

LOCAL VESSELS ADVISORY COMMITTEE

Proposal on Upholding the Original Number of Persons Permitted to Carry for Kaitos and Transportation Sampans after Replacement of Main Engines

Purpose

This paper sets out a proposal of the Marine Department (“MD”) on upholding the number of persons originally permitted to carry for kaitos and transportation sampans which have replaced their main engines with ones with greater horsepower.

Background

2. Kaitos are Class I vessels issued with “kaito” ferry service licences by the Transport Department. They mainly ply within Aberdeen Typhoon Shelter and in the sheltered waters between Sai Kung and the outlying islands nearby for conveyance of local residents and visitors. Transportation sampans are Class II vessels operating within various typhoon shelters to carry a small number of passengers in sheltered waters. The above-mentioned kaitos and transportation sampans, mostly built before 2007, are usually of wooden structure. As they operate in sheltered waters, the number of persons permitted to carry under the same circumstances is usually greater than that of other types of vessels such as ferry vessels. Under the codes of practice pertaining to the safety standards for local vessels which came into effect in 2007, , and the number of persons permitted to carry in respect of newly built vessels or vessels defined as new vessels after alterations have been made shall be determined by a new formula^(Note 1) based on their length and breadth. Existing vessels which

¹ Section 3.4 of Chapter V of the Code of Practice – Safety Standards for Class I Vessels is excerpted as follows –

The maximum carrying capacity (including passengers and crew) in any kaito of single deck shall be determined by the following formula:

Maximum carrying capacity (including passengers and crew) for kaitos of single deck	
(a) if no simple inclining test is carried out Cnp =0.35	(b) if a simple inclining test is required and the result is satisfactory, and the vessel only operates under favourable weather Cnp = 0.35~ 0.85
Total number of persons = L × B × 0.35	Total number of persons = L × B × Cnp

have not undergone any alterations may continue to carry the number of persons originally permitted.

Recent Development

3. Generally, the propulsion of kaitos and transportation sampans are main engines used for years with relatively low power output. Since the original models have ceased to be produced or there is a lack of the spare parts in the market, vessel owners must then change the original models which are not beyond economic repair in the course of vessel maintenance. In addition, since the power output of the original engines is relatively low, the power output of replacement engines in the market often exceed 10% of the original ones, the vessels are then defined as new vessels^(Note 2) after replacement of main engines, leading to a reduction in the number of persons permitted to carry as determined by the new formula^(Note 1).

Proposal

4. Having considered the above and factors such as balance of risk, MD is of the view that kaitos and transportation sampans built before 2007 may operate with the number of persons originally permitted to carry provided that the following conditions are met:

The maximum carrying capacity of kaitos with more than one deck shall be considered on individual merits. The passenger capacities of existing kaitos and transportation sampans remain unchanged. However, if alteration or replacement has been made, the passenger number shall be determined by the above formula for new vessels.

² The “Interpretation” of Section 2 of the Merchant Shipping (Local Vessels) (Safety and Survey) Regulation (Cap. 548G) is excerpted as follows -

“new vessel (新船隻)” means –

(b) a local vessel that ... undergoes, on or after the commencement date of this Regulation, alteration –

(i) of –

(A) its length, breadth or depth as recorded in the certificate of ownership issued or endorsed under the Certification and Licensing Regulation;

(B) the output of its main propulsion engine so that –

(I) the output is increased by 10% or more than what is recorded in its certificate of inspection or certificate of survey; or

(II) particulars relating to the materials, scantlings or design of the propulsion shafting or stern tube, as shown in the plans approved under Part 3, are no longer accurate; ...

- (1) they only operate under favourable weather^(Note 3);
- (2) they only operate in specified sheltered waters S3, S4 (see the maps in *Annexes 1, 2 and 3*) and various typhoon shelters.

