## **CODE OF PRACTICE ----**

# **Safety Standards for Class IV Vessels**

(issued under Section 8 of the Merchant Shipping (Local Vessels) Ordinance, Cap 548)



Local Vessels Safety Section Marine Department, HKSAR (January 2025 Edition)

## RECORD ON UPDATING AND AMENDMENTS

This Code of Practice is issued under section 8 of the Merchant Shipping (Local Vessels) Ordinance (Cap. 548). The Code was first notified in the Gazette Notice on 29 December 2006 to take effect on 2 January 2007. Subsequent updating and amendments would be notified to the industry through further notice in the Gazette from time to time. This record sheet is intended for good record keeping of the amendment history of the Code.

Amend.	Gazette	Gazette	Effective	Topic Areas / Pages	
No.	No.	Date	Date	Topic Freus / Luges	
1	G.N.7422	11.11.2011	25.11.2011	Whole revision	
2	G.N.3790	29.05.2015	29.05.2015	Revision of section 1.1 of Chapter VI	
3	G.N.3790	29.05.2015	29.05.2015	Addition of new section 1.1A in Chapter VI	
4	G.N.4986	02.09.2016	29.05.2015	Addition of sections 2.4 and 2.5 in Chapter VI	
5	G.N.4986	02.09.2016	02.09.2016	Revision of Annexes 7 and 7A	
6	G.N.4986	02.09.2016	02.09.2016	Revision of sections 4.1 to 4.4 and 5.1[Note(F)] of Chapter VII	
7	G.N.1134	03.03.2017	03.03.2017	FOREWORD: Omission of quote of section 9 of Cap. 548G in para. 3	
8	G.N.1134	03.03.2017	03.03.2017	Chapter I: Revision of sections 1.3~1.4 setting out the usage of the terms "shall", "must"	
9	G.N.1134	03.03.2017	03.03.2017	Chapter I: Omission of sections 1.6~1.8	
10	G.N.1134	03.03.2017	03.03.2017	Chapter I: Addition of three Cap. 413 sub. leg. in section 2.1	
11	G.N.1134	03.03.2017	03.03.2017	Chapter I: Omission of section 2.2.1	
12	G.N.1134	03.03.2017	03.03.2017	Chapter I: Revision of the required certification in section 2.3	
13	G.N.1134	03.03.2017	03.03.2017	Chapter I: Revision/addition of definitions in section 3	
14	G.N.1134	03.03.2017	03.03.2017	Chapter I: Revision of section 4.1 to consolidate requirements scattered in the original sections 4.1, 4.3, 9, 12, Chapters III-A and III-B	
15	G.N.1134	03.03.2017	03.03.2017	Chapter I: Revision of section 4.2	
16	G.N.1134	03.03.2017	03.03.2017	Chapter I: Omission of sections 8.2, 11 and 12	
17	G.N.1134	03.03.2017	03.03.2017	Chapter I: Revision of sections 10 and 13	
18	G.N.1134	03.03.2017	03.03.2017	Chapter II: Addition of URL for Certificate of Inspection in section 1.2	
19	G.N.1134	03.03.2017	03.03.2017	Chapter III: Deletion of bracketed remark at beginning of chapter	

Amend. No.	Gazette No.	Gazette Date	Effective Date	Topic Areas / Pages			
20	G.N.1134	03.03.2017	03.03.2017	Chapter III: Revision of simple inclining test requirements given in section 2.6(2) and 2.7			
21	G.N.1134	03.03.2017	03.03.2017	Chapter III: Revision of section 3.15 in respect of dark smoke emission			
22	G.N.1134	03.03.2017	03.03.2017	Chapter III: Addition of section 3.17 for requirements in respect of compressed air system			
23	G.N.1134	03.03.2017	03.03.2017	Chapter III: Revision of section 6.3 setting out the requirement on use of naked fire			
24	G.N.1134	03.03.2017	03.03.2017	Omission of Chapters III-A and III-B			
25	G.N.1134	03.03.2017	03.03.2017	Chapter IV: Revision of section 2.4(2) in respect of requirements for carrying passengers on sunken deck			
26	G.N.1134	03.03.2017	03.03.2017	Chapter IV: Revision of section 4.1(5) on usage of fore and aft part of vessel as passenger space			
27	G.N.1134	03.03.2017	03.03.2017	Chapter IV: Addition of section 5 setting out requirements on acceptance of inflatable boat			
28	G.N.1134	03.03.2017	03.03.2017	Chapter V: Addition of section 1.2.7 for requirement of periodical inspection for portable fire extinguishers			
29	G.N.1134	03.03.2017	03.03.2017	Chapter V: Revision of section 3.1 for addition of URL on the requirements of fire-fighting apparatus			
30	G.N.1134	03.03.2017	03.03.2017	Chapter VI: Revision of official name of Communications Authority (CA) in section 1.2			
31	G.N.1134	03.03.2017	03.03.2017	Chapter VI: Addition of section 2.6 for recommendation of wearing lifejackets at all times on board open vessels			
32	G.N.1134	03.03.2017	03.03.2017	Chapter VI: Omission of section 3			
33	G.N.1134	03.03.2017	03.03.2017	Chapter VI: Revision of section 4.1 for addition of URL on the requirements of life-saving appliances			
34	G.N.1134	03.03.2017	03.03.2017	Chapter VII: Addition of section 1.1 setting out the effective date of the chapter			
35	G.N.1134	03.03.2017	03.03.2017	Chapter VII: Addition of section 1.3 setting out the requirements on new/replaced lights and sound signals			
36	G.N.1134	03.03.2017	03.03.2017	Chapter VII: Revision of sections 5.2.1, 5.2.3 and 5.4 according to COLREG amendments			
37	G.N.1134	03.03.2017	03.03.2017	Chapter VII: Addition of section 5.5 setting out the requirements on vertical sectors			
38	G.N.1134	03.03.2017	03.03.2017	Annex 1A: Revision of para. 6(3)(b)			

Amend. No.	Gazette No.	Gazette Date	Effective Date	Topic Areas / Pages	
39	G.N.1134	03.03.2017	03.03.2017	Annex 5: Change of the term "passenger" to "persons' throughout the annex	
40	G.N.1134	03.03.2017	03.03.2017	Annex 8: Partial revision/addition of para. 2.5~2.7 for methods on measurement of appendages	
41	G.N.1134	03.03.2017	03.03.2017	Annex 10: Addition of minimum sludge tank capacity under para.(b)	
42	G.N.1134	03.03.2017	03.03.2017	Annex 11: Omission of para. 3	
43	G.N.1134	03.03.2017	03.03.2017	Annex 12: Whole revision according to MDN 124/2007	
44	G.N.1134	03.03.2017	03.03.2017	Annex 13A: Revision of remark (2) under para. (III)	
45	G.N.1134	03.03.2017	03.03.2017	Annex 13B: Revision of Remark *5 under Periodic Survey Programme Table	
46	G.N.1134	03.03.2017	03.03.2017	Annex 13B: Revision of Remark *3 under Final Inspection Table	
47	G.N.8215	20.12.2019	20.12.2019	Chapter VI:	
				Section 1 –subsection 1.1A to 1.1B renumbered, new subsection 1.1A inserted after subsection 1.1; subsections 1.2 and 1.3 revised to specify the new and former lifejacket requirements; and	
				Section 4 –subsections 4.1, 4.2, 4.3 and 4.4 revised to specify the requirements of new and former regulations.	
48	G.N.4206	24.7.2020	1.8.2020	The Code was amended with regard to regulatory regime reform for Class IV vessels.	
49	G.N.4206	24.7.2020	1.8.2020	Chapter I:	
				Addition of the definition of "CE standard" in section 2.2.1; and addition of a note under the definitions of "new vessel" and "existing vessel" for the meaning of date denoted at the top right corner of the terms and definition of "authorized surveyor (AS)" in section 3	
50	G.N.4206	24.7.2020	1.8.2020	Chapter. I/8.4, II/1.3, V/3.1, VI/4.1, and Annex 7: URL of sources updated	
51	G.N.4206	24.7.2020	1.8.2020	The terms "open decked vessel" and "closed decked vessel" are respectively substituted by "open cruiser" and "cruiser" in order to be consistent with Merchant Shipping (Local Vessels)(Certification and Licensing) Reg.; and addition of the definitions in IV/2.1	

Amend. No.	Gazette No.	Gazette Date	Effective Date	Topic Areas / Pages		
52	G.N.4206	24.7.2020	1.8.2020	Chapter. IX/3.1 and 3.2: The vessel "length" is clarified as vessel "length overall"		
53	G.N.4206	24.7.2020	1.8.2020	Chapter. X/Part 2, sections 1~4: Revision of the types of vessels Part 2 applicable according to the Merchant Shipping (Local Vessels) (Safety and Survey) (Amendment) Regulation 2020; and addition of effective dates		
54	G.N.4206	24.7.2020	1.8.2020	Annex 1A: Insertion of the excerpt of the Merchant Shipping (Local Vessels) (Certification and Licensing) (Amendment) Regulation 2020 regarding the requirement of advance approval for Class IV vessel intending to let for hire or reward		
55	G.N.4206	24.7.2020	1.8.2020	Forms in Annex 3, 4 are revised according to amendments of the Code; and moved to Marine Department web site		
56	G.N.4206	24.7.2020	1.8.2020	Annex 4A: Omission of the contents regarding "installation suitable for unattended machinery space"		
57	G.N.4206	24.7.2020	1.8.2020	Revision of survey requirements in Annex 7 and 7A in accordance with the Merchant Shipping (Prevention of Air Pollution) (Amendment) (No. 2) Regulation 2019		
58	G.N.4206	24.7.2020	1.8.2020	Annex 8:  Deletion of contents not applicable to pleasure vessels in section 2.5; and addition of method for determination of tonnage length for open cruiser in section 4.2.2		
59	G.N.4206	24.7.2020	1.8.2020	Annex 14: Addition of RINA rules applicable to Class IV vessels		
60	G.N.4206	24.7.2020	1.8.2020	Chapter III: Contents of section 2.2 amended and moved to Ch. IV/5		
61	G.N.4206	24.7.2020	1.8.2020	Chapter V, Table 1:  Omission of the requirement for fire mai + hose + hydrant + jet nozzle in respect of (L)<15 vessels in accordance with the Merchant Shipping (Local Vessels) (Safety and Survey) (Amendment) Regulation 2020		
62	G.N.6256	2.11.2020	2.11.2020	Chapter X: Part 1A – Note *4 iii) under subsections 3.4 and 4.5(a) revised		

Amend. No.	Gazette No.	Gazette Date	Effective Date	Topic Areas / Pages	
63	G.N.6256	2.11.2020	2.11.2020	Annex 5:	
				In the annex throughout the term "person" substituted by "passenger";	
				Part 2 – equation for calculating heeling moment revised;	
				Part 2 – equation for calculating GMo revised (Chinese version only)	
64	G.N.6256	2.11.2020	2.11.2020	Annex 13B: Remarks in Table 2 – remark *1 revised	
65	G.N.7604	3.12.2021	3.12.2021	Annex 13B: Remarks in Table 1 – remark *9 revised	
				Record of Amendment	
66	G.N.949	10.2.2023	20.2.2023	Update of amendments	
67	G.N.949	10.2.2023	20.2.2023	Chapter IV	
				Section 2 – subsection 2.2(1) revised	
				Chapter VI:	
				Section 1 – subsection 1.1A.1and 1.1B repealed	
				Section 1 – subsection 1.1A.2 and 1.1A.3 revised	
68	G.N.949	10.2.2023	20.2.2023	Section 4 –subsection 4.2, 4.3 and 4.4 revised;	
				Section 4 – Table 1, Table 3 and Table 7 revised;	
				Section 4 - New paragraph 4.5 inserted;	
				Section 4 - New Table 8 inserted.	
69	G.N.949	10.2.2023	20.2.2023	Chapter IX:	
	0.11.717	10.2.2023	20.2.2025	Section 3 – subsection 3.1 revised	
70	G.N.949	10.2.2023	20.2.2023	Chapter X:	
				Section 3 – subsection 3.4 revised	
71	G.N.949	10.2.2023	20.2.2023 Annex 5: Part 2 revised		
72	G.N.949	10.2.2023	20.2.2023	Annex 10: Section 1(e) revised	
73	G.N.4206	19.7.2024	22.7.2024 New Chapter XI added		
74	G.N.235	10 January 2025	15 January 2025	Table of content: Chapter XII added	
75	G.N.235	10 January 2025	15 January 2025	Chapter III: Section 8 revised	
76	G.N.235	10 January 2025	15 January 2025	Chapter V: Sections 1.4.3 & 1.5 added	

Amend. No.	Gazette No.	Gazette Date	Effective Date	Topic Areas / Pages
77	G.N.235	10 January 2025	15 January 2025	Chapter VI: Section number 1.1A.7 revised
78	G.N.235	10 January 2025	15 January 2025	Chapter VII: Section 5.4 revised
79	G.N.235	10 January 2025	15 January 2025	Chapter X: Part 1A - Sections 4.4 & 4.5(b) revised
80	G.N.235	10 January 2025	15 January 2025	Addition of a new Chapter XII
81	G.N.235	10 January 2025	15 January 2025	Annex 3 revised
82	G.N.235	10 January 2025	15 January 2025	Annex 4 revised
83	G.N.235	10 January 2025	15 January 2025	Annex 8: Section 1.1 – revised Section 1.2(3) – added

#### **FOREWORD**

- (1) The Merchant Shipping (Local Vessels) Ordinance (Cap. 548) (hereafter referred to as "the Ordinance") provides for the regulation and control of local vessels in Hong Kong and for other matters affecting local vessels, including their navigation and safety at sea (whether within or beyond the waters of Hong Kong).
- This Code of Practice is approved and issued by the Director pursuant to section 8 of the Ordinance for the purpose of ensuring acceptable technical and safety standards in the design, construction, maintenance and inspection of local vessels in conjunction with the condition required or the standards prescribed by the Director under the Merchant Shipping (Local Vessels)(Safety and Survey) Regulation. This Code also provides necessary practical guidance on operational safety practices in conjunction with the relevant requirements in the Merchant Shipping (Local Vessels)(Certification and Licensing) Regulation.
- (3) Section 9 of the Ordinance explains the use of approved codes of practice in proceedings.

(Amendment No. 7)

## Code of Practice -Safety Standards for Class IV Vessels

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Annex 13A	Periodic Survey Programme for Pleasure Vessels Let for Hire and Are Issued with a Certificate of Inspection				
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#### CHAPTER I

#### **GENERAL**

#### 1 Introduction

- 1.1 The legislation relating to the control, licensing and regulation of local vessels in Hong Kong is contained in the Merchant Shipping (Local Vessels) Ordinance (Cap. 548) and its subsidiary legislation. This Code of Practice is issued under section 8 of the Ordinance.
- 1.2 This "Code of Practice Safety Standards for Class IV vessels" has been developed by the Hong Kong Marine Department in consultation with the local maritime industry through representation in relevant working groups and committees. The primary aim in developing the Code has been to set standards of safety and protection for all passengers and crew on board. The Code relates especially to the construction of a vessel, its machinery, equipment and stability and to the correct operation of the vessel so that safety standards are complied with and maintained.
- 1.3 This Code has been developed for application to Class IV (pleasure vessels) in the waters of Hong Kong, including vessels which are used exclusively for pleasure purposes and are let for hire or reward under the terms of a written charter agreement or a written hire-purchase agreement (hereafter referred to as "pleasure vessels let for hire"). In accordance with the legal status prescribed in section 9 of the Ordinance, requirements set out in this Code shall be followed.
- 1.4 The legislative requirements quoted in this Code should be subject to authentic provisions of the legislative instrument and its latest amended. These requirements are mandatory and must be complied with.
- 1.5 The builder, repairer or owner/managing agent of a vessel, as appropriate shall take all reasonable measures in accordance with the requirements of the Code to ensure that the designed materials, strength, appliances and stability of the vessel are suitable for the intended purpose having regard to their locations on the vessel, the area of operation and the weather conditions which may be encountered.

(Amendment No. 8, 9, 48)

#### 2 Statutory Regulations and Standards

- 2.1 This Code shall be construed in the light of the following ordinances and their subsidiary legislation as amended, and the relevant Rules, as appropriate:
  - (A) Merchant Shipping (Local Vessels) Ordinance (Cap. 548)(hereafter referred to as the "Ordinance")
    - (1) Merchant Shipping (Local Vessels)(Certification and Licensing) Regulation (Cap. 548D)
    - (2) Merchant Shipping (Local Vessels)(Typhoon Shelters) Regulation (Cap. 548E)
    - (3) Merchant Shipping (Local Vessels) (General) Regulation (Cap. 548F)

- (4) Merchant Shipping (Local Vessels) (Safety and Survey) Regulation (Cap. 548G) (hereafter referred to as "Survey Regulation")
- (5) Merchant Shipping (Local Vessels)(Compulsory Third Party Risks Insurance) Regulation (Cap. 548H)
- (6) Merchant Shipping (Local Vessels) (Fees) Regulation (Cap. 548J)
- (7) Merchant Shipping (Local Vessels)(Local Certificates of Competency) Rules
- (B) Merchant Shipping (Prevention and Control of Pollution) Ordinance (Cap. 413)
  - (1) Merchant Shipping (Prevention of Oil Pollution) Regulations (Cap. 413A)
  - (2) Merchant Shipping (Control of Harmful Anti-Fouling Systems on Ships) Regulation (Cap. 413N)
  - (3) Merchant Shipping (Prevention of Pollution by Garbage) Regulations (Cap. 413O)
  - (4) Merchant Shipping (Prevention of Air Pollution) Regulation (Cap. 413P)

    (Amendment No. 10)
- (C) Merchant Shipping (Safety) Ordinance (Cap. 369)
  - (1) Merchant Shipping (Safety) (Signals of Distress and Prevention of Collisions) Regulations (Cap. 369N)
  - (2) Merchant Shipping (Safety) (Use of Signals of Distress) Regulations (Cap. 3690)
- 2.2 Other standards
- 2.2.1 Apart from the requirements in this Code, the rules of classification societies recognized by Marine Department (see Annex 14) and the standards and rules of other maritime authorities (such as CE standards (i.e. the standard of product which complies with the relevant Product Directives adopted by the council of the European Communities and is affixed "CE marking")) applicable to vessels operating in Hong Kong waters or other equivalent standards may be used as assessment standards.

(Amendment No. 11, 48, 49)

2.2.2 Existing vessels shall comply with the requirements previously applicable to them before the implementation of this Code unless otherwise expressly specified in the Survey Regulation or in this Code. The approval and/or exemption of construction and equipment (if any) given to the existing vessels shall remain valid unless otherwise revoked.

(Amendment No. 48)

#### 2.3 Certificates or Records

- 2.3.1 Upon satisfactory completion of statutory surveys or assessment, the following certificates or record document (1) and (3) may either be issued by competent surveyor or Marine Department. Certificates (2) and (4) shall be issued by Marine Department as necessary:

  (Amendment No. 48)
  - (1) Certificate of Inspection

- (2) Certificate of Survey
- (3) Survey Record of Inspection for certain Equipment or Tests etc. (if applicable)
- (4) Exemption Certificate / Permit for alternate material, fitting or equipment (if applicable)
- 2.3.2 International Tonnage Certificate, if issued, may be issued by recognized classification societies directly to the owner, together with survey records in accordance with the requirements of the relevant Convention. A copy of such certificate and record is required to be submitted to Marine Department. (Amendment No. 12)
- 2.3.3 If the Merchant Shipping (Prevention and Control of Pollution) Ordinance (Cap. 413) applies to the vessel, plan approval and survey shall be conducted and/or the following certificates or records shall be issued:
  - (1) the specified certificate required under the Merchant Shipping (Prevention of Oil Pollution) Regulations (Cap. 413A) is the International Oil Pollution Prevention Certificate or HKOPP Certificate; and
  - (2) the specified certificate required under the Merchant Shipping (Prevention of Air Pollution) Regulations (Cap. 413P) is the International Air Pollution Prevention Certificate or HKAPP Certificate.

The certificate and survey record related to the International Oil Pollution Prevention Certificate and International Air Pollution Prevention Certificate can be issued by recognized classification societies direct to shipowners according to relevant international conventions. A copy of such certificate and record shall be submitted to Marine Department.

(Amendment No. 48)

#### 3 Definitions

- "approved", in relation to equipment, appliances, machinery, any fittings or materials, means approved by the Director;
- "authorized organization (AO)" means the classification society authorized (by means of authorization document) by the Director to carry out statutory survey work for local vessels;

  (Amendment No. 13)
- "authorized surveyor (AS)", as defined in section 2 of the Ordinance; (Amendment No. 49)
- "carrying xx passengers" means vessel's permissible number of passengers that can be carried:
- "certificate of ownership" means a certificate of ownership issued or endorsed by the Director under sections 10, 23 or 26 the Merchant Shipping (Local Vessels) (Certification and Licensing) Regulation;
- "Class I vessel" means any vessel, other than a Class IV vessel, that is allowed to carry more than 12 passengers;

  (Amendment No. 48)
- "classification societies" means the classification societies recognized by the Director, which are as follows:
  - (1) American Bureau of Shipping (ABS);

- (2) Bureau Veritas (BV);
- (3) China Classification Society (CCS);
- (4) DNV AS; (Amendment No. 13)
- (5) Korean Register of Shipping (KR);
- (6) Lloyd's Register (LR);
- (7) Nippon Kaiji Kyokai (NK);
- (8) RINA S.p.A. (RINA); or
- (9) Russian Maritime Register of Shipping (RS) (Amendment No. 13)

"competent surveyor" as defined in section 2 of the Survey Regulation;

- "existing vessel" means a vessel which is not a new vessel as defined in section 2 of the Survey Regulation Note 1; (Amendment No. 49)
- "extreme breadth (最大寬度)", in relation to a local vessel, means the athwartship distance between the extremity of the outermost permanent structure (which includes fender of any kind, bulwark, hand rails, etc.) on the port side and the extremity of the outermost permanent structure on the starboard side of the vessel; (Amendment No. 13)
- "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 a large amount of sea splash comes to the weather deck or, in the case of open cruisers, over the gunwale of a vessel;
- "final inspection" means the last or final visit for the purpose of survey or inspection, usually carried out on safety equipment items and functional trials in an initial survey or a periodical survey for a vessel;
- "gross tonnage" (GT), a measurement figure for a Class IV vessel, of which the details and calculation can be referred to Annex 8 of this Code:
- "initial survey" in connection with anyone of the certificates mentioned in Part 3 and Part 4, in so far as applicable, of Survey Regulation means the survey (including its final inspection) to be completed for a new vessel for the first issue of the concerned certificate;
- "length" or the symbol "(L)", unless otherwise expressly specified in this Code, as defined in section 2 of the Survey Regulation (see the diagram in Annex 17);

(Amendment No. 48)

"length overall (LOA)" (總長度), as defined in section 2 of the Ordinance;

<sup>&</sup>quot;Code" means this Code;

- "new vessel", as defined in section 2 of the Survey Regulation (Amendment No. 49)
- "novel type vessel", means a vessel that is not designed, constructed or used according to the traditional form;

  (Amendment No. 48)
- "owner", as defined in section 2 of the Ordinance;
- "Ordinance" or "LVO" means the Merchant Shipping (Local Vessels) Ordinance (Cap. 548);
- "passenger", as defined in section 2 of the Ordinance;
- "periodical survey" in connection with anyone of the certificates mentioned in Part 4, in so far as applicable, of Survey Regulation means the survey (including its final inspection) to be completed for an existing vessel for the renewal survey, annual endorsement survey or intermediate survey for the issue of the concerned certificate;
- "pleasure vessel", as defined in section 2 of the Ordinance;
- "pleasure vessel operator", in relation to a Class IV vessel, means a person who is in charge of the vessel;
- "sister vessels" means vessels constructed of the same design (i.e. the same hull form with identical length, breadth, depth and arrangement) in the same shipyard;

(Amendment No. 48)

"waters of Hong Kong" means waters of Hong Kong within the meaning of Schedule 2 of the Interpretation and General Clauses Ordinance (Cap. 1).

