

FRENCH-INDO-CHINA

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I.S.T.D./F/418A (Restricted)

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SUPPLEMENT TO I.S.T.D./F/418

INDO-CHINA

THE CAM RANH - SAIGON AREA:

KUA TIEU to MUI KHEGA

(SOUTH OF MY THO - NORTH OF NHA TRANG)

COAST, BEACHES AND EXITS

INTER-SERVICE TOPOGRAPHICAL DEPARTMENT

August 1944

RESTRICTED

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I.S.T.D. F/418 (Restricted)

LIST OF PLANS

August 1944

Plan No.	Title	Date
1	South-east Indo-China: Geology (1:500,000)	To follow
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3A	South-east Indo-China: Roads and Railways in relation to Beaches and Landing Places (1:400,000)	July 1944

Inter-Service Topographical Department

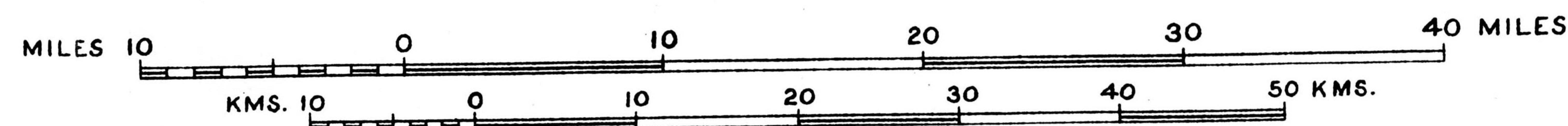
August 1944

INDO-CHINA

S. E. AREA

ROADS AND RAILWAYS IN RELATION TO BEACHES AND LANDING PLACES

Scale 1: 400,000

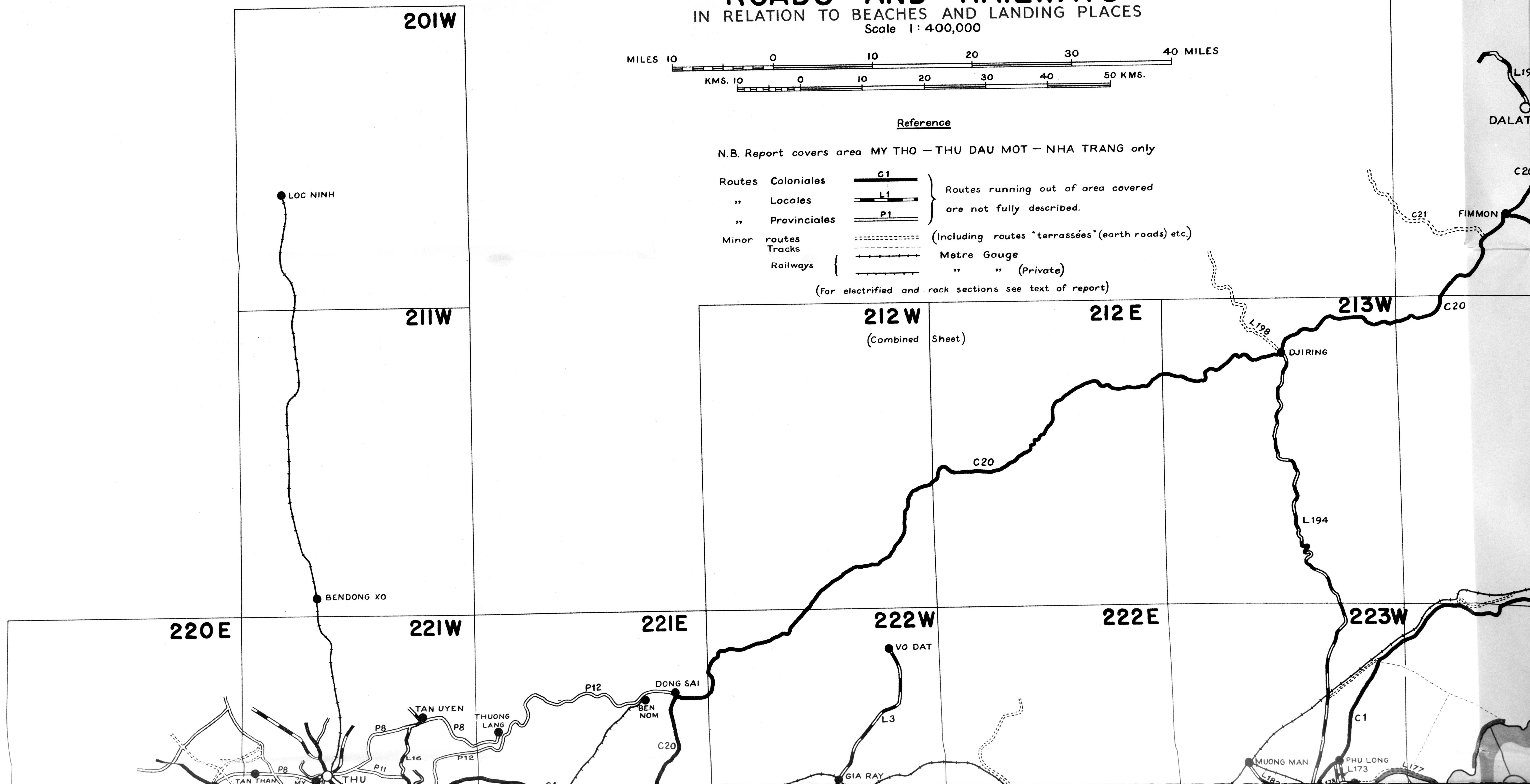


Reference

N.B. Report covers area MY THO - THU DAU MOT - NHA TRANG only

Routes	Coloniales		C1	} Routes running out of area covered are not fully described.
"	Locales		L1	
"	Provinciales		P1	
Minor routes				(Including routes "terrassées" (earth roads) etc.)
Tracks				Metre Gauge
Railways				" " (Private)

(For electrified and rack sections see text of report)



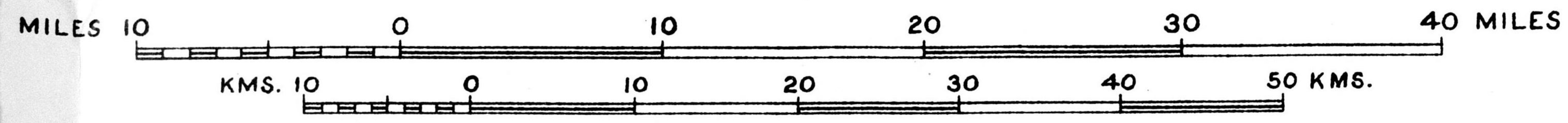
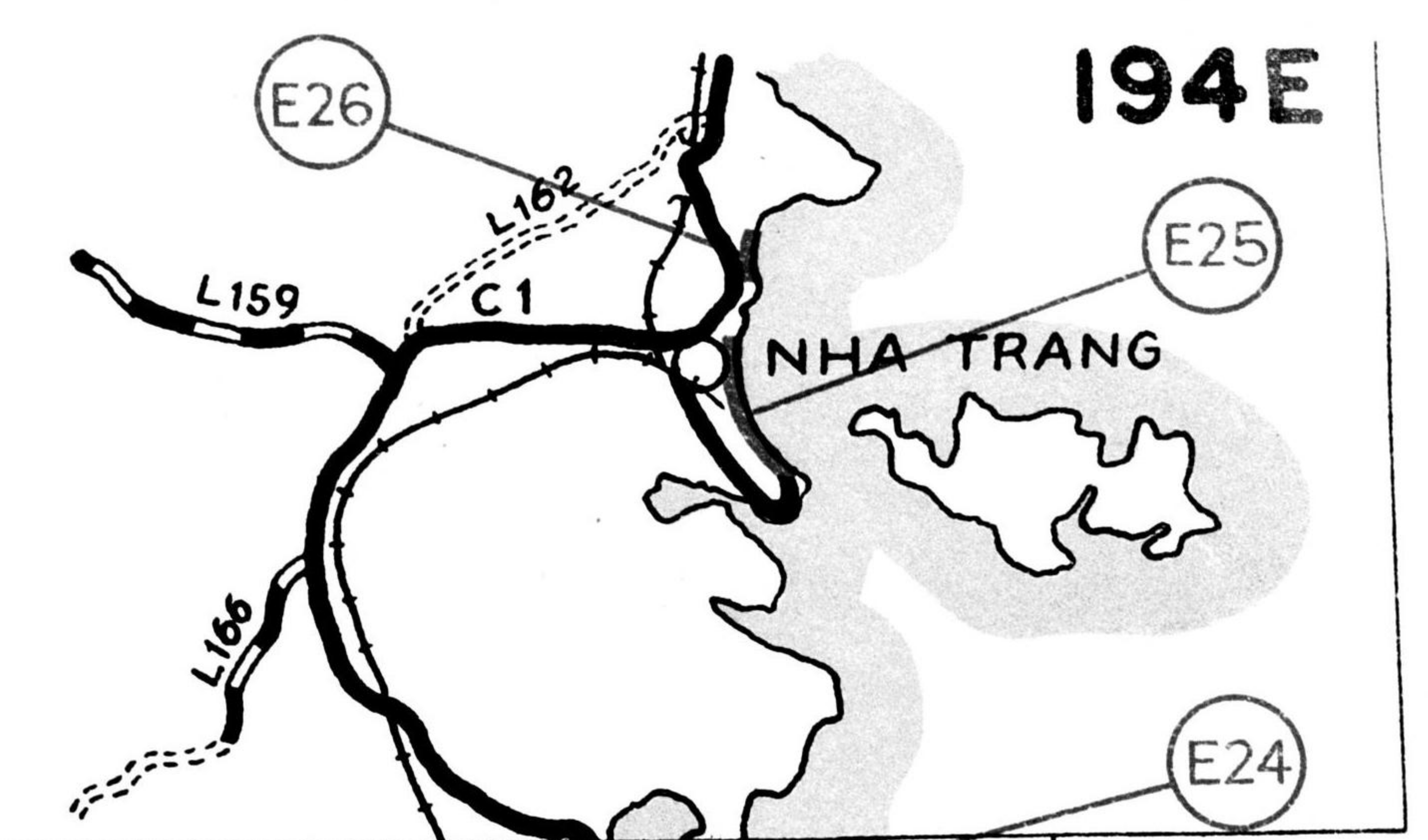
INDO-CHINA