Way Forward

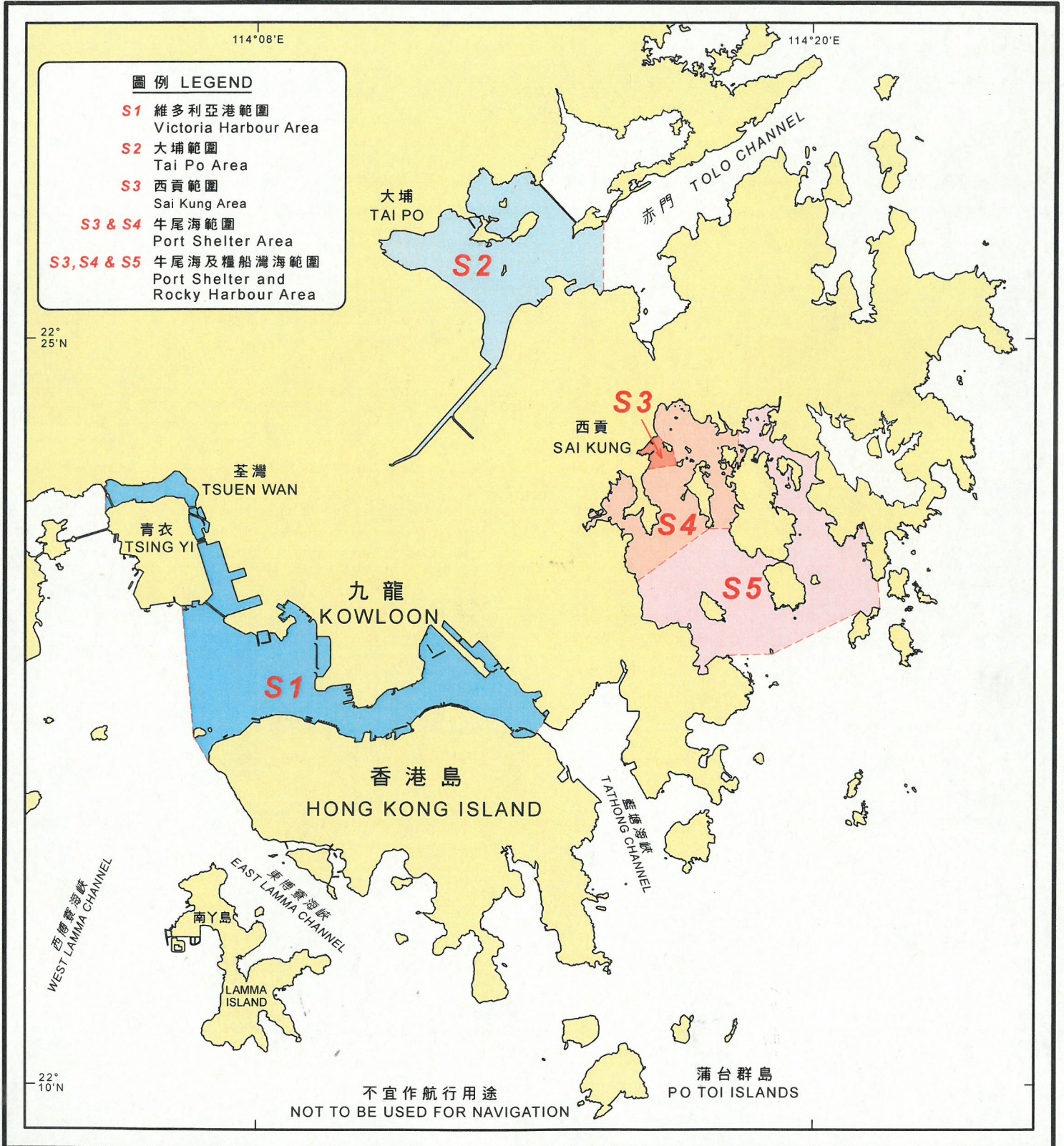
5. Members are invited to comment on the above proposal. Subject to members' views, the MD will amend the Code of Practice – Safety Standards for Class I Vessels as well as the Code of Practice – Safety Standards for Class II Vessels by inclusion of the relevant contents (see *Annex 4*).

Local Vessels Safety Section
Marine Department
December 2017

³ The “Definitions” of Section 3 in Chapter I of the Code of Practice – Safety Standards for Class I Vessels is excerpted as follows -

“favourable weather” means weather, when the visibility is good and when the combined effects of wind, sea or swell, upon the ship under consideration are never greater than those which would cause moderate rolling or pitching, or result in the shipping of green seas onto the main deck (in the case of open boats, over the gunwale).

