

CODE OF PRACTICE ----

Safety Standards for Class IV Vessels

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

(Draft)

(The part in **red** shows the amendments from the existing version(March 2017edition) of code of practice.)

(For Consultation)



Local Vessels Safety Section
Marine Department, HKSAR

(October 2018 Consultation Draft)

**Code of Practice -
Safety Standards for Class IV Vessels
(October 2018 Consultation draft)
Content**

Chapter I	General
Chapter II	Inspection and Certification
Chapter III	Hull, Machinery and Electrical Installations
Chapter IV	Passenger and Crew Accommodation
Chapter V	Fire Protection
Chapter VI	Life Saving Appliances and Arrangements
Chapter VII	Lights, Shapes and Sound Signals
Chapter VIII	Domestic Liquefied Petroleum Gas Installation
Chapter IX	Vessel Operator Requirements
Chapter X	Additional Requirements Applicable to Certain Types of Class IV Vessels (New Chapter)
Annex 1	Safety Briefing for Class IV Vessels That Are Let for Hire or Reward
Annex 1A	Provisions in the Merchant Shipping (Local Vessels)(Certification and Licensing) Regulation on Matters Relating to Restrictions on Class IV Vessels That Are Let for Hire or Reward and the Arrangement of MD's Prior Approval for Class IV Vessel That Is Let for Hire or Reward and the Arrangement of Audit Checks
Annex 1B	Provisions in the Merchant Shipping (Certification and Licensing) Regulation on Matters Relating to Certificates of Competency Required for Class IV Vessels
Annex 2	Safety Precautions for Proper Storage and Use of Petrol
Annex 3	Certificate of Inspection
Annex 4	Inspection Record for a Class IV Vessel That Is Issued with a Certificate of Inspection

Annex 5	Approximate Determination of Stability by Simple Inclining Test
Annex 6	Plans for Simple Traditionally Built Class IV Vessels
Annex 7	Implementation of the Requirement of Annex VI of MARPOL 73/78 to Locally Licensed Vessels
Annex 7A	Merchant Shipping (Prevention of Air Pollution) Regulation (Cap. 413 sub. leg. P) - Inspection Checklist for Local Vessels
Annex 8	Tonnage Measurement for Class IV Vessels
Annex 9	(Repeals)
Annex 10	Installation, Document and Certification for Prevention of Oil Pollution
Annex 11	(Repeals)
Annex 12	(Repeals)
Annex 13A	Periodic Survey Programme for Class IV Vessels That Carry 60 Passengers or Less and Are Let for Hire or Reward and Are Issued with a Certificate of Inspection
Annex 13B	Periodic Survey Programme for Other Class IV Vessels That Are Issued with a Certificate of Survey or Certificate of Inspection
Annex 14	Classification society's Rules and Regulations Applicable to Class IV Vessels (New Annex)
Annex 15	Records of Vessel Particulars (New Annex)
Annex 16	GRP Vessel Yards Inspection Report (Sample) (New Annex)
Annex 17	Determination Method for Registered Length (L) of Vessels (New Annex)

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 “Class IV 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.
- (Amended G.N. 1134 of 2017)
- 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.
- (Amended G.N. 1134 of 2017)
- 1.5 The builder, repairer or owner/managing agent of a vessel, as appropriate shall take all reasonable measures to ensure that a material, **strength, appliance and stability** ~~or appliance~~ fitted in accordance with the requirements of the Code is suitable for the purpose intended having regard to its location in the vessel, the area of operation and the weather conditions which may be encountered.

2 Statutory Regulations and Standards

- 2.1 This Code shall be construed in the light of the following statutory provisions and their amendments (if any) 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.548 sub. leg. D
- (2) Merchant Shipping (Local Vessels)(Typhoon Shelters) Regulation, Cap. 548 sub. leg. E
- (3) Merchant Shipping (Local Vessels) (General) Regulation, Cap. 548 sub. leg. F
- (4) Merchant Shipping (Local Vessels) (Safety and Survey) Regulation, Cap. 548 sub. leg. G (hereafter referred to as "Survey Regulation")