S. E. AREA

ROADS AND RAILWAYS

IN RELATION TO BEACHES AND LANDING PLACES

Scale 1:400,000

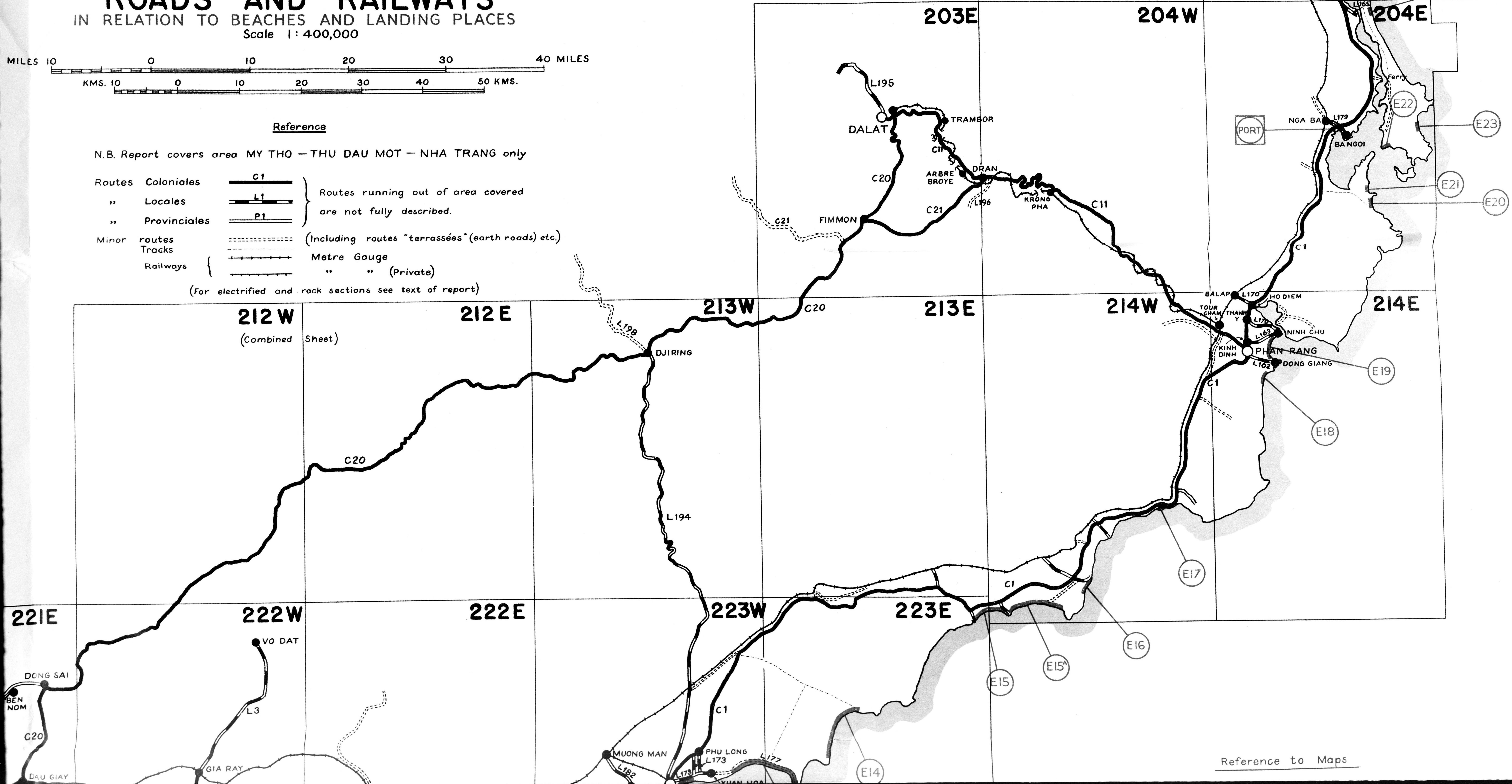


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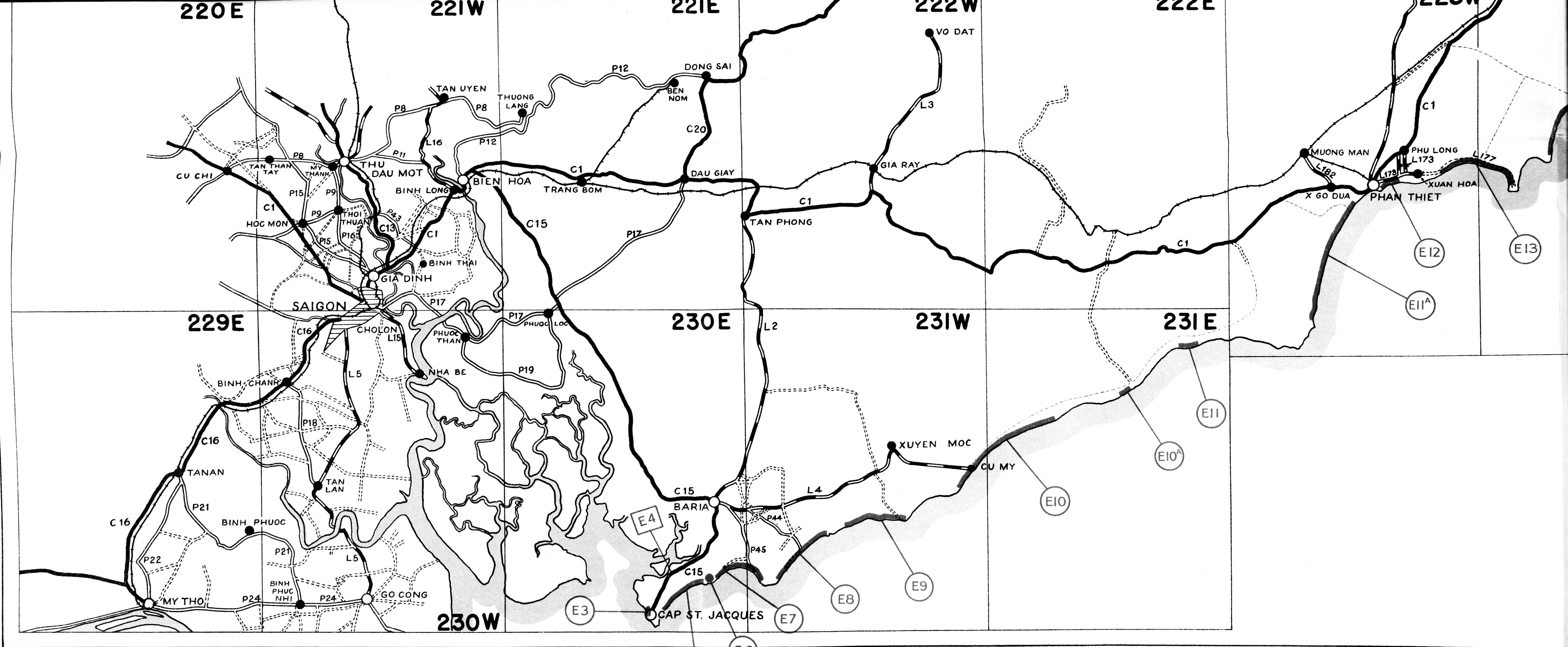
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Routes Coloniales		} Routes running out of area covered are not fully described.
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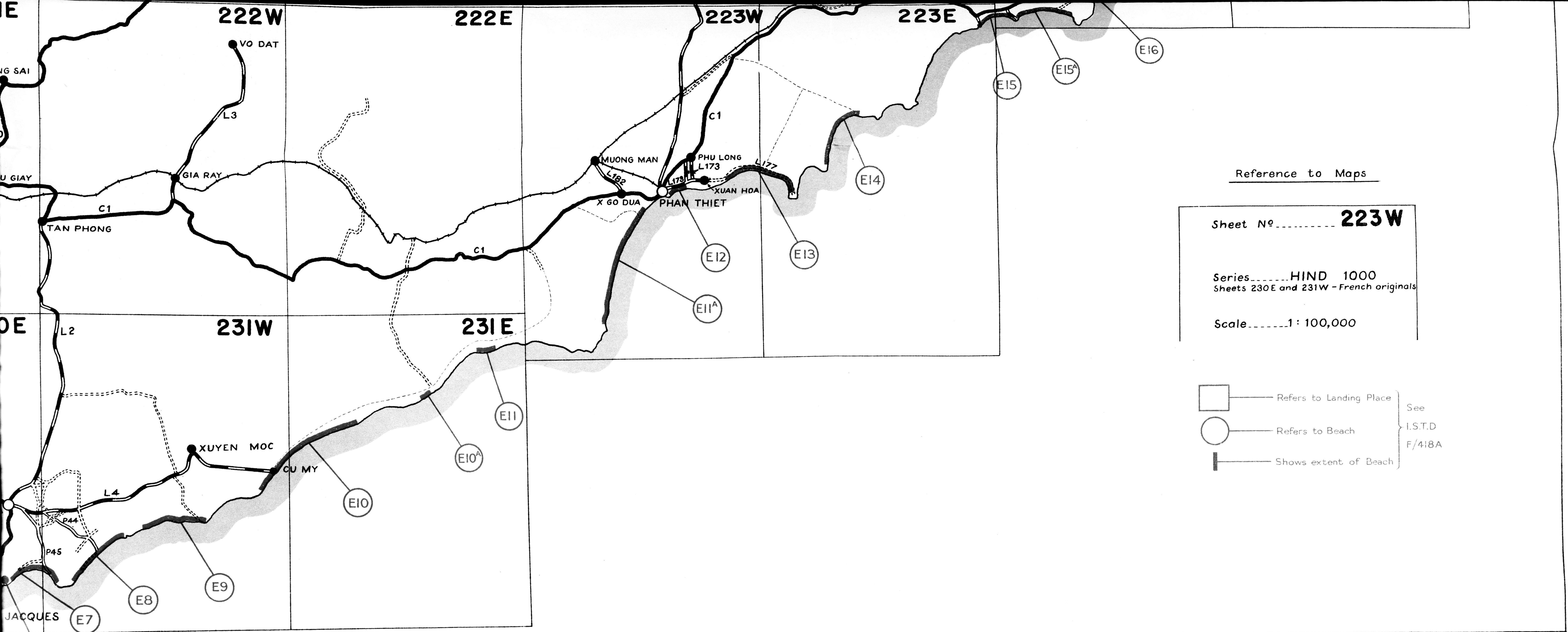
(For electrified and rack sections see text of report)



Reference to Maps



Printed under the Superintendence of Vice-Admiral Sir John Edgell, K.B.E., C.B., F.R.S., Hydrographer.






Reference to Maps

Sheet No. **223W**

Series **HIND 1000**
 Sheets 230E and 231W - French originals

Scale 1 : 100,000

-  Refers to Landing Place
 -  Refers to Beach
 -  Shows extent of Beach
- } See
I.S.T.D
F/418A

Printed under the Superintendence of Vice-Admiral Sir John Edgell, K.B.E., C.B., F.R.S., Hydrographer.

Compiled and drawn by Inter-Service Topographical Department

I.S.T.D. F/418 A (RESTRICTED)

SUPPLEMENT TO I.S.T.D. F/418:

I N D O - C H I N A

KUA TIEU TO MUI KHE GA:

Coast, Beaches and Exits

This report supersedes I.S.T.D. Report
F/218 as far as concerns the subject and area
covered.

C O R R E C T I O N

In I.S.T.D. F/418, p. 1, Introductory Note, second paragraph,
and I.S.T.D. F/418A, Introductory Note, second and fourth
paragraphs,

for I.S.T.D. F/496

read B.R. 877 U/13

SUPPLEMENT TO F/418
INDO - CHINA
MY THO TO MUI KHEGA
COAST, BEACHES AND EXITS

INTRODUCTORY NOTE

This report is issued as a supplement to I.S.T.D. Report F/418, which deals with Terrain and Movement in the area My Tho - Thu Dau Mot - Nha Trang. This report (F/418 A) describes the coast, beaches and landing places, exits from selected beaches, and anchorages in the area covered by F/418. These beaches and exits are marked on Plan 3A (dated July 1944) which is an amended version of Plan 3 (dated May 1944) of I.S.T.D. F/418; Plan 3A is issued with this report, to be inserted in F/418.

A report on the Coast, Beaches and Landing Places of Southern Indo-China (from the Siamese frontier to Qui Nhon) will be issued as I.S.T.D. F/496, and will contain all the information given in the present report together with more detailed plans.

Roads are referred to in this report (F.418 A) by the French official numbering as used in report F.418 and in Plan 3A. For details, see F.418, pages 39-40.

Beaches and Landing Places are numbered as in the forthcoming report F.496. Landing Places Nos. E.1 and E.2 are outside the area covered by this report, so that the Beaches and Landing Places here dealt with are numbered from E.3 onwards.

Coast Report

Reference: Admiralty Charts 1016, 1261, 1263, 2660A, 2661A,
 F.024, 3028, 1008, 264.
 French Government Charts; F.5495, F.5695,
 F.5739, F.5564.
 Maps: Carte d'Indochine; 1: 100,000, Sheets
 230 E, 231 W.
 HIND 1000; 1: 100,000, Sheets 231 E, 223 W,
 223 E, 214 W, 214 E, 204 E, 194 E.
 Plan: 3A.

INTRODUCTION

This report covers the coast from the Kua Tieu ($10^{\circ}16'N.$, $106^{\circ}45' E.$) to Mui Khe Ga ($120^{\circ}18'N.$, $109^{\circ}13' E.$), being the coastline of the area described in I.S.T.D. F/418, to which this report is a supplement.

The coastline is described under two areas :-

- Area (i) Kua Tieu to Cape Padaran;
- Area (ii) Cape Padaran to Mui Khe Ga.

General Notes

The coastal area included between the entrance to the Kua Tieu, one of the mouths of the Mekong river, on the west and Mui Khe Ga, Nha Trang Bay, on the east comprises a small portion of Cochin China and a considerable extent of the south and south-eastern coasts of Annam.

The former section covers the delta region of the Mekong and Saigon rivers and their many mouths. The land in the vicinity of these is low, covered in parts by mangroves and subject to frequent changes from the accumulation of the alluvial deposit brought down. The Mekong delta has a relatively small area of mangrove, and a high proportion of area under cultivation; that of the Saigon is an alluvial flat intersected by numerous rivers and streams. On the Mekong are the towns of Pnom Penh, the ancient capital of Cambodia, and My Tho, about 180 and 30 miles from the sea respectively. Saigon, the most important town in Indo-China, lies about 35 miles from the mouth of the Saigon river.

From Cap. St. Jacques to Cape Padaran the coast is composed of broad bights and bays separated by high promontories. The whole stretch is bordered by large sand dunes. The interior, until the Annam border is reached, consists of extensive areas of marsh, swamp and paddy, which give place to low-lying land intersected by small rivers with isolated hills about 6 to 8 miles from the coast. Near Cape Padaran the mountains approach the coast closely, with large expanses of forest land inland.

Northward from Cape Padaran, the coast becomes rugged and broken. Peninsulas with granite headlands fringed by cliffs, and with off-lying rocky islets, enclose deep water inlets providing good harbours with sheltered anchorages. Inland, marshy plains are backed by a chain of mountains, densely wooded, running parallel to the coast.

Communications generally are good. On the west they are confined to the waterways and canals which, connecting with the principal rivers, link up all parts of this low-lying district. There are only two rivers open for navigation to deep-water ships, the Mekong and the Saigon. Smaller rivers have shallow bars which restrict their use to local craft. On the south and

east, the railway from Saigon to Hanoi runs parallel to and, for long distances, close to the coast, with the main motor highway, Route Coloniale I (C 1), close at hand and, in the Saigon area, with many secondary connecting roads. These link up the principal towns in southern Annam, where densely wooded mountainous country would otherwise make communications difficult and impossible (See Plan 3A).

Beaches and Landing Places

Mekong and Saigon Deltas.

In the Mekong and Saigon deltas there are no beaches or landing places, with the exception of Landing Places E.3 and #.4.

South Coast. Beaches E.5 to E.11.

There are many sandy beaches between Cap St. Jacques and Khe Ga Point, but all are fully exposed and would only be possible in calm weather. The best landings would appear to be Beaches E.5 and E.7 where the beaches are most favourable for successful landings and the exits are very good.

South-east Coast. Beaches E.12 to E.16.

These beaches are also fully exposed and landings would be subject to fair weather. Beach E.12 would appear to be the best landing.

East Coast. Beaches E.17 to E.26.

The eastern coast is mountainous with cliffy headlands forming sheltered bays with good beaches. Beaches E.19, 22, and 25 would appear to be the best landings.

Anchorage

There are few sheltered anchorages on the south coast of Cochin China and Annam, where the monsoons blow along the coastline, but some of these afford shelter during the S.W. monsoon. Anchorages also can be found at some of the off-lying islands. On the east coast of Annam there are many land-locked bays which provide secure and sheltered anchorage for the largest ships, during either monsoon, such as Kam Ranh and Nha Trang bays. See (c) Anchorages.

Weather as affecting landing operations (see also F/214, Climate)

The majority of the beaches between the mouths of the Mekong river and Cape Padaran are fully exposed to the prevailing winds and their use for landing operations would depend entirely on the weather conditions. Between Cape Padaran and Mui Khe Ga there are sheltered bays and harbours, though even in these, successful operations would depend in great measure on favourable weather.

Cochin China and Southern Annam have two distinct seasons, wet and dry; June to September the rainy season, with the S.W. monsoon and October to April, the dry, when the N.E. monsoon prevails. April and May are transition months when winds are light and variable. The summer or S.W. monsoon is not well established until June, does not burst with violence, as in India, and arrives less suddenly than the winter or N.E. monsoon. It blows regularly throughout June, July and August with variable force, seldom exceeding 5 on the Beaufort Scale, and, in direction, from the S.E. on the coast of Annam as far south as Cape Padaran, and from the SW. between that cape and Cap St. Jacques.

The N.E. monsoon is not in full force south of Lat. 20°N. until early in October and there is great variety in its direction, which is generally NE. in Laos and Northern Annam, but along the coasts of South Annam and Cochin China it blows parallel to the shore. This feature renders few beaches on the south Annam coast practicable for landings when it is at full strength. Its force, however, is not constant and though it may sometimes exceed force 7 on the Beaufort Scale it may fall below 4. Calm periods for as much as 2 or 3 days consecubively, may be anticipated at intervals in the winter months and opportunities for landing may occur from time to time. Typhoons are rare and when they occur it will be in November or December and seldom as early as October; they are accompanied by very heavy rain.

Land and sea breezes are regularly felt in April on the SE. coast of Cochin China. During the monsoons, the sea breeze combines with the prevailing wind during the day and, near the shore, a light land breeze is sometimes felt at night. Along the coast of Annam, land and sea breezes are fairly regular during the period of the S.W. monsoon. Wind dies away in the evening when the land breeze begins to be felt, which lasts until the morning. At noon the sea breeze springs up and continues during the day.

Fogs are infrequent off the southern coast of Annam and are more often met with on the northern coast. At Cap St. Jacques and along the coast of Cochin China and Cambodia fog is unknown.

The rainfall is generally plentiful - September and October are the wettest months on the coasts of Cochin China, but northward of Cape Padaran the heaviest rainfall is during the first part of the N.E. monsoon and on the Annam coast from October to December.

Tides and Currents

In the China Sea the tides are of a predominantly diurnal character and the principal changes follow the moon's declination rather than the angular distance between the sun and moon. This is the case on the coast of Annam where the tides are very irregular and vary especially with the declination of the moon; they are sometimes diurnal and at others, semi-diurnal. In Kam Ranh bay and Nha Trang bay there is only one High Water daily.

(i) Tidal Streams

Between Khe Ga Point and Lagan Point the tidal streams are only felt along the coast during calms. The ebb sets north-east and the flood south-westward, parallel to the coast.