香港水域範圍內指明遮蔽水域 Specified Sheltered Waters within Hong Kong Waters



海事處海道測量部於2014年6月繪製
Prepared by the Hydrographic Office,
Marine Department. June 2014

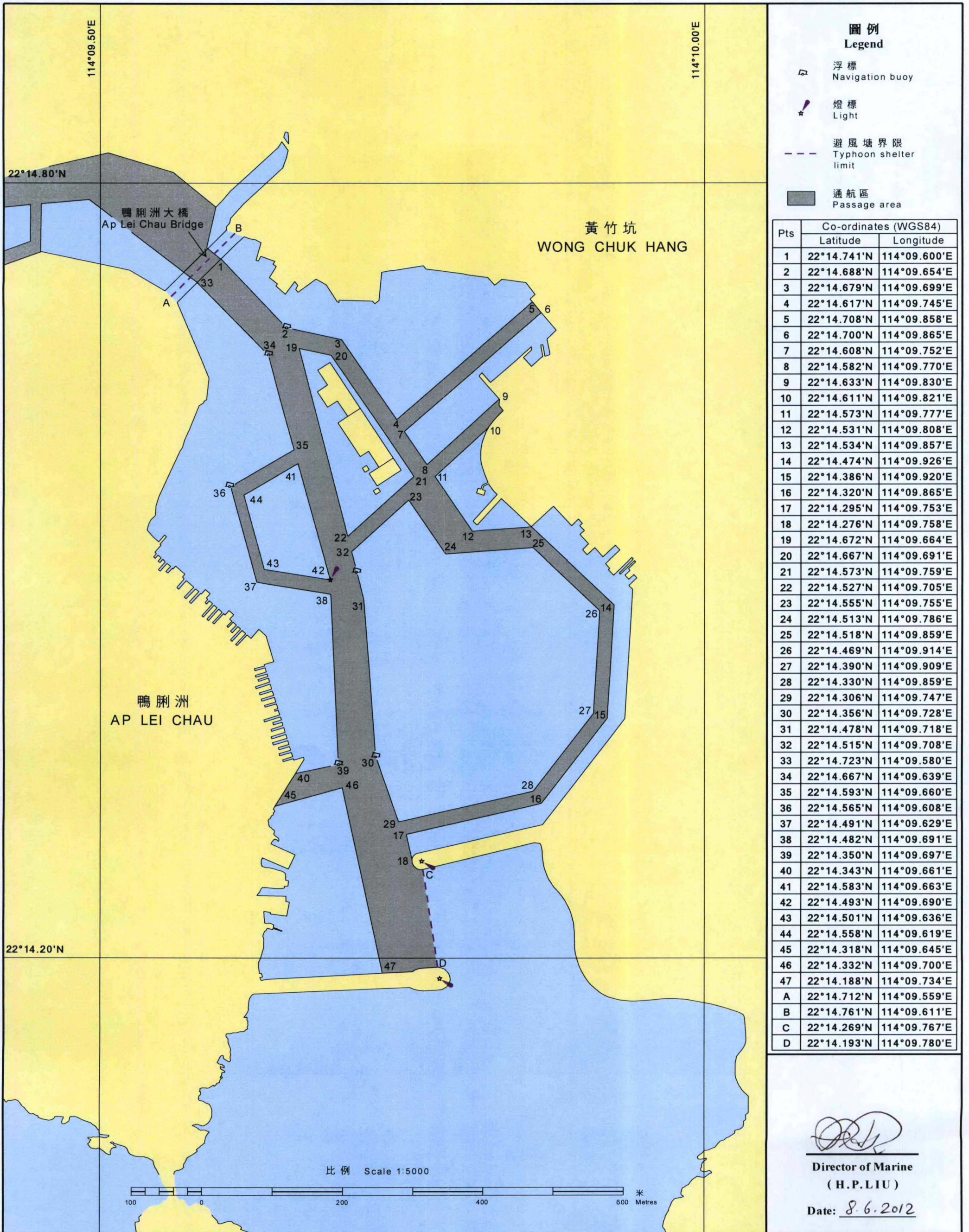
基準
Datum WGS 84

圖則編號
Drawing No. 2014mar014

根據《商船(本地船隻)(避風塘)規例》(第548E章)第3條規定
香港仔南避風塘通航區圖則

Pursuant to Section 3 of the Merchant Shipping (Local Vessels) (Typhoon Shelters) Regulation (Cap. 548E)