#### 4 Application

- 4.1 Except otherwise specified in the following section 4.2, this Code applies to all pleasure vessels which are required to be licensed as Class IV vessels. The applicable chapters and annexes are as follows:
  - (1) all vessels: Chapters I, III, IV, V, VI, VII, VIII and IX; Annexes 1B, 2, 4A, 5, 6, 8, 9 and 10;
  - (2) all pleasure vessels let for hire, Annexes 1 and 1A, in addition to the above (1);
  - (3) any pleasure vessels let for hire that carry not more than 60 passengers (i.e. vessels issued with a Certificate of Inspection): Chapter II, Annexes 3, 4 and 13A, in addition to the above (1) and (2);
  - (4) Other vessels that are issued with a Certificate of Survey or Certificate of Inspection: Chapter II, Annexes 3, 4 and 13B, in addition to the above (1) and (2);

Note1 In this code, a vessel (to which a particular requirement applies) is a "new vessel" when the reference to "the commencement date" in the definition of "new vessel" under section 2 "Interpretation" of the Survey Regulation is substituted by a date denoted at the top right corner of the term "new vessel". (Example: "new vessel<sup>1.8.2020</sup>" means, according to the definition of Survey Regulation, a vessel first licensed or altered on or after 1.8.2020). The date denoted at the top right hand corner of the term "existing vessel" is the date before which the vessel was first licensed. (Amendment No. 49)

(5) Certification of vessels and the types of vessels that must also comply with the additional requirements stated in Chapter X of this Code are shown in the following table:

	EXISTING VESSEL 1.8.2020					NEW VESSEL 1.8.2020				
No. of Passengers /	Gross Tonnage	NO'	Pleasure vessel NOT let for hire or reward		Pleasure vessel let for hire or reward		Pleasure vessel NOT let for hire or reward		Pleasure vessel let for hire or reward	
Feature	(GT)*	Additional Require- ment	Certificat- ion	Additional Require- ment	Certificat- ion	Length (L)*	Additional Require- ment	Certificat- ion	Additional Require- ment	Certificat- ion
(a) More than 60 passengers	Any Tonnage	X/Pt 2	CoS	X/Pt 2	CoS	Any Length	X/Pt 2, CoP1	CoS	X/Pt 2, CoP1	CoS
(b) 13 to 60	CT > 150	GT > 150 X/Pt 2	CoS	X/Pt 2	CoS	L≥ 24m & GT>150	X/Pt 1A	CoS	X/Pt 1A, X/Pt 2	CoS
passengers	GT > 150					L≥ 24m & GT≤ 150		CoI		CoI
	GT ≤ 150	-	Not required	X/Pt 2	CoI	L< 24m	-	Not required	X/Pt 1A, X/Pt 2	CoI
(c) not more than	GT > 150	X/Pt 2	CoS	X/Pt 2	CoS	L≥ 24m & GT>150	X/Pt1A	CoS	X/Pt 1A,	CoS
12 passengers	G1 / 130	70102	005	70102	COD	L≥ 24m & GT≤ 150	70,10171	CoI	X/Pt 2	CoI
	GT ≤ 150	-	Not required	X/Pt 2	CoI	L< 24m	1	Not required	X/Pt 1B**, X/Pt 2	CoI
Novel Construction	Any Tonnage	case by	CoS	case by	CoS	Any length	case by	CoS	case by	CoS

### Legend

\* by gross tonnage (GT): applicable to existing vessels<sup>1.8.2020</sup>; by length (L): applicable to new vessels<sup>1.8.2020</sup>

\*\* applies solely to open cruisers

CoP1: in accordance with the relevant requirements for the vessel type "launch" carrying the same number of passengers specified in the "Code of Practice – Safety Standards for Class I Vessels"

X/Pt 1A: the provisions of Part 1A of Chapter X of this Code

X/Pt 1B: the provisions of Part 1B of Chapter X of this Code

X/Pt 2: the provisions of Part 2 of Chapter X of this Code

CoS: except for novel type vessels, officers of Marine Department or AO are to undertake statutory plan approval and surveys (including final inspection); Marine Department officers are to undertake the issuance of Certificates of Survey

CoI: competent surveyors (or as directed by the Director) are to undertake all statutory plan approval and surveys as well as the issuance of Certificates of Inspection

Case by case: to be considered by the Director on a case-by-case basis in respect of the impact on life safety and environment posed by the design, construction and operation of the vessel.

(Amendment No. 14, 15, 48)

- 4.2 This Code does not apply to any vessel prescribed in section 10 of the Ordinance.
- 4.3 The coxswain of a pleasure vessel let for hire:
  - (1) is required to conduct a safety briefing to all persons on board before commencing a voyage. A general guide on the content of the "Safety Briefing for Pleasure Vessels Let for Hire" is at Annex 1;
  - shall comply with section 6 of the Merchant Shipping (Certification and Licensing) Regulation (Cap. 548D) concerning the restrictions on Class IV vessels. Excerpts of the relevant Ordinance are at Annex 1A.

(Amendment No. 48)

- 4.4 The owner, agent or coxswain of any vessel which carries or uses petrol onboard is required to observe the "Safety Precautions on the Proper Storage and Use of Petrol" indicated in Annex 2.
- 4.5 Compliance with this Code satisfies the condition relevant to the safety and pollution prevention requirements of the Survey Regulation relating to any Class IV vessel operating in the waters of Hong Kong.
- 4.6 The Director may, on the certificate of ownership of a certificated Class IV vessel, make an endorsement to the effect that the certificated vessel may be used with one ancillary vessel meeting the following conditions:
  - (1) belongs to the same owner as the certificated vessel;
  - (2) does not exceed 4 metres in length overall (LOA); and
  - (3) either is not fitted with an engine or is fitted with engines not exceeding 7.5 kW total propulsion power.

(Former Sections 5, 6 and 7 revoked (Amendment No. 48))

## **8** Duties Relating to Class IV Vessels

- 8.1 It is the responsibility of the owner and agent of any Class IV vessel to ensure that the vessel is properly maintained and examined in accordance with the requirements of the ordinances and regulations mentioned in section 2 above in this Code. (Amendment No. 48)
- 8.2 The coxswain of every mechanically propelled Class IV vessel shall ensure that the machinery spaces of his vessel are at all times kept clean and free from unnecessary combustible materials and that waste oil is not allowed to accumulate in the bilges.
- 8.3 Any jet ski belonging to Class IV shall be of the type/model approved or recognized by

classification society or by the national maritime authority of their country of manufacture.

(Amendment No. 48)

8.4 Application must be made to Marine Department for any vessel intending for towing a banana boat or similar vessel. The application form can be downloaded from the following URL: https://www.mardep.gov.hk/filemanager/en/share/forms/pdf/md530.pdf

(Amendment No. 48, 50)

## 9 Equivalent

Under section 83 of the Survey Regulation Marine Department may grant permission for providing on board any other fitting, material, appliance or apparatus, or type thereof, or other facilities that are different from those required in this Code if the Department is satisfied by testing or other methods that their effectiveness is equivalent to that required in this Code; supported by necessary survey and test reports. (Amendment No. 16)

## 10 Display of Certificate

Under section 30 of the Survey Regulation, the Certificate of Inspection / Certificate of Survey must be displayed in a conspicuous location onboard. (Amendment No. 17)

(Former Section 11 revoked (Amendment No. 48))

## CHAPTER II

#### INSPECTION AND CERTIFICATION

(This chapter applies to Class IV vessels holding a Certificate of Survey or Certificate of Inspection required by the legislation)

#### 1 Certification

- 1.1 A certification inspection is to determine that the vessel's structure, machinery, electrical, safety equipment installations and stability comply with the requirements of this Code, including the examination when the vessel is on slip or dry-docking.
- 1.2 The surveyor should decide the scope of the examination based on the vessel type, number of passengers to be carried and the intended plying limits of the vessel in a certification inspection.
- 1.3 Any pleasure vessels licensed to carry not more than 60 passengers that are let for hire should pass the periodic survey carried out by Marine Department, AO or AS before a Certificate of Inspection would be issued. See the Periodic Survey Programme at Annex 13A of this Code. The format of the Certificate of Inspection is available at Marine Department website: https://www.mardep.gov.hk/en/public-services/port-services/lvs/lvs-survey7/index.html
  - The validity period of the certificate is decided by the competent surveyor subject to the intended purpose and condition of the vessel, and should not be more than 12 months. See Annex 4 of this Code for the inspection record of a vessel that is issued with a Certificate of Inspection.
- 1.4 New pleasure vessels <sup>1.8. 2020</sup> of 24m or above in length and not more than 150 gross tonnage (i.e. L≥24m & GT≤150) should pass the periodic survey carried out by Marine Department, AO or AS before a Certificate of Inspection would be issued. Please see the Periodic Survey Programme at Annex 13B of this Code.
- 1.5 Vessels holding a Certificate of Survey issued by Marine Department as required by the Ordinance, including any pleasure vessels that are licensed to carry more than 60 passengers, existing pleasure vessels <sup>1.8. 2020</sup> of over 150 gross tonnage (GT>150) and new pleasure vessels <sup>1.8. 2020</sup> of 24m or above in length and over 150 gross tonnage (i.e. L≥24m & GT>150) are subject to the periodic survey carried out by Marine Department or AO. Refer to the relevant Survey Programme at Annex 13B of this Code.

(Amendment No. 18, 48)

## 2 Examination and Inspections

- 2.1 For the purpose of obtaining a Certificate of Inspection for any vessel, matters relating to examination and inspection of its design, construction, safety equipment installations and stability in compliance to the requirements of this Code are to be appropriately arranged and agreed with the competent surveyor.
- 2.2 Relevant document from builder shall be endorsed and certified by the competent surveyor confirming the standard of construction applied to the vessel. (Amendment No. 48)
- 2.3 New vessels of proto-type approval, including details of approved production procedures and key inspections, with valid certification document is acceptable. Proven type pleasure

- vessels with proper documentation or verification details can also be considered acceptable.
- 2.4 For any vessel, the builder's inspection reports or certificates and the inclining test report are required for endorsement by a competent surveyor. The endorsed documents shall be kept onboard with the Inspection Record.

  (Amendment No. 48)

(Former section 3 revoked (Amendment No. 48))

#### **CHAPTER III**

## HULL, MACHINERY AND ELECTRICAL INSTALLATIONS

(Unless otherwise expressly specified, this chapter applies to all Class IV vessels)

#### 1 Standards for Construction and Installations etc.

The vessel's strength, structure, arrangements, materials, scantlings, main and auxiliary machinery, boilers and pressure vessels, electrical installations, etc. shall be so designed, constructed and installed as to ensure that the vessel is fit for the service for which it is intended. Owner or builder may make reference to any relevant standards of classification societies for pleasure vessels or small craft or appropriate standards (such as CE standards); or any other equivalent standards.

(Amendment No. 48)

## 2 Hull Construction and Marking

- 2.1 (1) The vessel shall be designed and constructed to:
  - (a) provide structural strength adequate for the intended services of the vessel;
  - (b) maintain adequate freeboard and stability; and
  - (c) prevent the ready ingress of sea water.
  - (2) Vessel shall not have false bottom or secret compartment.

(Contents of former section 2.2 were amended and moved to Ch. IV, section 5 (Amendment No. 60))

- 2.3 Bulkheads of vessel except those of wooden construction, and as far as practicable on wooden vessel in particular the foremost bulkhead, shall be of watertight construction.
- 2.4 (1) Every enclosed space shall be provided with suitable ventilation and lighting. Every such space for regular entrance by crew or working personnel shall be suitably mechanically ventilated and illuminated.
  - (2) Every deck house shall be provided with appropriate insulation to avoid from excessive heat.
- 2.5 The certificate of ownership number of a vessel must be painted and mounted in accordance with section 38 of the Certification and Licensing Regulation.
- 2.6 If an existing pleasure vessel <sup>1.8.2020</sup> (i.e. first licensed before 1 August 2020) licensed to carry not more than 60 passengers that is not let for hire changes its use to be let for hire, an inclining test or calculation shall be conducted according to the standards of an authorized classification society or their equivalent. Alternatively, relevant certificates (such as class certificates or CE certificates), documents or declarations issued by an authorized classification society or a certification body shall be provided

- 2.7 As an alternative to section 2.6 above, a simple inclining test can be conducted. Refer to Annex 5 for details
  - (1) for Class IV vessels (including open cruisers or cruisers (enclosed deck vessels)) that are licensed to carry not more than 12 passengers, to ascertain that the angle of heel will not exceed 7° when having 2/3 of the passengers distributed on one side of the vessel and 1/3 on the other. The test is to be carried out in accordance with the details stated in Part 1; or
  - (2) for Class IV vessels (including open cruisers or cruisers (enclosed deck vessels)) that are licensed to carry 13 to 60 passengers, to ascertain that the angle of heel will not exceed 10° when all passengers move from one side of the vessel to the other. The test is to be carried out in accordance with the details stated in Part 2.

If the vessel is not longer than 6 metres, an immersion test to prove its adequacy of buoyancy is also acceptable.

2.8 If a new pleasure vessel <sup>1.8.2020</sup> (i.e. first licensed on or after 1 August 2020) not let for hire changes its use to be let for hire, an inclining test or calculation shall be conducted as per Chapter X of this Code.

(Amendment No. 20, 48)

## 3 Machinery Installations

- 3.1 Suitable means of protection or device shall be provided to machinery, equipment, winches, etc. so as to avoid posing a danger to the persons on board. Special attention shall be paid to moving parts, hot surfaces and other dangers. (Amendment No. 48)
- 3.2 Machinery spaces shall be so designed and built so as to prevent risk of fire or explosion, and provide safe and free access to all machinery and its controls as well as to any other part that may require servicing. Adequate ventilation shall be provided for the machinery spaces.
- 3.3 On any open cruiser capable of cruising at high speeds Note, it is recommended that a safety device capable of tripping the propulsion engine(s), shall the vessel become out of control, be fitted. For a jetski, manufacturer recognized engine cutoff device or as appropriate, is to be fitted on board.

**Note:** When an open cruiser is rated with operating speed exceeding 17 knots or capable to achieve that speed, it is also termed as "high speed open cruiser"

- 3.4 If the vessel is of wooden construction, it is recommended that a metal tray, which can readily be cleaned, be fitted under the engine to protect the bilges against saturation by oil.
- 3.5 The engine's exhaust pipe and bulkhead piece shall be insulated with heat-resistant material unless it is served by a water-cooling system. A silencer or expansion chamber

- shall be fitted on the exhaust pipe.
- 3.6 The arrangements for filling fuel tanks shall be such that oil will not spill or overflow into any compartment of the vessel.
- 3.7 Fuel tanks shall be substantially constructed of suitable material and securely fixed in position. Fuel oil outlet valves shall be readily closed from a position outside the space where the tank is situated. A suitable metal tray for collection of leaking oil shall be fitted under each valve of oil tank.

  (Amendment No. 48)
- 3.8 All fuel oil tank and lubrication oil tank venting pipes shall be led outside the compartment to open area. The open end of each venting pipe for fuel oil tanks shall be fitted with properly secured metallic wire-gauze.
- 3.9 Oil pipes, water pipes and engine exhaust pipes shall generally not be fitted above or close to any electrical distribution board, switchboard, etc. or any hot surface. If it is unavoidable to do so, suitable protection shall be provided.
- 3.10 Fuel oil pipes and their attachments shall be of adequate strength and free from excessive vibration.
- 3.11 A bilge pump of sufficient capacity shall be provided for any vessel of length (L) 8 metres and above.
- 3.12 When petrol is stowed onboard for use in outboard engines or portable generator engines, safety precautions as indicated in Annex 2 shall be strictly followed.
- 3.13 Every vessel of gross tonnage 400 and above must be fitted with an oily water separator of an approved type in compliance with the requirements of the Merchant Shipping (Prevention of Oil Pollution) Regulations (refer to Annex 10).
- 3.14 Engine Room and Wheelhouse Communication and Safety Arrangement
  - (1) On any vessel with manned engine rooms, a suitable system of communication between wheelhouse and engine room shall be provided.
  - (2) Any vessel with length as indicated below, operating in unattended machinery spaces mode, shall be provided with the following installation in the proximity of the position of helmsman:
    - (a) Vessel of L < 24 m

(Amendment No. 48)

(i) for main engine - essential control (such as means of start and stop control of speed and clutch), indicators and abnormal alarms.

(Amendment No.48)

- (ii) for generator engine and engine room ventilation fans means to stop.
- (iii) for bilge water in engine room high level audible alarm<sup>Note</sup>.

- (iv) for existing vessels<sup>2.1.2007</sup>, a fixed fire detection (operated by smoke detectors) and fire alarm system for engine room are recommended. If these fittings are not installed, regular surveillance shall be exercised from outside engine room or control station by the coxswain or a crew member.
- (v) for new vessels<sup>2.1.2007</sup>, a fixed fire detection (operated by smoke detectors) and fire alarm system for engine room are to be installed. <sup>Note</sup>

#### Note

For vessel length of less than 12 m, if regular surveillance can be exercised from outside engine room or control station by the coxswain or a crewmember, these requirements can be waived.

- (b) Vessel of  $L \ge 24$  m (Amendment No. 48) same as (a) above but in addition, provided with a fixed fire detection (operated by smoke detectors) and fire alarm system for engine room.
- 3.15 Any engine fitted on a vessel shall be properly maintained at all time free from dark smoke emission. In this regard, during the final inspection for initial and periodic survey, engine performance condition check would include smoke emission test using Ringelmann Chart. When the dark smoke emitted is as dark as or darker than Shade 2 of the Ringelmann Chart and is emitted for a continuous period of more than 3 minutes, the emission is considered a contravention of the law. (Amendment No. 21)
- 3.16 Any vessel if found or reported emitting excessive dark smoke, owners would be requested to present vessel's engine(s) for special inspection and smoke test to ensure compliance. Any non-compliance will be pursued in accordance with relevant legislation requirement.
- 3.17 Compressed Air System
- 3.17.1 Suitable pressure-relief arrangements shall be provided to prevent excess pressure in any part of the compressed air systems.
- 3.17.2 The starting air arrangements for main engine of a cylinder diameter exceeding 300 mm shall be adequately protected against the effects of back firing and internal explosion in the starting air pipes.
- 3.17.3 The discharge pipes from starting air compressor shall be led directly to the starting air receiver. Starting air pipes from air receivers serving main or generator engines shall be entirely separate from other services.
- 3.17.4 Provision shall be made to avoid or minimize the entry of oil into the air pressure systems and to drain the oil from the systems.
- 3.17.5 (1) Air receivers of a new vessel <sup>1.8.2020</sup> or air receivers newly installed in an existing

vessel shall meet the standards stated below (solely for air receivers of low pressure installation (such as air whistle)) and undergo the survey of a relevant maritime institution or an authorized surveyor/person:

- (i) to meet the national standards of a maritime authority or the standards of a classification society or other recognized international standards such as ASME Standards or CE Standards, and to be issued with relevant certificates and have a comprehensive maintenance and survey programme; or
- (ii) to be inspected and issued with a certificate by an authorized person who can inspect, test and issue a certificate for a pressurized gas installation under the Dangerous Goods (General) Regulations.
- (2) Each air receiver shall be provided with the following fittings:
  - (i) Stop valve and pressure gauge
  - (ii) Drain valve
  - (iii) Safety valve

(Amendment No. 22, 48)

#### 4 Electrical Installations

- 4.1 The nominal voltage of electrical systems is recommended to be 380V for generation and power circuits, 220V for lighting and distribution circuits and 24V D.C. for low voltage circuits.
- 4.2 The hull return system shall not be used for power or lighting.
- 4.3 Permanently exposed fixed metal parts of electrical machines or equipment which are not intended to be "live", but which are liable under fault conditions to become "live" shall be earthed if they are supplied at a voltage exceeding 50V, except arranged with double insulation internally.
- 4.4 Electrical apparatus shall be so constructed and so installed that it should not cause injury to person when handled or touched in the normal manner.
- 4.5 The voltage rating of any cable shall not be less than the nominal voltage.
- 4.6 Every conductor of a cable or flexible cord shall be capable of carrying the maximum current which will normally flow through it without exceeding the appropriate current rating as specified by the manufacturer of the cable.
- 4.7 Cable runs shall be selected so as to protect against condensed moisture or drips. Cables shall, as far as possible, be remote from sources of heat, such as hot pipes, resistors, etc., and shall be protected from avoidable risks of mechanical damage.
- 4.8 Circuits shall be protected against short circuit and overload.

- 4.9 The current rating of circuit breakers shall not exceed the current rating of the smallest size of cable in the circuit protected by the circuit breaker.
- 4.10 Lighting fittings shall be so arranged as to prevent temperature rises which could damage the wiring and to prevent surrounding material from becoming excessively hot.
- 4.11 Accumulator batteries of lead-acid type shall not be located in accommodation spaces. Suitably installed hermetically-sealed accumulator batteries of alkaline type are acceptable to be placed in accommodation spaces.
- 4.12 In spaces where flammable mixtures are liable to collect and in any compartment assigned principally to contain an accumulator battery lead-acid type, the electrical fittings shall be of an explosion proof type.
- 4.13 A lightning conductor is recommended to be fitted for a vessel whose hull or mast is constructed of nonconductive materials. The lightning conductor may be connected to a copper plate fixed to the vessel's hull below the light waterline. The requirement is applicable to only non-metallic hull vessels.

#### **5** Pollution Prevention

Owners and agents are required to comply with the requirements relevant to the MARPOL as follows:

- (1) The Merchant Shipping (Prevention of Oil Pollution) Regulations (Cap. 413A) applicable to any pleasure vessel of gross tonnage 400 and above (Refer to Annex 10 of this Code);
- (2) Merchant Shipping (Control of Harmful Anti-Fouling Systems on Ships) Regulation (Cap. 413N);
- (3) Merchant Shipping (Prevention of Pollution by Garbage) Regulations (Cap. 413O); and
- (4) The Merchant Shipping (Prevention of Air Pollution) Regulation (Cap. 413P) applicable to any pleasure vessel (Refers to Annexes 7 and 7A of this Code).

(Amendment No. 48)

## 6 Other Installations and Equipment

6.1 At least one anchor of adequate weight is to be installed with anchor chain of adequate size, length and strength for its intended purpose. Where ropes are used instead of chain cables, the rope's size and strength shall be equivalent to that of chain cable. Except for manual operating type, suitable cable and anchor recovery arrangement or windlass is recommended.

- 6.2 A repair tool kit for main and auxiliary engines is to be carried.
- 6.3 No naked fire is permitted to use for cooking or similar activities whenever there is passenger onboard, unless the cooking is done inside a galley fitted with fire protected bulkheads.

  (Amendment No. 23)

### 7 Shipboard Passenger Lift

#### 7.1 Certificate of manufacture:

Lifts on board shall not affect the structural safety of the ship and shall be constructed in accordance with applicable standards (e.g. Australian Standards, British Standards and CE Standards, etc.). A certificate issued by a recognized organization or an equivalent professional body shall be attached.

### 7.2 Periodic Inspection

The lifts on board shall be regularly tested and inspected in accordance with the manufacturer's guidelines, and the relevant work and relevant inspection report shall be carried out and issued by the manufacturer or the works contractor recognised by the certificate issuing agency. Registered lift contractors of the Electrical and Mechanical Services Department may also carry out relevant inspection work and issue relevant reports.

The shipowner is required to submit a valid inspection report at the time of the annual survey.