(ii) Currents

The main currents of the China Sea are the N.E. and S.W. monsoon drifts produced by those monsoons.

From November to January, when the N.E. monsoon is at its height, a well marked and fairly strong current flows down the coast of Annam in a direction west-south-west to south-south-west, at a speed of about 16 miles a day, though speeds up to 2 knots may be experienced.

From May to July during the S.W. monsoon an equally well marked current flows in a reverse direction, but only at a rate of 7 miles a day.

During the N.E. monsoon the current sets south-westward towards the banks fronting the Mekong delta, over which there is then a considerable sea. The direction of the current varies and its rate is sometimes as much as 40 or 50 miles a day. Near the delta the rate of this current increases with the flood stream entering the rivers and decreases with the ebb.

Sea and Swell

Sea conditions on that part of south and south-east coasts of Indo-China covered by this report are usually bad from mid October to mid March.

The south-east coast to westward of Cape Padaran is probably unsuitable for landings for 50% of the time from the middle of June to the end of August. Otherwise conditions generally good.

Sources of Information

1. Charts. Admiralty Charts: 1016, 1261, 1263, 2660 A, 2661 A, F.024, 3028, 1008, 264.
French Government Charts: F.5495, 5695, 5739, 5564.
2. Maps. Map references in this report are to Carte d'Indochine, 1: 100,000, reproduced by Survey of India as HIND 1000, 1: 100,000, 1942, which covers the whole area dealt with in this report except for the coast between 10°23'N., 106°52½'E. and 10°35'N., 107°35'E. (Area (i), Beaches and Landing Places E.3 to E.9). For this area only French original ungridded sheets (230 E. and 231 W) were available.
3. Sailing Directions: China Sea Pilot Vol. I: Instructions Nautiques Mers de Chine, Vol. I.

Area (i) The Kua Tieu (10°16'N., 106°44'E.) to Cape Padaran (11°22'N., 109°1'E.)

Admiralty Charts: 1016, 1261, 2660 A, 1263.
French Government Charts: F.5495, F. 5695.
Maps: Carte d'Indochine, 1: 100,000, Sheets 230 E, 231 W,
HIND 1000, 1: 100,000, Sheets 231 E, 223 W, 223 E, 214 W.

(a) Description of Coast

The Kua Tieu (10°16'N., 106°44'E.)

The Kua Tieu, the north-easternmost mouth of the Tieu-Kiang branch of the Mekong is used by vessels proceeding to the port of My Tho (Mitho) and beyond. It is navigable all the year for vessels of 10 ft. draught of 700/800 tons as far as Kratie, and to Pnom-Penh by vessels of 1,500 tons. In the rainy season (August-October) the permissible draught is 16 to 19 ft. The entrance lies between the north-easterly extreme of the island of Kulao Loi Kwan and Pointe du Mirador (10°16'N., 106°45'E.) about 1,500 yds. north-eastward. On the north side of the entrance is Norodom bank, which dries 3 ft. on its southern edge extending south-eastward of Pointe du Mirador for about 3½ miles, and on the south side a similar sand bank extends eastward of Kulao Loi Kwan for the same distance. Depths of less than 3 fathoms extend further to the south-east for about 9 miles, with many shallow banks on which the sea breaks heavily. Opposite the light structure on Pointe du Mirador the channel is obstructed by fish traps and large isolated fish stakes, invisible at night, which constitute a danger to navigation; above these obstructions navigation is said to be simple. There is a depth of 8 ft. at L.W. over the bar, but vessels should not enter without local knowledge.

Tides: The ebb stream in the rainy season attains a rate of 3 to 4 knots, bringing down a quantity of floating matter. At other times the rate is from $1\frac{1}{2}$ to $2\frac{1}{2}$ knots at springs, the ebb being stronger than the flood.

Springs rise $11\frac{1}{2}$ ft.; neaps rise $9\frac{1}{2}$ ft. at L.W.

Currents: During the N.E. monsoon the current sets south-westward towards the banks fronting the Mekong delta, over which there is then a considerable sea. The current varies in direction from WSW. to SSW., and its rate, which is greatly influenced by the force of the wind, is sometimes as much as 40 or 50 miles per day. Near the delta the rate increases with the flood stream entering the rivers, and decreases with the ebb.

SAIGON RIVER

The delta of the Saigon river lies in a bay which is entered between Pointe du Mirador ($10^{\circ}16'N.$, $106^{\circ}45'E.$) and Cap St. Jacques ($10^{\circ}19'N.$, $107^{\circ}05'E.$) about 20 miles east-north-eastward. The delta is formed by many islands separated by rivers or canals which are inter-connected. On the north-western side of the bay is the mouth of the Song Soirap, and close eastward of it, that of the Kua Dong Tranh. On the north-eastern side is Ganh-Rai Bay, into which the main Saigon (Don-Nai) river and several smaller rivers discharge their waters.

The main Saigon river rises about 80 miles north-westward of Cap St. Jacques and pursues a winding course as far as Saigon which, with its commercial port of Cho-Lon, is about 35 miles north-westward of the same cape. It is joined by the Dong-nai (Don-Nai) river about 4 miles south-eastward of Saigon and at Fami point, 4 miles lower, the river divides into two branches, the western being the Song Soirap and the eastern the Saigon (Don-Nai) river, which flows through the middle of the delta into Ganh-Rai bay.

The main Saigon (Don-Nai) river is the waterway usually followed by sea-going vessels and these, up to 656 ft. in length, can proceed to Saigon, whilst those with local knowledge can ascend the Dong-Nai river to within 6 miles of Bien-Hoa.

The river enters Ganh-Rai bay between the shoals at the south end of Kulao Fu Loi and those on the north-east of Kan-gio point, with the least depth on the bar, about 2 miles wide, of 20 ft. at L.W. with mud bottom.

In the fairway up the river to Saigon there was a least depth (in 1934) of 19 ft. in the channel at Coral Bank (though the channel was formerly reported as dredged to 23 ft.), with a bottom chiefly of soft mud, but there are some patches of sand and coral.

Tidal Streams: In the entrance the tidal streams run strongly, but are probably less in strength than at Saigon, the ebb lasting longer than the flood.

At Saigon the tidal streams which are fairly regular at springs, run at about 2 knots, reaching 4 knots in the rainy season. The duration of slack water is very short, about 20 minutes or half an hour. The flood runs from about $1\frac{1}{2}$ to 2 hours after low water until $1\frac{1}{2}$ to 2 hours after high water at Saigon, which is approximately 2 hours after high water at Cap St. Jacques.

Tidal range, Saigon roadstead: Springs rise $12\frac{1}{2}$ ft.; neaps $10\frac{1}{2}$ ft.

Delta: Western part

The Song Soirap, though not generally used in peace-time as the principal waterway to Saigon, is now reported on reliable authority to be superior to that of the main Saigon (Don-Nai) river, hitherto more favourably regarded. It is stated that the depths shown in the public charts have been intentionally shown incorrectly and the true depths have not been disclosed. The channel is said to carry a minimum depth of 24 ft. throughout and cruisers of the French fleet of greater draught than the least depths shown in the chart have, at all times, made use of it.

But there is no other evidence in support of this statement and as the mud banks in the estuary of the river are continually changing, unless the channel is marked it will be impossible for deep water ships to negotiate the bar, the depths over which are constantly altering. One who has an intimate knowledge of these water has stated that he has never seen a steamship in the Soirap and it was only used by local sailing craft.

The Soirap is entered between Doi Ba Kai, a point on the mainland about $8\frac{1}{2}$ miles northward of Pointe du Mirador ($10^{\circ}16'N.$, $106^{\circ}45'E.$), and a point to the eastward 288° - $16\frac{1}{2}$ miles from Cap St. Jacques. The channel leading to the entrance, about $1\frac{1}{4}$ miles wide, lies between the shoals extending north-eastward of Norodom bank and the shoals which extend south-eastward from the eastern entrance point of the river for a distance of about 9 miles.

Soirap Bank, with least depth of 10 ft., lies near the extremity of these shoals, and a coastal mudbank which dries 4 ft. extends south-eastward of the eastern entrance with several shoal banks between it and Soirap Bank. According to the chart, in the fairway over the outer bar of the Song Soirap there are depths of 18 ft. and in the entrance of this channel isolated patches of 15 ft. only, but these soundings cannot be depended upon as correct. The bar is studded with fishing stakes and vessels should keep close to the fish traps which mark the course of the channel.

Delta: Eastern part

The eastern mouths of the Saigon river are approached between Cap St. Jacques and Kan Gio Point ($10^{\circ}24\frac{1}{2}'N.$, $106^{\circ}59'E.$), about 8 miles to the north-west, which is low, covered with brushwood and not easily seen. The ship channel lies between the cape and the South-West and Kan-gio Banks. Extensive sandy shoals which lie to the west and north-west of the cape, the former having a least depth of 14 ft. at L.W. and the latter drying 5 ft. in places. On the east side of the channel is the Ranza Bank, about $\frac{7}{8}$ mile westward of Cap St. Jacques with depths of 18 to 30 ft. at L.W. The least depth in the entrance of the channel is 26 ft., which increases from 7 to 12 fathoms north of the Ranza bank in the track recommended that leads northward into Ganh Rai Bay.

Cap St. Jacques is the southern extreme of an island on the western side of which are three steep hills, the first high land seen when approaching from south-westward and which, at a distance, appear as islands. Nui Vung Tan, (597 ft.) lies nearly one mile north-westward of Cap St. Jacques; Nui Hon Sup, (814 ft.) about $1\frac{1}{2}$ miles north-north-westward of Nui Vung Tan; and Nui Vung Mai (791 ft.), about one mile further to the north-north-west. These hills descend steeply to the sea with rocky bases and give no suitable landing places, but between the two southern hills lies Baie des Cocotiers with a wide sandy beach fronting the health resort of Ville du Cap (Beach E.3). There is anchorage for small vessels about one mile off the beach and for larger vessels off the high land to the northward. (See (c) Anchorages).

It is reported that the Japanese are developing a large fishing port at Binh Dinh on the Rach Ben Dinh to the eastward of Nui Vung Mai and wooden ships are being constructed in the vicinity. There is a road leading directly to Ville du Cap.

Tides: Springs rise 12 ft., neaps 10 ft.

Note: The unequal semi-diurnal tides at Cap St. Jacques have an important influence on navigation in the rivers and canals, and also on the discharge of drainage and flood waters from them.

Delta: Ganh Rai Bay

The entrance to Ganh Rai Bay is between Ganh Rai point, about 4 miles north-north-west of Cap St. Jacques and Kan-Gio point. The bay forms the central waterway of the confluence of the main Saigon river and five smaller rivers, the Song Kai Bap, Song Lai Lang, and Song Ben from the north and Song Cha Va and Song Dinh, which is navigable to the town of Baria, on the east (Landing Place E.4). There are no suitable landing places on the surrounding shores of the bay, which are mud flats with mud shoals extending for some distance off them. There is anchorage during the north-east monsoon for small vessels on the east of the bay off the mouths of the Song Cha Va and the Song Dinh, and on the west in the channel of approach to the Saigon river. (See (c) Anchorages).

Tides: Springs rise $12\frac{3}{4}$ ft.; neaps $10\frac{1}{2}$ ft.

Coast: Cap St. Jacques to Khe-Ga Point. ($10^{\circ}42'N.$, $107^{\circ}59'E.$)

Between Cap St. Jacques and Cape Ti-Wan, about 10 miles east-north-eastward, there is a shallow bay the shores of which are low, backed by sand hills, and fringed by a drying bank about a quarter of a mile wide. Inland there are large areas of marsh, swamp and paddy, intersected by streams.

There are shoals extending for about 3 miles at each side of the entrance to the bay, to the south-eastward of Cap St. Jacques (including Formosa Bank, least depth 6 ft.), and to the south-south-eastward of Cape Ti-wan for about $3\frac{1}{2}$ miles.

Kua Lap, about $1\frac{1}{4}$ miles wide, debouches at the head of the bay, its bar fairway having a least depth of 2 ft. at L.W. The village of Kua Lap lies on the western side of the entrance and that of Phuok (Fuok) Tinh on the eastern side.

Landings could be made on the western beach about $1\frac{1}{2}$ miles to the northward of Cap St. Jacques (in support of landings in Baie des Cocotiers in the Saigon delta, and at Kua Lap for operations by boat up the river Kua Lap, which leads into Ganh-Rai Bay), and on the eastern side at Phuoc Tinh, or at the village of Ap Long about 2 miles to the north-westward of Cape Ti-Wan (Beaches E.5 to E.7).

Cape Ti-Wan is a hilly promontory having several peaks, the highest (1,115 ft.) lying $2\frac{1}{2}$ miles to the northward of the cape and $1\frac{1}{2}$ miles inland. On the eastern side the hills slope steeply to the shore, but on the western side the land is low and swampy with a motor road (P.45) running from the cape to the northward and to Baria.

Between Cape Ti-Wan and Tram Point, about 12 miles east-north-eastward, there is a bight fringed by a narrow drying bank, the eastern half of the bay being very shallow, depths of less than 3 fathoms extending to about 2 miles from the beach. The coast is backed by sand dunes, with swampy land behind.

The village of Cho (Sho) Luoi Re lies about $3\frac{1}{2}$ miles north-eastward of Cape Ti-Wan and, about $2\frac{1}{2}$ miles above the village, the Song Rai flows into the bay. Thuan Bien, a village, lies close westward of Tram Point. Landing could be effected in the western half of the bay at the village of Cho (Sho) Luoi Re, whence a metalled road (P.44) runs to Baria and to the north and east, and in the eastern half at Thuan Bien, whence a dry-weather road joins up with the main road (L.5) about 5 miles to the northward (Beaches E.8 and 9).

Off Tram Point, a low sandy projection backed by sand dunes, a number of detached shoals run to the south-south-eastward for about 7 miles, the southernmost known as the Ba Ke shoals. Cape Ba Ke, a hilly point about 4 miles north-eastward of Tram Point, lies close eastward of the boundary between Cochin-China and Annam. Rosslyn Rock, an outlying danger, with a depth of 2 ft. lies about 6 miles south-south-eastward of Cape Ba Ke. Between Cape Ba Ke and Mui Tan, about 11 miles to the north-eastward, the coast is low, wooded along the shore, and to seaward is fringed by a narrow drying bank. Landings could be made anywhere on this stretch of coast, but most advantageously at Cu My, about 3 miles northward of Cape Ba Ke, from which a metalled road (L.5) runs to the westward to Xuyen Moc (Beach E.10).

From Mui Tan the coast continues low and wooded to Mui Ho Lo, about $4\frac{1}{2}$ miles to the north-eastward, off which is a small islet and a sandy spit running to the southward for about 4 miles, with a least depth of less than 6 ft. at its base, about 1 mile eastward of the point. About 10 miles to the south-eastward of Mui Ho Lo is Britto Bank which has a rock with a depth of less than 6 ft. on its western side. It lies just within the 10 fathom line running about 10 miles off the coast between the Saigon river and Ke Ga Point to which it approaches closely. Vessels are advised not to pass between Britto Bank and the coast without local knowledge and, in thick weather, not to approach the bank in depths of less than 16 fathoms. From Mui Ho Lo the coast runs to the north-eastward to Deu point, about 8 miles distant, and is backed by sand dunes, with shoal water extending for about 1 mile from the coast. Hon Ba, a round islet, with a wooded summit, lies $4\frac{1}{2}$ miles north-eastward of Mui Ho Lo.