Plan of Passage Area in Aberdeen South Typhoon Shelter



圖例 Legend

- 浮標 Navigation buoy
- 燈標 Light
- 避風塘界限 Typhoon shelter limit
- 通航區 Passage area

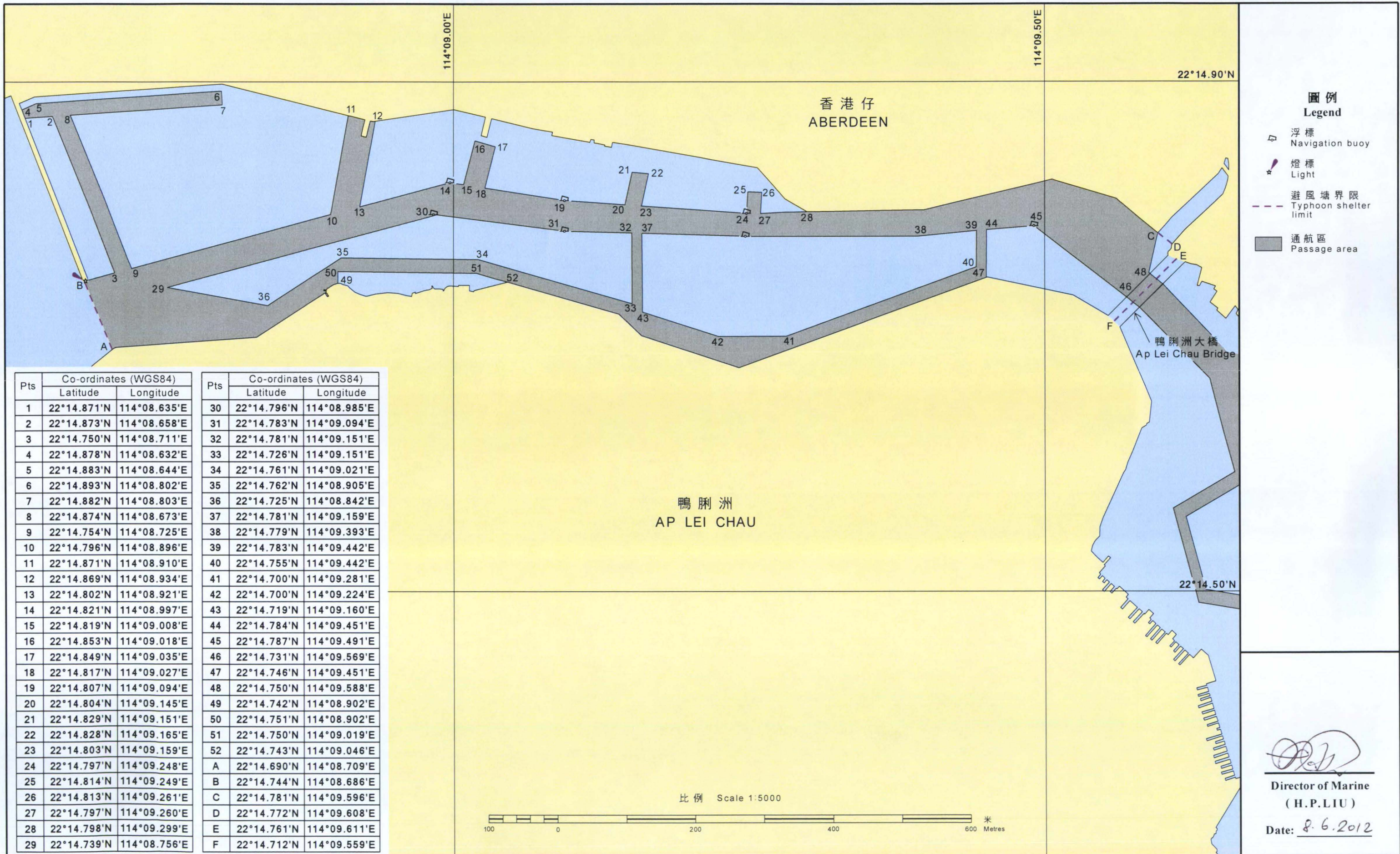
Pts	Co-ordinates (WGS84)	
	Latitude	Longitude
1	22°14.741'N	114°09.600'E
2	22°14.688'N	114°09.654'E
3	22°14.679'N	114°09.699'E
4	22°14.617'N	114°09.745'E
5	22°14.708'N	114°09.858'E
6	22°14.700'N	114°09.865'E
7	22°14.608'N	114°09.752'E
8	22°14.582'N	114°09.770'E
9	22°14.633'N	114°09.830'E
10	22°14.611'N	114°09.821'E
11	22°14.573'N	114°09.777'E
12	22°14.531'N	114°09.808'E
13	22°14.534'N	114°09.857'E
14	22°14.474'N	114°09.926'E
15	22°14.386'N	114°09.920'E
16	22°14.320'N	114°09.865'E
17	22°14.295'N	114°09.753'E
18	22°14.276'N	114°09.758'E
19	22°14.672'N	114°09.664'E
20	22°14.667'N	114°09.691'E
21	22°14.573'N	114°09.759'E
22	22°14.527'N	114°09.705'E
23	22°14.555'N	114°09.755'E
24	22°14.513'N	114°09.786'E
25	22°14.518'N	114°09.859'E
26	22°14.469'N	114°09.914'E
27	22°14.390'N	114°09.909'E
28	22°14.330'N	114°09.859'E
29	22°14.306'N	114°09.747'E
30	22°14.356'N	114°09.728'E
31	22°14.478'N	114°09.718'E
32	22°14.515'N	114°09.708'E
33	22°14.723'N	114°09.580'E
34	22°14.667'N	114°09.639'E
35	22°14.593'N	114°09.660'E
36	22°14.565'N	114°09.608'E
37	22°14.491'N	114°09.629'E
38	22°14.482'N	114°09.691'E
39	22°14.350'N	114°09.697'E
40	22°14.343'N	114°09.661'E
41	22°14.583'N	114°09.663'E
42	22°14.493'N	114°09.690'E
43	22°14.501'N	114°09.636'E
44	22°14.558'N	114°09.619'E
45	22°14.318'N	114°09.645'E
46	22°14.332'N	114°09.700'E
47	22°14.188'N	114°09.734'E
A	22°14.712'N	114°09.559'E
B	22°14.761'N	114°09.611'E
C	22°14.269'N	114°09.767'E
D	22°14.193'N	114°09.780'E