(Amendment No. 48)

#### 8 Alteration

Before making any major alterations to the vessel, the shipowner/agent/competent surveyor shall follow the guidelines in Marine Department Notice No. 215 of 2023 on "Alterations to Local Vessels". (Amendment No. 48)

#### **CHAPTER IV**

#### PASSENGER AND CREW ACCOMMODATION

#### 1 Accommodation

- 1.1 Accommodation spaces shall be maintained in a clean, suitable lighting, well-ventilated and habitable condition with efficient means of escape.
- 1.2 There shall be sufficient handholds and grab-rails within the accommodation to allow safe movement around the accommodation when the vessel is in a seaway.
- 1.3 Heavy items of equipment such as batteries, cooking appliances etc., shall be securely fastened in place to prevent movement when the vessel is underway.
- 1.4 All vessels shall ensure the boarding for crew and passengers is safe.
- 1.5 For vessels carrying more than 12 passengers, sanitary apparatus or wash room shall be provided on board as far as practicable, taking into consideration the actual operational needs (e.g. voyages exceeding 30 minutes). (Amendment No. 48)
- 1.6 Glass or mirror shall be made of materials, which will not break into dangerous fragments if fractured.
- 1.7 Passenger and crew accommodation shall have at least 1.85 metres of clear headroom above deck flooring.

## 2 Maximum Carrying Capacity and Seating

- 2.1 The maximum carrying capacity (including passengers and crew) for a Class IV vessel shall be determined as follows:
  - (1) open cruiser Note (i)

(Amendment No. 51)

L × B numeral	Total Number of Persons
≤ 5	2
>5 to ≤ 10	3
> 10	4

(2) cruiser (closed deck vessel) Note (ii)

(Amendment No. 51)

total number of persons  $=L_d \times B \times 0.4$ 

where L = vessel length (m) as defined in Chapter I of this Code

Ld = vessel deck overall length (m)

B = vessel maximum breadth (m)

**Note (i)**: "Open cruiser" means a vessel which is not a "cruiser". For the avoidance of doubt, jetski is an Open cruiser.

**Note (ii):** "cruiser" means a vessel which (a) has a continuous main deck; or (b) cabin could accommodate 60% of vessel's carrying capacity (total number of persons permitted to carry) with weatherproof cabin door and drainage holes on deck.

(Amendment No. 51)

- 2.2 An increased capacity may be considered subject to a satisfactory result of the test stated below for a vessel with the maximum carrying capacity required exceeding the upper limit of the calculated value in section 2.1 above. Such increase shall take into consideration the minimum number of crew required for the vessel as specified in the operating licence, of which the evaluation is guided by the details given at Annex 4A of this Code:
  - (1) an existing pleasure vessel <sup>1,8,2020</sup> (i.e. first licensed before 1 August 2020) receiving a satisfactory result after conducting an inclining test or calculation in accordance with the requirements stipulated in section 2.6 or 2.7 in Chapter III of this Code;
  - (2) a new pleasure vessel <sup>1.8.2020</sup> (i.e. first licensed on or after 1 August 2020) receiving a satisfactory result after conducting an inclining test or calculation in accordance with Chapter X of this Code.

(Amendment No. 48)

- 2.3 All passengers shall be arranged with seating or resting facilitates adequate for the intended purpose. As a guidance, the number of fixed seats shall be not less than 50% of its maximum number of carrying capacity and the balanced number of seats can be in other form or type provided that they are relatively stable and safe for its purpose.
- 2.4 (1) Any new pleasure vessel <sup>2.1.2007</sup> (i.e. first licensed on or after 2 January 2007) that is let for hire shall not carry passenger below main deck.
  - (2) For any new pleasure vessel <sup>2.1.2007</sup> not let for hire or any existing pleasure vessel <sup>2.1.2007</sup> (i.e. first licensed before 2 January 2007) let for hire; any compartment below main deck shall not be used as passenger space as far as practicable, except on a sunken deck which has scantlings equivalent to main deck and shall be at least 100 mm above the deepest loaded waterline or fitted with flooding alarms, provided these spaces are clearly marked with the accessible escape route. (Amendment No. 25)
- 2.5 For any pleasure vessel let for hire, a "Seating plan" and a passenger capacity assessment form of format indicated in Annex 4A are to be submitted and verified by AS or Marine Department.

## 3 Marking of carrying capacity in Passenger Space

3.1 For any pleasure vessel carrying more than 12 passengers that is let for hire, the number of

passengers in which each deck can accommodate shall be indicated, in a conspicuous location, at all spaces where passengers will be embarking, in Chinese and English:-

Upper Deck	XXX
Main Deck	XXX
Others	XXX
Total Number of Passengers	XXX
Minimum Number of Crew	XXX
Total Number of Person Permitted	XXX

- 3.2 For any pleasure vessel carrying not more than 12 passengers that is let for hire, it is recommended to mark the maximum carrying capacity in a conspicuous location, in Chinese and English.
- 3.3 Lifejacket stowage location shall be clearly marked.

(Former section 4 revoked (Amendment No. 48))

## 5 Protection of Passengers and Crew

Bulwarks, guardrails or equivalent should as far as practicable be installed near the periphery of weather decks accessible to passengers and crew. If persons on board will not walk or work on the sides of the main deck under normal conditions during sailing, fitting of bulwarks or guardrails is not required provided there are suitable warning plates.

(Amendment No. 60)

#### 6 Inflatable Boat

- Organization issued ISO 6185 with respect to structural materials, functional components and safety requirements (including maximum load capacity), etc. appropriate to vessel's length and engine horsepower. Independent certification for the vessel applying for licence shall be furnished. A relevant certificate (CE certificate) provided by the certification body is also acceptable.
- 6.2 The maximum carrying capacity (including passengers and crew) of a vessel shall comply with the requirements of ISO 12217-1 (appropriate to the design category of the vessel) and ISO 14946 on the number of persons intended to carry.

(Amendment No. 27, 48)

#### **CHAPTER V**

#### FIRE PROTECTION

#### 1 General Requirements

1.1 Fire-fighting apparatus shall be of approved type. Apparatus approved by the maritime administration of a convention country, or classification society on behalf of an administration in accordance with the recommendations of the International Maritime Organization (IMO), or fire-fighting apparatus approved by the national maritime authority of its country of manufacture or equivalent (such as CE approved), is acceptable.

(Amendment No. 48)

- 1.2 Portable Fire Extinguishers
- 1.2.1 The approximate fire-extinguishing capacity of each type of portable fire extinguisher are as shown in the following table:

Vessel Length (L)(m) Media	L ≤ 9	9 < L < 15	L ≥ 15
Foam, water (litres)	2.8	4.6	9
CO <sub>2</sub> (kg)	1	1.5	3
Dry Powder (kg)	1.4	2.3	4.5

- 1.2.2 Fire extinguishers to be used for switchboards, control panels, batteries, etc. shall be of a type suitable for electrical fires, e.g. dry-powder or CO<sub>2</sub> fire extinguishers.
- 1.2.3 Fire extinguishers to be used for machinery spaces shall be of the type suitable for oil fires, e.g. foam, dry powder or CO<sub>2</sub> fire extinguishers.
- 1.2.4 Portable extinguishers are to be suitably distributed throughout the protected spaces. Normally at least one shall be stowed near the entrance to that space.
- 1.2.5 Carbon dioxide fire extinguishers shall not be used in accommodation spaces.
- 1.2.6 No portable fire extinguisher is required for a jetski.
- 1.2.7 Portable fire extinguishers shall be periodically examined and subject to tests in accordance with the requirements in Note\*5 of Annex 13B. (Amendment No. 28, 48)
- 1.3 Fire Pumps
- 1.3.1 When an emergency fire pump is required, such pump, its source of power (if any) and sea connection shall not be situated in the same compartment of the main fire pump.
- 1.3.2 A manually operated pump shall be capable of producing a jet of water having a throw of not less than 6 metres from its nozzle.
- 1.4 Hydrants, Hoses, Nozzles
- 1.4.1 Fire hydrants shall be positioned so as to allow at least one jet of water from a single length of fire hose to reach any part of the vessel normally accessible. If only one hydrant is provided for the engine room it shall be located outside that space and near the entrance.
- 1.4.2 The nozzles shall be appropriate to the delivery capacity of the fire pumps fitted, but in any case shall have a diameter of not less than 10 mm.

- 1.4.3 Dual purpose nozzle incorporating a shut-off meeting the requirements set out in Appendix I of MDN No. 49 of 2019 is accepted as an alternative to the requirements of jet nozzles and spray nozzles stipulated in Schedule 4 of the Survey Regulation.
- 1.5 Fixed Fire Extinguishing System

Aerosol System meeting the requirements set out in Part B, MDN No. 49 of 2019 or FM-200 System meeting the requirements set out in MDN No. 25/2023 is accepted as an alternative to the fixed CO<sub>2</sub> fire-extinguishing system stipulated in Schedule 4 of the Survey Regulation.

## 2 Ready Availability and Maintenance of Apparatus

- 2.1 Whenever a local vessel is being used or operated, every fire-fighting apparatus carried on board the vessel shall be:
  - (a) in working order;
  - (b) ready for immediate use; and
  - (c) placed in a position easily accessible.
- 2.2 The apparatus shall be inspected at intervals of not more than 12 months.

## **3** Scale of Fire-fighting Apparatus

3.1 The requirements of fire-fighting apparatus are prescribed under Schedule 4 of Survey Regulation. The electronic version of which is available at URL –

https://www.elegislation.gov.hk/hk/cap548G!en-zh-Hant-HK/sch4

(Amendment No. 29, 48)

- 3.2 The requirements for a vessel of 75 m or more in length shall be specified by the Director on case by case basis having considered the following factors:
  - (a) the vessel's mode of operation;
  - (b) the vessel's intended service;
  - (c) the vessel's size;
  - (d) the vessel's construction;
  - (e) the total number of persons on board (and crew manning);
  - (f) the compliance of regional standards or international standards, if applicable; and
  - (g) potential hazards to the safety of the vessel and any person or property on board the vessel.
- Provisions of fire-fighting apparatus in Survey Regulation Schedule 4 (Table 8) are quoted below:

**OUOTE** 

Table 8

Pleasure vessels licensed to carry not more than 60 passengers and operate within waters of Hong Kong that are not let for hire

Fire-fighting Apparatus	essel Length (L)(m)	L<5.5	5.5≤ L ≤9	9 <l<15< th=""><th>15≤ L&lt;24</th><th>L≥24</th></l<15<>	15≤ L<24	L≥24
Portable Fire Extinguisher	1.4 kg	1 <sup>(1)</sup>	2	-	-	-
	2.3 kg	-	-	2	-	-
	4.5 kg	-	-	-	2	2
	Engine Room	-	-	$2^{(3)}$	2 <sup>(3)</sup>	2 <sup>(3)</sup>
Fire Bucket with Lanyard (4)		1 (or 1 bailer)	2	2	2	3
Main Fire Pump	Power	-	-	-	1 <sup>(5)</sup>	1
	Manual	-	-	-	1	-
Emergency Fire Pump	Power	-	-	-	-	1 (5)
	Manual	-	-	-	-	
Hydrant		1	1	ı	capable of delivering one jet of water having a throw of not less than 6 m which can be directed on to any part of the vessel through a hose with a 10 mm	
Hose		-	-	-	1	2
Nozzle	Jet	-	-		1	2
	Spray	-	-	-	-	1
Fireman's Axe		-	-	-	-	1

### Notes:

- (1) (a) Portable dry powder fire extinguisher or equivalent.
  - (b) No fire extinguisher is required for a jetski.
- (2) Two extinguishers shall be provided if there is a galley on board.
- (3) For engine room that contains internal combustion type machinery having in aggregate a total power output of not less than 375 kW.
- (4) Fire buckets may be substituted by an equal number of portable dry powder fire extinguishers each of a capacity of not less than 4.5 kg of dry powder or equivalent.
- (5) The fire pump and its sea suction shall be situated outside the engine room.

3.4 Provisions of fire-fighting apparatus in Survey Regulation Schedule 4 (Table 1) are quoted below:

Table 1

- (i) Pleasure vessels that are licensed to carry more than 60 passengers
- (ii) Pleasure vessels licensed to carry 13 to 60 passengers that are let for hire

Vessel length (L)(m) Fire-fighting Apparatus		(L)<15	15≤(L)<24	24≤(L)<60	60≤(L)<75 <sup>(1)</sup>	
Portable Fire Extinguisher	Passenger Accommodation Space	1 on each de (minimum 2		1 within not more than 10 m walking distance, but at least 2 on each deck		
	Wheel House	1				
	Galley	1				
	Engine Control Room	1				
	Engine Room	3	4	1 for each 750 kW or thereof of the power output the engine and electric mobut at least 3 and not more to 6 in each room		
	Machinery Space	1 within each space				
<fixed co<sub="">2 Fire Extinguishing System&gt;(2) (3)</fixed>	Engine Room	-		gas quantity, storage, piping, nozzle, alarm, location and arrangement shall be in accordance with the relevant plans approved under Part 3 of Survey Regulation		
<fire alarm="" and="" detection="" system="">(3)</fire>				quantity, type, location and arrangement shall be in accordance with the relevant plans approved under Part 3 of Survey Regulation		
Main Fire	Power		1 <sup>(4)</sup>	1 <sup>(5)</sup>	1	
Pump	Manual	-		-	-	
Emergency Fire Pump	Power		_	1 <sup>(4)</sup>	1 <sup>(4)</sup>	
	Manual		T	•	•	
Fire Main + Hose + Hydrant + Jet Nozzle		- (Amendment 1 set No. 61)		1 set to be provided for each pump <sup>(6)</sup>		
Fireman's Axe	Fireman's Axe			1		

<sup>(1)</sup> The requirement for a local vessel of 75 m or more in length shall be specified by the Director on a case-by-case basis.

<sup>(2) (</sup>a) Required for any local vessel that is licensed to carry more than 12 passengers and installed with internal combustion engines of aggregate propulsion power of 375 kW or

over.

- (b) The fixed CO<sub>2</sub> fire extinguishing system may be substituted by a non-portable fire extinguisher (45L foam or equivalent CO<sub>2</sub> type) if it can be satisfactorily demonstrated that the jet of the fire extinguishing media can reach any part of the engine room.
- (c) For local vessels of 24 m or more in length and that are not new vessels<sup>2.1.2007</sup>, one 45L foam or 16 kg CO<sub>2</sub> fire extinguisher shall be provided in the engine room.
- (3) Requirements in angle brackets ("<>") are for new vessels<sup>2.1.2007</sup> only.
- (4) The fire pump and its sea suction shall be situated outside the engine room.
- (5) The fire pump may be propulsion engine driven, provided it can be readily engaged to the engine.
- (6) A Class IV vessel of 24 m or more in length shall be provided with the following additional appliances:
  - (a) 1 hydrant in each engine room; and
  - (b) 1 spray nozzle on each deck and in each engine room.

#### UNQUOTE

Remark: For existing pleasure vessels<sup>2.1.2007</sup> of length less than 24 m that is let for hire, power/manual pump may be substituted by equivalent means of additional fire fighting apparatus.

3.5 Provisions of fire-fighting apparatus in Survey Regulation Schedule 4 (Table 3) are quoted below:

**QUOTE** 

Table 3
Pleasure vessels licensed to carry not more than 12 passengers that are let for hire

Fire-fighting Apparatus	Vessel length (L)(m)	L < 12	12≤L<24	24\leqL<75 (Note)		
Portable Fire Extinguisher	Accommodation Space	1 on ea	2 on each deck			
	Wheel House	1				
	Galley	1				
	Engine Control Room	1				
	Engine Room	2	3	4		
	Machinery Space	1 within each space				
Fire Bucket With Lanyard		1	2	3		

#### UNQUOTE

Note: The requirement for a local vessel of 75 m or more in length shall be specified by the Director on a case-by-case basis.

#### CHAPTER VI

#### LIFE-SAVING APPLIANCES AND ARRANGEMENTS

#### 1 General Requirements

All life-saving appliances (other than lifejackets) shall be of the approved type. Appliances conforming to the International Life-Saving Appliance ("LSA") Code adopted by the Maritime Safety Committee of the International Maritime Organization by its resolution MSC.48(66), and approved by a maritime administration of a jurisdiction to which the International Convention for the Safety of Life at Sea, 1974 is applicable or a classification society, or life-saving appliances approved by the national maritime authority of their country of manufacture or equivalent (such as CE approved), are acceptable.

(Amendment No. 2, 47, 48)

#### 1.1A Lifejacket

#### 1.1A.1 (Repealed)

1.1A.2 Under the Survey Regulation, unless otherwise specified, a Class IV vessel shall provide every person (regardless of whether he/she is a child or an adult) on board with a suitable lifejacket (refer to 1.1A.4), the total number of which must be not less than the maximum number of persons licensed to be carried (i.e. including crew members) as specified in the operating licence. Also, pleasure vessels carrying more than 12 passengers that are let for hire shall provide infant lifejackets, the total number of which must be not less than 2.5% of the maximum number of passengers licensed to be carried (excluding crew members) as specified in the operating licence.

## 1.1A.3 Lifejacket Standards

The lifejackets required to be provided on board a local vessel under section 32 of and Schedule 3 to the Survey Regulation must –

- (a) at least comply with the performance standards and requirements set out in
  - (i) for a vessel which is permitted to leave the waters of Hong Kong
    - (A) section 2.2.1 or 2.2.2 of the LSA Code; or
    - (B) ISO 12402-3:2006 (Personal floatation devices Part 3: Lifejackets, performance level 150 Safety requirements) issued by the International Organization for Standardization (ISO); and
  - (ii) for a vessel which is permitted to ply solely in the waters of Hong Kong
    - (A) section 2.2.1 or 2.2.2 of the LSA Code; or
    - (B) ISO 12402-4:2006 (Personal floatation devices Part 4: Lifejackets, performance level 100 Safety requirements) issued by the ISO; and
- (b) be of a type approved by a maritime administration of a jurisdiction to which the International Convention for the Safety of Life at Sea, 1974 is applicable or a classification society or the European Union.

#### 1.1A.4 Suitable Lifejacket1<sup>1</sup>

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<sup>&</sup>lt;sup>1</sup> In complying with the requirements in section 1.2(ii) under Part 2 in Chapter X, passengers on board open cruiser let for hire during water sports activities can wear a lifejacket of a standard not lower than the performance standards and requirements set out in ISO 12402-5:2006 (Personal floatation devices – Part 3: Lifejackets, performance level 50 – Safety requirements) issued by the International Organization for Standardization (ISO). Provision of such additional lifejackets for use shall not replace any of the lifejackets required to be provided on board in accordance with the maximum number of persons to be carried as specified in the operating licence. (Amendment No. 48, 49)

A suitable lifejacket means a lifejacket that is designed and manufactured in accordance with 1.1A.3 above, and fit for the intended wearer. A lifejacket complying with such standard is designed with a normal size range, differentiated by the weight and/or height of the intended wearer. Such a range of sizes would be marked on the label of lifejacket for reference:

	SOLAS	ISO
Adult	≥43kg, ≥155cm	≥40kg
Child	15-43kg,100-155cm	15-40kg
Infant	<15kg, <100cm	<15kg
"Common Lifejacket" (refer to <1.1A.6>	N.A.	15-120kg

1.1A.5 To avoid confusion, the lifejackets (except infant lifejackets) placed on board should as far as practicable not of mixed standards.

# 1.1A.6 "Common Lifejacket"

A lifejacket suitable for both adults and children (Common Lifejacket) complies with ISO performance level 100. It is only suitable to be used by vessels sailing within the Hong Kong waters. For details of the Common Lifejacket accepted by the Marine Department and the information of the manufacturers, refer to Marine Department Notice No. 69 of 2019.

The Common Lifejacket should have a Radio Frequency Identification (RFID) electronic tag attached with a unique identification serial number. The electronic tag should fulfill the following specification requirements:

1	Material	Silicon (or equivalent).
2	Dimension	56 x 12 x 1.8 mm (+/- 10% on each dimension).
3	Frequency band	Within the 860 to 960 MHz band of the UHF spectrum, and shall be readable within the frequency range 865 – 868MHz and/or 920 – 925MHz allocated by the Office of the Communications Authority (OFCA) of the Hong Kong Special Administrative Region.
4	Protocol	EPC global ISO 18000-6C (or equivalent).
5	IC	Higgs 3 (or equivalent).
6	EPC memory	96 bits (or above).
7	User memory	512 bits (or above).
8	Write cycles	100 000 (or above).
9	Storage environment	-40°C to +90°C (or wider range).
10	Wet clean	85°C (up to 60 minutes) (or equivalent). 120°C (up to 10 minutes) (or equivalent).

11	Iron	200°C (up to 10 seconds with press cloth) (or equivalent).
12	Security features	(a) The tags shall be compatible with the security scheme for product authentication.
		(b) Each tag shall be assigned a unique ID in EPC memory bank. Structure of the encoding and numbering scheme shall make reference to Item 13 below with details to be provided and confirmed by the Marine Department.
		(c) Each tag shall be protected by a locked access password to avoid unauthorised access (32 bits).
		(d) Each tag shall be protected by a locked kill password to avoid unauthorised access (32 bits).
		(e) Each tag shall be assigned an authentication code (96 bits) in user memory bank which will be updated during authentication process.
		(f) Data content of the security scheme for tag initialization.
13	Structure of the encoding in the UHF RFID tag (for	(a) The code is AA99-999999, of which each "A" represents an alphabetic character from A to Z and each "9" represents a digit from 0 to 9.
	reference)	(b) The hyphen is fixed.
		(c) The prefix "MD" will be used in the RFID provided by the Marine Department. The RFID of other Common Lifejackets shall not use "MD" in the encoding.

### 1.1A.7 Oversized or Overweight Passengers/Personnel on Board

With reference to the LSA Code, restraining straps should be provided on board to assist overweight or oversized passengers/personnel in securing their lifejackets as they are unable to don the standard-compliant lifejackets.

# 1.1B (Repealed)

- 1.2 Very high frequency (VHF) radio equipment shall obtain the Ship Station Licence issued by the Communications Authority (CA), Hong Kong. (Amendment No. 30)
- 1.3 One lifebuoy must be able to support two adult persons. (Amendment No. 47)
- 1.4 The buoyant lifeline shall be attached to a lifebuoy and be placed in the proximity of the ship's side.
- 1.5 Lifebuoys should be marked on both sides with the name or certificate of ownership number of the vessel on which they are carried.

# 2 Stowage of Appliances

- 2.1 Whenever a local vessel is being used or operated, every life-saving appliance carried on board the vessel should be
  - (a) in working order;
  - (b) ready for immediate use; and
  - (c) placed in an easily accessible position.
- 2.2 Lifebuoys should be in good and serviceable condition and ready for use at all times.

Lifebuoys should as far as practicable be distributed on both sides of the vessel. They are to be placed in racks by means of loose attachment to allow them to float freely as necessary.

(Amendment No. 48)

- 2.3 Lifejackets should be stowed in racks or under seats and be clearly marked. They should be evenly distributed according to the disposition of persons on board.
- 2.4 If a lifejacket is individually stored in a plastic bag, and
  - (a) where the plastic bag is completely transparent, the plastic bag should be easily ripped open; and
  - (b) where the plastic bag is opaque or is not completely transparent
    - (i) the plastic bag should be easily ripped open; and
    - (ii) there should be a clear indication at a conspicuous place on the outside of the plastic bag that the plastic bag contains a lifejacket.

(Amendment No. 4)

- 2.5 If one or more lifejackets are stored in an enclosed space (for example: a cabinet, a bag) which is opaque or is not completely transparent, there should be a clear indication at a conspicuous place on the outside of the enclosed space that the enclosed space contains a lifejacket.