Landings could be made at Ham Tan about midway between Mui Ho Lo and Hon Ba, and also at Tam Tan close to the westward of Deu Point (Beaches 10 A and 11).

From Deu Point the coast curves very gradually to the eastward to Nui Nhum point, about 7 miles distant, forming a shallow bight, backed with sand dunes, and a smaller one between Nui Nhum and Khe Ga point, backed with white sand hills over 400 ft. in height. Off Nui Nhum there are some detached rocks which dry at L.W. and a shoal spit extending to the west-south-westward for about 3 miles. There are beaches in the larger bight which could be used for landing, but the exits are not good and Beach E.11 would seem to be the best landing beach.

Coast: Ke Ga Point to Cape Padaran. ($11^{\circ}22'N.$, $109^{\circ}1'E.$)

Ke Ga point is the extremity of a tongue of low land, the prolongation of a spur from Nui Ta Kou (2,273 ft.). Ke Ga Islet, on which was a conspicuous lighthouse, lies close southward of the point.

Inland from the coast to the westward of Ke Ga Point the country is mountainous, with several peaks ranging from 2,000 to 2,800 ft. Of these Nui Ta Kou is the most conspicuous, being isolated from any other high land.

From Khe Ga point the coast trends northward for about 13 miles and then turns eastward for 10 miles to Vinay Point forming Phan (Fan) Thiet Bay, in the centre of which the Song Ca Ti river flows into the bay. The town of Phan (Fan) Thiet stands on both banks of the mouth. The coast is backed by high white sand hills and dunes on the west and some red sand hills to the northward of Vinay point. The shore is fronted by a narrow bank of sand and landings, in fair weather, could be made anywhere on the stretch of coast between Ke Ga Point and Phan (Fan) Thiet (Beach E.11A). The bay provides anchorage in the south during the S.W. monsoon and on the north in the N.E. monsoon. Fishing nets may be found up to 10 miles offshore abreast Phan (Fan) Thiet Bay and Vinay Point. (See (c) Anchorages).

Phan (Fan) Thiet ($10^{\circ}55'N.$, $108^{\circ}07'E.$) is an important fishing port with a population of about 10,000 and is one of the principal ports for coastwise traffic. It is built on low land on both banks of the Song Ca Ti. The port is the eastern terminus of the highway to Djiring (L.194) and Dalat (C.20) and is on the main coastal highway from Saigon to the Chinese frontier (C.1). A branch railroad connects with the main coastal railroad to Saigon and Phan (Fan) Rang. The bay is entered between Ke Ga Point and Vinay Point, with irregular depths varying between 5 and 10 fathoms; the 5 fathom line lying about 3 miles off the coast in the northern part of the bay. There are no dangers until the mouth of the Ca Ti river is approached, with Enclume (Anvil) Rock, 15 ft. high, about $\frac{1}{2}$ mile to the south-westward. About 1 mile from the river mouth the depths decrease from 3 fathoms to about 1 fathom at L.W. in the entrance.

Tides: Springs rise 10 ft., neaps 8 ft.

Tidal streams: Between Ke Ga Point and Lagan Point the tidal streams are only felt along the coast during calms; the ebb sets north-eastward and the flood south-westward, parallel with the coast.

Anchorage. There is anchorage about 2 miles to the south-eastward of the river and vessels lighter their cargoes to the shore or the banks of the river. (See (c) Anchorages).

The best landing place is on the beach to the east of the river mouth. (Beach E.12).

From the mouth of the Song Cai about one mile to the eastward of the town, the coast trends to the eastward, backed by high sand hills with rocky fore-shore, to Mui Can Giay 3 miles distant. It then curves gradually to Vinay Point, making a small bay 5 miles long, with the village of Thien Khanh at its centre. It is backed by high sand dunes on the west and red sand dunes on the east.

Landing could be made at Thien Khanh from which tracks lead northward and westward connecting with the main high road (C.1) (Beach E.13).

Vinay Point is the extremity of a low wooded hill sloping steeply on the south, which is the southern end of a peninsula projecting nearly 3 miles. The point is steep-to on the east. Ile Tigre or Hon Lao, 81 ft. high, and grass covered, lies eastward of Vinay Point, separated from it by a channel nearly $\frac{1}{2}$ mile wide.

From Vinay Point the coast runs to the northward forming a small bay with Hon Rom (406 ft.) about $3\frac{1}{2}$ miles north-eastward. Between Hon Rom and Guio Point the coast is indented, with Mt. Guio, a conspicuous sandhill (770 ft.) close to the shore, about $4\frac{1}{2}$ miles west of Guio Point. Landings would be possible on sandy beaches anywhere on the south-west of Mt. Guio, but exits are not good as the beaches are backed by large sand areas, 2 miles in width, with dense forest in rear. (Beach E.14).

Between Guio Point and Lagan Point, 15 miles to the north-eastward the coast curves to the northward, forming Fan (Phan) Ri Bay, with the Song Luy entering the bay in the centre, having the village of Fan Ri at its mouth. There are depths of 7 to 8 fathoms in the centre of the bay and two detached shoals of $3\frac{3}{4}$ and $4\frac{3}{4}$ fathoms lying south-westward of Lagan Point at $5\frac{1}{2}$ and $6\frac{1}{2}$ miles distant. A shoal spit about $2\frac{1}{2}$ miles long extends to the south-westward from Lagan Point with depths of less than 3 fathoms.

The shore of the bay is fringed by a shallow bank about $\frac{1}{2}$ mile wide increasing to nearly a mile off the entrance to the Song Luy, which has a bar with a least depth of 3 ft. at L.W. and is only accessible to small craft with local knowledge. Fan (Phan) Ri village, on the east bank of the Song Luy, is on the main coastal roadway and about 5 miles distant from the Saigon-Hanoi railway line. Landing could be made to the east of the Song Luy where the coast is sloping and wooded. (Beach E.15). Troops should have little difficulty in reaching the main road (C.1) running parallel to, and about $\frac{1}{2}$ mile from the shore.

From Fan (Phan) Ri the coast curves to the eastward for $8\frac{1}{2}$ miles to Lagan Point and is bordered by sand dunes with flat low lying country inland to the north. The intervening bight is divided into two parts by a rocky point, on the western side of which is the village of Phu Duc, about 3 miles eastward of Phan Ri. Junks anchor off this point during the N.E. monsoon. The village of Trai Luoi is situated about the centre of the eastern bay from which a fair weather road runs to the northward and joins Route C.1. (Beach E.15A). Lagan Point is a narrow neck of land terminating a sandy belt of coastline from the northward. South-south-east of the point a coastal bank, with a depth of less than 10 fathoms over it, sand and coral, extends offshore for a distance of 13 miles. On this bank are several dangerous shoal heads. Althea Bank, with 7 fathoms over it, is the outermost of these shoals, lying about 12 miles south-south-eastward of Lagan Point. All of these banks are rocky and as there are . bamboo . fish traps on or near them vessels should give Lagan Point a berth of about 15 miles.

Padaran Bay is entered between Lagan Point and Mui Sung Tran about 15 miles north-eastward, with Cape Padaran a further 7 miles in the same direction. The coast between the two points is backed by mountains, Ka Na 313° - 6 miles from Mui Sung Tran attaining a height of 2,942 ft. This peak is at the southern end of a gap between the mountains and is only conspicuous from south-westward.

From Lagan Point the coast, bordered by sand dunes, runs to the northward for about 5 miles to the village of Long Huong at the mouth of the Song Long Soog. Landing could be made here. (Beach E.16). An area of cultivated paddy land about 2 miles wide runs inland from Long Huong to the westward for about 6 miles, and a branch metalled road runs from the village to the westward joining the Route Coloniale 1 (C.1) about a mile distant.

From Long Huong the sandy coast continues to the northward for 4 miles to Vinh Hao, it then trends to the north-eastward for 7 miles to Ka Na, a village on the eastern side of a narrow entrance to a lake. The coast is fringed by coral reefs in places and fronted by a shore bank $\frac{1}{2}$ mile wide.

Les Barillets, two rocky heads drying 6 ft. and which only break at high water during bad weather, lie about 2 miles north-westward of Mui Sung Tran and $\frac{1}{2}$ mile offshore.

Pulau Cecir de Terre is a small rocky and barren island 85 ft. high. It lies in the centre of the bay, surrounded by rocks and shoals, with Breda Bank having a least depth of 5 ft. lying half way between the island and Mui Sung Tran. These and a number of shoal depths render the centre of the bay an area to be avoided.

The bay is of importance, for the main coastal railroad between Saigon and Hanoi runs close to the shore about 1 mile westward of Ka Na, and also the main highway road from Saigon to the Chinese frontier (C.1). Both of these lead directly to the northward between the mountain ranges. This offers a vulnerable spot for landing operations, but there is no beach, and deep water close to the shore, so that landing could only be undertaken in calm weather (Beach E.17). There is anchorage southward of Ka Na. (See (c) Anchorages).

Cape Padaran ($11^{\circ}22'N.$, $109^{\circ}01'E.$) is steep and convex to seaward; high land extends south-westward of the cape as far as Mui Sung Tran. Of the peaks, Nui Deo Kat (Ca) (2,047 ft.) lies about 4 miles westward of Cape Padaran and 2 miles inland, and Nui Da Bak, (2,115 ft.), lies about 3 miles north-westward of Nui Deo Kat. The land near Cape Padaran appears isolated when approached from the south-westward or northward.

Off-lying Island

Pulau Cecir de Mer is situated 159° , - 40 miles from Lagan Point. It is an island about 3 miles long with two hills near its northern end; the south-western hill is 349 ft. and has a round top, the north-eastern, 294 ft. is conical with a jagged appearance.

A reef extends south-eastward of the island for about $1\frac{1}{2}$ miles and South Islet, 149 ft. high, is near the centre of the reef.

The sides of the island are fringed with shelving rocks and coral reefs and provide no suitable landing beaches. A number of shoal banks exist to the northward and north-westward of the island, the outermost of which is Holland Bank, of coral, with a least depth of 12 ft., lying about 16 miles to the north-westward.

Anchorage can be found during the monsoons on the north-east and south-west of the island, but the reef surrounding the island is steep-to. (See (c) Anchorages).

(b) Beaches and Landing Places.

Note: For Beaches and Landing Places E.3 to E.9 inclusive only the French original ungridded sheets 230 E. and 231 W. of Carte d'Indo Chine, 1: 100,000 were available. See Sources of Information.

No. E.3 Beach: Coconut Bay ($10^{\circ}20\frac{1}{2}'N.$, $107^{\circ}4'E.$) (Baie des Cocotiers)

Charts: Admiralty Charts 1016, 1261; French Government Chart 5495.

Plan : 3A.

Map reference: Carte d'Indo Chine, 1: 100,000, sheet 230 E (ungridded).

Location and surface: A sandy beach in the centre of Coconut Bay, between Nui Vung Tan and Nui Hon Sup, wooded hills $1\frac{1}{2}$ and $2\frac{1}{2}$ miles NNW. of Cap St. Jacques, and fronting Ville du Cap. During the SW. monsoon a heavy swell runs into the bay, but landing would be easy in the NE. monsoon.

Suitability for landing various arms: Suitable for landing all arms and M.T., but the beach is dominated by the two hills on either side.

Dimensions: 1,000 yds. long. The beach slopes gradually, and the depths shoal very gradually into the bay.

Gradient: L.W. line lies 100 yds. from H.W. line.
1-fathom line lies 250 yds. from L.W. line.
2-fathom line lies 500 yds. from L.W. line.

Charted gradient: L.W. line to 1-fathom line, 1: 125.
1-fathom line to 2-fathom line, 1: 125.

Approaches: The approach from the anchorage, about 1 mile off the beach, is quite clear. There are shelving rocks at each end of the beach and at the south end, close off the entrance point of the bay, there is a partially destroyed mole, covered at H.W., extending for about 600 yds. in a west-north-westerly direction, which affords shelter for landing during the SW. monsoon.

Tides: Springs rise 12 ft.; neaps rise 10 ft.

Exits: On to the sea front of Ville du Cap which is intersected by good roads in all directions. A metalled road (C.15) runs directly to Rach Dua to the NE. and a metalled corniche road runs round the two hills and Ganh-Rai point on the north of them.

Hinterland: Behind the town flat swampy land with paddy fields, divided and crossed by dykes and cuttings; a line of sand dunes runs to the NE. from Cap St. Jacques. It would be difficult for troops to move across country or to deploy off the roads.

Local resources: Provisions are plentiful at Ville du Cap. Drinking water is scarce and is stored in cisterns.

No. E.4 Landing Place: Rach Dua (10°24'N., 107°6'E.)

Charts: Admiralty Chart 1016; French Government Chart 5495.
Map reference: Sheet 230 E (ungridded).

Location: About 1 mile within the entrance of the Song Dinh on the southern bank of the river, and about 600 yds. to the eastward of the southern point of Kulao Tau.

Suitability for landing various arms: Jetty landing for infantry only. But M/T and infantry could be landed on the sandy beach at either side if necessary.

Access: From the anchorage off the mouth, the Song Dinh is entered between the northern extreme of Ben Dinh Island and the southern extreme of Kulao Tau, an island about $\frac{1}{2}$ mile east-north-eastward. A bank, which dries, extends westward of Kulao Tau for over a mile and its southern edge is marked by a beacon. The river bar has a least depth of 10 ft. at L.W. and is about $\frac{3}{4}$ mile wide.

Landing Facilities: Jetty, available in all weathers.

Depth at end of jetty: about 20 ft.

Tides: Springs rise 12 ft., neaps 10 ft.

Exits: There is a short metalled road running SE. from the jetty and joining the metalled road (from Ville du Cap) running NE. to Baria (C.15).

Hinterland: Low-flat, paddy land with sand dunes to the south.

No. E.5 Beach: Ti Wan Beach, Cap St. Jacques (10°22'N., 106°50'E. at centre)

Charts: Admiralty Charts 1016, 1261; French Government Chart F.5495.
Plan : 3A.
Map reference: Sheet 230 E (ungridded).

Location and surface: This is a sandy beach running from the rocks lying about 1,200 yds. to the NE. of Cap St. Jacques to the western entrance point of the Cua Lap.

Suitability for landing various arms: Suitable for landing all arms, M/T and A.F.V's.

Dimensions: 10,000 yds. long.

Gradient: The depths in the bay decrease very gradually from seaward.

L.W. line lies 300 yds. from H.W. line.

At southern end, 1-fathom line lies 200 yds. from L.W. line.

3- " " " 400 " " " "

At northern end, 1- " " " 1,000 " " " "

3- " " " 1,500 " " " "

Charted gradient:

Southern end: L.W. line to 1-fathom line, 1: 100.

1-fathom line to 3-fathom line, 1: 50.

Northern end: L.W. line to 1-fathom line, 1: 500.