- (5) Merchant Shipping (Local Vessels)(Compulsory Third Party Risks Insurance) Regulation, Cap. 548 sub. leg. H
- (6) Merchant Shipping (Local Vessels) (Fees) Regulation, Cap. 548 sub. leg. J
- (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. 413 sub. leg.A
 - (2) Merchant Shipping (Control of Harmful Anti-Fouling Systems on Ships) Regulation, Cap. 413 sub. leg. N
 - (3) Merchant Shipping (Prevention of Pollution by Garbage) Regulations, Cap. 413 sub. leg. O.
 - (4) Merchant Shipping (Prevention of Air Pollution) Regulation, Cap. 413 sub. leg. P
- (C) Merchant Shipping (Safety) Ordinance, Cap. 369
 - (1) Merchant Shipping (Safety) (Signals of Distress and Prevention of Collisions) Regulations, Cap. 369 sub. leg. N
(Added G.N. 1134 of 2017)

2.2 Other standards

2.2.1 ~~The vessel's strength, structure, arrangements, materials, scantlings, main and auxiliary machinery, boilers and pressure vessels, electrical installations, etc. shall be so designed and installed as to ensure that the vessel is fit for the service for which it is intended.~~ Apart from the requirements in this Code, present rules ~~and standards~~ of classification societies recognized by Marine Department and rules and standards of other maritime authority (such as CE standards) with equivalent criteria that appropriate for vessels operating in Hong Kong waters (see Annex 14) or other equivalent standards may be used as assessment standards. ~~(Amended G.N. 1134 of 2017)~~

2.2.2 Existing vessels shall comply with the requirements previously applicable to these vessels 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 repealed.

2.3 Certificates or Records

2.3.1 Upon satisfactory completion of statutory surveys or assessment, the following certificates or record document (1) and ~~(4)~~ (3) may either be issued by competent surveyor or Marine Department. Certificates (2) and (4) shall be issued by Marine Department as necessary ~~(Annex 11 also lists the other certificates and documents that a local vessel might require, as appropriate):~~

- (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. (Amended G.N. 1134 of 2017)

2.3.3 If Merchant Shipping (Prevention and Control of Pollution) Ordinance, Cap. 413 applies to the relevant vessel, plan approval, survey shall be conducted and/ or the following certificates or records shall be issued:

- (1) The specified certificate required under Merchant Shipping (Prevention of Oil Pollution) Regulations, Cap. 413 Sub. leg. A is the International Oil Pollution Prevention Certificate / Hong Kong Oil Pollution Prevention Certificate.
- (2) The specified certificate required under Merchant Shipping (Prevention of Air Pollution) Regulations, Cap. 413 Sub. leg. P is the International Air Pollution Prevention Certificate / Hong Kong Air Pollution Prevention 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 organisations direct to the ship owners according to relevant international conventions; a copy of such certificate and record shall be submitted to the Marine Department.

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; (Added G.N. 1134 of 2017)

“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 local vessel, other than a Class II, III or IV vessel defined in sections 5 and 6 of the Merchant Shipping (Local Vessels) (Certification and Licensing) Regulation;~~ any vessel, other than a Class IV vessel, that is allowed to carry more than 12 passengers;

“Code” means this Code;

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

“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 GL; (Amended G.N. 1134 of 2017)
- (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) (Added G.N. 1134 of 2017)

“existing vessel” means a vessel which is not a new vessel defined in section 2 of the Survey Regulation;

“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 boats, 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;

“length” or the symbol “(L)”, unless otherwise expressly specified in this Code of Practice, as defined in section 2 of the Survey Regulation. (See the diagram in Annex 17);

“length overall” (總長度), as defined in section 2 of the Merchant Shipping (Local Vessels) Ordinance;

“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; (Amended G.N. 1134 of 2017)

“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;

“new vessel”, as defined in section 2 of the Survey Regulation;

“novel type vessel”, means vessel that is not designed, constructed or used according to the traditional form;

“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;

“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 Subject to 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 relevant to the types of vessels are as follows:

- (1) all Class IV vessels: chapters I, III, IV, V, VI, VII, VIII and IX; annex 1B, 2, 4A, 5, 6, 8, 9, and 10;
- (2) all Class IV vessels let for hire, annex 1 and 1A, ~~3 and 4~~, 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, annex 3, 4 and 13A, in addition to the above (1), (2);
- (4) Other Class IV vessels that are issued with a Certificate of Survey or Certificate of Inspection: chapter II, annex 3, 4 and annex 13B, in addition to the above (1), (2);
- (5) ~~the application of Chapter III of this Code or other specified standards with respect to vessel's design, construction, safety equipment, installations and fittings and~~

~~survey, etc, together with certification requirements are as indicated in the following table:~~

Certification of vessel and the type of vessel that must also comply with the additional requirements applicable in Chapter X of this Code of Practice are shown in the following table:

No. of Passengers /Construction Feature	Existing Vessel					New Vessel ¹				
	Gross Tonnage (GT)*	Not Let for hire or reward		Let for hire or reward		Vessel Length (L)*	Not Let for hire or reward		Let for hire or reward	
		Constructn Standard	Survey, Certificatn	Constructn Standard	Survey, Certificatn		Constructn Standard	Survey, Certificatn	Constructn Standard	Survey, Certificatn
(a) More than 60	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	> 150	X/Pt 2	CoS	X/Pt 2	CoS	L ≥ 24m & GT > 150	X/Pt 1A	CoS	X/Pt 1A	CoS
	≤ 150	-	Not required	X/Pt 2	CoI	L ≥ 24m & GT ≤ 150	X/Pt 2	CoI	X/Pt 2	CoI
(c) Not more than 12	> 150	X/Pt 2	CoS	X/Pt 2	CoS	L < 24m	-	Not required	X/Pt 1 X/Pt 2	CoI
	≤ 150	-	Not required	X/Pt 2	CoI	L ≥ 24m & GT > 150	X/Pt 1A	CoS	X/Pt 1A	CoS
(c) Not more than 12	> 150	X/Pt 2	CoS	X/Pt 2	CoS	L ≥ 24m & GT ≤ 150	X/Pt 2	CoI	X/Pt 2	CoI
	≤ 150	-	Not required	X/Pt 2	CoI	L < 24m	-	Not required	X/Pt 1B	CoI
Novel Construction	Any Tonnage	case by case	CoS	case by case	CoS	Any length	case by case	CoS	case by case	CoS

Legend

* applicable to existing vessels in terms of gross tonnage (GT); applicable to new vessels in terms of length (L)

CoP1: to be in accordance with relevant requirements for vessel of type “Launch” carrying the same number of passengers specified in “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

~~Ch. III: to be in accordance with relevant requirements specified in Chapter III of this Code~~

CoS: Except for novel type vessels, Marine Department officer or Authorized Organization to undertake all statutory plan approval and surveys (including final inspection) ~~except the final inspection (i.e. items in Table 2 of Annex 13B)~~; Marine Department officer to undertake ~~final inspection and~~ issuance of the Certificate of Survey

CoI: competent surveyor (or as directed by the Director) to undertake all statutory plan approval and surveys and issuance of the Certificate of Inspection

Case by case: to be specified by the Director on a case-by-case basis.

^{Note1} A vessel which is a new vessel when the reference to “the commencement date” in the definition of “new vessel” under section 2 of the Survey Regulation is substituted by “x x 201x”. (Added G.N. xxxx of 201x)

- 4.2 This Code does not apply to any vessel prescribed in section 10 of the Ordinance.
- 4.3 The coxswain of any Class IV vessels let for hire:
(1) is required to conduct safety briefing to all persons onboard before commencing a voyage ~~to ensure general understanding of safety issues and arrangement onboard. A general guide on the content of the “Safety Briefing for a Class IV vessel that is let for hire or reward” is indicated in~~ at Annex 1.

(2) shall comply with Section 6 of Merchant Shipping (Certification and Licensing) Regulation, Cap 548D related to the restrictions on Class IV vessels. Excerpts of relevant Ordinance are at Annex 1A.
- 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.