  (Amendment No. 4)
- 2.6 (Repealed)

# 3 Safety Briefing

When a pleasure vessel let for hire is engaged in chartering, the coxswain should ensure that all persons on board are briefed for safety as per Annex 1.

# 4 Scale of Life-Saving Appliances

4.1 The requirements of life-saving appliances for Class IV vessels are prescribed in the Survey Regulation Schedule 3, the electronic version of which is available at the URL below—

https://www.elegislation.gov.hk/hk/cap548G!en-zh-Hant-HK/sch3 (Amendment No. 33)

4.2 Provisions of life-saving appliances in Survey Regulation Schedule 3 (Table 7) are quoted below:

Table 7
Class IV vessels that are licensed to carry not more than 60 passengers and are not let for hire or reward and operate within waters of Hong Kong

Life-saving Appliances	Quantity	
	Vessel Length (L)(m)	Number
	(L) < 12	1
Lifebuoy	$12 \le (L) < 21$	2
	21 ≤ (L) < 37	4
	(L) ≥ 37	6
Buoyant Lifeline <sup>(2)</sup>	1	

Notes:

- (1) (Repealed L.N. 154 of 2019)
- (2) The minimum length of buoyant lifeline is:

For (L) < 21 m

18 m

For  $(L) \ge 21 \text{ m}$ 

27.3 m

4.3 Provisions of life-saving appliances in Survey Regulation Schedule 3 (Table 1 and Table 2 are quoted below:

Table 1

- (i) Class IV vessels that are licensed to carry more than 60 passengers
- (ii) Class IV vessels licensed to carry 13 to 60 passengers that are let for hire

Operation Area Life-saving Appliances	Specified Sheltered Waters, typhoon shelter or anywhere within Waters of Hong Kong	
Lifebuoy	minimum number per Table 2	
Buoyant Lifeline (3)	1 for vessel (L)<12 m 2 for vessel (L)≥12 m	
Self-igniting Light (4)	2	

Notes:

- (1)-(2) (Repealed L.N.154 of 2019)
- (3) The minimum length of buoyant lifeline for a Class IV vessel that is licensed to carry more than 60 passengers is 30 m.

The minimum length of buoyant lifeline for a Class IV vessel that is licensed to carry not more than 60 passengers is :

For  $(L) \le 21 \text{ m}$ 

18 m

For  $(L) \ge 21 \text{ m}$ 

27.3 m

(4) Required for a Class IV vessel that carries more than 100 passengers.

Table 2

Minimum number of lifebuoys as required in Table 1

Vessel length (L)(m)	Number of lifebuoys
(L) < 12	2
12 ≤ (L) < 15	4
$15 \le (L) < 18$	6
$18 \le (L) < 21$	8
21 ≤ (L) < 24	10
(L) ≥ 24	12

4.4 Provisions of life-saving appliances in Survey Regulation Schedule 3 (Table 3 and Table 5) are quoted below:

Table 3
Class IV vessels that are licensed to carry not more than 12 passengers but are let for hire

Operation Area Life-saving Appliances	Specified Sheltered Waters, typhoon shelter or anywhere within Waters of Hong Kong	
lifebuoy	Minimum number per Table 5	
buoyant lifeline <sup>(6)</sup>	1 for vessel (L) < 12 m 2 for vessel (L) $\geq$ 12 m	
<pre><self-igniting (for="" (l)="" <math="" light="" vessel="">\geq 37 m)&gt; (5)</self-igniting></pre>	2	

### Notes:

- (5) Requirements in angle brackets ("< >") are for new vessels<sup>2.1.2007</sup> only.
- (6) The minimum length of buoyant lifeline is 30 m.

Table 5
Minimum Number of Lifebuoys as required in Table 3

Vessel Length (L)(m)	Number of Lifebuoys
(L) < 12	1
$12 \le (L) < 24$	2
24 ≤ (L) < 37	4
(L) ≥ 37	6

Note: For jetski, one lifejacket for each person to be provided onboard.

(Amendment No. 47)

4.5 Provisions of life-saving appliances in Survey Regulation Schedule 3 (Table 8) are quoted below:

# Table 8

- (i) A Class IV vessel that is licensed 1 August 2020 to carry not more than 60 passengers and is let for hire or reward (except a Class IV vessel that is and open cruiser)
- (ii) A Class IV vessel that is an open cruiser licensed to carry not more than 60 passengers and is let for hire or reward
- (iii) A Class IV vessel of more than 150 gross tonnage and is licensed before 1 August 2020

Life-saving appliances	Number
Litebilov	sufficient for use by the maximum number of persons that the vessel is licensed to carry <sup>(1)</sup>

# Note:

(1) For a Class IV vessel that is an open cruiser licensed to carry not more than 60 passengers and is let for hire or reward, this requirement is exempted if the passengers on board the vessel wear suitable lifejackets while the vessel is underway.

### **CHAPTER VII**

### LIGHTS, SHAPES AND SOUND SIGNALS

### 1 General

- 1.1 Unless indicated otherwise, this chapter (including amendments made therein) applies to all vessels (new and existing). (Amendment No. 34, 48)
- 1.2 Lights, shapes and sound signals provided for navigational purpose shall be in accordance with the provisions of the Merchant Shipping (Safety) (Signals of Distress and Prevention of Collisions) Regulations (Cap. 369N), which gives effect to the International Regulations for Preventing Collisions at Sea 1972 (COLREG), as amended.
- 1.3 All navigation lights and sound signals shall be of the type approved/certified by Marine Department, or the Maritime Administration of a convention country.
  - All lanterns and sound signals fitted on any new vessel<sup>3,3,2017</sup>; or replacement of these lights/signals on existing vessel shall be of the type approved/certified by Marine Department, or the Maritime Administration of a convention country or an authorized organization (definition in Ch. I/3.1 refers). Each navigation light shall be accompanied by a type-approval certificate. (Amendment No. 35, 48)
- 1.4 In addition to section 1.3 above, lights, shapes and sound signals that comply with the European Product Directive, meet the relevant provisions of the above-mentioned COLREGs and bear a "CE" mark are acceptable. (Amendment No. 48)

### 2 Definitions

For the purpose of this chapter, except where the context otherwise requires:

- (1) The words "length (L)" and "breadth" of a vessel mean her length overall and greatest breadth (definition in Ch. I/3 refers).
- (2) The term "height above the hull" means height above the uppermost continuous deck. This height shall be measured from the position vertically beneath the location of the light.

### **3** Alternative Lights

Lanterns may be either electric or oil type.

### 4 Lights and Sound Signals

The tables at the following sections indicate the signal appliances to be carried by vessels of the length (L) as indicated.

# 4.1 Power Driven Vessels $L \ge 50 \text{ m}$

Item	No. Reqd	Intensity/Size	Remark
Masthead Light	1 fwd 1 aft	visibility 6 n. miles	
Side Light (P&S)	1 set	" 3 n. miles	
Stern Light	1	" 3 n. miles	
Anchor Light	1 fwd 1 aft	" 3 n. miles	all round white
N.U.C. Light	2	" 3 n. miles	all round red
Black Ball	2	0.6 m diameter	
Black Diamond	1	0.6 m diameter, 1.2 m height	
Whistle	1	Audibility range $50 \text{ m} \le \text{L} < 75 \text{ m}$ 1 n. mile $75 \text{ m} \le \text{L} < 200 \text{ m}$ 1.5 n. mile	
Bell	1	0.3 m mouth diameter	
Gong	1		for L ≥ 100 m

# 4.2 Power Driven Vessels 20 m $\leq$ L < 50 m

Item	No. Reqd	Intensity/Size	Remark
Masthead Light	1	visibility 5 n. miles	
Side Light (P&S)	1 set	" 2 n. miles	
Stern Light	1	" 2 n. miles	
Anchor Light	1	" 2 n. miles	all round white
N.U.C. Light	2	" 2 n. miles	all round red
Black Ball	2	0.6 m diameter	
Black Diamond	1	0.6 m diameter, 1.2 m height	
Whistle	1	audibility range 1 n. mile	
Bell	1	0.3 m mouth diameter	

# 4.3 Power Driven Vessels 12 m $\leq$ L < 20 m

Item	No. Reqd	Intensity/Size	Remark
Masthead Light	1	visibility 3 n. miles	
Side Light (P&S)	1 set	" 2 n. miles	may be combined lantern
Stern Light	1	" 2 n. miles	
Anchor Light	1	" 2 n. miles	all round white
N.U.C. Light	2	" 2 n. miles	all round red
Black Ball	2	dimensions commensurate with size of vessel	
Black Diamond	1	ditto	
Whistle	1	audibility range 0.5 n. miles	
Sound Signal	1	means of making efficient sound signal	

### 4.4 Power Driven Vessels L < 12 m

Item	No. Reqd	Intensity/Size	Remark
Masthead Light	1	visibility 2 n. miles	may exhibit an all-round white
Stern Light	1	" 2 n. miles	light instead Note (A)
Side Light (P&S)	1 set	" 1 n. miles	may be combined lantern
Anchor Light	1	" 2 n. miles	all round white
N.U.C. Light Note (B)	2	" 2 n. miles	all round red
Black Ball Note (B)	2	dimensions commensurate with size of vessel	
Black Diamond Note (B)	1	ditto	
Sound Signal	1	means of making efficient sound signal	

### Note

- (A) The masthead light or all-round white light may be displaced from the fore and aft centreline of the vessel if centreline fitting is not practicable, provided that the sidelights are combined in one lantern which shall be carried on the fore and aft centreline of the vessel or located as nearly as practicable in the same fore and aft line as the masthead light or the all-round white light.
- (B) Except those engaged in diving operations, the subject lights and shapes shall not be required.

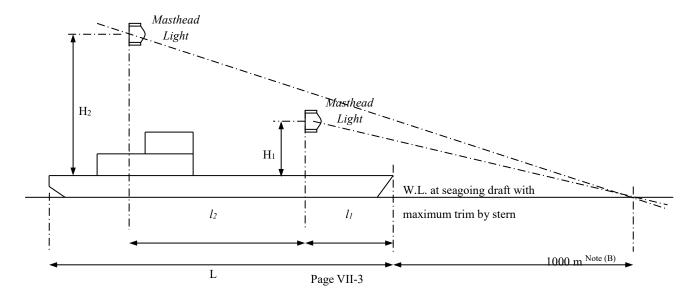
(Amendment No. 6)

- 4.5 Power driven vessel with L < 7 m and maximum speed not exceeding 7 knots may in lieu of the lights prescribed in 4.4 above, exhibit an all round white light and shall, if practicable, also exhibit sidelights.
- 4.6 Whenever a jetski is to operate from sunset to sunrise or restricted visibility in daytime, all lights prescribed above shall be exhibited.

# 5 Positioning of Light Signals

Except in special cases, the masthead light, side lights and stern light shall be so placed as to be above and clear of all other lights and obstructions.

# 5.1 Masthead Light



Ship Length L (m)	$L < 12$ $_{Note(A)}$	$12 \leq L < 20$ $_{Note  (A)}$	$20 \le L < 50$ Note (A)	L ≥ 50
I <sub>1</sub>	As far forward as is practicable	As far forward as is practicable	≤ 0.5L	≤ 0.25L
l <sub>2</sub>				≥ 0.5 L
H <sub>1</sub>	may be < 2.5 m Note (D)(F)	≥ 2.5 m Note (C)(F)	≥ 6 m or ship's breadth (whichever is greater), but need not > 12 m  Note (F)	
H <sub>2</sub>		1		$\geq$ (H <sub>1</sub> +4.5) Note (E)(F)

#### Note

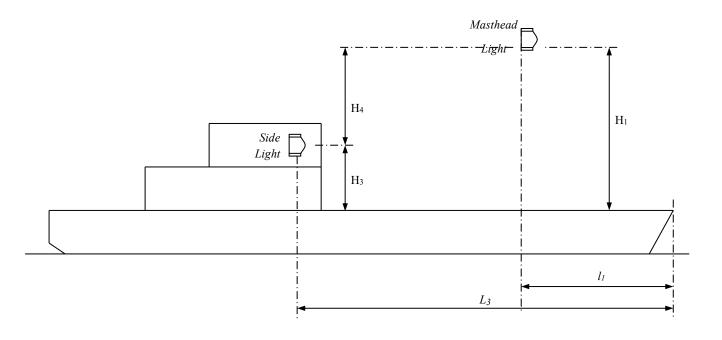
- (A) On vessels of L < 50 m only one masthead light is required.
- (B) The vertical separation of masthead lights of power-driven vessels shall be such that in all normal conditions of trim the after light will be seen over and separate from the forward light at a distance of 1000 m from the stem when viewed from sea level.
- (C) On vessels of  $12 \text{ m} \le L < 20 \text{ m}$  the height is measured from gunwale.
- (D) Vessels of L < 12 m may carry the uppermost light at a height of less than 2.5 m above the gunwale. When however a masthead light is carried in addition to side lights and a stern light or the all-round lights prescribed in the regulation is carried in addition to side lights, then such masthead light or all-round light shall be carried at least 1 m higher than the side lights.
- (E) One of the two or three masthead lights prescribed for a vessel when engaged in towing or pushing another vessel shall be placed in the same position as either the forward masthead light or the after masthead light; provided that, if carried on the after mast, the lowest after masthead light shall be at least 4.5 m vertically higher than the forward masthead light.
- (F) The masthead light of a high speed vessel may be placed at a height related to the breadth of the vessel lower than that prescribed for *H*<sub>1</sub>, provided that the base angle of the isosceles triangles formed by the sidelights and masthead light, when seen in end elevation, is not less than 27°. For the dimension of vertical separation between foremast and mainmast light on a high speed vessel of L ≥ 50m, paragraph 13 in Annex I of the Schedule to Merchant Shipping (Safety) (Signals of Distress and Prevention of Collisions) Regulations refers. (*Amendment No. 6*)

### 5.2 Side Light

- 5.2.1 The side lights of vessels of L ≥ 20 m shall be fitted with inboard screens painted matt black and meet the requirements with respect to horizontal sectors. On vessels of L < 20 m the side lights, if necessary to provide with horizontal sectors, shall be fitted with inboard matt black screens. With a combined lantern, using a single vertical filament and a very narrow division between the green and red sections, external screens need not be fitted.

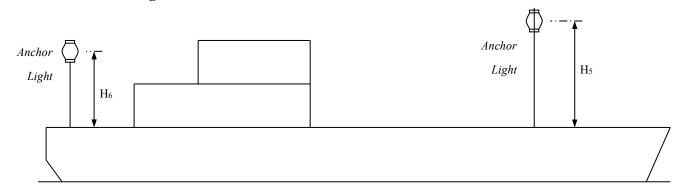
  (Amendment No. 36)
- 5.2.2 Side lights shall not be so low as to be interfered with by deck lights. They shall be placed at or near the side of the vessel (recommended not more than 0.1 ship's breadth from shipside).
- 5.2.3 The sidelights, if in a combined lantern and carried on a power-driven vessel of less than 20 m in length, shall be placed not less than 1 m below the masthead light.

(Amendment No. 36)



Length (m)	L < 20	20 ≤ L < 50	L ≥ 50
$l_3$	no requirement	$> l_I$ (i.e. side light not to be in front of masthead light)	$> l_l$ (i.e. side light not to be in front of forward masthead light)
$H_3$		$\leq$ 0.75 H <sub>1</sub>	
$\mathrm{H}_4$	in the case of combined lantern, ≥ 1m		

# 5.3 Anchor Light



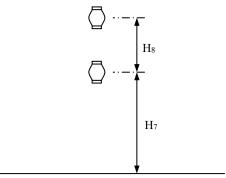
Length (m)	L < 50 Note	L ≥ 50
H <sub>5</sub>	Desition can best be seen	≥ 6 m
$H_6$	Position can best be seen	$\leq$ (H <sub>5</sub> - 4.5)

# Note

On vessels of L < 50 m, only one anchor light is required.

# 5.4 Vertical Spacing of Lights fitted in a Vertical Line

(Amendment No. 36)



Uppermost Continuous Deck (for  $L \ge 20 \text{ m}$ ) / Gunwale (for L < 20 m)

Length (m)	L < 20	L ≥ 20
$H_7$	≥ 2 m (except where a towing light is fitted)	≥ 4 m (except where a towing light is fitted)
H <sub>8</sub> Note	≥ 1 m	≥ 2 m

**Note** When 3 lights are carried they shall be equally spaced.

# 5.5 Electric Light Vertical Sectors

The lights shall be so positioned such that:

- (i) at least the required minimum intensity is maintained at all angles from 5° above to 5° below the horizontal; and
- (ii) at least 60% of the required minimum intensity is maintained from 7.5° above to 7.5° below the horizontal.

(Amendment No. 37)

# **Chapter VIII**

# DOMESTIC LIQUEFIED PETROLEUM GAS INSTALLATION

No naked fire is permitted to use for cooking or similar activities when carrying passengers on board, unless cooking is done inside a galley fitted with fire-protected bulkheads.

(Amendment No. 48)

### 1 Marking

Liquefied petroleum gas (LPG) cylinders shall be clearly marked of the name of their contents.

# 2 Properties of LPG

- 2.1 Possible dangers arising from the use of LPG appliances include fire, explosion and asphyxiation due to leakage of gas from the installation, etc.
- 2.2 LPG is heavier than air and, if released in a space with coaming, may travel some distance whilst seeking the lowest part of that space and its adjourning spaces. The accumulation of LPG probably poses dangerous consequence and fatality when triggered by inadvertent spark or ignition.

# 3 Storage

- 3.1 No more than 50 kg (or combined water capacity 130 litres) of LPG shall be carried on board.
- 3.2 LPG cylinders and expended cylinders shall as far as practicable be stowed on open decks. The cylinders and all valves, pressure regulators and pipes leading from such cylinders shall be properly secured, protected against mechanical damage, and excessive variations in temperature and direct rays of the sun. The cylinders shall be installed upright to prevent liquid from flowing into the pipes.
- 3.3 The LPG cylinder storage locker, and associated pipes and joints shall be readily accessible for the check of suspected leaks; and shall be as far away from any air pipes, ventilators, hatchways, etc. and close to the cooking appliances as practicable.
- 3.4 Except as necessary for service within the space, electrical wiring and fittings shall not be permitted within compartments used for the storage of LPG. Where such electrical fittings are installed, they shall be to the satisfaction of the Department for use in a flammable atmosphere. Sources of heat shall be kept clear of such spaces and "不准吸煙 No Smoking" and "不准明火 No naked light" notices shall be displayed in a prominent position.
- 3.5 Compartments used for the storage of LPG shall not be used for storage of other combustible products nor for tools or objects nor part of the gas distribution system. The LPG locker shall be marked with "LPG" on the door of the locker.

### 4 Installation

# 4.1 LPG pipes-

(a) LPG pipes shall be of solid drawn copper alloy or stainless steel pipes, with appropriate compression or screwed fittings.

(b) Flexible connections shall be avoided. Should they be used, an approved type of synthetic rubber hose connection shall be fitted. When used with flexible connections, appliances shall be controlled from the nearest isolating valve fitted on metallic pipe.

### 4.2 LPG cylinder storage locker

- (a) For storage above main deck-
  - (i) ventilation openings shall be provided on top and bottom of locker;
  - (ii) when LPG pipe is arranged to pass through bulkhead, the opening on bulkhead shall be of suitable size and height, to avoid the gas being leaked into the accommodation. If the LPG pipe is a synthetic rubber hose, precaution shall be taken to prevent the hose being chafed. A protecting conduit shall be fitted when necessary.
- (b) For storage below main deck-
  - (i) the locker bulkhead shall be of gastight construction. Bulkhead piece shall be fitted when LPG pipe is arranged to pass through bulkhead;
  - (ii) adequate ventilation shall be provided at top and bottom of locker and be led overboard;
  - (iii) gas detectors shall be fitted to detect any accumulation of LPG in the bilge.
- 4.3 Newly fitted or replaced gas consuming appliances (e.g. stove, water heater etc.) shall be of type approved by Gas Authority, EMSD and marked with "GU" on them. Existing Gas consuming appliances are recommended to be fitted with automatic gas shut-off device to stop the gas supply in the event of flame failure.



### 5 Maintenance

- 5.1 Changing cylinders shall be done according to instructions of gas dealers. If it is suspected that either a cylinder or valve is faulty, put it ashore as quickly as possible, and in the meantime keep it in the open air, clear of any gratings, hatches or other openings leading below decks.
- 5.2 Sufficient ventilation shall be provided at the cooking space to displace the products of combustion and respiration.

### 6 Inspection

The vessel's crew or operator shall regularly examine joints of the LPG installation. If a leakage is suspected, the cylinder stop valve shall be turned off immediately; the vessel's engine shall be stopped, no switch on/off of electrical appliances and no other means of ignition allowed until it is certain that the vessel is clear of gas. Never put an appliance back into use without the leak having been found and rectified.

# CHAPTER IX VESSEL OPERATOR REQUIREMENTS

#### 1 General

A Class IV vessel or an ancillary vessel of a Class IV vessel that is more than 3 metres in length overall or is fitted with engines of more than 3 kilowatts total propulsion power shall not be underway unless there is on board a person in charge of the vessel who is the holder of a local certificate of competency as a pleasure vessel operator, or any equivalent certificate as specified in the Merchant Shipping (Local Certificates of Competency) Rules. It is the responsibility of the owner or the person in charge of any Class IV vessel to ensure that the vessel is safe for its intended operation when underway, including the consideration of its essential fittings and number of crew.

# **2** Certificate of Competency

- 2.1 Pleasure Vessel Operator Certificates, which combine both deck and engineering qualifications, are issued in two grades as follows:-
  - (1) Pleasure Vessel Operator Grade 2 Certificate; and
  - (2) Pleasure Vessel Operator Grade 1 Certificate.

### Pleasure Vessel Operator Grade 2

A Pleasure Vessel Operator Grade 2 Certificate entitles the holder to take charge of a pleasure vessel that is of not more than 15 m in length overall operating in Hong Kong waters.

### Pleasure Vessel Operator Grade 1

A Pleasure Vessel Operator Grade 1 Certificate entitles the holder to take charge of any pleasure vessel operating in Hong Kong waters.