1-fathom line to 3-fathom line, 1: 125.

Approaches: The beach would have to be approached from the SE. towards the centre and care taken to avoid Formosa Bank and other shoals extending for 3 miles to the south-eastward of Cap St. Jacques. There is a conspicuous wreck on these shoals about $2\frac{1}{2}$ miles from the cape. On account of these dangers the parent flotilla should not approach within the 10-fathom line which runs about 7 miles off the beach.

Tides: Springs rise 12 ft., neaps 10 ft.

Exits: The best place for landing will be at the south end of the beach where there is the terminus of a metalled road running to the north-westward and connecting with the motor highway leading into Ville du Cap (C.15). The remainder of the beach is backed by sand dunes and the only exit will be by the road at the southern end.

Hinterland: A strip of low sand dunes running parallel to the coast and in rear paddy-land crossed by roadways leading into Ville du Cap; there appears to be very little cover from air observation.

Local resources: Provisions are plentiful at Ville du Cap. Drinking water scarce; stored in cisterns.

No. E.6 Beach: Kua Lap ($10^{\circ}23\frac{1}{2}'N.$, $107^{\circ}9'E.$ at centre)

Charts: Admiralty Chart 1261; French Government Chart F.5495.

Plan : 3A.

Map reference: Sheet 230 E. (ungridded).

Location and surface: At the village of Kua Lap (Cua Lap) on the right bank at the mouth of the Kua Lap river - sand. This landing would be useful only if it was desired to use the Kua Lap as a waterway connection with Ganh-Rai Bay or Baria.

Suitability for landing various arms: For infantry only.

Dimensions: About 1,000 yds. of river bank.

Approaches: From the bay are all clear, but the bay is very shallow and the 3-fathom line lies about 1 mile off the mouth of the river, the least depth over the bar being 2 ft. at L.W.

Tides: Springs rise 12 ft.; neaps 10 ft.

Exits: By waterway to Baria or across the river to Phuoc Tinh with metalled roadway thence to the main road connections (C.15).

Hinterland: Swamp, marsh and paddy.

No. E.7 Beach: Phuoc Tinh ($10^{\circ}24\frac{1}{2}'N.$, $107^{\circ}13'E.$ at centre)

Charts: Admiralty Chart 1261; French Government Chart F.5495.

Plan : 3A.

Map reference: Sheet 230 E. (ungridded)

Location and surface: A sandy beach from Phuoc Tinh about $4\frac{1}{2}$ miles west-north-westward of Cape Ti Wan and extending to Mui Cum Thien, a headland one mile to the west of the cape; Phuoc Tinh is on the Kua Lap, which can be used as a waterway to reach Ganh-Rai Bay (See Beach E.6).

Suitability for landing various arms: Suitable for all arms, M/T, and A.F.V's.

Dimensions: 7,000 yds. long.

Gradient: The bay is extremely shallow and the sea shoals very gradually from about 4 miles offshore. There is a sandy foreshore about 400 yds. wide at the western end and 300 yds. at the eastern.

Western end:	The 1-fathom line lies 1,200 yds. from L.W. line.
	" 3- " " " 4,000 " " " "
Eastern end:	" 1- " " " 2,000 " " " "
	" 3- " " " 3,500 " " " "

Charted gradient:

Western end:	L.W. line to 1-fathom line, 1: 600.
	1-fathom line to 3-fathom line, 1: 700.
Eastern end:	L.W. line to 1-fathom line, 1: 1,000.
	1-fathom line to 3-fathom line, 1: 375.

Approaches: Are all clear from seaward, if the beach is approached from the southward. The depths below 7 fathoms decrease rapidly and parent vessels should not approach within this depth of water.

Tides: Springs rise 12 ft., neaps 10 ft.

Exits: Directly on to fair weather road at Phuoc Tinh on the west which connects with the provinciale road (P.45) from Mui Cum Thien at the western end of the beach, and at the village of Long Hai at the eastern end where there is direct access to an all weather road (P.45). This runs northward to Baria and eventually connects with the Route Coloniale 1 (C.1) (Saigon - Hanoi) at Tan Phong.

Hinterland: At the west end paddy land intersected by rivers with low-lying cultivated land to the north. At the east end sand dunes backing the beach with a narrow belt of cultivated land in rear and on the east the range of the Nui Baria hills of which Cape Ti Wan is the extremity.

No. E.8 Beach: Cho Luoi Re ($10^{\circ}25\frac{1}{2}'N.$, $107^{\circ}17\frac{1}{2}'E.$ at centre)

Charts: Admiralty Chart 1261; French Government Chart F.5495.

Plan : 3A.

Map reference: sheet 231 W. (ungridded).

Location and surface: Sandy beach from the eastern side of Cape Ti Wan to the western entrance point of Song Rai and fronting the town of Cho Luoi Re which would be the most favourable landing place for the M/T and A.F.V's.Suitability for landing various arms: Suitable for all arms, M/T, and A.F.V's.Dimensions: 11,000 yds. long.Gradient: L.W. line lies about 400 yds. from H.W. line.

At southern end: 3-fathom line lies 600 yds. from L.W. line.

At centre: " " " " 1,200 " " " "

At northern end: " " " " 2,000 " " " "

Charted gradient:

Southern end: L.W. line to 3-fathom line, 1: 100.

At centre: " " " " " " , 1: 200.

Northern end: " " " " " " , 1: 330.

Approaches: Quite clear if the beach is approached from the south-eastward avoiding the Pernambuco Rock and shoals extending nearly 4 miles to the south-eastward of Cape Ti Wan and the $2\frac{3}{4}$ and $4\frac{1}{2}$ fathoms patches about 4 miles offshore on the east of the approach. As the bay is very shallow and has many shoal patches parent vessels should not approach within the 10-fathom line.Tides: Springs rise $10\frac{1}{2}$ ft., neaps $8\frac{1}{2}$ ft.Exits: The coast is backed by sand dunes and there are no exits at the ends of the beach, but the centre directly fronts the town of Cho Luoi Re which has a provinciale road (P.44) running from the beach to the north-westward and connecting up with the main road system at Baria.Hinterland: At the southern end the hills of the Nui Baria range. From the centre to the northern end the beach is backed by sand dunes with low-lying paddy land in rear intersected by roadways. Cross country movement off the roads would be difficult.Local Resources: There is a post and telegraph office at Cho Luoi Re.No. E.9 Beach: Thuan Bien ($10^{\circ}25'N.$, $107^{\circ}24'E.$ at centre)

Charts: Admiralty Chart 1261; French Government Chart F.5495.

Plan : 3A.

Map reference: Sheet 231 W. (ungridded).

Location and surface: Sandy beach extending from Tram Point for 4 miles to the westward.Suitability for landing various arms: Suitable for landing all arms, M/T, and A.F.V's. The most favourable spot for landing M/T A.F.V's will be at the eastern end.Dimensions: 8,000 yds. long.

Gradient: L.W. line lies about 300 yds. from H.W. line.
 At western end: 1-fathom line lies about 800 yds. from L.W. line
 3- " " " " 4,600 " " " "
 In centre: 1- " " " " 1,800 " " " "
 3- " " " " 3,200 " " " "
 At eastern end: 1- " " " " 800 " " " "
 3- " " " " 1,000 " " " "

Charted gradient:

Western end: L.W. line to 1-fathom line, 1: 400.
 1-fathom line to 3-fathom line, 1: 950.
 Centre: L.W. line to 1-fathom line, 1: 900.
 1-fathom line to 3-fathom line, 1: 350.
 Eastern end: L.W. line to 1-fathom line, 1: 400.
 1-fathom line to 3-fathom line, 1: 50.

Approaches: The approach from the southward is quite clear, but the $2\frac{3}{4}$ and $4\frac{1}{2}$ fathom shoal patches lying about 4 miles to the southward of the western end of the beach should be avoided, and on the eastern side of the approach the Ba Ke shoals extending $5\frac{1}{2}$ miles to the southward from Tram Point. Parent vessels should keep outside the 10-fathom line.

Tides: Springs rise $10\frac{1}{2}$ ft., neaps $8\frac{1}{2}$ ft.

Exits: The beach is backed by a line of sand dunes running parallel to the coast and the exit is at the eastern end of the beach at the village of Thuan Bien. This is the terminus of a fair weather road which runs to the northward and connects with a Route Locale (L.4), which connects with the main road system at Baria.

Hinterland: A belt of sand dunes fringes the coast with low-lying cultivated land to the north-westward. To the north-eastward low-lying land with isolated hills about 3 to 5 miles from the coast. There is a plantation about 1 mile behind the centre of the beach.

No. E.10 Beach: Cu My

Charts: Admiralty Chart 1261; French Government Chart F.5495.
Plan : 3A.
Map reference: Carte d'Indo Chine, 1: 100,000, sheet 231 W (ungridded),
 HIND 1000, 1: 100,000, sheet 231 E (gridded).
 RK 246280 at centre.

Location and surface: Sandy beach extending from Cape Ba Ke to Mui Tan.

Suitability for landing various arms: Suitable for all arms, M/T, and A.F.V's. The most favourable spot for landing M/T and A.F.V's will be near the southern end opposite the village of Cu My.

Dimensions: 20,000 yds. long.

Gradient: L.W. line lies 400 yds. from H.W. line.
 Southern end: 3-fathom line lies 400 yds. from L.W. line.
 Centre: " " " " 800 " " " "
 Northern end: " " " " 1,200 " " " "

Charted gradient:

Southern end: L.W. line to 3-fathom line, 1: 66.
 Centre: " " " " " " , 1: 133.
 Northern end: " " " " " " , 1: 200.

Approaches: From seaward are all clear. The beach should be approached from the south-eastward and Rosslyn Rock $6\frac{1}{2}$ miles to the south-eastward of Cape Ba Ke given a wide berth.

Tides: Springs rise 10 ft., neaps 8 ft.

Exits: The beach is backed by a sandy strip on which landing would be easy. At about 3 miles from the southern end is the village of Cu My from which a Locale road (L.4) runs to the westward to Xuyen Moc about 8 miles distant. Cu My is at the mouth of a narrow creek, which runs for about 5 miles to the north-eastward parallel to the coast, about 200 yds. behind the beach. The best place for landing M/T and A.F.V.'s would be on the bank southward of the mouth of this creek. A cart track runs from Cu My northward along the coast behind the creek to Ham Thang at the northern end of the beach and to Ham Tan about 8 miles further which is the terminus of a fair weather road.

Hinterland: Sand dunes interspersed with paddy, and low-lying cultivated land in rear of Cu My. Undulating wooded land on the west and SW. A mountain range, Nui Be, lies about 10 miles to the northward.

No. E.10A Beach: Ham Tan

Charts: Admiralty Chart 1261; French Government Chart F.5495.

Plan: 3A.

Map reference: sheet 231 E. RK 500400 at centre.

Location and surface: A sandy bank $17\frac{1}{2}$ miles to the north-eastward of Cape Ba Ke fronting the village of Ham Tan, bounded on the NE. by the Song Dinh.

Suitability for landing various arms: All arms and M/T in calm weather.

Dimensions: 2,000 yds.

Gradient: The bank is steep-to.
The 1-fathom line lies about 400 yds. from L.W. line.
" 3- " " " " 900 " " " "

Charted gradient:

L.W. line to 1-fathom line, 1: 200.
1-fathom line to 3-fathom line, 1: 125.

Approaches: Are all clear from the anchorage. There is a shoal spit with least depths of 4 and 6 ft. extending to the southward for 4 miles from the south end of the beach, and the islet of Hon Ba about $1\frac{1}{2}$ miles to the north-eastward, but these will be given good clearance if the beach is approached from the south-eastward.

Tides: Springs rise $10\frac{1}{2}$ ft., neaps $8\frac{1}{2}$ ft.

Exits: On to a sandy bank fronting the village of Ham Tan whence a metalled fair weather road leads to the northward and after about 13 miles joins the main Saigon - Hanoi roadway (C.1).

Hinterland: Undulating land with low hills and small rivers and, about 9 miles to the northward, a mountain range, the Nui Khong.

No. E.11 Beach: Tam-Tan

Charts: Admiralty Chart 1261; French Government Charts F.5495, 5695.

Plan : 3A.

Map reference: sheet 231 E., RK 580470 at centre.

Location and surface: About $\frac{1}{2}$ mile westward of Deu Point. Sandy beach and bank.

Suitability for landing various arms: Suitable for infantry only on account of exits.

Dimensions: 2,000 yds.

Gradient: On the western half the beach is steep-to and on the eastern half it slopes steeply.

Charted gradient:

The 3-fathom line lies 1,600 yds. from L.W. line.

L.W. line to 3-fathom line, 1: 266.

Approaches: The approaches from seaward are all clear. Hon Ba, a small islet 127 ft. high, will be conspicuous about 3 miles to the westward. The 5-fathom line lies about 3 miles from the shore and the depths decrease gradually to the beach.

Tides: Springs rise 10 ft., neaps 8 ft.

Exits: By track joining fair weather road running to the south-westward and joining the Ham-Tan road, or to the northward on to the fair weather road joining the main Saigon - Hanoi road (C.1) about 10 miles distant.

Hinterland: The beach is backed by a belt of sand dunes, with a small area of paddy land on the NE. At the east end of the beach is the village of Tam-Tan, on the right bank of the Song Phan. There is some marshy ground in the estuary. To the northward undulating open forest land, with a mountain range, the Nui Khong, about 6 miles to the north-westward.

No. E.11A Beach: Tan Binh

Charts: Admiralty Chart 1261; French Government Chart F.5695.

Plan : 3A.

Map reference: sheet 223 W. RK 820630 at centre.

Location and surface: A sandy beach from Che Ka Point, $2\frac{3}{4}$ miles northward of Ke Ga Point to 1 mile below the southern entrance point of the Song Ca Ti.

Suitability for landing various arms: Suitable for all arms, M/T, and A.F.V's in fine weather only.

Dimensions: 22,000 yds.

Gradient: L.W. line lies 300 yds. from H.W. line. It is not possible to give any gradient for this beach as the 3-fathom line lies close to the coast except for a short distance at the northern end. The 5-fathom line lies about 1,300 yds. from the coast until off Tan Binh when it curves outward and runs from 2 to $3\frac{1}{2}$ miles distant to Vinay Point.

Approaches: All clear from seaward.

Tides: Springs rise 10 ft., neaps 8 ft.

Exits: There are no exits from this beach which is backed by sand dunes with a narrow belt of paddy land in rear. There are two or three villages on the coast and a number of tracks leading into the open forest to the westward.

Hinterland: Low-lying open forest land.

No. E.12 Beach: Phan (Fan) Thiet

Charts: Admiralty Chart 1261; French Government Chart F.5695.

Plan : 3A.

Map reference: sheet 223 W. RK 910736 at centre.

Location and surface: Sandy beach extending from the lighthouse at the end of the point on the eastern side of the entrance to the Song Ca Ti to the entrance of the Song Cai.

Suitability for landing various arms: Suitable for landing all arms, M/T, and A.F.V's.

Dimensions: 2,000 yds. long.

Gradient: L.W. line lies about 200 yds. from H.W. line.
3-fathom line lies about 800 yds. from L.W. line.