Director of Marine
(H.P. LIU)
Date: 8.6.2012

根據《商船(本地船隻)(避風塘)規例》(第548E章)第3條規定
香港仔西避風塘通航區圖則

Pursuant to Section 3 of the Merchant Shipping (Local Vessels) (Typhoon Shelters) Regulation (Cap. 548E)

Plan of Passage Area in Aberdeen West Typhoon Shelter



Amendment to the Codes of Practice

Safety Standards for Class I Vessels

Excerpt from Chapter V “Passenger and Crew Accommodation”

<3.4>

The maximum carrying capacity (including passengers and crew) in any kaito of single deck shall be determined by the following formula:

Maximum carrying capacity (including passengers and crew) for kaitos of single deck Total number of persons = $L \times B \times C_{np}$	
(a) if no simple inclining test is carried out $C_{np} = 0.35$	(b) if a simple inclining test is required and the result is satisfactory, and the vessel only operates under favourable weather $C_{np} = 0.35 \sim 0.85$
Total number of persons = $L \times B \times 0.35$	Total number of persons = $L \times B \times C_{np}$

The maximum carrying capacity of kaitos with more than one deck shall be considered on individual merits.

The passenger capacity of existing kaitos remains unchanged. However, if alteration or replacement has been made, the passenger number shall be determined by the above formula for new vessels.

For existing kaitos which have replaced their main engines on board with ones with an increase in output by 10% or more, they may operate with the number of persons originally permitted to carry provided that the following conditions are met:

- (1) they only operate under favourable weather (see the definition in Ch. I/3.1 of this Code);
- (2) they only operate in specified sheltered waters S3, S4 (refer to Annex W) and Aberdeen Typhoon Shelters.

**Safety Standards for Class II Vessels
Excerpt from Chapter V “Passenger and Crew Accommodation”**

3. Maximum Carrying Capacity and Seating

The maximum number of passengers and crew which may be carried in any vessel shall be determined having regard to the clear space properly available in such vessels and according to the standards set out below. In this Chapter, L is vessel's length overall, B is extreme breadth; both of which are defined in the Definitions under Ch. I/3.1 of this Code and are in metric unit. The measurement of passenger seating should be based on the method given in Annex G;

- 3.1 (a) **Passenger-carrying** mechanically propelled Class II vessels operating in **typhoon shelters or** specified sheltered waters

Passenger number = the number of fixed passenger seats provided on board;

【Maximum number of passengers = $0.35 \times L \times B$ and not greater than 10**】** ;

With a maximum crew allowance of 4 persons.

For existing vessels which have replaced their main engines on board with ones with an increase in output by 10% or more, they may operate with the number of persons originally permitted to carry provided that the following conditions are met:

- (1) they only operate under favourable weather (see the definition in Ch. I/3.1 of this Code);
- (2) they only operate in the originally specified **typhoon shelters or specified** sheltered waters.