2.2 Other certificates issued under the current or the repealed legislation are recognized in accordance with the appropriate provisions in the Examination Rules for Pleasure Vessel Operator Certificate of Competency and the Merchant Shipping (Local Vessels)(Local Certificate of Competency) Rules, as follows:

https://www.mardep.gov.hk/filemanager/en/share/pub-services/pdf/examrules\_ploc.pdf https://www.mardep.gov.hk/filemanager/en/share/pub-services/pdf/cocrules.pdf

(1) Other certificates issued under the current legislation Cap. 548

Item	Certificates issued under	Equivalent Grade of Pleasure Vessel Operator	Type of Local Vessel the Certificate
	<b>Cap. 548</b>	Certificate	Holder may operate
(a)	Coxswain Grade 1 Certificate	Pleasure Vessel Operator Grade 1 Certificate	Any pleasure vessel
	or Coxswain Grade 2 Certificate		
	<u>Plus</u>		
	Engine Operator Certificate		
	(without restriction)		
(b)	Coxswain Grade 3 Certificate that is not endorsed to the effect that the holder is restricted to act as the coxswain only within certain areas or of particular type of vessels	Pleasure Vessel Operator Grade 2 Certificate	A pleasure vessel of not more than 15 m in length overall
	<u>Plus</u>		
	Engine Operator Certificate		
	(without restriction)		

(2) Following certificates issued under the repealed legislation Cap. 313 (a full list of all such certificates can be found in the links provided in paragraph 2.2 above.):

Item	Combination of Former	Equivalent Grade of	Type of Local Vessels
	Certificates (as pleasure	Pleasure Vessel Operator	that the certificate
	vessel master or engineer	Certificate for the purpose	holder may operate
	issued under Cap. 313)	of Cap. 548	under Cap. 548
(a)	Local certificate of competency as Pleasure Vessel Master Grade I  Plus  Any pleasure vessel engineer certificate of competency, or equivalent	Pleasure Vessel Operator Grade 1 Certificate	Any pleasure vessel

Item	Combination of Former Certificates (as pleasure vessel master or engineer issued under Cap. 313)	Equivalent Grade of Pleasure Vessel Operator Certificate for the purpose of Cap. 548	Type of Local Vessels that the certificate holder may operate under Cap. 548
(b)	Local certificate of competency as Pleasure Vessel Master Grade II or local certificate of competency as master of a vessel of 15 tons and under, endorsed with "valid for privately owned pleasure craft only"  Plus  Any pleasure vessel engineer certificate of	Pleasure Vessel Operator Grade 2 Certificate	A pleasure vessel of not more than 15 m in length overall
(c)	Local certificate of competency as master of a vessel of 300 tons and under, local certificate of competency as master of a vessel of 60 tons and under, or certificate of competency as a trawling master  Plus  Any pleasure vessel engineer certificate of competency, or equivalent	Pleasure Vessel Operator Grade 1 Certificate	Any pleasure vessel
(d)	Local certificate of competency as master of a fishing vessel (without restriction)  Plus  Any pleasure vessel engineer certificate of competency, or equivalent	Pleasure Vessel Operator Grade 2 Certificate	A pleasure vessel of not more than 15 m in length overall

# 3 Manning Requirements

- 3.1 Any Class IV vessel carrying not more than 12 passengers and having vessel length overall less than 12 metres can be operated by:

  (Amendment No.52)
  - (1) a person in charge of the vessel who is the holder of a local certificate of competency as a pleasure vessel operator (i.e. COC Pleasure Vessel Operator Grade I or Grade II) or equivalent certificate; and
  - (2) an additional crew member is required if the pleasure vessel exceeds 8 metres in length overall and carries more than 10 persons that is let for hire (see Annex 1 of this Code).

    (Amendment No. 48, 52)

- 3.2 For any Class IV vessel carrying more than 12 passengers but not more than 60 passengers or having vessel length overall of or above 12 metres the vessel can be considered safe and properly controlled by one person holding the Local Certificate of Competency as a Pleasure Vessel Operator Grade 1, or a Pleasure Vessel Operator Grade 2 if the length overall of the vessel is not more than 15 metres, or its equivalence, provided that the following arrangements are met: (Amendment No. 52)
  - (1) the vessel is appropriately equipped for unattended machinery space operation. For pleasure vessels let for hire, these requirements are indicated in Ch. III/3.14; and
  - (2) there shall be at least one additional crew member with common engineering knowledge on board to assist the person in charge while the vessel is underway in order to cope with operational needs including helping out emergency measures, etc. (refer to Annex 1 of this Code).
- 3.3 The requirement in sect. 3.2 (2) can be waived provided that the vessel is not carrying any passenger and the owner satisfies that person in charge can properly control the vessel safely for the voyages intended.
- For any Class IV vessel carrying more than 60 passengers, the minimum safe manning requirements shall be specified by the Director on a case by case basis.

### CHAPTER X

# ADDITIONAL REQUIREMENTS APPLICABLE TO CERTAIN TYPES OF CLASS IV VESSELS

(New chapter (Amendment No. 48))

### PART 1A

This part applies to the following types of new vessels<sup>1.8.2020</sup>

- (a) pleasure vessels of 24m or more in length (L≥24m) that are not let for hire; or
- (b) pleasure vessels of any length and carry not more than 60 passengers that are let for hire (except open cruisers carrying not more than 12 passengers that are let for hire).

# 1 Vessels Shall Be Built to Acceptable Standards

- 1.1 Each vessel shall be designed and built to the standards of classification societies specified in Annex 14 or equivalent standards (e.g. CE/ISO standards) based on its size, building materials, intended use, etc. However, in the event of any inconsistency between this Code and any of the standards of the classification societies, CE/ISO, etc., the requirements of this Code shall prevail.
- 1.2 Relevant certificates, documents or declarations provided by the ship builder/shipyard or other certification bodies are acceptable.

# 2 Ship Builder/Shipyard

- 2.1 Shipyards should be recognized by relevant authorities or international certification bodies; obtain ship building approval documents endorsed by classification societies, relevant authorities or quality certification bodies; or be inspected by an AS who shall submit a relevant report to Marine Department (see the sample report in Annex 16) upon satisfactory inspection of the following:
  - (1) **workshop facilities & equipment:** e.g. workshop scale, ventilation system, dust extracting system, illumination, lifting appliances, fire-fighting system;
  - (2) **quality control:** e.g. humidity control (or an equivalent measure), material storage, quality monitoring and reporting, material certificates (resin, fibre glass, paint, etc.);
  - (3) **production process:** e.g. types of tools and methods used, hull inspection and repair records, the method statement of mould loft, transportation process from mould loft to sea; and
  - (4) **competency of management staff and technicians:** e.g. qualifications of management staff and technicians (professional/training certificates, relevant experience, etc.).
- 2.2 A copy of the supporting documents mentioned in section 2.1 above shall be provided to Marine Department for record purposes.

### 3 Submission of Plans and Data for Approval

- 3.1 Plans and data for the items listed in the table below shall be submitted for approval.
- 3.2 For plans and data submitted to Marine Department for approval, 3 copies of each plan shall be submitted for the first of a series of sister ships and 2 copies for the remaining sister ships. For plans and data submitted to the AO/AS for approval, 1 copy of the approved plans and data shall be submitted to Marine Department for record purposes.
- 3.3 Plans shall be drawn in appropriate scale and of legible quality.
- 3.4 For vessels of 24m or more in length with gross tonnage of more than 150 (L≥24m & GT>150), let for hire or not for hire, their plans and data shall be submitted to Marine Department or AO for approval;

For (a) vessels of 24m or more in length with gross tonnage of 150 or below (L≥24m & GT≤150) that are not let for hire; or (b) pleasure vessels of any length with gross tonnage of 150 or below that are let for hire, their plans and data may be submitted to Marine Department, AO or AS for approval.

No.	Plans and Data	
(1)	General arrangement	
(2)	Safety equipment plan, showing:	
(2)	(a) life saving appliances	
	(b) fire fighting apparatus, emergency controls and structural fire protection arrangement	
	(c) Lights, shapes and sound signals	
	(d) means of escape, escape installations and arrangement, etc.	
(3)	Structures and scantlings, watertight/weathertight closing appliances*1	
(4)	Machinery installations*2	
(5)	Electrical installations*2	
(6)	Installations for prevention of oil and air pollution*2	
(7)	Inclining test report *3, *4	
(8)	Intact stability information booklet (after inclining test) *3, *4	
(9)	Damage stability information booklet (after inclining test) (for any pleasure vessels carrying more than 12 passengers that are let for hire) *3, *4	

### Notes

- \*1 The plan requirement for this item can be waived if the ship builder/shipyard or other certification bodies provide relevant certificates, documents or declarations on the construction standards.
- \*2 The required vessel particulars in the form of Annex 15 may be filled in in lieu of the plan required for this item.
- \*3 Only one report for the same ship model of the same shipyard is required to be provided to Marine Department for record purposes.

(Note: If the newly built vessel is of the same design as a ship found in the database (i.e.

constructed with the same mould and material, having the same number of watertight bulkheads and the same bulkhead arrangement, as well as the same essential machinery installations, carrying capacities of persons, water and fuel. If there are changes in machinery installations, an inclining test has to be carried out to ascertain that the variances of lightship weight and vertical centre of gravity (VCG) are less than 2%, and the variance of longitudinal centre of gravity (LCG) is less than 1%), the survey and plan approval requirement of intact and damage stability (if applicable) can be waived.)

- \*4 The plan required for this item may be substituted by the following:
  - i) an inspection report or a certificate or declaration issued by the ship builder/shipyard or a third-party inspection body (e.g. a CE certification body, a competent surveyor or an IACS member); or
  - ii) calculation based on inclining test data made and relevant reports endorsed by a competent surveyor; or
  - iii) on-site verification/test carried out by a competent surveyor to confirm the vessel's compliance with section 4.5(b), and hence its compliance with the equivalent intact stability requirements. (Amendment No. 62)

### 4 Intact Stability

- 4.1 Except for vessels mentioned in section 4.5 below, the intact stability of any vessel shall meet the following requirements in both lightship and full load conditions:
  - (a) sections 4.1.1 4.1.4; or
  - (b) section 4.2; or
  - (c) section 4.3.
- 4.1.1 Criteria regarding righting lever (GZ) curve properties
  - (a) the initial transverse metacentric height (initial  $GM_T$ )  $\geq 0.15m$ ;
  - (b) the area under the righting lever (GZ) curve :
    - (i)  $\geq 0.055$  m-rad up to an angle of heel of  $30^{\circ}$ ;
    - (ii)  $\geq 0.090$  m-rad up to an angle of heel of  $40^{\circ}$  or the angle of down flooding (if that angle is less);
    - (iii)  $\geq 0.030$  m-rad between the angles of heel of 30° and 40° or the angle of down flooding (if that angle is less);

(Note: angle of down flooding is an angle of heel at which the lower edges of any opening in the hull, superstructures or deckhouses which cannot be closed weathertight immerse).

- (c) the righting lever (GZ) shall be at least 0.20m at an angle of heel equal to or greater than 30°; and
- (d) the maximum righting lever (GZmax) shall occur at an angle of heel not less than 25° but preferably over 30°.
- 4.1.2 Crowding (this section applies to any vessels carrying more than 12 passengers)

The angle of heel due to the crowding of passengers when they move from one side of the vessel to the other shall not be greater than  $10^{\circ}$ . The passengers shall be assumed to congregate at  $0.25\text{m}^2$  per person on the uppermost deck(s), with all passengers crowding on

one side of the vessel. The vertical centre of gravity of a standing passenger shall be taken.

4.1.3 Turning (this section applies to any vessels carrying more than 12 passengers)

Heeling is developed due to turning of the vessel. The angle of heel shall not be greater than 10°. The heeling moment may be derived from the following formula: –

 $MR = 0.2 \text{ Vo} \triangle (KG - d/2) /Lwl$ 

where

MR = heeling moment (kN-m)

Vo = speed of the vessel in the turn (m/sec)

Lwl = length of vessel on the waterline (m)

 $\triangle$  = displacement (tonnie)

KG = height of the centre of gravity above keel (m)

d = mean draft (m)

4.1.4 Wind Moment (this section applies to any vessels carrying more than 12 passengers)

Wind moment is calculated according to section 2.3 "Severe Wind and Rolling Criterion (Weather Criterion)" of the International Code on Intact Stability, 2008 (2008 IS Code) published by the International Maritime Organization (IMO). The wind pressure factor shall be taken to be 500 Pa. (ref: Resolution A.749(18))

- 4.2 For vessels of less than 20m in length (L<20m) that carry not more than 100 passengers, Marine Department accepts the standards for intact stability applicable to vessels operating within sheltered waters as stipulated in the Technical Regulation for the Survey of Coastal Boats (《沿海小型船舶檢驗技術規則》) promulgated by the Maritime Safety Administration of the People's Republic of China (MSA), or the equivalent. For vessels of 20m or more in length (L≥20m) that carry not more than 100 passengers, Marine Department accepts the standards appropriate for vessels operating in Hong Kong waters as promulgated by the MSA.
- 4.3 Other standards (such as CE) with equivalent criteria on intact stability appropriate for vessels operating in Hong Kong waters are also acceptable.
- 4.4 Every vessel shall be inclined according to the standards of the AO or equivalent to confirm the vessel's displacement, VCG and LCG in lightship condition on completion or close to completion of construction (for a new vessel) or alteration (for an existing vessel). An inclining test report shall be submitted for approval.
- 4.5 For vessels operating solely under favourable weather<sup>Note1</sup> and sea conditions, only the following requirements are to be complied with:
  - (a) requirements of sections 4.1.1(a), 4.1.2 & 4.1.3, and to carry out an inclining test in accordance with section 4.4; or (Amendment No. 62)
  - (b) an alternative to intact stability calculation (this section does not apply to pleasure vessels carrying more than 12 passengers that are let for hire):
    - (i) a simple on-site inclining test carried out by a competent surveyor in

Note1 Refer to the definition under section 3 of Chapter I of this Code.

accordance with the procedures set out in Annex 5:

- (1) for Class IV vessels that are licensed to carry not more than 12 passengers, to ascertain that the angle of heel will not exceed 7° when having 2/3 of the passengers distributed on one side of the vessel and 1/3 on the other. The test is to be carried out in accordance with the details stated in Part 1; or
- (2) for Class IV vessels that are licensed to carry 13 to 60 passengers, to ascertain that the angle of heel will not exceed 10° when all passengers move from one side of the vessel to the other. The test is to be carried out in accordance with the details stated in Part 2; and
- (ii) a sea trial of the vessel in full load condition carried out to the satisfaction of a competent surveyor.
- **Damage Stability** (this section applies to any pleasure vessels carrying more than 12 passengers that are let for hire)
- 5.1 Subdivision standard

Every vessel shall comply with the subdivision standard for flooding of any one main compartment.

- 5.2 The final condition of the vessel after damage shall satisfy the following requirements
  - in the case of symmetrical flooding, there shall be a positive residual metacentric height of at least 50mm as calculated by the constant displacement method;
  - (b) in the case of asymmetrical flooding, the angle of heel for one-compartment flooding shall not exceed 7°;
  - (c) in no case shall the main deck be submerged in the intermediate stages or final stage of flooding.

### **6** Watertight Bulkheads, Closing Appliances

- 6.1 A vessel to which Part 1A applies shall be fitted with the following watertight bulkheads:
  - (a) collision bulkhead;
  - (b) fore and after bulkheads of engine room;
  - (c) watertight doors below the main deck (if any) shall be fitted with visual and audio alarms to the wheelhouse to give alerts when watertight doors are open.
- 6.2 On every vessel, air pipes, ventilators, small hatchways, manholes, skylights and doors leading to a space below the main deck shall be fitted with weathertight or watertight closing appliances. If they are of weathertight design, the sills, coamings, etc. shall be of a suitable height to avoid ingress of water.

# **7** Emergency Controls

- 7.1 Means for stopping machinery, shutting off oil fuel suction pipes and closing of openings.
- 7.1.1 In every vessel there shall be provided with
  - (a) means for stopping ventilation fans serving machinery and accommodation spaces; and

(b) means for closing all skylights, doorways, ventilators and other openings to such spaces.

Such means shall be capable of being operated from positions outside the said spaces which would not be made inaccessible by a fire within such spaces.

- 7.1.2 Power driven forced and induced draught fans, oil fuel transfer pumps and other similar fuel pumps shall be fitted with remote controls situated outside the spaces in which such machinery or pumps are situated, and which would not be made inaccessible by a fire within such spaces. The controls shall be capable of stopping such machinery or pumps in the event of fire in the said spaces.
- 7.1.3 A pipe connected to any oil fuel or lubricating oil storage tank, not being a double bottom tank, which if damaged would permit discharge of the contents and pose a fire hazard, shall be fitted with a valve or cock which shall be secured to the tank to which it is connected and be capable of being closed from a readily accessible position outside the space in which the tank is situated.

# 8 Structural Fire Protection, Escape Installations, Etc.

- 8.1 In all spaces
  - (a) paints, varnishes and other finishes used on exposed surfaces shall not contain highly flammable base products, including nitrocellulose, and shall not be capable of producing toxic gases or excessive quantities of smoke;
  - (b) insulating materials shall be of non-combustible materials; and
  - (c) any means of escape shall lead to the open deck.
- 8.2 In accommodation, service spaces and control stations
  - (a) all exposed surfaces in corridors, exposed surfaces of ceilings and surfaces in concealed or inaccessible spaces shall have low flame spread characteristics;
  - (b) primary deck coverings shall be of a material which will not readily ignite or give rise to toxic or explosive hazards at elevated temperatures;
  - (c) the doorways and stairways for escape purpose shall be evenly distributed and arranged so as to avoid congestion in any part of a vessel. Every door and hatch cover shall be operable from either side; and
  - (d) dead-end corridor shall not be more than 7m in length.
- 8.3 For vessels with hull constructed of non-steel materials, fire retarding material shall be used in the hull, deck and bulkhead structures of engine room boundaries so that the required strength could be maintained for a period of 30 minutes or more. For hull structures below the waterline, the insulation shall extend to at least 300mm below the lightest waterline.
- 8.4 Any part of a deck or bulkhead, which separates a crew space from any machinery space, galley, or spaces used for the storage of flammable substances, shall be of gastight construction.

# 9 Stairways, Passageways, Doors and Exits in Passenger Spaces

- 9.1 Any stairways and passageways forming part of an escape route shall be kept unobstructed at all times, with a minimum width of 400mm or of a design (including the width) meeting the standards of a maritime institution recognized by Marine Department (e.g. Australia AMSA or CE).
- 9.2 The clear width of every passageway, door and exit forming part of an escape route shall at least be the same as the width of the stairway and passageway.
- 9.3 The doors of any enclosed passenger space shall be opened in such a direction so as not to obstruct the route of escape. The doors shall not be locked during a voyage.

### PART 1B

This part applies to new open cruisers <sup>1.8.2020</sup> that are let for hire and carry not more than 12 passengers.

### 1 Hull Construction

The design and construction of the vessel shall:

- (a) provide structural strength sufficient for the intended use of the vessel;
- (b) maintain adequate freeboard and stability;
- (c) prevent the ready ingress of sea water; and
- (d) not be fitted with a false bottom or concealed space.

### **2** Vessel Construction Standards

- 2.1 Apart from the requirements in this Code, present rules and standards of classification societies recognized by Marine Department or other equivalent standards may be used as assessment standards.
- 2.2 Relevant certificates, documents or declarations provided by the ship builder/shipyard or other certification bodies are acceptable.

### 3 Ship Builder/Shipyard

- 3.1 Shipyards shall be recognized by relevant authorities or international certification bodies; obtain ship building approval documents endorsed by classification societies, relevant authorities, quality certification bodies; or be inspected by an AS who shall submit a relevant report (see the sample report in Annex 16) upon satisfactory inspection of the following:
  - (1) **workshop facilities & equipment:** e.g. workshop scale, ventilation system, dust extracting system, illumination, lifting appliances, fire-fighting system;
  - (2) **quality control:** e.g. humidity control (or an equivalent measure), material storage, quality monitoring and reporting, material certificates (resin, fibre-glass, paint, etc.);
  - (3) **production process:** e.g. types of tools and methods used, hull inspection and repair records, the method statement of mould loft, transportation process from

- mould loft to sea; and
- (4) **competency of management staff and technicians:** e.g. qualification of management staff and technicians (professional/training certificates, relevant experience, etc.).
- 3.2 A copy of the supporting documents mentioned in section 3.1 above shall be provided to Marine Department for record purposes.

### 4 Submission of Plans and Data for Approval

- 4.1 Plans and data for the items listed in the table below shall be submitted for approval.
- 4.2 For plans and data submitted to Marine Department for approval, 3 copies of each plan shall be submitted for the first of a series of sister ships and 2 copies for the remaining sister ships. For plans and data submitted to the AO/AS for approval, 1 copy of the approved plans and data shall be submitted to Marine Department for record.
- 4.3 Computer drawings or hand sketches must be clear and concise. Plans shall be drawn to scale and of legible quality as far as possible.
- 4.4 The plans and data may be submitted to Marine Department, AO or AS for approval.

No.	Plans and Data (reference can be made to the simple plans in Annex 6)	
(1)	General arrangement (including installations of lights, shapes & sound signals)	
(2)	Life Saving Appliance and Fire Fighting Appliance installation and arrangement diagram (incl. escape routes)	
(3)	Vessel particulars and basic hull and deck plate thickness diagram*1	
(4)	Machinery/electrical installation plans	
(5)	Inclining test report/simple inclining test report	

### Note

\*1 For hull and deck plate thickness, reference can be made to the information provided by the ship builder/shipyard or other certification bodies.

### 5 Stability

- Any open cruisers that are let for hire and carry not more than 12 passengers shall conduct a simple inclination test. The test is to ascertain that no angle of heel exceeding 7° will arise when having 2/3 of the passengers distributed on one side of the vessel and 1/3 on the other (see Annex 5 of this Code).
  - For a new vessel of less than 6m length, an immersion test which proves its adequacy of buoyancy is also acceptable as an alternative.
- 5.2 As an alternative to satisfying the requirement set out in section 5.1 above, an inclining test or calculation conducted in accordance with the standards of an authorized classification society or equivalent, or the provision of relevant certificates (such as class certificates or

CE certificates), documents or declarations issued by an authorized classification society or certification bodies is also acceptable.

### **PART 2 (Other Requirements)**

- Additional Requirements for Life-saving Appliances (this section will come to effect on 1 April 2021)

  (Amendment No. 53)
- 1.1 For (a) any existing pleasure vessels <sup>1.8.2020</sup> (except open cruisers) let for hire; or (b) existing pleasure vessels <sup>1.8.2020</sup> of more than 150 gross tonnage (GT>150) (whether let for hire or not), the quantity of life-saving appliances shall be appropriately increased to facilitate speedy escape of the crew and passengers on board in case the vessels are in distress. The total quantity of life-saving appliances, such as lifebuoys <sup>Note</sup>, after the increase (i.e. including the number of lifebuoys required to be provided on board the vessels in accordance with the vessel length as stipulated in the Survey Regulation) shall be adequate for use by the maximum number of persons to be carried as specified in the operating licence
- 1.2 Any (new or existing) open cruiser carrying not more than 60 passengers that are let for hire shall comply with the following requirement:
  - (i) as per the requirements set out in section 1.1 above, to provide lifebuoys<sup>Note</sup> adequate for use by the maximum number of persons to be carried as specified in the operating licence; or
  - (ii) all passengers on board shall wear a suitable lifejacket when the vessel is underway. Section 1.1A in Chapter VI of this Code shall be referred to for the standards and requirements for the lifejacket.

(Note: Lifebuoys can be substituted by inflatable liferafts, buoyant apparatus, lifebuoys or its combination. Each lifebuoy which complies with the standards is taken to be for use by two persons).

# 2 VHF Radio Equipment

(Note: this section applies to any pleasure vessel that is —

- (a) licensed to carry more than 12 but not more than 60 passengers and is let for hire;
- (b) licensed to carry more than 60 passengers, whether let for hire or not.

(Note: This section will come into operation on a day to be appointed by notice published in the Gazette). (Amendment No. 53)

- 2.1 A vessel to which this section applies shall be fitted with a piece of VHF radio equipment. A relevant licence issued by the Communications Authority (CA) shall be obtained for the equipment.
- 2.2 The operator of the VHF radio equipment must have received training in the use of the equipment and obtained an operator certificate issued by the CA. An operator certificate issued by the authorities in the Mainland or other countries will also be recognized.
- **AIS** (this section applies to any pleasure vessel that is licensed to carry more than 100 passengers)

  (Amendment No. 53)

A vessel to which this section applies shall be fitted with an AIS. For specifications of the

AIS, the Code of Practice – Safety Standards for Class I Vessels shall be referred to.

**Radar** (this section applies to any pleasure vessel that is licensed to carry more than 100 passengers)

(Amendment No. 53)

A vessel to which this section applies shall be fitted with a piece of radar equipment that is capable of determining any risk of collision exists, including equipment that can, by long-range scanning, give early warning of any risk of collision. For specifications of the radar, Annex I-4 of the Code of Practice – Safety Standards for Class I Vessels shall be referred to. The vessel is required to have on board, at all times when underway, a radar operator who has successfully completed a radar training course approved by the Director for the operation of the radar.