Charted gradient: L.W. line to 3-fathom line, 1: 133.

Approaches: From seaward are all clear and there are no dangers in the vicinity. Enclume (Anvil) Rock is well away to the SW. distant about 1 mile from the lighthouse point.

Tides: Springs rise 10 ft., neaps 8 ft.

Exits: On to the village of Hung Long with the terminal railway station and town of Phan Thiet only about $\frac{1}{2}$ mile distant. The branch railway joins the main Saigon - Hanoi system about 12 miles to the westward and the Route Coloniale 1 (C.1) runs through the town from the west and runs to the northward and north-eastward.

Hinterland: Large areas of paddy land to the north-east and west of the town, intersected by rivers and streams. Cross country movement off the roads, difficult especially for M/T. To the NW. open forest land with range of mountains about 14 miles distant.

Local resources: Provisions are plentiful. The Societé Franco-Asiatique des Pétroles had an oil storage depot here.

No. E.13 Beach: Thien Khanh

Charts: Admiralty Chart 1261; French Government Chart F.5695.

Plan : 3A.

Map reference: sheets 223 W. and 223 E. RK 065770 at centre.

Location and surface: A sandy beach between Mui Can Giay and Vinay Point.

Suitability for landing various arms: For infantry only on account of exits.

Dimensions: 11,000 yds. long.

Gradient: The beach slopes steeply.

L.W. line lies 100 yds. from H.W. line.

The 3-fathom line lies 2,000 yds. from L.W. line.

Charted gradient: L.W. line to 3-fathom line, 1: 333.

Approaches: The approaches from the centre of Fan Thiet Bay are all clear. A shoal spit with $2\frac{1}{2}$ fathoms extends about $1\frac{3}{4}$ miles to the westward of Vinay Point, but this is easily avoided if the beach is approached from the SW.

Tides: Springs rise 10 ft., neaps 8 ft.

Exits: On to a narrow belt of sand dunes bordering the coast with a track from Thien Khanh, in the centre of the beach, running to the westward near the coast and leading to Phan Thiet (see Beach E.12). Another track leads northward and joins the Route Coloniale 1 (C.1) about 9 miles distant.

Hinterland: The beach is backed by sand dunes, which are of red sand on the eastern side. To the north, flat open forest land with some steeply-sloping, isolated detached hills. Patches of cultivated land with some paddy, about 6 miles inland to the northward.

No. E.14 Beach: Binh Thien

Charts: Admiralty Chart 1261; French Government Chart F.5695.

Plan : 3A.

Map reference: sheet 223 E. SF 187830 at centre.

Location and surface: Sandy beach from Hon Rom northward to Binh Thien.

Suitability for landing various arms: Suitable for infantry only.

Dimensions: 10,000 yds. long.

Gradient: Beach shelves steeply at southern end and centre.

L.W. line lies 200 yds. from H.W. line.

At southern end and centre: 3-fathom line lies 100 yds. from L.W. line.

At northern end: " " " " 800 " " "

Charted gradient:

Southern end and centre, L.W. line to 3-fathom line, 1: 17.

Northern end, " " " " " " " , 1: 133.

Approaches: The approaches are all clear from seaward and there are no dangers near the beach, with the exception of a small islet at the northern end about $\frac{1}{2}$ mile below Binh Thien and about 400 yds. from the coast. This is above water and easily seen and avoided.

Tides: Springs rise 10 ft., neaps 8 ft.

Exits: The beach is backed by sand dunes and there is no exit except at the north of the bay at Binh Thien from which a track runs to the westward connecting with the Route Coloniale 1 (C.1) about 12 miles distant.

Hinterland: Broad belt of sand and sand dunes interspersed with strips of paddy, running parallel to the coast, about $1\frac{1}{2}$ miles wide. To the westward hilly country densely wooded and to the north undulating country with partly scrub and partly dense forest.

No. E.15 Beach: Fan (Phan) Ri

Charts: Admiralty Chart 1261, French Government Chart F.5695.
 Plan : 3A.
 Map reference: sheets 223 E, 214 W. SA 470055 at centre.

Location and surface: Sandy beach extending from the eastern entrance point of the mouth of the Song Luy and in front of the village of Fan Ri.

Suitability for landing various arms: Suitable for landing all arms, M/T and A.F.V's.

Dimensions: 6,000 yds.

Gradient: L.W. line lies about 400 yds. from H.W. line.
 The 3-fathom line lies 1,200 yds. off L.W. line. The soundings off the beach are very irregular. There are 15 ft. at the northern end and 2 ft. only at the southern end.

Approaches: The approaches from the anchorage in the bay, about 3 miles to the south-westward, are quite clear, but the beach should be approached from the SE. on account of the shoal depths at the south end and off the mouth of the Song Luy referred to above.

Tides: Springs rise 10 ft., neaps 8 ft.

Exits: On to sandy land backing the beach and the village of Fan Ri which lies on the main metalled coastal road from Saigon to Hanoi (C.1). The railroad passes about 5 miles to the northward.

Hinterland: Sandy area backing the beach with low forested land to the north and, further inland, hilly, densely wooded country. There are some salt pans at the east end of the beach.

No. E.15A Beach: Trai Luoi

Charts: Admiralty Chart 1261; French Government Chart F.5695.
 Plan : 3A.
 Map reference: sheet 214 W. SA 560068 at centre.

Location and surface: Sandy beach from Phu Duc to Lagan village about 1 mile northward of Lagan Point on the western side.

Suitability for landing various arms: Suitable for all arms, M/T, and A.F.V's.

Dimensions: 9,500 yds. long.

Gradient: The beach slopes steeply.
 L.W. line lies 100 yds. from H.W. line.
 At western end: 3-fathom line lies 1,200 yds. from L.W. line.
 At centre: " " " " 800 " " " "
 At eastern end: " " " " 1,600 " " " "

Charted gradient:
 At western end, L.W. line to 3-fathom line, 1: 200.
 At centre, " " " " " " , 1: 133.
 At eastern end: " " " " " " , 1: 266.

Approaches: The approaches from the anchorage off Fan Ri are all clear, but if approached from seaward the bay should be entered between the $3\frac{3}{4}$ fathom patch in the centre of Fan Ri Bay and the end of the shoal extending to the SW. for $2\frac{1}{2}$ miles from Lagan Point.

Tides: Springs rise 10 ft., neaps 8 ft.

Exits: On to a sandy belt bordering the shore. In the centre of the bay, at Trai Luoi village, is the terminus of a fair weather road running to the north-eastward and joining the Route Coloniale 1 (C.1) at Vinh Hanh about $3\frac{3}{4}$ miles distant. On the western side at Phu Duc there is a Locale metalled road joining the Route Coloniale 1 at a distance of about 1 mile.

Hinterland: A sandy belt about a mile wide backing the beach and to the northward undulating land with an area of cultivated land about 3 miles to the north-eastward. The Saigon - Hanoi railway runs about 5 miles to the north of the beach with a station at Tuy Tinh. There are hills rising to heights of up to 780 ft. between the road and the railway.

No. E.16 Beach: Long Huong, Padaran Bay

Charts: Admiralty Chart 1261; French Government Chart F.5695.

Plan : 3A.

Map reference: sheet 214 W. SA 658116 at centre.

Location and surface: A small sandy spit at the northern entrance point of the Song Long Soog and 500 yds. south of the village of Long Phuoc. This is merely a beach landing place.

Suitability for landing various arms: A small force of infantry only might be landed here.

Dimensions: 200 yds. long.

Gradient: The 3-fathom line lies 600 yds. from L.W. line.

Charted gradient: L.W. line to 3-fathom line, 1: 100.

Approaches: The approach from seaward should be made from the south-eastward and is quite clear. The shoals extending to the south-eastward from Lagan Point, of which Octant Bank 9 miles from the point is the easternmost, should be avoided, but they are well clear to the southward.

Tides: Springs rise 10 ft., neaps 8 ft.

Exits: On to a sandy spit at the northern entrance point of the Song Long Soog and close to the village of Long Phuoc from which a fair weather road leads across the river into Long Huong and there joins an all weather road which connects with the Route Coloniale 1 about 1 mile distant, and continues for 4 miles until it reaches the railway (Saigon - Hanoi) at Song Long Soon station.

Hinterland: Cultivated land to the northward of Long Huong with wooded hills country inland. To the south-westward low undulating land with small patches of cultivated land. Close northward of the beach there is a small plantation.

No. E.17 Beach: Ka Na, Padaran Bay

Charts: Admiralty Chart 1261; French Government Chart F.5695.
 Plan : 3A.
 Map reference: sheet 214 W. SA 781245 at centre.

Location and surface: Coastal bank, probably hard sand at a position about 2 miles to the westward of the village of Ka Na in Padaran Bay. This landing would only be possible in calm weather.

Suitability for landing various arms: Suitable for a small force of infantry only.

Dimensions: About 600 yds.

Gradient: The coastal bank is steep-to and estimated to be about 7 ft. above H.W. There is about 1 fathom at the edge of the bank at L.W. The 3-fathom line lies about 400 yds. off L.W. line.

Approaches: The approach from the anchorage to the westward of Mui Sung Tran is quite clear.

Tides: Springs rise 10 ft., neaps 8 ft.

Exits: On to the coastal highroad Route Coloniale 1 (C.1) and the main railway, Saigon - Hanoi, both of which run within a few yards of the coast.

Hinterland: There appears to be a small stream at the centre of the beach. Hills rise very steeply from the beach to heights of 860 ft. on the west and 1,020 ft. on the east. To the north-westward hilly and mountainous country with forests and to the north and north-eastward low-lying land with cultivated areas of flat land about 10 miles to the northward, through which the rail and highroad run to Phan Rang. On the SW., low-lying scrub and forest land with an area of cultivated land in the vicinity of Long Huong.

(c) Anchorages

Admiralty Charts 1016, 1261; French Government Charts, F.5495, F.5695.

Saigon River

After entering the Saigon river at Cap St. Jacques vessels can anchor off the coast of the high land at Ganh-Rai Point, in a depth of about 7 fathoms, mud, about one mile offshore. The swell is heavy during the S.W. monsoon, but the anchorage is excellent during the N.E. monsoon.

Small vessels will find a convenient anchorage about 400 yds. from the light structure on the mole in Coconut Bay with it in line with Nui Vung Tan lighthouse bearing 123°. During the S.W. monsoon a better anchorage will be found off the mouth of the Rach Dua, but local knowledge is essential.

During the N.E. monsoon, small vessels, with local knowledge can anchor off the mouths of the Song Dinh and Song Sha Va.

Vessels can anchor anywhere in the channel of approach to the Saigon river. The best anchorage during the S.W. monsoon is northward of Kan-gio point, in depths of from $6\frac{1}{2}$ to 7 fathoms. Vessels proceeding up the river Saigon to Saigon can anchor as convenient en route. Anchorage was prohibited except in an emergency, within a distance of 1 mile on either side of the sharp bends of the river or near the channel dredged through the Coral Bank, also between Fami Point and the Rach Doi.

Cape St. Jacques to Cape Padaran

In the first portion of the area between Cap St. Jacques and Ke Ga Point there are no recognised anchorages, and open anchorage would have to be selected off the beach at which a landing was to be made. Such anchorages would necessarily be some distance from the shore and much exposed in either of the monsoons, as the coast line runs NE. and SW. and would give little shelter.

In the second portion - Ke Ga Point to Cape Padaran there are several anchorages.

(i) Fan Thiet Bay ($10^{\circ}54'N.$, $108^{\circ}8'E.$)

In the S.W. monsoon a vessel can anchor with Ke Ga Point bearing 208° - 7 miles in 7 fathoms, sand. Anchorage off Fan Thiet may be obtained with the lighthouse bearing 314° - 2 miles in a depth of 26 ft., mud.

During the N.E. monsoon there is anchorage westward of Vinay Point off Thien Khanh, in $3\frac{1}{2}$ fathoms, sand.

During the S.W. monsoon there is anchorage off a fishing village in the bay eastward of Vinay Point in depths of $2\frac{3}{4}$ to 5 fathoms, but the anchorage is not secure.

(ii) Fan Ri Bay ($11^{\circ}07'N.$, $108^{\circ}32'E.$)

Good anchorage in 4 to 5 fathoms, sand, about $2\frac{3}{4}$ miles south-south-westward of the mouth of the Song Luy with Lagan Point 75° - $9\frac{1}{2}$ miles.

(iii) Padaran Bay ($11^{\circ}18'N.$, $108^{\circ}53'E.$)

During the N.E. monsoon anchorage may be obtained in 5 to 7 fathoms, sand, southward of Ka Na, and three-quarters of a mile offshore, with Mui Sung Tran bearing 94° - $1\frac{1}{2}$ miles.

(iv) Pulau Cecir de Mer ($10^{\circ}32\frac{1}{2}'N.$, $108^{\circ}56'E.$)

There is fair anchorage during the N.E. monsoon, off the sandy foreshore at the south-western and western sides of the island, in 13 to 16 fathoms, sand and shells. A better position is just southward of the south-western extreme in 10 to 14 fathoms, about $\frac{1}{2}$ mile off the coastal reef which is steep-to.

It is possible to obtain shelter from the S.W. monsoon off the north-eastern end of the island in 14 to 15 fathoms, but the bottom is rocky and the holding ground bad and it cannot be recommended as an anchorage.

Area (ii) Cape Padaran, $11^{\circ}22'N.$, $109^{\circ}1'E.$ to Mui Khe Ga,
 $12^{\circ}19'N.$, $110^{\circ}14'E.$

Admiralty Charts: F.024, 3028, 1008, 264, 1261, 1342, 2660 A,
 2661 A, 1263.

French Government Charts: F.5655, F.5739, F.5564.

Plan : 3A.

Maps : HIND 1000, 1: 100,000, sheets 214 E, 204 E, 194 E.

(a) Description of coast

Coast: Cape Padaran to Mui Khe Ga ($112^{\circ}19'N.$, $110^{\circ}14'E.$)

From Cape Padaran the coast trends northward for about 11 miles to the mouth of the Song Kinh Dinh. Close northward of the cape there is anchorage for large vessels during the S.W. monsoon (see (c) Anchorages). Song Hai, a village, lies about 3 miles northward of the cape and between this and a point about $4\frac{1}{2}$ miles further northward the coast is fringed by a coral bank, about $\frac{1}{4}$ mile wide in places. Between the point and the mouth of the Song Kinh Dinh the coast is fronted by a narrow bank of sand. Landing could be made here (Beach E.18). This stretch of coast is backed by a belt of sand dunes from 1 to 2 miles wide and, further inland, there is open forest and scrub with a mountain range behind, of which Nui Cha Bang (1,410 ft.), about $4\frac{1}{2}$ miles inland, is prominent on the north.

Phan (Fan) Rang Bay is entered between the mouth of the Song Kinh Dinh and Hon Do, a low peninsula, joined to the mainland by a narrow neck of land, about 6 miles east-north-eastward. On either hand there are dangers with a deep water channel about 1 mile wide between them. On the west a coral bank extends eastward from the mouth of the Song Kinh Dinh and on the east a line of shoals runs to the south-westward from Hon Do, with Chateaufrenault Bank lying at the extremity. When the bay is entered there are 6 to 8 fathoms in the centre and secure anchorages on the western side. (See (c) Anchorages).

