have no oilers available for this fueling so it will have to be done by the carriers.

What employment to our advantage can be made of the Carriers by having them ready with their destroyer escort on the 500 mile circle at 0500 on 6 February?

The greatest danger to our forces while operating at sea is from aircraft and submarines. Anything we can do to lessen this hazard will be to our advantage. Owing to more important duties for the airplanes it will not be profitable to employ them against submarines unless surprised at their base. It would seem however that by having the carriers ready for a swift descent on the Islands they may effect a tactical surprise that will catch the enemy aircraft flat-footed and afford an opportunity to destroy some of them and damage their bases thereby making them either inoperative or less efficiently operative than otherwise would be the case. It being only 500 miles from the 0500 position of the Carriers on 6 February, it would be an easy matter with their high speed and the high speed of the destroyers to arrive in the vicinity of OAHU and make an attack on such objectives as may be considered desirable at daylight on 7 February. Such procedure may provide the tactical surprise so much desired, and we therefore conclude to direct this operation. While the primary objective should be the enemy aircraft and their bases, there would be an additional advantage if damage could be done either by the use of toxic gases, by bombs, or by both, to troop concentrations, communication centers, railroad junctions and gun emplacements. We therefore make the following **AUXILIARY DECISIONS**:

- (r) To direct the airplane carriers with eight destroyers to arrive at the limiting 500 mile circle from PEARL HARBOR at 0500 on 6 February.
- (s) To direct the Carriers to refuel the destroyers prior to that time.

- (t) To direct the Carriers to make an attack on OAHU at daylight on 7 February with the destruction of aircraft and damaging of their bases as the primary objectives, and the inflicting of casualties on troop concentrations and the damaging of communication centers, railroad junctions and gun emplacements, as a secondary objective.

We have previously decided to have the carriers participate in the demonstration scheduled for the evening of 10 February. Accordingly there is a period between the completion of the attack on 7 February and the beginning of the operation on 10 February for which no provision has been made for their employment. We have the option of determining this employment or to permit the Commander Aircraft to do so. Consideration should be given to the facts that beginning with the attack on 7 February Commander Aircraft will be on the scene, that he will have first hand knowledge of the results of the attack, and that therefore he will be in a good position to judge whether such an attack should or should not be repeated, or whether other operations would be to our advantage; that he understands, as well as we do, the necessity for the conservation of forces and the desirability of having his personnel and material in the best possible condition for the strenuous operations beginning on the afternoon of 10 February and continuing on the following morning. Taking all these into consideration it is concluded that Commander Aircraft is best situated to determine whether other operations and what operations in addition to those which we have decided on, should be undertaken. We therefore make the **AUXILIARY DECISION:**

- (u) To leave to the discretion of Commander Aircraft the employment of his force from the completion of the surprise attack on seven February to the beginning of the demonstration on ten February.

CONSIDERATION OF EMPLOYMENT OF DESTROYERS.

After consideration of the employment of the types of ships which will require destroyer escort when in submarine waters we decided to assign destroyers as follows:

- An indefinite number with the Expeditionary Force.
- 2 with the three cruisers operating in the HILO Area.
- 2 with the Train.
- 8 with the Carriers.

This makes a definite assignment of 12 destroyers, leaving 14 available for the Expeditionary Force. Considering that with this force will be seven battleships and approximately thirty troop transports, all of this number will be required for protection against submarines. It is therefore concluded that no destroyers can be diverted for other operations and we accordingly make the **AUXILIARY DECISION:**

- (v) To assign fourteen destroyers as escort for the Expeditionary Force.

CONSIDERATION OF THE EMPLOYMENT OF SUBMARINES.

Our five submarines are all of long radius. One, the ARGONAUT, is a mine layer with a maintained cruising speed of about 10 knots. The other four have a maintained cruising speed of from 11 to 12 knots. This will permit of their arrival well in advance of the time for beginning the landing operations on 11 February. Irrespective of what other operations might be suitable and desirable, their chief value to us will be in the service of information especially with respect to the feasibility of landing at the various beaches selected and the situation at those beaches. It is important that this information be secretly obtained whether it be by observation from the ship or by espionage. This is particularly so for the beaches selected for landing under our PLAN I. It is accordingly concluded that the primary objective of the submarines is in reconnaissance and observation for the purpose of ascertaining the condition of and the situation at the landing beaches; and the secondary objective to gain whatever other information that may be of value to us in carrying out the operations. These observations should commence as soon as practicable and the submarines should therefore proceed at their best sustained speed to the area of operations. The mine layer might lay mines off the entrance of PEARL HARBOR. To do this would lessen her time for observation. In addition the only ships that might be destroyed by such mines are those of the BLACK mine and submarine forces. In view of these considerations it is concluded to have the ARGONAUT retain her mines until some valuable use for them develops.