First Aid Kit (this section applies to any pleasure vessels carrying more than 12 passengers that are let for hire, effective from 1 April 2021) (Amendment No. 53)

A vessel to which this section applies shall be provided with a first aid box that contains the medical items as listed in the following table.

	Name	Specification	Quantity required
1	Triangular of calico	110cm x 110cm x 127cm	8 pieces
2	Pressure bandage	5cm x 2m	2 rolls
3	Bandage (ordinary or elastic)	5cm x 5.5m	2 rolls
4	Bandage (ordinary or elastic)	7.5cm x 5.5m	2 rolls
5	Plaster	Assorted, sterile, adhesive	20 pieces
6	Gauze	Sterile paraffin gauze	10 pieces
7	Таре	2.5cm x 5m	2 rolls
8	Absorbent cotton wool	35g	2 packs
9	Safety pin	Rustless, size 5cm	1 dozen
10	Scissors	Stainless steel throughout	1 pair
11	Disinfectant		0.2 litre

### **CHAPTER XI**

# SPECIAL REQUIREMENTS FOR BATTERY POWERED VESSELS

# 1 Application to Battery Powered Vessels

1.1 This chapter applies to local vessels that use electric power for the propulsion or general electrical loads with an installed battery capacity greater than 600Wh using cells and batteries containing alkaline or other non-acid electrolytes. Such vessels shall comply with the requirements of this chapter in addition to any other applicable requirements of this code of practice.

### **2** Requirements for Battery Powered Vessels

- 2.1 Batteries shall be constructed and tested in accordance with the relevant IEC Publications or equivalent where applicable.
- 2.2 Any lithium-ion batteries and battery systems with a capacity greater than 600 Wh installed a local vessel shall comply with the Technical Specification Small Craft Lithium-ion batteries (ISO/TS 23625:2021) or equivalent.
- 2.3 Any local vessels of 24 meters or above, or any of the vessel type listed below, shall comply with the relevant rules published by an Authorized Organization for Electric Propulsion Systems or equivalent.
  - o Class I vessels;
  - Dangerous goods carrier;
  - o Oil / Noxious liquid substance / Gas carriers;
  - o Special purpose vessels;
  - o Mobile fishing vessels; and
  - o Any Class II vessels that may navigate within river trade limits.
- 2.4 Any local vessels which do not belong to the vessels in paragraph 2.3 shall comply with the following:
  - (a) Vessels shall be constructed to the International Standards Small Craft Electric Propulsion System (ISO 16315:2016) and Small craft Fire protection (ISO 9094), or their equivalent.
  - (b) Batteries shall be positioned aft of the collision bulkhead.
  - (c) Boundaries of battery compartment which is part of a vessel's structure or enclosures shall be of equivalent structural integrity and A-60 fire integrity.
  - (d) A battery compartment shall be fitted with fire/heat detectors or detection system where suitable.

(e) A battery compartment with combined stored energy over 50 kWh in lithium ion batteries shall be equipped with a type of fixed fire extinguishing system recommended as suitable for suppressing battery fire by the battery maker of that batteries.

### **CHAPTER XII**

# SPECIAL REQUIREMENTS FOR VESSELS USING GASES OR OTHER LOW FLASHPOINT FUELS

### 1 Application to ships using gases or other low-flashpoint fuels

- 1.1 Unless expressly provided otherwise, this chapter applies to the vessels using gases or other low-flashpoint fuels ("Alternate Fuels") as fuel except gas carriers (Note 1) ("IGF Vessel").
- 1.2 IGF Vessel shall comply with the requirements of this chapter in addition to any other applicable requirements of this code of practice.

### 2 Requirements for ships using gases or other low-flashpoint fuels

- 2.1 An IGF Vessel shall comply in entirety with the requirements of the International Code of Safety for Ships Using Gases or Other Low-Flashpoint Fuels ("**IGF Code**") as amended or equivalent.
- 2.2 An IGF Vessel shall hold a valid classification certificate issued by an Authorized Organization (AO).
- 2.3 The procedures as required under Part C of the IGF Code shall be endorsed by a suitably qualified AO for the compliance of IGF Code.
- 2.4 The crew of an IGF Vessel shall meet the applicable training requirements related to IGF Code in accordance with the STCW Convention and Code, as amended.
- 2.5 The owner of an IGF Vessel shall ensure that:
  - (a) the procedures listed in section 2.3 of this chapter are fully implemented on board the vessel;
  - (b) drills and emergency exercises related to Alternate Fuels shall be conducted at least once in every two months; and
  - (c) the crew of the vessel are adequately trained and experienced for the operation of the specific vessel related to the IGF Code.

### 3 Periodical Survey

3.1 During periodical survey of an IGF Vessel, full compliance of IGF Code shall be verified, including Part C and Part D of the IGF Code.

Note 1 For the special requirements for gas carriers, see Chapter XIII of "Safety Standards for Class II Vessels"

# Safety Briefing for Pleasure Vessels Let for Hire

- Before the commencement of any voyage for which the vessel is let for hire or reward, the coxswain shall ensure that all persons on board are briefed on the appropriate safety precaution, stowage and use of personal safety equipment such as lifejackets, buoyancy aids and lifebuoys, and the procedures to be followed in cases of emergency.
- In addition to the requirements of section 1, the coxswain shall brief at least one assistant (if applicable, please see Ch. IX/3.1(2) of this Code)) who will be sailing with the vessel regarding the following:

  (Amendment No. 48)
  - (1) Procedures for the recovery of a person from the sea;
  - (2) Location of first aid kit, if any;
  - (3) Procedures and operation of radios carried on board, if any;
  - (4) Location of navigation light switches and other light switches;
  - (5) Location and use of fire-fighting equipment;
  - (6) Method of starting, stopping, and controlling the main engine; and
  - (7) Handling emergency situations and communication arrangements.
- 3 Safety guide plates or cards will be considered to be an acceptable way of providing the information required in section 2 above.

# Provisions in the Merchant Shipping (Local Vessels)(Certification and Licensing) Regulation on Matters Relating to Restrictions on Pleasure Vessels Let for Hire and the Arrangement of Marine Department's Prior Approval and Audit Checks

(Amendment No. 48)

(A) The provisions are quoted below:

# **QUOTE**

### 6 Restrictions on Class IV vessels

- (1) A Class IV vessel shall not be used otherwise than:
  - (a) by the owner exclusively for pleasure purposes; or
  - (b) if it has been let to any person, by that person exclusively for pleasure purposes.
- (2) A Class IV vessel shall not be let for hire or reward unless:
  - (a) it is let under the terms of a written charter agreement or written hire-purchase agreement;
  - (b) the agreement contains a warning that states clearly:
    - (i) that the person to whom the vessel is let commits an offence if he does not comply with section 6(5)(b) of the Merchant Shipping (Local Vessels) (Certification and Licensing) Regulation (Cap. 548D);
    - (ii) that the person to whom the vessel is let should read carefully section 6 (except subsections (1), (2) and (4)) of the Regulation; and
    - (iii) where in the agreement the full text of those provisions may be found;
  - (c) the agreement contains, either in its body or as its attachment, the full text of this section (except subsections (1), (2) and (4));
  - (d) the warning and text referred to in paragraphs (b) and (c) are in the same language as that of the remaining parts of the agreement and are presented prominently in the agreement; and
  - (e) the agreement is signed by the owner and the person to whom the vessel is let.
- (3) A Class IV vessel shall not be let for hire or reward for an intended service that involves the carriage of passengers unless there is in force in respect of the vessel:

- (a) such certificate of inspection certifying that the vessel is fit for the intended service as is required under the Survey Regulation for a Class IV vessel of the type for which the vessel is certificated; and
- (b) such policy of insurance in respect of third party risks as is required under Part VA of the Merchant Shipping (Local Vessels) Ordinance for a Class IV vessel of the type for which the vessel is certificated, having regard to the intended service. (Amendment No. 38)
- (4) If, without reasonable excuse, subsection (1), (2) or (3) is contravened the owner of the vessel, his agent and the coxswain each commits an offence and is liable on conviction to a fine at level 3.
- (5) Where a Class IV vessel is let for hire or reward:
  - (a) the owner, his agent and the coxswain shall ensure that there is kept on board the vessel:
    - (i) the relevant written charter agreement or written hire-purchase agreement; and
    - (ii) if any passenger is carried in the vessel, the certificate of inspection and the policy of insurance referred to in subsection(3), or certified copies of them;
  - (b) the person to whom the vessel is let shall ensure that throughout the period when the person is in possession of the vessel:
    - (i) the vessel is not used otherwise than by him exclusively for pleasure purposes; and
    - (ii) the documents referred to in paragraph (a) are kept on board the vessel; and
  - (c) the coxswain shall, on request by an authorized officer, produce for inspection the documents referred to in paragraph (a).
- (6) A person who without reasonable excuse contravenes subsection (5), commits an offence and is liable on conviction to a fine at level 2.
- (7) A person to whom a Class IV vessel is let does not have a reasonable excuse for contravening subsection (5)(b)(ii) merely because the person's contravention is attributable to the contravention by the owner, his agent and the coxswain of subsection (5)(a).
- (8) For the purpose of this section, a Class IV vessel is to be regarded as being used by a person exclusively for pleasure purposes if:
  - (a) in the case of the person being an individual, the vessel is used to carry the individual, his family members, relatives, friends and employees, and

- family members, relatives and friends of his employees, for their pleasure purposes; or
- (b) in the case of the person being a club, company, partnership or association of persons, the vessel is used to carry its members and employees, and family members, relatives and friends of those members and employees, for their pleasure purposes.
- (9) If a person to whom a Class IV vessel is let under a hire-purchase agreement is named in the certificate of ownership as owner by virtue of section 9(b), then subsections (3) and (5) apply neither to the hire-purchase agreement nor to the vessel as far as that agreement is concerned.

### UNQUOTE

(B) Arrangement of Marine Department's Prior Approval for Class IV Vessel That are Let for Hire or Reward

Excerpt of the Merchant Shipping (Local Vessels) (Certification and Licensing) (Amendment) Regulation 2020

### QUOTE

### Section 6 amended (restrictions on Class IV vessels)

- (1A) A Class IV vessel must not be let for hire or reward unless there is an endorsement on the vessel's operating licence showing that approval for the vessel to be let for hire or reward has been given by the Director.
- (1B) If an owner of a Class IV vessel intends to let the vessel for hire or reward for an intended service that involves the carriage of passengers, the owner must, when applying for or renewing an operating licence in respect of the vessel—
  - (a) indicate that it is the owner's intention to let the vessel for hire or reward;
  - (b) submit to the Director copies of the certificate of inspection or certificate of survey referred to in subsection (3)(a) and the policy of insurance referred to in subsection (3)(b); and
  - (c) seek the Director's approval for the vessel to be let for hire or reward.
- (1C) If the Director approves a Class IV vessel to be let for hire or reward, the Director must make an endorsement to that effect on the vessel's operating licence.
- (1D) If subsection (1A) is contravened in respect of a vessel, the owner of the vessel, the owner's agent and the coxswain of the vessel each commits an offence and is liable on conviction to a fine at level 3.
- (1E) During the transitional period, a contravention of subsection (1A) does not constitute an offence under subsection (1D).

(1F) For subsection (1E), transitional period means the 12-month period beginning on the date on which the Merchant Shipping (Local Vessels) (Certification and Licensing) (Amendment) Regulation 2020 comes into operation.

UNQUOTE (Amendment No. 54)

# (C) Arrangement of Audit Check

- Under section 7 of the Ordinance, the Director of Marine may authorize any person to be a surveyor for the purposes of the Ordinance subject to such conditions as the Director thinks fit and specified in the authorization to carry out the relevant provisions of the Ordinance, including the inspection of local vessels or the approval of plans.
- Under section 7(4) of the Ordinance, the Marine Department may carry out audit check of any survey carried out or any plan approved by an authorized surveyor for the purposes of the Ordinance. The purpose of the audit check is to ensure that the vessel is in compliance with the relevant safety and survey regulations and that the work of the authorized surveyor is in compliance with relevant standards.
- The Marine Department may conduct audit check of pleasure vessels surveyed and licensed by the authorized surveyors, including document check, review of plans and drawings in accordance with relevant rules and regulations, and conduct of vessel audit check. Details are as follows:
  - Document check: The Marine Department will check whether the documents provided on the pleasure vessels let for hire are complete and accurate, such as checking if the information on the certificate of inspection and survey records are consistent with the certificate of manufacture;
  - Review of plans and drawings: The plans and drawings of most of the pleasure vessels let for hire are inspected and approved by the authorized surveyors and the related certificates of inspection are issued by the authorized surveyors. At the time of review, the Marine Department may check whether the plans and drawings approved by the authorized surveyors are in compliance with the relevant requirements of relevant rules and regulations; and
  - ➤ Vessel audit check: The Marine Department will conduct a random inspection of the pleasure vessels let for hire to ensure that the physical condition and arrangement of the vessel are in accordance with the information listed in the relevant plans.

### • Arrangement:

- Authorized surveyors inspect and issue certificates of inspection (CoI) in normal procedures.
- ➤ The Marine Department will make an appointment with the owner of the selected vessel to conduct vessel inspection.

If deficiencies found, the subject AS will rectify accordingly. Unless the deficiency found is serious to the extent of affecting seaworthiness, e.g. critical hull damage, the entire procedure will not affect the validity of the issued licence.

(Amendment No. 48)

# Provisions in Merchant Shipping (Certification and Licensing) Regulation on Matters Relating to Certificate of Competency Required for Class IV Vessels

The provisions are quoted below:

### **QUOTED**

### 47 Vessels required to carry operators holding local certificates of competency

- (1) A Class I, II or III vessel that is fitted with any propulsion engines shall not be underway unless there is on board:
  - (a) a person in charge of the vessel who is the holder of a local certificate of competency as a coxswain appropriate for the vessel, or any equivalent certificate specified in the Local Certificate of Competency Rules;
  - (b) in addition to the person referred to in paragraph (a), a person in charge of the engines who is the holder of a local certificate of competency as an engine operator appropriate for the total propulsion power of the engines of the vessel, or any equivalent certificate specified in the Local Certificate of Competency Rules; and
  - (c) such additional number of crew with such qualification, training and experience as may be specified in the full licence or temporary licence for the vessel.
  - (2) Subsection (1)(b) does not apply to a local vessel specified in Schedule 3.
- (3) It is sufficient compliance with subsection (1)(a) and (b) if:
  - (a) a Government surveyor, having regard to the size of the vessel, the engines of the vessel, and the location of the controls, certifies in writing that a Class I, II or III vessel (including its engines) can be properly controlled by one person; and
  - (b) the person in charge of the vessel (including its engines) is the holder of both of the certificates referred to in subsection (1)(a) and
- (4) A Class IV vessel or an ancillary vessel of a Class IV vessel that is more than 3 metres in length overall or is fitted with engines of more than 3 kilowatts total propulsion power shall not be underway unless there is on board a person in charge of the vessel who is the holder of a local certificate of competency as a pleasure vessel operator, or any equivalent certificate as specified in the Local Certificate of Competency Rules.
- (5) If subsection (1) or (4) is contravened, the owner and the coxswain of the local vessel each commits an offence and is liable on conviction to a fine at level 3 and imprisonment for 6 months.

### 48 Person under 16 prohibited from operating certain vessels

- (1) A person under the age of 16 shall not steer, navigate or operate a local vessel that is fitted with a propulsion engine.
- (2) If subsection (1) is contravened by any person, that person, the owner and the coxswain of the local vessel each commits an offence and is liable on conviction to a fine at level 3.

### 50 Local certificates of competency to be carried on board

- (1) A person while in charge of a local vessel fitted with a propulsion engine shall carry with him in the vessel the local certificates of competency, or their equivalents, required under sections 47 and 49 and shall, on request by an authorized officer, produce them for inspection.
- (2) A person while in charge of the engines of a local vessel fitted with a propulsion engine shall carry with him in the vessel the local certificates of competency, or their equivalents, required under sections 47 and 49 and shall, on request by an authorized officer, produce them for inspection.
- (3) A person who contravenes subsection (1) or (2) commits an offence and is liable on conviction to a fine at level 2.

UNQUOTED

### Safety Precautions on the Proper Storage and Use of Petrol

- 1 No excessive quantity of petrol shall be carried on board a vessel.
- If portable container is used to carry petrol, the containers shall be of a type approved by the manufacturer of petrol engine (if necessary, owner shall submit supporting document issued by the manufacturer, e.g. invoice, sale receipt etc.); and fitted with air vent.
- The portable container shall be stored in a well ventilated place, if necessary, on the open deck. The containers and all valves and pipes leading from such containers shall be made of suitable material and properly secured and protected against mechanical damage, excessive temperature variations and direct sunlight. The container, storage cabinet, associated valve, pipes and joints shall not have any fuel leaking, and shall be readily accessible for checking of suspected leaks.
- 4 Sources of heat shall be kept clear of the storage spaces and caution notices "不准吸煙 No Smoking" and "不准明火 No Naked Lights" shall be displayed in a prominent position when necessary.
- 5 Petrol shall not be used for other purposes, e.g. cleaning of engine parts, which may impose an unnecessary fire risk.
- 6 Unless it is certain that the containers storage space is well ventilated, otherwise the containers and the petrol shall be removed from the storage place which is expected to be unattended for a period of time.

# 檢查證明書 Certificate of Inspection

The sample of Certificate of Inspection can be downloaded from Marine Department web site at the following URL:

https://www.mardep.gov.hk/en/public-services/port-services/lvs/lvs-survey7/index.html

(Amendment No. 55)

# **Inspection Record for a Class IV Vessel That Is Issued With a Certificate of Inspection**

The sample of Inspection Record can be downloaded from Marine Department web site at the following URL:

https://www.mardep.gov.hk/en/public-services/port-services/lvs/lvs-survey7/index.html

### (Note

Form A is applicable to vessel that is licensed to carry not more than 60 passengers but is let for hire or reward; but not include vessel that is not less than 24 metres in length, of not more than 150 gross tonnage and licensed for the first time on or after 1 August 2020.

Form B is applicable to vessel that is not less than 24 metres in length, of not more than 150 gross tonnage and licensed for the first time on or after 1 August 2020)

(Amendment No. 55)

# 第 IV 類船隻的最高可運載人數的計算

# Determination of Maximum Number of Persons to be Carried of a Class IV Vessel

船	名		擁有權證明	月書號碼				
Name	e of Vessel		Certificate of	of Ownershi	p No :			
1 (a)	最高可運載量和	座椅	Maximum Carrying C	Capacity an	d Seating			
			舌乘客和船員在內)的					
			city (including passengers	and crew) as	re determined	as follo	ows:	
[ ]	,		=	)				
	L×B 所得數 nu	ımeral 終	!人數 Total No. of Person	s 計算網	恩人數 Determine	ned To	otal No. of Perso	ons
	≤ 5		2		(		)	
或/or	>5 to ≤ 10	0	3		(		)	
	> 10		4		(		)	
[ ]	(ii) 遊樂船 cru			計算網	人數 Determin	ed Tota	al No. of Person	ıs
	-		of persons = $L_d \times B \times 0.4$					
及/and	(iii)船東要求最少	船員名額	Owner's requested mini	mum numbe	r of crew		= (	)
			(甲板)的總長(米) vess				,	)
	B	:船隻	的最大寬度(米) vess	sel's maximu	m breadth in n	netres	= (	)
(b)	所有乘客應有足	夠的座橋 (国完座位	f或休息設施可供擬定的 Z,餘數可採用另外的形	用途。作指式或類別,	引之用,應有 但必須相對地	不少 釋巫	不適用	
	及安全,符合擬定	用途。					Not applicable	
	All passengers shou	ıld be arra As a guida	anged with seating or rest ance, the number of fixed	ing facilitate: I seats should	s adequate for I be not less t	the	足夠 / 不足	貓
	50% of its maximu	m number	r of carrying capacity and	the balance	d number of se	eats	Adequate	
	purpose.	n or type	provided that they are re	latively stab.	ie and safe for	IIS	Not Adequa	
(c)	運載超過 12 名乘	客及出	租以收取租金或報酬	州的船隻之	乘客艙室的棒	票記		
	Marking in Passe	nger Spa	ce for vessel let for hire	e or reward	and carrying	g capa	city more than	12
	須在乘客上船的縣	眼位置,	以中、英文註明每層甲	板可運載的	乘客人數,如	以下戶	沂示	
			in which each deck can bassengers will be embark				ed, in a conspic	cuous
			bassengers will be embark	Ing, in Clinic	)	1		
	上層甲板 Ur			(	)		不適用	
		ain Deck		(	)	N	ot applicable	/
	其他 Others				<del></del>			
	總乘客人數 T	Total numl	ber of passengers	(	)			
	最少船員人	Minim	um number of crew	(	)	已相	票記 / 未有標	能
						Ma	rking Complet	ed /
	允計理軟總/	、數 Iota	l number of persons pe	rmitted (	)		arking Not Dom mendment No	
H1:3-3-	D 1 //u+/表示	For Dise	<b>写事に                                    </b>	: 1)		(217	nenameni 140	<i>. 50)</i>
備託	Remark:(如有需要	是可另加原	頁數 Additional sheet if	required)				
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	各験船師(機構/公司)의 of Competent Surve		췛船師姓名 tution/Company) and nam	ne of surveyo	r			
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簽署	Signature			日期 Date				

### Approximate Determination of Stability by Simple Inclining Test

#### Part 1

(Amendment No. 48, 63)

#### 1 General

1.1 The simple inclining test is to ascertain the angle of heel a vessel would occur when 2/3 of the passengers distributed on one side of the vessel and 1/3 on the other side. The objective being that it should be ensured that no angle of heel exceeding 7° will arise as a result of the movement of passengers from one side of the vessel to the other side.

### 2 Test Procedure

- 2.1 The vessel should be tested with weights to represent the fully laden service condition.
- 2.2 The weights should be disposed, as far as practicable, with their centres of gravity in the correct vertical and lateral positions having regard also to those vessels where passengers should be taken as congregated at 0.3 m<sup>2</sup> each on the uppermost deck or decks to which they have access.
- 2.3 The test should be carried out in the following manner:
  - (a) The vessel is to be loaded with weights as described above,
  - (b) Calculate a heeling moment equal to the weight of the passengers (W) multiplied by the extreme breadth (B) of the vessel and divided by 12 (=WB/12),
  - (c) Transfer weights from one side of the vessel to the other side in 3 equal increments such that the final heeling moment is equal to WB/12, the same vertical centre gravity of the whole being maintained. The weights and the distance they are moved together with the angle of heel should be recorded for each of the 3 moves.
  - (d) Restore all the weights to their original positions and record angle of heel when they are restored,
  - (e) Repeat (c) moving weights from opposite side,
  - (f) Repeat (d),
  - (g) If the angle of heel exceeds 7° during the test, the owner might add ballast weight and to repeat the test procedures (c), (d), (e) and (f). The weight and position of such ballast should be recorded.

### 3 Acceptance of Stability

- 3.1 As a general rule, no vessel will be accepted where the angle of heel exceeds 7° as a result of a heeling moment of WB/12 or any greater heeling moment that could be expected to arise in service.
- In any case where an angle of heel exceeding 4° has arisen as a result of a heeling moment of WB/12, the seating and other arrangements of the vessel should be examined to see whether a heeling moment greater than WB/12 could be expected to arise in service. If this is found to be so, proper measure should be taken to avoid an angle of heel greater than 7° would arise as a result of this heeling moment.

### 4 Determination of weight of passengers and crew

- 4.1 The following information should be used for the consideration of the effects of passenger and crew weight:
  - (1) The distribution of passengers is 4 per square metre;
  - (2) Each person has a mass of 68 kg or <75 kg>;
  - (3) Vertical centre gravity of seated passengers is 0.3 m above seat;
  - (4) Vertical centre gravity of standing passengers is 1.0 m above deck;
  - (5) Passenger and luggage should be considered to be in the space normally at their disposal

Note: <> applicable for new vessels<sup>2.1.2007</sup> calculation only.