The town of Phan Rang, which has a conspicuous church, lies on the left bank of the Song Kinh Dinh about 3 miles north-westward of its mouth, and is the centre of a large area of rice fields. It is a port of some importance and is connected to the important health centre of Dalat (on the Plateau du Lang Bian, about 50 miles distant) by road (C.11) and railway; the main line junction being at Tourcham about $3\frac{1}{2}$ miles north-westward of the town.

The Song Kinh Dinh has a coral ledge at its entrance and is not navigable. Between its mouth and the town of Ninh Shu, about 3 miles to the northward, there is a small bight, with sandy foreshore and roads (L.163, L.162) at each end leading to Phan Rang. Landing could be made here (Beach E.19).

Ninh Shu stands on the western side of the entrance of a river which leads to Nai lagoon about $1\frac{1}{2}$ miles to the northward. It has a jetty which could be utilised for landing purposes concurrently with the beach landing in the adjacent bight.

On the eastern side of the entrance of the same river is Khanh Hoi, a village which in normal times had a light, the sectors of which cleared the dangers when entering Phan Rang Bay. Between Khanh Hoi and Hon Do, $4\frac{1}{2}$ miles to the eastward, the coast is fringed by a narrow drying bank, mostly coral, and inland is low-lying paddy land with several small villages.

From Hon Do the coast trends to the north-north-eastward and at a point about $1\frac{1}{4}$ miles from the cape there is a bight about 1 mile long, the shore of which is fringed by a coral bank 400 yds. wide. Lying about $\frac{1}{4}$ mile eastward of the northern end of this bight is Hon Shong (166 ft. high), the outermost of a group of islands which are joined to the mainland by a bank which dries. Bai Lua an islet (84 ft. high) lies about $4\frac{1}{2}$ miles to the north-north-eastward. Between Hon Shong and the southern entrance point of Vung Gang Bay, about $8\frac{1}{2}$ miles north-north-eastward, the coast is irregular and slopes steeply from the mountains inland. It is fringed with coral reefs and landing is impracticable. On nearing the bay the coast becomes steep-to and the depths are considerable close to the shore.

Vung Gang Bay

The bay is difficult to distinguish on account of the high mountains near it. The northern entrance point lies about $\frac{1}{2}$ mile north-north-eastward of the southern entrance point. Entrance Island (La Sentinelle) lies close off the western shore of the bay with three rocks lying close to the northward of the island. Above these rocks the bay is divided into two basins, the outer of which affords good protection at all times and is easy of access. The entrance to the inner basin, about 200 yds. wide, is about $\frac{1}{2}$ mile northward of Entrance Island and some rocks lie close off Pointe Tortue, the southern entrance point. The head of the basin is shallow and there is a village, Vinh Hi, on its western side at the mouth of a river. A pagoda stands on the north bank about 100 yds. inland. There are sandy beaches in both basins, but no exits inland, the bay being surrounded by lofty mountains and dense forest.

The bay affords secure and sheltered anchorage in the outer basin. (See (c) Anchorages).

Nui da Vaish, or False Cape Varella, lies nearly 2 miles east-north-eastward of the northern entrance point of Vung Gang Bay, with Da Toi (267 ft. high) an islet, close offshore, midway between the two. The cape rises steeply to a height of 1,374 ft. sloping regularly from the summit and is wooded down to the steep cliffs that front the sea. It forms the eastern extreme of a range of mountains, of which Nui Vung Gang (False Varella Summit), about 5 miles north-west of the cape, reaches a height of 3,119 ft.

Kam Ranh Bay: Approaches

Kam Ranh Bay is approached between Mui da Vaish and Kam Ranh Point, about 9 miles north-north-eastward. The bay, which consists of an outer and inner harbour, is one of the finest on the coast of Annam. It is available for all classes of vessels and offers secure anchorage at all times of the year both in its approaches and within the bay itself.

On the south-western side of the approach Hon Shut (Chut), 381 ft. high, bare and rocky, lies about 3 miles to the northward of Mui da Vaish with small islets on the north-west and south-east and Ba Tien Point about $2\frac{1}{2}$ miles to the north-westward of Hon Shut. Ba Tien is the extremity of a peninsula joined to the mainland by a narrow neck of land with Hong Trung (De La Prise Island) 129 ft. high, lying off it, 800 yds. to the north-eastward. Between Hon Shut and the mainland there is a narrow 2-fathom passage, available for junks.

To the southward of Ba Tien Point the coast forms a sandy bay, $1\frac{1}{4}$ miles long, off which is Hon Shut anchorage, with depths 7 to 9 fathoms about $\frac{1}{2}$ mile offshore. The bay is well protected from southerly winds. (See (c) Anchorages). Landing could be made on the beach during the S.W. monsoon, but the exits are not good and there is only a track through densely wooded hills to the south-east corner of Kam Ranh Bay. (Beach E.20).

The north-eastern side of the approach is formed by the mountainous end of a peninsula of which Kam Ranh Point is the eastern extreme. Nui Thanh Xuong, the summit of this peninsula, is 1,539 ft. and lies $2\frac{1}{2}$ miles west-north-westward of Kam Ranh Point. Off the southernmost point of this peninsula is Tagne Island separated from it by Petite Passe, about 200 yds. wide, with a least depth of 21 ft. in the fairway, which leads into Binh Ba Bay. There are several rocks and shoals bordering this passage, which should only be used by small craft with local knowledge.

Tagne Island, horse shoe in shape, is hilly and divided into two portions by a belt of low land. The summit (680 ft.), is on the south-western side of the island, the coast of which is composed of large boulders. The southernmost point is Pay Nom and between this and Hon Trung, 2 miles to the west-south-westward, is Grande Passe, the entrance to the outer harbour.

Outer Harbour

On the south-western side of Grande Passe there is a bight between Ba-Tien Point and Bai Tun Point, about $1\frac{1}{4}$ miles north-westward, which has a sandy beach three-quarters of a mile long where landing could be effected concurrently with that in the adjoining bay, but the exit is not good (Beach E.21).

Between Bai Tun Point and Mui Sopt, $2\frac{3}{4}$ miles northward, there are two bights with small sandy beaches, but above water rocks front the shores of these and there are no exits, which renders them unsuitable for landing purposes. Mui Sopt is the northern extreme of the range of mountains of which Mui Da Vaish is the eastern extreme and forms the southern entrance point to the inner harbour of Kam Ranh Bay. Rocher Doigt, (456 ft.), lies 800 yds. southward of the point. Mui Hon Lan, three-quarters of a mile to the east-north-eastward, is the northern entrance point and the passage between is known as Le Goulet.

Mui Hon Lan is the western extremity of the mountainous promontory of which Kam Ranh Point, previously mentioned, is the eastern. Between this and Mui Nam, the northern point of Tagne Island, 2 miles to the south-south-eastward is the entrance to Binh Ba Bay.

This is a well sheltered bay, 3 miles long by $1\frac{1}{2}$ miles wide, with depths of 8 to 11 fathoms. Its northern shores comprise two bights between Mui Hon Lan and Hon Xa, 177 ft., $2\frac{1}{4}$ miles to the east-south-eastward. The western bight between Mui Hon Lan and Bai Shot Point, 1 mile to the eastward, has a broad sandy beach and is suitable for landing (Beach E.22).

The southern end of the bay is formed by a bight in the northern coast of Ile Tagne, between Mui Nam and the north-eastern extremity of the island, about $1\frac{1}{4}$ miles eastward. Rocks above and below water border the shores of this bight and the head of it is shallow. There is a small sandy beach at the head fronting the village of Brinh-Ba, where landing could be made if required.

There is good anchorage, in 11 to 12 fathoms, in the area between Mui Nam and Mui Sopt and also in Brinh Ba Bay, which in peace-time was a prohibited area for vessels belonging to the French government. (See (c) Anchorages).

Coast: Kam Ranh Point to Cape Vert

Between Kam Ranh Point and a point about $1\frac{1}{2}$ miles northward the coast is high and cliffy. Ba-Dai Bay lies between the latter point and a point 2 miles to the northward. The bay is fronted by a narrow drying bank of sand and, inland, is backed by an extensive area of sand and scrub extending to Sandy Point in Kam Ranh Bay, 3 miles to the westward. Landing could be effected easily during the S.W. monsoon, but there are no exits except on to the sandy plain (Beach E.23).

Between the northern entrance of Ba-Dai Bay and Hon Nai, a bare and rocky point about $1\frac{1}{4}$ miles north-north-eastward, the coast is steep and cliffy with rocks lying close offshore. Anse de la Carcasse is entered between Hon Nai Point and a point about $1\frac{1}{4}$ miles north-north-westward. Its northern and southern ends are high and cliffy, but it has a small sandy bay, with above-water rocks close offshore, on its south-western side.

Nui Shut, (477 ft.), lies about three-quarters of a mile westward of the northern entrance point of Anse de la Carcasse and a short distance inland. During the S.W. monsoon, anchorage can be obtained northward of Nui Shut. The approaches to seaward have not been closely surveyed and the coast in this vicinity should only be approached with great caution. Dgiai (Thui Trieu) beach, lined with low sandhills and backed inland by a barren belt of sand and scrub, lies between the northern entrance point of Anse de la Carcasse and Mui Dong Ba, a point about 10 miles north-north-westward. It is a sandy beach 9 miles long separating the head of the Lagune de Thuy Trieu from the sea. The Lagune runs northward from the head of Kam Ranh Bay for about 12 miles, parallel to the coast and 1 to $2\frac{1}{2}$ miles inland. It has a track running along its eastern shore which affords access to the main road at the north end of the lagoon, which is marshy.

Landing would be possible on Dgiai beach at the northern end, where the sand belt between the lagoon and the coast is only about 1 mile wide. Nearby, on the western side of the lagoon, at a point where its width is only about 300 yds., there is the terminus of a metalled branch road (L.165) which joins the main Saigon - Hanoi road (C.1) about 2 miles to the north-westward. This beach is only suitable for landing infantry, for the troops would have to cross the neck of the lagoon, as above mentioned, before they could reach the road on the opposite bank (Beach E.24).

Off-lying Islets

Fishermen Isles (Iles des Pecheurs), are a group lying north-north-eastward of Hon Nai Point. Hon Nai, 361 ft. high, steep and sharp, with a white cairn on its summit, is the southernmost of the group and lies about $3\frac{3}{4}$ miles north-north-eastward of the point, with Vulcan Rock $\frac{1}{2}$ mile to the northward. Hon Ngoai (Ngai) is the largest of this group, its summit (331 ft.) on which is a white cairn, lies 2 miles northward of Hon Nai. Islets and rocks extend to north and south of the island. Castlereagh Bank lies $1\frac{3}{4}$ miles to $4\frac{1}{4}$ miles westward of Hon Ngoai with Bancs de Thui Trieu and du Tondu from 2 to 3 miles to the north-westward.

Vessels without local knowledge should not pass between Fishermen Isles and the coast.

Nhatrang Bay and approaches

This bay lies in the middle of a mountainous region of the coast between Dong Ba Point on the south and Khe Ga Point on the north. It is protected from seaward on the south-east by a group of islands, of which Lon Island is the principal, and on the north-east by an extensive coral shoal, the Grand Bank. It affords good anchorage and is of importance as the sea outlet for Khanh Hoa, the capital of the province, which lies on the Saigon - Hanoi railway and the main coastal road Route Coloniale 1 (C.1). It can be approached from the south, east, and north-east with deep water in each passage.

Southern approach

Five islands lie at the sides of this passage, two on the west and three on the east of which Lon Island is the largest. This has three mountain ranges connected by low isthmuses, the centre range (1,640 ft.) being the highest. The island is densely wooded and has steep cliffs in places. Mung Island (590 ft.) lies about three-quarters of a mile to the southward and Mot Island (328 ft.) $1\frac{1}{2}$ miles to the north-westward of the latter. About 700 yds. to the westward of Mot Island, is Lion Rock, with 12 ft. at L.W., lying on the edge of the fairway and the only danger in the passage.

On the western side, from Dong Ba Point to Chut Point, a hilly promontory (509 ft.) about $3\frac{1}{2}$ miles to the northward, the coast forms a bight fronted by coral reefs on the south and with the sandy estuary of the Cua Be river on the north. Tam Island (378 ft. high), lies 2 miles to the north-eastward of Dong Ba Point, with Mieu Island about 1 mile to the north-westward and opposite the entrance to Cua Be. The mouth of this river is obstructed by a bank of mud and sand, but there is a narrow channel at low water by which small craft with local knowledge can reach Tong Dinh, a village about $\frac{1}{2}$ mile up the river.

The channel to Nhatrang Bay is between Dong Ba Point and Mung Island, passing on either side of Tam Island and entering the bay between Chut Point and Nam Point on Lon Island, $1\frac{1}{4}$ miles to the north-eastward.

Anchorage may be found in the bay and amongst the islands, see (c) Anchorages.

Eastern approach

This passage is between Tre Point on the north-east of Lon Island and Pyramid Island (712 ft.), high and conspicuous, about $3\frac{3}{4}$ miles to the north-eastward, and Kau Island (350 ft.), high and bare, about 1,200 yds. to the north-east.

North-eastern approach

To the northward of the passage Shala Island (525 ft.), high and rocky, lies $2\frac{1}{2}$ miles south-eastward of Cap Vert, and Seche Island (53 ft.) about $3\frac{1}{2}$ miles south-south-westward of that cape. Grand Bank lies near the middle of the passage with very irregular depths; North-west Rock having the least depth, 3 ft., over it.

Nhatrang Bay

This lies between Chut Point on the south and Khe Ga Point about $6\frac{1}{2}$ miles to the northward. It is an excellent natural harbour and affords good anchorage during the S.W. monsoon.

Between Chut Point and the southern entrance point of the Nhatrang river, about 3 miles northward, the south-western shore of the bay is fronted by a narrow sandy beach and is backed by the town of Nhatrang. This affords good landing with easy exits (Beach E.25).

On the north-western side of the bay Khe Ga Point rises steeply from the sea with several lofty peaks. There is a bight between Khe Ga Point and the northern entrance of the Nhatrang river about $3\frac{1}{2}$ miles to the southward. Off the northern end of this bight lies Tortoise Island, about 1 mile southward of Khe Ga Point.

The northern and southern ends of the bight are fronted with coral reefs, but in the centre there is a small sandy beach, affording good landing, which is backed by low-lying land and is in proximity to the main Saigon - Hanoi railway and coastal high road (C.1) (Beach E.26).

Nhatrang river (Song Cai) is about 200 yds. wide at its mouth and is obstructed by a bar, 600 yds. wide, with a least depth of 8 ft. over it. The river is navigable by boats and sampans for about 30 miles. Khanh-Hoa, the capital of the province is situated about 7 miles from the mouth.

The town of Nhatrang lies along the shore of the bay to the southward of the river. It has developed considerably in recent years and now has Pasteur Institute, barracks, airfield, etc., and a number of metalled roads. A branch of the Saigon - Hanoi railroad runs into it and also a branch from the main road, Route Coloniale 1 (C.1). The land at the back of the town and to the westward is low, undulating in parts, and cultivated, forming the valley of the Song Cai which flows through mountainous and densely wooded country and discharges into the bay at the north of the town.