The following **AUXILIARY DECISIONS** are made:

- (w) To direct the submarines to proceed at their best maintained cruising speed and on arrival in HAWAIIAN Area to operate secretly in the service of information with the primary objective of ascertaining and reporting the conditions of and the situations at the beaches selected for landing operations.

CONSIDERATION OF OPERATIONS FOR DAMAGE TO MEANS OF COMMUNICATION.

Our main attack is to be made on the north coast of OAHU. Prior to that we have decided on a demonstration in force on the southwest coast. The lines of communications between these points are by the railroad which skirts the shore line and by railroad and vehicular roads that pass over the central plateau. We have decided that a secondary objective of the Carriers is to damage communication centers and railroad junctions. These points are mainly in the PEARL HARBOR-HONOLULU Area, in the WAIALUA-HALIEWA Area, and inland. The railroad along the coast is subject to attack by aircraft, gun fire from ships and by landing men under cover of darkness to destroy sections with high explosives. Such action on our part should be taken if we feel assured that any damage inflicted on the railroad will not later be to our own disadvantage. Damaging this road prior to the demonstration on 10 February might prevent or delay the movement of troops and mobile defense artillery from the northern area to the southern area, which is one of the chief purposes of the demonstration. We therefore conclude that it would be better not to damage this railroad prior to the main attack and to leave all advance operations in respect to the damage of communication centers and railroad junctions to the aircraft in accordance with decision previously made.

CONSIDERATIONS OF TIME TO BE KEPT.

At SAN PEDRO zone 8 Time is kept. At PEARL HARBOR zone 10 $\frac{1}{2}$ Time is kept. This difference of 2 $\frac{1}{2}$ hours is too great and would cause too much inconvenience to designate one zone Time for all forces in whatever area they may be operating. While we do not customarily keep a mid zone Time, it is believed that in this case those vessels operating in the HAWAIIAN Area should keep the same Time as is customary there as this will simplify the consideration of the operations during the critique following the maneuvers. We therefore make the **AUXILIARY DECISION**:

- (x) To keep Zone Time except that vessels within the circle of five-hundred miles from PEARL HARBOR will keep zone ten and one-half Time.

COMMUNICATION CONSIDERATIONS.

Radio communication should be kept to a minimum and should be excluded entirely when by its use the enemy may locate forces which are intended for making surprise attacks. This is particularly applicable for those forces which are due for early arrival in the area of operations and those which, if located, will be subject to submarine or surprise air attacks. After the initial surprise attacks which give the enemy the information that we are operating in the vicinity, all information that will be of value to the Commander-in-Chief or the Task Force Commanders should be sent out. Submarines operating secretly should depart from their observation positions prior to sending radio messages.

We make the **AUXILIARY DECISION**:

- (y) To reduce radio communication to the minimum consistent with the carrying out of the prescribed operations, excepting that after operations begin in the HAWAIIAN Area, information of value should always be transmitted unless such action would unduly endanger the sending ship. Submarines will not transmit messages when near their secret observation stations.

For extended operations it is always desirable to have a number of designated points which may be used for rendezvous purposes or reporting of positions. By having such points designated before hand it eliminates the necessity of reporting position by Latitude and Longitude thereby giving the enemy a better opportunity to compromise our code, and enables the position of any ship to be communicated by giving her distance and bearing from any of the designated points. Such procedure is not applicable of course in making reports during tactical scouting. The **AUXILIARY DECISION** is made:

- (z) To designate a number of points between SAN PEDRO and OAHU for the purposes of reference in reporting positions and in making rendezvous, and to direct all forces, except during tactical scouting, to make position reports by distance and bearing from the nearest designated point.