(Amendment No. 39)

### Part 2

According to the procedure described in Part 1, with the value of the heeling moment equal to WB/2, to ensure that the ship's heel angle will not exceed 10° when all (100%) passengers are distributed on one side of the ship. For safety's sake, the test shall be carried out from one side of the vessel to the other side in three equal increments as described in paragraph 2.3(c) above, until the final heeling moment equals WB/2.

(Amendment No. 48, 63)

A rolling period test to derive the metacentric height can replace the requirements in Part 1 or Part 2:

### General

The rolling period is the duration for one complete oscillation, i.e. starting from the extreme end of a roll to one side of the vessel, i.e. moves right across to the other extreme side and returns to the original starting point.

### **Test Procedure**

- (a) The test should be conducted in harbour, in smooth waters with the minimum interference from wind and tide.
- (b) The mooring should be slack. A reasonable clearance at the sides of the vessel should be maintained to avoid making any contact during its rolling.
- (c) Weights which are liable to swing or liable to move (e.g. a drum) should be secured against such movement. The free surface effects of slack tanks should be kept as small as practicable.
- (d) The vessel is made to roll (e.g. by rhythmically lifting up and putting down a weight far off middle-line; by people running athwartships in unison; or by any other means). As soon as this forced rolling has commenced the vessel is allowed to roll freely and naturally.
- (e) By means of a stopwatch, the time is taken for not less than about five complete oscillations.
- (f) After allowing the roll to completely fade away, repeat the operations in paragraphs (d) and (e) twice with the time recorded.

### **Determination of Metacentric Height (GM)**

- (a) From the total time for the total number of oscillations made, calculate the mean time (say T seconds) for one complete oscillation.
- (b) The metacentric height GM<sub>o</sub> is to be determined from the following formula:

$$GM_0 = (0.77 \text{ B/T})^2$$

where

B = extreme breadth of vessel in metres

(Note: The formula is valid for vessels with length not more than 24 metres)

(Amendment No. 48, 63)

# 適用於簡單傳統建造的第 IV 類別船隻的圖則 Plans for Simple Traditionally Built Class IV Vessels

# 首次申請牌照 需要審批的簡單圖則 Simple Plans Required Approval for Initial Licensing

擁有權	證明書號碼:	船名:	
Certif	icate of Ownership No.	Name of Vessel	
	[則] / Approval Plans 登明書編號 Certificate of Inspection No		備 註/Remark
	般圖則/ General Plans		
1.	簡單圖則 Plan(Simple)-G -01		有/沒有/不需 *
	一般佈置圖則 (包括號燈、號型、聲號佈置) General Arrangement Plan (incl. lights, shapes & sound si	gnals installations)	Yes / No / Not Applicable *
2.	簡單圖則 Plan(Simple)-HS-02		有/沒有/不需 *
	船隻資料及基本船殼和甲板之板厚示意圖則 Vessel Particulars, and Basic Hull and Deck Plate Thicknow	ess Diagram	Yes / No / Not Applicable *
3.	簡單圖則 Plan(Simple)-HS-03 傾斜試驗 / 橫搖週期 / 簡單傾斜- 測試報告		有/沒有/不需*
	Inclining Experiment Report/Rolling Period / Simple Inclin	ning - Test Report	Yes / No / Not Applicable *
4.	簡單圖則 Plan(Simple)- HS –04		有/沒有/不需*
7.	救生及救火設備及佈置示意圖則 (包括逃生示意圖)		Yes / No / Not Applicable *
	LSA & FFA Installation and Arrangement Diagram (incl.	escape route)	
5.	簡單圖則 Plan(Simple)-ME-05		有/沒有/不需 *
	機器/電器設備圖則 Machinery / Electrical Installation Plans		Yes / No / Not Applicable *

註 : 如有需要,船東必須另加圖則去補充不足資料之處 (請參考本有關 工作守則或規例)。

Note : Owner must submit additional plans to supplement for deficient information if necessary (please refer to relevant Code of Practice or regulation).

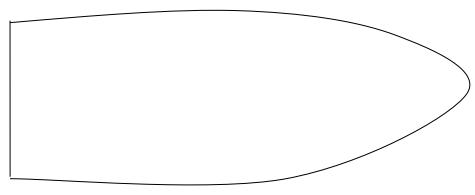
\* 删去不需要處 / Delete where not appropriate

一般佈置圖則 (包括號燈、號型、聲號佈置)

(Note: A copy of this diagram must be kept onboard) (註:一份此圖則必須存放在船上)



# <u>側面圖</u> Side View Profile



<u>甲板</u> DECK

Annex 6 Page 2

#### Annex 6

### Remarks 備註:

- 1. If there is superstructure, please indicate. 如設有上層建築, 請標示
- 2. Details can be supplemented by photos or separate sheets. 詳細可以相片補充或另加紙張
- 3. Not to proportion/scale. 不按比例/標尺

Vessel info 船隻賞		Content 資料內容
1. File No. 檔案號碼		
2. Certificate of C 擁有權證明書		
3. Vessel Class / 7 船隻類別 / 類		
4. Length Overall 總長度		
5. Extreme Breath 最大寬度	ı	
6. Depth 深度		
7. No. of Decks 甲板層數		
8. Lights, Shapes & Signals Installa 號燈、號型、 (Please show loca 置)	ations 聲號設備	
Approved by 經辦署	番批:	Date 日期:

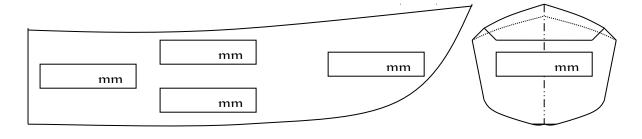
簡單圖則 Plan(Simple)-HS-02

# Vessel Particulars and Basic Hull and Deck Plate Thickness Diagram 船隻資料及基本船殼和甲板之板厚示意圖則

(Note: A copy of this diagram must be kept onboard) (註:一份此圖則必須存放在船上)

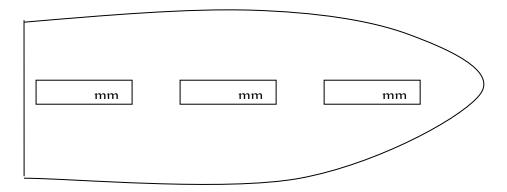
#### Remarks 備註:

- 1. If there is a superstructure, please indicate. 如設有上層建築, 請標示
- 2. Details can be supplemented by photos or separate sheets.
  - 詳細可以相片補充或另加紙張.
- 3. Please show by dotted line long/transverse frame. 請以虛線列出縱及橫向肋骨.
- 4. Not to proportion/scale. 不按比例/標尺
- 5. Hull and Deck Plate Thickness could make reference to the information provided by the ship builder/ shipyard or other certification bodies 船殼和甲板之板厚可參照船隻建造者/船廠或其他驗證機構提供的資料. (Amendment No. 48 修改第 48 號)



# <u>船旁及船底板</u> SIDE & BOTTOM PLATING

<u>船尾板圖</u> TRANSOM



**甲板 DECK PLATING** 

Vessel Particulars & Basic Hull information 船隻資料及基本 船殼資料	Content 資料內容
1. File No. 檔案號碼	
2. Certificate of Ownership No. 擁有權證明書號碼	
3. Vessel Class / Type 船隻 類別 / 類型	
4. Length Overall 總長度	
5. Extreme Breath 最大寬度	
6. Depth 深度	
7. Material 構造材料	
8. Number of Transverse Frame 横架數目	
9. Number of Long. Girder/Keelson/ Frame 縱龍骨/邊龍骨/直隔擋數目	
10. Number / Size of Buoyancy Space 浮艙數目及容量	
(Please show location/ 請顯示位置)	
11. Hull Design / Construction Standards /Rules adopted 應用的船殼/結構標準/規則	
Approved by 經辦審批	Date 日期

簡單圖則 Plan(Simple)-HS-03

Inclining Experiment Report/Rolling Period / Simple Inclining - Test Report 傾斜試驗/橫搖週期 / 簡單傾斜- 測試報告

### Remarks 備註:

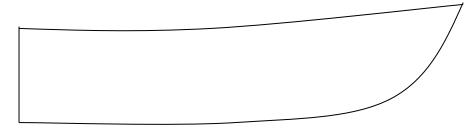
- Details can be supplemented by photos or separate sheets.
   詳細可以相片補充或另加紙張.
- Please show by dotted line long/transverse frame.
   請以虛線列出縱及橫向肋骨.
- 3. Not to proportion/scale. 不按比例/標尺

Vessel Particulars & Basic Hull information 船隻資料及基本船殼資料	Content 資料內容
1. File No. 檔案號碼	
2. Certificate of Ownership No. 擁有權證明書號碼	
3. Vessel Class / Type 船隻類別 / 類型	
4. Length Overall 總長度	
5. Extreme Breath 最大寬度	
6. Depth 深度	
7. Material 構造材料	
8. Number of Transverse Frame 横架數目	
9. Number of Long. Girder/Keelson/ Frame 縱龍骨/邊龍骨/直隔擋數目	
10. Number / Size of Buoyancy Space 浮艙數目及容量	
(Please show location/ 請顯示位置)	
11. Hull Design / Construction Standards /Rules adopted 應用的船殼/結構標準/規則	
Approved by 經辦審批	Date 日期

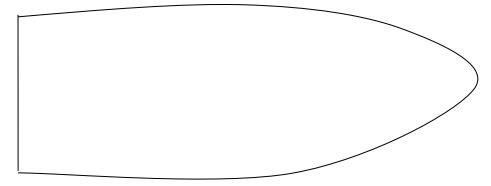
# LSA & FFA Installation and Arrangement Diagram (incl. escape route)

救生及滅火設備及佈置示意圖則(包括逃生示意圖)

(Note: A copy of this diagram must be kept onboard) (註:一份此圖則必須存放在船上)



# <u>側面圖</u> Side View Profile



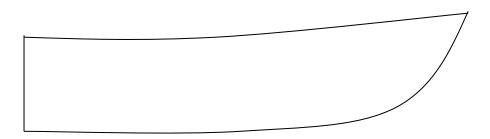
<u>甲板</u> DECK

Vessel information 船隻資料	Content 資料內容			
1. File No. 檔案號碼				
Certificate of Ownership No. 擁有權證明書號碼				
3. Vessel Class / Type 船隻 類別 / 類型				
4. LSA & FFA Installation 救生及救火設備	(Please show location/ 請顯示位置)			
(a)				
(b)				
(c)				
(d)				
(e)				
5. Escape Route 逃生路線				
Approved by 經辦審批	Date 日期			

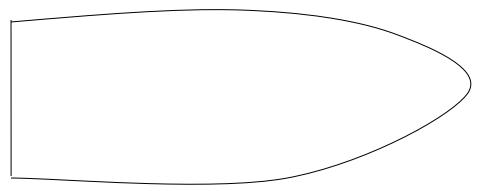
簡單圖則 Plan(Simple)-ME-05

# Machinery & Electrical Installation Plans 機器與電器設備圖則

(Note: A copy of this diagram must be kept onboard) (註:一份此圖則必須存放在船上)



# <u>側面圖</u> Side View Profile



<u>甲板</u> DECK

	Vessel information 船隻資料	Content 資料內容
1.	File No. 檔案號碼	
2.	Certificate of Ownership No. 擁有權證明書號碼	
3.	Vessel Class / Type 船隻類別 / 類型	
4.	No. of Main Engines/Propellers 主機 / 推進器 數量	
5.	Main engine Maker /Type 主機製造商/型類	
6.	Main Engine Serial Number 主機號碼	
7.	Total Engine Power (kW)/ RPM 主機總功率 (千瓦) / 轉速	
8.	Fuel type/ tank no./ total capacity 燃油類 / 油缸數量 / 總容量	
9.	Generator Engine Maker / Type 發電機製造商/型類	
10.	Generator Engine Serial No. 發電機號碼	
11.	Total Generator Engine Power (kW)/ RPM 發電總功率 (千瓦) / 轉速(每分)	
12.	Voltage (V) / Frequency (Hz) 電壓 (伏特) / 週頻 (轉數/每秒)	
(Pl	ease show location/ 請顯示位置)	
App	proved by 經辦審批	Date 日期

# Implementation of the Requirements of Annex VI of MARPOL 73/78 to Locally Licensed Vessels

(Merchant Shipping (Prevention of Air Pollution) Regulation (Cap. 413P))

The amendments to Merchant Shipping (Prevention of Air Pollution) Regulation have entered into force on 1 July 2016 and 1 March 2020 respectively. The Regulation is to give effect to the requirements of MARPOL Annex VI in Hong Kong. The Marine Department Notice (MDN) No. 39 of 2016 and 33 of 2020 give details of the relevant requirements applicable to local vessels under the Regulation. The subject MDNs are available at the following URLs:

https://www.mardep.gov.hk/filemanager/en/share/notices/pdf/mdn16039.pdf https://www.mardep.gov.hk/filemanager/en/share/notices/pdf/mdn20033.pdf

(Amendment No. 5, 57)

# Merchant Shipping (Prevention of Air Pollution) Regulation (Cap. 413P)

# **Inspection Checklist for Local Vessels**

Certificate of Ownership Number: Date of Survey: Place of Survey: Name of Surveyor:

	Cap. 413P	Inspection Details	Ins	spection Items	Inspection	on Results	Remarks	
1	Division 2, Part 3 - Ozone- depleting substance (ODS)		aboard, n condition refrigerat To check & relevan	may be emitted nainly from air ing systems, ion equipment, etc. management guidelines at records (if applicable) yed on board	Requirement met	Requirement not met		
			are fitted installation	ons containing ODS on board, and no ons containing orofluorocarbons	Requirement met	Requirement not met		
2	Division 3, Part 3 - Nitrogen oxides (NOx)	Records of brand, models and serial numbers of shipboard diesel engines with power output of more than 130 kW	are fitte diesel eng "new ves emission	t if "existing vessels" d with "existing gines" or if engines on sels" comply with NOx requirements (document cceptable)	Requirement met	Requirement not met	Requirement for control of NOx emissions not applicable to "existing vessels"fitted with "existing engines".	
			Tier I Ship built after 1 June 2008 but before 1 July 2016		Requirement met	Requirement not met	Tier II emission limits apply to engines which undergone a	
			Tier II Ship built on or after 1 July 2016		Requirement met	Requirement not met	substantial modification on or after 1.7.2016 on ships built on or after 1.1.2011	
3	Division 6, Part 3	Shipboard incinerators	Incinerators		Available	Not available		
	- Shipboard incinerators	(incl. type, manual, training & record) meeting IMO	IMO spec	cifications	Requirement met	Requirement not met	Incinerators not meeting IMO	
		requirements.	operated Operation & record	roved incinerator in Hong Kong: n (manual, training of incinerators meeting requirements	Yes No		requirements are not permitted to operate.	

	Cap. 413P	Inspection Details	Inspection Items	Inspectio	Remarks	
4	Division 4, Part 3	Vessels of 400 gross tonnage or above:	Bunker delivery note kept on board	Yes	No	Some vessels may already
4.1	& Section 87, Part 6 -Fuel oil quality	bunker delivery notes shall be kept on board	Bunker delivery note issued by a local supplier or recognized/recorded supplier in the Mainland	Yes	No	have obtained the exemption document from Marine Department
	Sulphur oxides Vessels of less than 400 gross tonnage:		Not Required	Not ap	plicable	
	(SOx)	bunker delivery note not required.	Sulphur content of fuel oil not exceeding 0.5% m/m	Yes	No	

(Amendment No. 5, 57)

### TONNAGE MEASUREMENT

### PART 1 GENERAL

### 1 Application

- 1.1 Subject to section 1.2, this chapter applies to new vessels (see definition in Ch. I/3).
- 1.2 The following vessels are not required to be measured in accordance with this chapter
  - (1) any vessel the tonnage of which has been measured in accordance with the Merchant Shipping (Registration)(Tonnage) Regulations and is issued with the relevant tonnage certificate; or
  - (2) any vessel in possession of International Tonnage Certificate issued in accordance with the International Convention on Tonnage Measurement of Ships, 1969.
  - (3) any existing vessel the tonnage of which has been measured in accordance with the previous methods of tonnage measurement.

### 2 Method of Tonnage Measurement

- 2.1 The gross and net tonnages shall be determined in accordance with Part 2 of this chapter provided that in the case of novel types of vessel with constructional features which render the application of the provisions of Part 2 unreasonable or impracticable, the gross and net tonnages shall be determined as required by the Director.
- 2.2 All measurements used in the calculations of volumes shall be taken and expressed in metres to the nearest centimetre.
- 2.3 Gross and net tonnages shall be expressed as whole numbers, decimals being rounded off downwards.
- 2.4 All volumes included in the calculation of gross and net tonnages shall be measured, irrespective of the fitting of insulation or the like, to the inner side of the shell or structural boundary plating in ships constructed of metal, and to the outer surface of the shell or to the inner side of the structural boundary surfaces in ships constructed of any other material.
- 2.5 The total volume shall include volumes of appendages (e.g. rudder, kort nozzle, skeg, propeller shaft bossings, etc.) but exclude the volumes of spaces open to sea. Volumes within the hulls of ship shall be retained in V and V<sub>c</sub>. (Amendment No. 40, 58)
- 2.6 Enclosed spaces above the main deck not exceeding 1 m<sup>3</sup>, air trunks having a cross-sectional area not exceeding 1 m<sup>2</sup> shall not be measured. (Amendment No. 40)
- 2.7 Masts, cranes and container support structures, which are completely inaccessible and

above the main deck, separated on all their sides from other enclosed spaces shall not be included in the total volume of all enclosed spaces. All mobile cranes shall be exempted.

(Amendment No. 40)

### PART 2 ASCERTAINMENT OF TONNAGE

### **3** Vessels of 24 Metres in Length and Above

Tonnage of vessels of 24 m in length and above shall be ascertained in accordance with Part II of the Merchant Shipping (Registration)(Tonnage) Regulations. Only tonnage certificate or tonnage measurement record issued by the competent surveyors are considered to be acceptable.

### 4 Class IV Vessels of Less Than 24 m in Length

- 4.1 The tonnage of Class IV vessels of less than 24 m in length shall be ascertained in accordance with this section.
- 4.2 Gross tonnage
- 4.2.1 The gross tonnage (GT) shall be determined by the following formula:

$$GT = K_1 (V_1 + V_2)$$

where:  $K_1 = 0.2 + 0.02 \log_{10} V_1$ 

 $V_1$ =  $V_H$ , total volume of all enclosed spaces under the main deck, in  $m^3$ ; which shall be obtained from section 4.2.2 (in catamaran,  $V_1$  = 2 ×  $V_H$ ).

 $V_2$  = total volume of all enclosed spaces above the main deck, in m<sub>3</sub>; which shall be obtained from section 4.2.3 below.

4.2.2  $V_1$  shall be determined by the following formula:

$$V_H = L_d \times B \times D \times C$$
  $m^3$ 

where:  $L_d$  = length of the main deck, m (Main deck is the deck which form the top of the enclosed space of the hull.); for open cruiser, the length overall of the hull; (Amendment No.58)

B =in vessels of other than wooden construction, the moulded breadth (in catamaran, the moulded breadth of one hull); and in wooden vessels, the breadth measured to the outer planking of the hull, m;

D = moulded depth, m;

C = coefficient obtained from the following table depending on the type of vessel:

Basic Hull Form	Hull Form Factor (C)						
alaira	monohull	0.55					
ship	catamaran	0.50					
junk	0.60						
box	0.90						

4.2.3  $V_2$  shall be determined by the following formula:

$$V_2 = \sum l \times b \times h$$
  $m^3$ 

where l, b, h are respectively the mean length, mean breadth and mean height of each tier of the enclosed spaces above the main deck, in m.

- 4.3 Net Tonnage
- 4.3.1 The net tonnage (NT) shall be determined by the following formula:

$$NT = K_2 \times GT$$

where:  $K_2 = 0.5$  for all Class IV vessels

GT = gross tonnage calculated by section 4.2.1 above.

# Installation, Document and Certification for Prevention of Oil Pollution

The installation, documentation and certification required on board, and information required to submit for approval for vessel of gross tonnage (GT)  $\geq$  400 are detailed as follows.

### 1 Required Installation, Documentation and Certification

- (a) An approved type oily water separator designed to produce effluent not more than 15 ppm of oil.
- (b) Tank (sludge tank) for oil residue in engine room.

The minimum sludge tank capacity  $(V_1)$  should be determined by the following formula:

 $V_1 = 0.005CD \text{ (m}^3\text{)}$ 

where

 $C = \text{daily fuel oil consumption (m}^3); \text{ and}$ 

D = maximum no. of days when sludge can be discharged ashore.

Oil residue (sludge) may be disposed of directly from the oil residue (sludge) tank(s) through the standard discharge connection, or any other approved means of disposal. The oil residue (sludge) tank(s) should be provided with a designated pump for disposal that is capable of taking suction from the oil residue (sludge) tank(s); and should have no discharge connections to the bilge system, oily bilge water holding tank(s), tank top or oily water separators except that the tank(s) may be fitted with drains, with manually operated self-closing valves and arrangements for subsequent visual monitoring of the settled water, that lead to an oily bilge water holding tank or bilge well, or an alternative arrangement, provided such arrangement does not connect directly to the bilge piping system. (Amendment No. 41)

- (c) Standard discharge connection.
- (d) For Class IV vessels of GT ≥400, Hong Kong Oil Pollution Prevention Certificate and Supplement issued/endorsed by the Director or International Oil Pollution Prevention Certificate and Supplement issued / endorsed by a recognized classification society.
- (e) Oil record book (Part I and Part II); pleasure vessels require Part I.

### 2 Information to be submitted

- (f) Installation plans for oily-water separator consist of:
  - (i) piping arrangements
  - (ii) wiring diagram of electrical installation.
- (g) Sludge tank and discharge arrangement plans include:
  - (i) construction, size and location of sludge tank
  - (ii) piping diagram of sludge tank from machinery spaces to reception facility via standard discharge connection.
- (h) Shipboard oil pollution emergency plan.

# Periodic Survey Programme for Pleasure Vessels Let for Hire and Are Issued with a Certificate of Inspection

(This annex applies to any pleasure vessel carrying not more than 60 passengers that is let for hire)

Pursuant to the Survey Regulation, all pleasure vessels carrying 60 passengers or less that are let for hire should possess a valid Certificate of Inspection. These type of vessels should conduct the annual or biennial periodical survey Remark (1). The stipulations of these periodical survey items are as follows:

### (I) Annual Survey Afloat

### (A) Vessels carrying 60 passengers or less

- (a) A general inspection of hull external (above waterline), decks, superstructure, water-tight integrity and cabin arrangement etc.
- (b) An inspection of fire-fighting apparatus, life-saving appliances, navigation lights, shape and sound signals etc.
  - (i) the inspection of CO<sub>2</sub> and sprinkler systems (if fitted) shall be carried out in accordance with the requirements set out in remark\*4 of Annex 13B.
  - (ii) the inspection of portable fire extinguishers and CO<sub>2</sub> bottles shall be carried out in accordance with the requirements set out in remark\*5 of Annex 13B. The inspecting authorized surveyor is responsible for the work in place of Marine Department officer.
- (c) Passage and escape means of passenger cabin, safety protection means, ventilation means with closing appliances (if applicable), notice and markings.
- (d) A functional test of engine room bilge pump and fire pump (if fitted).
- (e) An inspection of the fuel oil system of engines, fire and oil pollution hazards prevention at machinery space, and a running test of main and auxiliary engines.
- (f) A general inspection of electrical installation and megger tests of A.C. electric circuits Remark (2).
- (g) An inspection of ventilation arrangement and closing appliance of machinery space, if applicable.
- (h) Air Pollution Prevention installation (if applicable).
- (i) Verification of principal dimensions, engine and major machinery particulars.
- (i) Checking the domestic LPG system, if fitted.