Tides: Springs rise 6 ft. There is only one H.W. daily in Nhatrang Bay.

Anchorage during the S.W. monsoon can be found anywhere in the bay with bottom of sand and mud. See (c) Anchorages.

(b) Beaches and Landing Places *

No. E.18 Beach: Nam Than - Phan Rang Bay

Charts: Admiralty Chart 1261; French Government Chart F.5739.

Plan : 3A.

Map reference: sheet 214 E. SA 972480 at centre.

Location and surface: Sandy beach fronting the village of Nam Than and about 1 mile to the south-westward of the entrance to the Song Kinh Dinh.

Suitability for landing various arms: Suitable for infantry only.

Dimensions: 2,000 yds.

Gradient: L.W. line lies about 100 yds. from H.W. line.
3-fathom line lies about 300 yds. from L.W. line.

Charted gradient: L.W. line to 3-fathom line, 1: 50.
There is deep water close to the coast and the 10-fathom line lies 1 mile offshore.

Approaches: The approach from seaward is quite clear.

Tides: Springs rise 10 ft., neaps 8 ft.

Exits: On to sandy strip fronting the village of Nam Than from whence a track over cultivated land to the roads running through the villages of Long Thanh and An Long connected by bridge over the Song Kinh Dinh with the town of Phan Rang.

* Note: Map references are to Carte d'Indo-Chine, 1: 100,000 reproduced by Survey of India as HIND 1000, 1: 100,000.

Hinterland: Low paddy land intersected with streams, and to the south open forest and scrub.

No. E.19 Beach: Phan (Fan) Rang

Charts: Admiralty Chart 1261; French Government Chart F.5739.
Plan : 3A.
Map reference: sheet 214 E. SA 981535 at centre.

Location and surface: Sandy bank from the village of Ninh Shu on the west of the entrance to the Nai Lagoon running to the southward on the west side of Phan Rang Bay. The northern end of the beach commences 1,200 yds. from the mouth of the lagoon.

Suitability for landing various arms: Suitable for all arms, M/T, and A.F.V's.

Dimensions: 4,100 yds.

Gradient: The beach is steep-to.
 In the northern half the 3-fathom line lies 130 yds. from L.W. line.
 In the southern " " " " " " from 550 to 1,000 yds. from L.W. line.

Charted gradient:

Northern half, L.W. line to 3-fathom line, 1: 21.
 Southern half, " " " " " " , 1: 91 to 1: 166.

Approaches: The approach from the anchorage in the bay is all clear. There is a sand spit extending southward from the mouth of the Nai Lagoon and the northern end of the beach commences well to the westward of this.

Tides: Springs rise 10 ft., neaps 8 ft.

Exits: At the south end of the beach at Dong Giang there is the terminus of the metalled all weather road connecting with the main Saigon - Hanoi roadway (Route Coloniale 1) (C.L) at Phan-Rang town, about $1\frac{1}{2}$ miles to the westward of the beach. At the north end of the beach a branch road (L.163) from Phan-Rang ends at Ninh Chu where there is a jetty which could be used at H.W. for landing purposes in conjunction with the beach landing. The chart shows 13 ft. at the end of the jetty at L.W.

Hinterland: The beach is backed by sand dunes, with extensive paddy fields to the westward and northward and, on the extreme NW., mountainous wooded country.

Local resources: Small government operated electric plant. No information as to water, oil and coal supplies. Fresh provisions are available.

No. E.20 Beach: Hon Shut, Kam-Ranh Bay

Charts: Admiralty Charts F.024, 3028, 1008.
Plan : 3A.
Map reference: sheet 204 E. SB 167815, at centre.

Location and surface: A sandy beach from the southern side of the neck of Ba-Tien Point, Kam-Ranh Bay.

Suitability for landing various arms: For infantry only on account of exits.

Dimensions: 2,400 yds. long.

Gradient: L.W. line lies 120 yds. from H.W. line.
3-fathom line lies 250 yds. from L.W. line.

Charted gradient: L.W. line to 3-fathom line, 1: 41.

Approaches: The approaches from the anchorage in Hon Shut Bay are quite clear. Salacco Shoal lies well to the eastward and Hon-Ti Rock to the southward of the beach.

Tides: Springs rise 6.2 ft.
There is generally only one tide in 24 hours. Tidal streams are weak.

Exits: The exit from the beach is by a track running parallel to the beach and through a valley leading to the westward from the northern end into the SE. corner of Kam-Ranh harbour.

Hinterland: Mountainous and densely wooded country, with a strip of level country at the back of the beach $\frac{1}{4}$ to $\frac{1}{2}$ mile wide.

No. E.21 Beach: Bai-Tun, Kam-Ranh Bay

Charts: Admiralty Charts 3028, F.024, 1008.

Plan : 3A.

Map reference: sheet 204 E. SB 161838 at centre.

Location and surface: A sandy beach from a rocky point 1,000 yds. to the southward of Bai-Tun Point, Grande Passe, Kam-Ranh Bay.

Suitability for landing various arms: For infantry only on account of poor exits.

Dimensions: 1,300 yds. long.

Gradient: L.W. line lies 60 yds. from H.W. line.
3-fathom line lies 100 yds. from L.W. line.

Charted gradient: L.W. line to 3-fathom line, 1: 17.

Approaches: The approach from Grande Passe is all clear.

Tides: Springs rise 6.2 ft. There is generally only one tide in 24 hours. Tidal streams are weak.

Exits: By track to the southward joining the track, about 800 yds. distant, running from Beach E.20 across the promontory to Kam Ranh harbour.

Hinterland: Mountainous and densely wooded country rising steeply behind the beach.

No. E.22 Beach: Binh-Ba, Kam-Ranh Bay

Charts: Admiralty Chart 3028, F.024, 1008.

Plan : 3A.

Map reference: sheet 204 E. SB 200915 at centre.

Location and surface: Sandy beach lying between Mui Hon Lan and Bai Shoi Point in Binh-Ba Bay.

Suitability for landing various arms: Suitable for landing infantry only on account of exits, but all arms, M/T, and A.F.V.'s could be landed if necessary.

Dimensions: 1,700 yds. long.

Gradient: Beach is steep-to.

The 1-fathom line lies 90 yds. from L.W. line.

" 3-fathom " " 120 " " " "

Off which there is deep water close in shore varying from 25 ft. 52 ft.

Charted gradient: L.W. line to 1-fathom line, 1: 45.

1-fathom line to 3-fathom line, 1: 8.

Approaches: The approach from the anchorage in Binh-Ba Bay is all clear.

Tides: Springs rise 6.2 ft. There is generally only one tide in 24 hours. Tidal streams are weak.

Exits: On to a level sandy flat giving access to Mui Hon Lan the northern entrance point to Kam-Ranh Bay.

Hinterland: Extensive sand flats to the north, and on the east the mountainous promontory of Kam Ranh Point.

No. E.23 Beach: Ba Dai

Charts: Admiralty Charts 3028, F.024; French Government Chart F.5564.

Plan : 3A.

Map reference: sheet 204 E. SB 252960 at centre.

Location and surface: Sandy beach in Ba-Dai Bay from a rocky point 4,000 yds: northward of Kam Ranh Point.

Suitable for landing various arms: For infantry only on account of exits.

Dimensions: 3,600 yds. long.

Gradient: L.W. line lies 50 yds. from H.W. line.

1-fathom line lies 200 yds. from L.W. line.

2- " " " 250 " " " "

3- " " " 450 " " " "

Charted gradient: Drop at L.W. line, 1 ft.

L.W. line to 1-fathom line, 1: 120.

1-fathom line to 2-fathom line, 1: 25.

1- " " " 3- " " , 1: $\frac{112}{4}$

There is deep water close in to the shore and the 10-fathom line is only $\frac{3}{4}$ mile from the beach.

Approaches: The approach from seaward is quite clear.

Tides: Springs rise 6.2 ft. See tides for Beach E.20.

Exits: On to low-lying sandy land with numerous sand dunes and with no roads or tracks across the peninsula.

Hinterland: Flat sandy plain to the north; sand dunes and hills on the west; with a mountainous promontory on the south.

No. E.24 Beach: Dgiai Beach

Charts: Admiralty Charts 1008, 1342; French Government Chart F.5564.
 Plan : 3A.
 Map reference: sheets 204 E, 194 E. NW 172160 at centre.

Location and surface: Sandy beach. From a point on the coast $2\frac{1}{2}$ miles south by west of Dong Ba Point.

Suitability for landing various arms: For infantry only on account of exits; necessitating crossing of the neck of the Thui-Trieu lagoon.

Dimensions: 4,000 yds.

Gradient: L.W. line lies 100 yds. from H.W. line.
 1-fathom line lies 220 yds. from L.W. line.
 5- " " " 650 " " " "

Charted gradient:

L.W. line to 1-fathom line, 1: 110.
 1-fathom line to 5-fathom line, 1: 41.

Approaches: The beach should be approached from the NE. passing midway between the southern part of Mui Dong Ba and Banc du Tondu, coral, which has 18 ft. at L.W. over it. There are no other dangers and the waters fronting the beach inside Banc du Tondu are quite clear. The parent flotilla should not approach within 3 miles of the coast on account of the coral banks extending to about 5 miles south-eastward of Banc du Tondu.

Tides: Springs rise 6.2 ft. See tides for Beach No. 20.

Exits: On to a flat strip of sand and scrub separating the beach from the head of the Thui-Trieu lagoon, which narrows to about 300 yds. at a point about 1 mile to the south-westward of the southern end of the beach. A fair weather metalled road (L.165) terminates on the opposite side of the water and leads north-westward to the main Route Coloniale 1 (C.1), about 2 miles distant.

Hinterland: On the west an area of flat land 1 mile wide with sand and scrub. There are a number of small villages bordering the lagoon on the eastern side: to the north a mountain range with dense forest.

No. E.25 Beach: Nhatrang Bay

Charts: Admiralty Charts 1008, 1342; French Government Chart F.5564.
 Plan : 3A.
 Map reference: sheet 194 E. NW 171345 at centre.

Location and surface: Sandy beach on the western side of Nhatrang Bay running to the northward from Chut Point to a position $\frac{1}{2}$ mile south of the entrance to the Song Cai.

Suitability for landing various arms: Suitable for all arms, M/T, and A.F.V's.

Dimensions: 5,500 yds. long.

Exits: On to a strip of flat cultivated land backing the beach across which both the main highway road (Route Coloniale 1) (C.1) and the railway run to the northward from Nhatrang, about 1 mile inland.

Hinterland: This beach is dominated at the northern end by Hon Ko (1,280 ft.). On the west low cultivated land with some paddy, intersected by rivers and streams, and to the north mountains with dense forest.

Local resources: As for Nhatrang Bay. Beach E.25.

(c) Anchorage: Admiralty Charts: 1261, 3028, F.024, 1342.
French Government Charts: F.5739, F.5564.

Cape Padaran (11°22'N., 109°1'E.)

There is anchorage for large vessels, during the S.W. monsoon, off a small bay close northward of Cape Padaran, with the eastern extreme of the Cape bearing 157° - 660 yds., in depths of 8 fathoms, sand. The Bancs du Lutin, with depths of from 1 to 2 fathoms, lie about 550 yards to the northward of the anchorage and the bottom is foul close around the cape.

Tides: Springs rise 6 ft. Mean tide level 4½ ft.

Phan (Fan) Rang Bay (11°34'N., 109°03'E.)

Vessels can anchor northward of the mouth of the Song Kinh Dinh in a depth of about 4 fathoms.

During the N.E. monsoon good anchorage can be obtained by vessels with local knowledge within Phan Rang Bay in a depth of 3¼ fathoms, good holding ground, or south-south-westward of Ninh Shu, in a similar depth, clear of two shoal patches with depths of 2¼ to 2½ fathoms over them, lying ½ mile southward and a mile south-south-westward of the town.

Wind induced currents have a strong southerly set along the coast during N.E. monsoons.

Tides: Springs rise 6 ft. Mean level 4½ ft.

Vung Gang Bay (11°43'N., 109°11'E.)

There is good anchorage in this bay with Entrance Island (La Sentinelle) in line with the westernmost of the above water rocks lying 100 yds. northward of it, in 7 to 8 fathoms, but vessels should not proceed on this line north-eastward of the line joining the rocks, lying off Pointe Tortue, with the north-eastern side of the pagoda at Vinh Hy bearing 306°.

Heavy squalls occur at times, but the holding ground is good.

Tides: Springs rise 6 ft. Mean level 4½ ft.

Kam Ranh Bay Approaches "A" Anchorage. (11°50'N., 109°2'E.)

Kam Ranh Bay is the largest and best fleet anchorage on the coasts of Cochin China and is situated at nearly equal distances from the important centres of Singapore, Hongkong, Manila and Labuan.

The holding ground is good and the anchorage well sheltered from prevailing winds.

Hon Shut Bay, Grande Passe. ($11^{\circ}48'N.$, $109^{\circ}11'E.$)

Anchorage can be obtained in this bay, which lies on the south-west of Grande Passe, with shelter from the S.W. monsoon, in 8 to 9 fathoms, sand.

Binh Ba Bay ($11^{\circ}52'N.$, $109^{\circ}12'E.$)

Good anchorage can be found in the entrance of the bay about 1 mile north-westward of Mui Nam, the north-west point of Ile Tagne, in a depth of 11 fathoms, mud. Also within the bay northward of Ile Tagne, in depths of from 8 to 10 fathoms, not too near the shoal which extends about $\frac{1}{4}$ mile from the head of the bight on the northern side of that island.

Tides: Springs rise 6 ft. Mean level $4\frac{1}{2}$ ft. There is generally only one tide in the 24 hours. Tidal streams are weak.

Nhatrang Bay ($12^{\circ}14\frac{1}{2}'N.$, $109^{\circ}12\frac{1}{2}'E.$)

During the N.E. monsoon vessels can find good anchorage in either Vung Dam Shinh or Vung Dam Lon, on the southern side of Hon Lon in 8 to 10 fathoms. Also off the south-west corner of Hon Lon with Mot Island summit 132° - 1 mile, in 10 to 11 fathoms.

Westward, and also north-north-westward, of Hon Mieu there is anchorage, frequented by junks, in $6\frac{1}{2}$ fathoms. In the N.E. monsoon these anchorages are sheltered from the heavy swell by the north-western side of Hon Lon, and, during the S.W. monsoon, from the swell which frequently comes from a south-easterly direction.

During the S.W. monsoon secure anchorage can be found by vessels with local knowledge in either Vung Dam Tre or Vung Dam Lia, on the northern side of Hon Lon, in 6 or 7 fathoms.

Good anchorage can be found anywhere in Nhatrang Bay during the S.W. monsoon, sand and mud. A good position for vessels of light draught is abreast the town in $4\frac{3}{4}$ fathoms.

Tides: Springs rise $7\frac{1}{4}$ ft., neaps 5 ft. There is generally only one tide in 24 hours.