- (k) Safety valve of air receiver functioning test (if fitted).
- (1) Checking the relevant document/certificate of the vessel.

### (B) GRP open cruiser of LOA less than 8 m

- (a) A general inspection of hull external (above waterline), decks, superstructure, water-tight integrity and cabin arrangement etc.
- (b) An inspection of fire-fighting apparatus, life-saving appliances, navigation lights, shape and sound signals etc..
- (c) Passage and escape means of cabin, safety protection means, notice and markings.
- (d) A functional test of engine room bilge pump and fire pump (if fitted).
- (e) An inspection of the fuel oil system of engines, fire and oil pollution hazards prevention at machinery space, and a running test of main and auxiliary engines.
- (f) A general inspection of electrical installation and megger tests of A.C. electric circuits Remark (2).
- (g) Verification of principal dimensions, engine and major machinery particulars.
- (h) Checking the relevant document/certificate of the vessel.

### (II) Biennial Survey on Slipway

### (A) Vessel carrying 60 passengers or less

- (a) The vessel is to be slipped and cleaned for inspection of the external hull (internal inspection of void spaces, tanks and double bottoms are required).
- (b) Gauging of the thickness of the keel, bottom, shell, deck and bulkhead plates for the vessel made of steel/aluminum and is eight (8) or more years old.
- (c) All sea and overboard discharge valves at below waterline are to be opened up for inspection.
- (d) Inspection of tail shaft, propeller, rudder and rudder stock.
- (e) Inspection of main engine and gearbox Remark (3).
- (f) Air receiver to undergo a hydraulic test plus an internal inspection (if the external condition is good, a maximum of one survey cycle can be extended, i.e. conduct once every 4 years); if the air receivers meet the standards of a maritime administration's national standards or a classification society or other international recognized standards such as ASME Standards or CE Standards and are issued with appropriate certificates, the survey can be conducted by relevant maritime institutions/authorized surveyors/persons according to the standards of the institution or standard survey scheme (including interval).

  (Amendment No. 48)

(g) Items in section (I)(A) above.

### (B) GRP open cruiser of LOA less than 8 m

- (a) The vessel is to be slipped and cleaned for inspection of the external and internal hull Remark (4).
- (b) Items in section (I) (B) above.

### (III) Additional Requirements

During any periodical survey, the relevant surveyor has the right to inspect any part of the vessel or require any item of machinery or equipment to be opened up under any conditions, if deemed necessary.

#### Remarks:

- (1) (a) The periodical survey should be carried out in subsequent order; i.e. an annual survey should be followed by a biennial survey, etc.
  - (b) If a certificate of inspection has expired and the certificate renewal inspection is carried out within one year from the date of the expiry of the certificate, the periodic survey that should be carried out will be the yearly survey due in accordance with the order as shown in (a). If the certificate had expired for more than one year, the biennial survey shall apply for renewal of the certificate.
- (2) Electric circuits insulation test reports issued by an EMSD registered electrical worker (REW) or registered electrical contractor (REC) are also acceptable. (Amendment No. 44)
- (3) An appropriate inspection/maintenance is subject to the engine maker's periodical maintenance schedule, an annual inspection/maintenance record issued by engine workshop or shipyard or ship owner as appropriate should be submitted for competent surveyor's endorsement.

  (Amendment No. 48)
- (4) Inspection record declared by ship owner / shipyard / competent surveyor is also acceptable.

# Periodic Survey Programme for Other Class IV Vessels that are issued with a Certificate of Survey or Certificate of Inspection

(Amendment No. 48)

# **Table 1 Periodic Survey Programme**

No	Survey Items	Mo	Vessel Carrying More Than 60 Passengers  New Vessel of or Existing V GT > 150*an for Hire or F Any Vess Novel Ty (Amendment			isting V 150*and ire or R ny Vesso ovel Ty	essel of d is Let eward; el of pe	New Vessel of L≥24m or Existing Vessel of GT > 150*and is NOT Let for Hire or Reward (Amendment No. 48)		
	Survey Intervals (*1)(*6)	1	2	4	1	2	4	1	2	4
A	General and Safety Equipment									
1	Fixed Fire Extinguishing Installation CO <sub>2</sub> system - blowing test Sprinkler System - function test		<b>√</b>				✓ (*5d)			(*5d)
2	Fixed Fire Extinguishing Installation - hydraulic test					(*4)				
3	Fire Extinguisher, CO <sub>2</sub> Bottle – refill and hydraulic test (*5)	<b>√</b>			<b>✓</b>			<b>✓</b>		
4	Buoyancy Apparatus – submerging test (for air case not filled with buoyant material)			✓			(*3)			(*3)
В	Hull and Fittings									
1	Hull - external (incl. Ship bottom) inspection	<b>√</b>				<b>√</b>			<b>√</b>	
2	Hull - internal (including oil tank, water tank and voids) inspection		<b>✓</b>				<b>✓</b>			<b>\</b>
3	Gauging thickness of deck, shell and bulkhead plating (for steel/aluminium vessel) (*2)			<b>√</b>			<b>√</b>			(*3)
4	Sea Suctions, Discharging Valves - stripped down inspection		<b>√</b>				<b>✓</b>			√ (*3)
5	Anchors, Cables - ranged out for inspection		<b>√</b>				<b>✓</b>			√ (*3)
C	Machinery and Electrical Installation									
1	Main Engine - hydraulic test of coolers (incl. air, lub. oil, cooling water), cylinder head and water jacket		✓				(*3)			(*10)
2	Main Engine - overhaul of fuel oil pump, fuel nozzles		√ (*3)				(*3)			(*10)

No	Survey Items	Mo	ore Than	el Carrying re Than 60 assengers		New Vessel of L≥24m or Existing Vessel of GT > 150*and is Let for Hire or Reward; Any Vessel of Novel Type (Amendment No. 48)			New Vessel of L≥24m or Existing Vessel of GT > 150*and is NOT Let for Hire or Reward (Amendment No. 48)		
	Survey Intervals (*1)(*6)	1	2	4	1	2	4	1	2	4	
3	Main Engine and Gear Box - stripped down for inspection)		✓ (*3a)			✓ (*3a)				✓ (*3a)	
4	Generator engine- stripped down for inspection			✓			√ (*3)			✓ (*10)	
5	Main fire pump and emergency fire pump		<b>✓</b>				√ (*3)			(*3)	
6	Bilge pump and windlass - stripped down for inspection		<b>✓</b>				√ (*3)				
7	Independent fuel oil tank – internal & hydraulic test			<b>√</b>			√ (*3)			<b>√</b> (*3)	
8	Air Receiver (P<17.2 bar) - internal inspection (*11)			<b>√</b>			<b>√</b>			✓	
9	Air Receiver (P<17.2 bar) - hydraulic test (*11)			✓			<b>√</b>			✓	
10	Air Receiver (P≥17.2 bar) - internal inspection (*11)		<b>✓</b>				<b>√</b>			✓	
11	Air Receiver (P≥17.2 bar) - hydraulic test (*11)		<b>✓</b>				<b>√</b>			✓	
12	Tail Shaft, Propeller, Rudder and Rudder Stock - inspection		√ (*3b)				✓ (*3b)			✓ (*3b)	
13	Steering System – stripped down for inspection			<b>√</b>			✓ (*3)			<b>✓</b> (*3)	
14	AC electrical circuit –main circuit breaker load test (*7)			<b>√</b>							
15	Oil Pollution Prevention Installation (for vessel with IOPP/HKOPP certificate)					(*9)		11			
16	Oil Pollution Prevention Installation (for vessel do not require IOPP/HKOPP certificate) – hydraulic test of independent sludge tank			<b>√</b>			√ (*3)			√ (*3)	
17	Relevant requirements of Merchant Shipping (Prevention of Air Pollution) Regulation (Cap. 413P)		•	•	(*	*8) and (*	*9)	•	•	•	

### Remarks in Table 1

<sup>\*</sup> The length (L) demarcation applies to new vessels <sup>1.8.2020</sup>; the Gross Tonnage (GT) demarcation applies to existing vessels <sup>1.8.2020</sup>. (Amendment No. 48)

<sup>\*1</sup> Survey Intervals

- 1 to be conducted every year
- 2 to be conducted every two years
- 4 to be conducted every four years
- (a) The periodical survey should be carried out in subsequent order; i.e. a 1st year survey should be followed by a 2-yearly survey, a 3rd year survey should be followed by a 4-yearly survey, etc.
- (b) If a certificate of survey has expired and the certificate renewal inspection is carried out within one year from the date of the expiry of the certificate, the periodic survey that should be carried out will be the yearly survey due in accordance with the order as shown in (a). If the certificate had expired for more than one year, the 4-yearly survey shall apply for renewal of the certificate.
- \*2 Applicable to vessels of age exceeding 8 years. For classed vessel possessing Classification Society's Certificate, the gauging inspections may be arranged when in the renewals of the Classification Society's Certificate.
- \*3 Inspection record issued by engine workshop or shipyard as appropriate, should be submitted for reference.
- \*3a For the survey schedule and interval for medium speed engine (of 300~1400 rpm), ship owners can refer to Annex K-1 of the Code of Practice Safety Standards for Class I Vessels "Survey Schedule for Medium Speed Engines". In addition, the survey interval of the engine may also be set in accordance with the original maintenance plan of the main engine and the gearbox (according to the operation time); and records and declarations shall be submitted.

(Amendment No. 48)

- \*3b The ship owner may arrange for the inspection of the tail shaft and propeller in accordance with the maintenance and inspection plan of the recognized classification society or the plan accepted by Marine Department; and shall submit records and declarations. (Amendment No. 48)
- \*4 Hydraulic test for CO<sub>2</sub> and sprinkler systems should begin from the 10th anniversary the system is in service, and thereafter at intervals of 10 years. The hydraulic testing pressure for the CO<sub>2</sub> system high pressure manifold should not be less than 125 bar.
- \*5 Inspection for portable fire extinguishers and CO<sub>2</sub> bottles should be in accordance with the following table. The inspection record should be retained on board for examination; or each fire extinguisher is to be marked by paint or attached with a tag indicating the date and type of test.

11	Foam, re Extinguisher	CO <sub>2</sub> Fire Extinguisher, CO <sub>2</sub> Fixed Installation Bottle				
Refill / Weighting (*a)	Hydraulic Test <sup>(*b)</sup>	Weighting	Refill	Hydraulic Test <sup>(*b)</sup>		
Owner (*c) /FSIC(*d)			DG Reg. 62	DG Reg. 66		

### **Abbreviation**

FSIC : Fire Service Installation Contractors registered in the Fire Service Department or

institutions acceptable to the Director

DG Reg. 62: A person holding a Dangerous Goods Licence issued under Reg. 62, Dangerous

Goods (General) Regulation

DG Reg. 66: A person approved by Fire Service Department under Reg. 66, Dangerous Goods

(General) Regulation

MD : Marine Department officer

### **Note**

(\*a) The need for refilling should be in accordance with the instruction of manufacturer of fire extinguisher.

- (\*b) Intervals of hydraulic test:
  - Portable Fire Extinguishers 5 years
  - CO<sub>2</sub> bottles/propellant cartridges 10 years
- (\*c) Marine Department officers may examine the owner's competence on carrying out the servicing and conduct random checks including function test of the portable fire extinguishers.

(Amendment No. 45)

- (\*d) Serviced by FSIC is acceptable.
- \*6 If the hull and machinery installation of a classed vessel are inspected by a surveyor of classification society, the inspection reports/certificates issued by classification society should be submitted for record.
- \*7 Applicable to vessel fitted with generator each of capacity exceeding 50 kW.
- \*8 Implementation of the requirements of Annex VI of MARPOL 73/78 to locally licensed vessels, refer to Annex 7 & 7A of this code of practice.
- \*9 For renewal of HKOPP or HKAPP certificate, surveys should be carried out by Marine Department or Authorized Organization (AO) surveyors only. For renewal/endorsement of IOPP or IAPP certificate, surveys to be conducted by relevant Classification Society only and report to be submitted for reference.

  (Amendment No. 65)
- \*10 For the survey interval for engine, maker's recommended maintenance practices can be referred. Inspection/maintenance records issued by the engine workshop or shipyard or ship owner as appropriate should be submitted for record purposes. (Amendment No. 48)
- \*11 If the air receiver complies with the national standards of the maritime authority or the classification society or other internationally recognized standards such as ASME Standards or CE Standards and is issued with the relevant certificate, it may also be inspected by a relevant maritime institution or authorized surveyor/person according to the inspection plan of the institution or standard inspection plan (including the interval). (Amendment No. 48)

### **Table 2 Final Inspection** (\*1)

No.	Survey Items (*2)
A	GENERAL, HULL & SAFETY EQUIPMENT
1	Life Saving Appliances - inspection and function test
2	Fire Fighting Apparatus (incl. CO <sub>2</sub> fixed fire extinguishing installation, emergency fire pump) - inspection and function test
3	Navigation Lights and Sound Signals - inspection and function test
4	Watertight / Weathertight Closing Appliances (incl. door, ventilator, air pipe, etc.) - inspection
5	Passenger Space (incl. escape signs, etc.), Crew Space, Escape Arrangement, Bulwarks and Rails - general inspection
6	General condition in Machinery Space  (a) protection from injury of personnel (b) prevention of fire hazard (c) prevention of oil pollution hazard
7	Verification of principal dimensions, engine and major machinery particulars
В	MACHINERY AND ELECTRICAL INSTALLATION
1	Main Engines, Generator Engines, Steering Gears - running test

No.	Survey Items (*2)
2	Air Emission Assessment
3	Air Receiver Safety Valves - function test
4	Bilge and Oily Water Pumping System - function test
5	Prevention of Oil Pollution Installation - function test
6	Electrical Circuit - earthing test
7	- insulation resistance test (*3)
8	Meters on Switchboard - function test
9	Domestic L.P.G. Installation – inspection
C	OTHERS
1	Verifying Certificates of Competency of Master and Engineer (if manoeuvring test required)
2	Permanent ballast - confirmation of amount and position
3	Survey report issued by the competent surveyor - verification
4	Marking of Safe Working Load and Certificate of Lifting Appliances – verification (*4)

### Remarks in Table 2

- \*1 The final inspection shall be carried out afloat annually. Vessels of novel type shall be carried out by Marine Department officer. (Amendment No. 64)
- \*2 Where practicable the listed items may be presented for inspection prior to the final inspection.
- \*3 A valid electrical system insulation test report (with the test being conducted by an EMSD registered electrical worker (REW) within 2 weeks prior to the final inspection) issued by an EMSD registered electrical contractor (REC) is acceptable in lieu of the insulation resistance test inspection conducted by Marine Department officers or authorized inspection personnel. A valid electrical system insulation test report shall include the relevant necessary information. A valid electrical system insulation test report issued by authorized inspection personnel is acceptable.

(Amendment No. 46, 48)

- \*4 The following document / certificates certified by competent examiner should be presented in final inspection for verification of validity:
  - i) Register of Lifting Appliance & Lifting Gear (Form 1);
  - ii) Certificate of Test and Examination of Winches, Derricks and their Accessory Gear (Form 2);
  - iii) Certificate of Test and Examination of Lifting Appliance and their Accessory Gear other than Derricks (Form 3).

# Rules and Regulations of Classification Societies Applicable to Class IV Vessels

### 1 American Bureau of Shipping (ABS)

- (i) Rules for Building and Classing Steel Vessels under 90 metres in Length
- (ii) Rules for Building and Classing High Speed Craft
- (iii) Steel Vessels for Service on Rivers and Intracoastal Waterways (for vessels operating within smooth waters)

### 2 Bureau Veritas (BV)

- (i) Rules for the Classification of Steel Ships
- (ii) Hull Structure and Arrangement for the Classification of Cargo Ships less than 65 m and Non Cargo Ships less than 90 m
- (iii) Hull Arrangement, Stability and Systems for Ships less than 500 GT
- (iv) Hull in Composite Materials and Plywood, Material Approval, Design Principles, Construction and Survey
- (v) Hull in Aluminium Alloys, Design Principles, Construction and Survey
- (vi) Rules for the classification of high speed craft

### **3** China Classification Society (CCS)

- (i) 游艇入級與建造規範
- (ii) 沿海小船入級與建造規範 (適用於長度不超過20米營業性遊艇)
- (iii) 海上高速船入級與建造規範
- (iv) 鋼質內河船舶建造規範(適用於長度大於或等於 20 米、在香港水域或內河航限(即珠江水域)距岸不超過 5 公里海域作業船隻)

### 4 DNV AS (DNV AS)

- (i) DNV Rules for Classification of Ships
- (ii) DNV Rules for Classification of High Speed, Light Craft and Naval Surface Craft

### 5 Lloyd's Register (LR)

- (i) Rules and Regulations for the Classification of Ships
- (ii) Rules and Regulations for the Classification of Special Service Craft (applicable to high speed craft, light displacement craft, multi-hull craft, yachts of overall length 24 m or greater and craft with draught to depth ratio less than or equal to 0.55)

### 6 Nippon Kaiji Kyokai (NK)

- (i) Rules and Guidance for the Survey and Construction of Steel Ships
- (ii) Rules and Guidance for the Survey and Construction of Passenger Ships
- (iii) Rules and Guidance for the Survey and Construction of Inland Waterway Ships
- (iv) Rules and Guidance for the Survey and Construction of Ships of Fibreglass Reinforced Plastics
- (v) Rules and Guidance for High Speed Craft

### 7 RINA S.p.A. (RINA)

- (i) Rules for the Classification of Ships
- (ii) Rules for the classification of pleasure yachts
- (iii) Rules for the classification of High Speed Craft
- (iv) Rules for the classification of ships with reinforced plastic, aluminium alloy or wooden hull

(Amendment No. 59)

### Note:

The above lists include the current rules and regulations applicable to Class IV vessels issued by classification societies/recognized authorities and are not exhaustive. Rules and regulations issued by other authorized organizations; and alternative standards may be considered.

# RECORDS OF VESSEL PARTICULARS

# (1) Vessel Basic Particulars

Type of Hull	Monohull / Catamaran
Material of Hull	Steel / Aluminum / Wood / GRP / (Others)
Material of Superstructure	Steel / Aluminum / Wood / GRP / (Others)
Place of Build	HK / Mainland China / Europe / (Others)
Year of Build	
Standard of Build	Class. Society: Rules: Others:
Designed Plying Limits	HK waters / Coastal / Ocean-going
Gross Tonnage	
Vessel Length	
Length Overall (m)	
Length Loaded Waterline (m)	
Length Between Perpendicular (m)	
Moulded Breadth (m)	
Moulded Depth (m)	
Designed Draft (m)	
Designed Speed (knots)	
Means of Propulsion	Propeller / Waterjet (numbers )

# (2) Machinery Installation

# (2-1) Main Engine

No.	Manufacturer and Model	Serial Number	Date of Manufact.	Location Frames No. (from) - (to)		Rated Speed (RPM)	Power Output (kW)
1							
2							
3							
4							
	Total Power Output (kW)						

# (2-2) Gear Box

	Manufacturer and Model	Serial Number	Remarks
1			
2			
3			
4			

# (2-3) Electric Motor (for diesel electric propulsion system)

No.	Manufacturer and Model	Serial Number	Location Frames No. (from) - (to)		Rated Speed (RPM)	Power Output (kW)
1						
2						
3						
4						
Total Power Output (kW)						

# (2-4) Generator Engine

No.	Manufacturer and Model	Serial Number	Date of Manufact.	Location Frames No. (from) - (to)	Rated Speed (RPM)	Power Output (kW)
1						
2						
3						
4						
	Total Power Output (kW)					

# (2-5) Propeller Shafting

No.		Propeller Shaft		Bearing	D 1
	Diameter (mm)	Material	Material Test Cert. Body	(Lubrication Mode)	Remark
1				Water / Oil	
2				Water / Oil	

# (2-6) Compressed Air Installation

No.	Serial Number of Air Receiver	Relief Valve / Safety Valve set pressure	Remark
1			
2			

# (2-7) Fuel Oil Tank

No.	Tank	Location Frames No. (from) - (to)		Capacity (m3)	Remark
1					
2					
3					
4					
5					
6					
	Total				

# (2-8) Prevention of Oil Pollution Installation

No.	Oily Water	Sludge Tank	Bilge Water Holding Tank		
	Manufacturer and Model	Serial Number	Oil Content (PPM)	Capacity (m3)	Capacity (m3)
1					
2					

(2-9)	Additional particulars of key installa	ations		
			·	·

# GRP VESSEL YARDS INSPECTION REPORT

# (Sample)

Name of Shipyard	ABC Shipyard
Address	Tung Chung XXX
Contact Person	
Date	

# **Inspection Report**

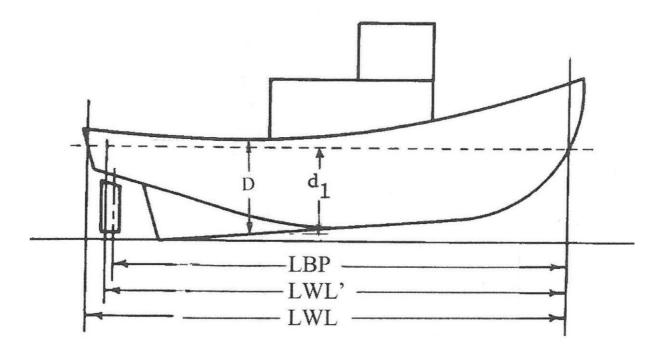
General Description	ABC shipyard has over 30 years' experience in open cruiser building. The GRP workshop is around 2000 feet <sup>2</sup> . It produces more than 20 GRP small vessels annually, including fishing sampans. There are various moulds ranging from 9 feet to 32 feet.
Personnel	Since the shipyard is in a smaller scale, there are usually only 2 to 3 workers working there, depending on the actual workload. From the conversation with the workers, they demonstrated satisfactory standards in GRP construction knowledge, procedures of ship building process, understanding of materials, maintenance and repair skills, etc.
Workshop Condition	The shippard is located at the Ma Wan Chung Village near the east coast of Tung Chung, with open area and natural ventilation. In addition, mechanical fans and dust extracting system are installed for ventilation. The capacity of dust control is sufficient.
Material Handling	The TGI Fiberglass is produced in Taiwan and stowed in space with proper ventilation. A bit messy though.
Fire Safety	There are sufficient Fire-fighting apparatuses, such as fire hoses and fire extinguishers.
Mould Condition	There are over 10 moulds. All of them are stored and covered properly.
Conclusion	The working environment of the shipyard is acceptable. Despite having sufficient shipbuilding knowledge, the shipyard is a bit small in terms of its working space, so resulting that the vessels under construction are packed, with potential hazards posed. Tools were placed messily, material cutting was not systematic. Nevertheless, the shipyard is acceptable overall.

Attachments	1.	Photos
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2. Material Certificates

Authorized Surveyor	

# 船隻註冊長度(L)確定方法 Method for Determining Vessel's Registered Length (L)



"長度"為下述LBP和LWL'兩項距離中的較大者 — "(L)" is the greater of LBP and LWL' below—

- (a) LBP = 船首前端至舵桿軸的距離

  The distance between the foreside of the stem and the axis of the rudder stock
- (b) LWL = 在最小型深(D)的85%(d<sub>1</sub>)的水線處,由船首前端至船尾後端的距離 The distance between the foreside of the stem and the aft side of the stern on a waterline (d<sub>1</sub>)at 85% of the least moulded depth (D)
- (c) LWL'= 96% LWL
- (d) 在無舵桿船隻,長度按(c)釐定 If the vessel is not fitted with a rudder stock, the length shall be determined in accordance with (c)