~~5—Reporting of Accidents~~

~~It is a statutory requirement for the owner or coxswain or agent of a Class IV vessel to report accidents relating to collisions and fires etc. as required in Sections 57 to 59 of Part XI of the Ordinance.~~

~~6—Observance of Safe Navigational Speed and Carrying Certificated Operators or Crew~~

~~6.1—When a Class IV vessel is under way, the coxswain shall ensure the vessel is proceeding at a safe navigational speed, and diligently comply with the speed limits in the relevant operating areas and the relevant operational requirements as promulgated in Marine Department notices from time to time. Further operational safety guidance on vessel operator requirements is given in Chapter IX.~~

~~6.2—Any Class IV vessel carrying more than 60 passengers, owner or coxswain of the vessel shall observe any specified licensing conditions on vessel operator requirements in order to cope with operational needs including helping out emergency measures etc.~~

~~7—Third Party Risks Insurance Coverage~~

~~7.1—It is the obligation of the owner and agent of a Class IV vessel to ensure compliance with the relevant requirements of the Merchant Shipping (Local Vessels) (Compulsory Third Party Risks Insurance) Regulation.~~

~~7.2—The insurance coverage and written charter agreement / written hire purchase agreement ^(Note) must be kept onboard as required under the Certification and Licensing Regulation.~~

~~Note : “written charter agreement / written hire purchase agreement”, their meaning or purposes are given in section 6 under the Certification and Licensing Regulation (as quoted in Annex 1A).~~

5 Duties Relating to Class IV Vessels

5.1 It is the responsibility of the owner and agent of any Class IV vessel:

~~(1)—to ensure that the vessel is properly maintained and examined in accordance with the requirements of the Ordinance and regulations as mentioned in section 2 above, in addition to this Code; and~~

~~(2)—to ensure that the vessel is built and constructed with adequate strength and stability, adequacy in safety for machinery, electrical and in safety arrangement and equipment for vessel’s intended purpose ^(Note).~~

~~Note: For any Class IV vessel that carries not more than 60 passengers and is not let for hire or reward, owner or agent of the vessel may seek advice and recommendations from a builder or competent surveyor, as appropriate, and for their confirmation and verification of vessel’s compliance in accordance with relevant standards and requirements as prescribed in this Code; and may request for the issue of relevant survey report or certificate as appropriate. Owners or builders may make reference to requirements on inspection and construction standards in Chapters II and III.~~

5.2 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.

5.3 Class IV vessels of ~~novel construction and~~ jetski shall be of the type/model approved or recognized by classification society or by the national maritime authority of their country of manufacture.

~~5.4 If any Class IV vessel is engaged in towing of a banana boat or similar vessel, the owner, agent or coxswain must complete a declaration form and make an application at any District Marine Offices of Licensing and Port Formalities Section for endorsement of Operation Licence with conditions (if any) and any vessel permitted to tow a banana boat or similar vessel shall conform to the conditions as stipulated in Annex 12 of this Code as~~

well as the following criteria:

- ~~(1) a Class IV vessel that is more than 3 metres in length overall;~~
- ~~(2) is fitted with engines of more than 3 kilowatts total propulsion power; and~~
- ~~(3) is equipped with towing facilities.~~

Approval of Director of Marine must be obtained for any vessels used for towing a banana boat or similar vessel. For details, please refer to Marine Department Notice No. 124 of 2007 (<http://intra.md.hksarg/intra/en/notice/mdn/doc/2007/mdn07124.pdf>)

(Note: Relocated from Annex 12 - Guidelines for Towing a Banana Boat or Similar Vessel of existing CoP and that Annex is repealed)

6 **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.

(Amended G.N. 1134 of 2017)

7 **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.

~~11 Application for Inspection and Fees~~

~~11.1 Under section 17(2)(a) of the Survey Regulation the owner or agent of any vessel carrying not more than 60 passengers which is let for hire or reward shall apply as required to a competent surveyor for the relevant statutory inspections.~~

~~11.2 Under section 15(2)(a), (c) and (d) of the Survey Regulation the owner or agent of any vessel with carrying capacity of more than 60 passengers or more than 150 gross tonnage or of novel construction, shall apply as required to the Marine Department for relevant statutory inspections and pay relevant fees.~~

(Amended G.N. 1134 of 2017)

CHAPTER II

INSPECTION AND CERTIFICATION

(This Chapter shall apply to Class IV vessels holding a Certificate of Survey or Certificate of Inspection required by the Ordinance)

1 Certification

1.1 A certification inspection as guided by the items in this Chapter, is to determine that the vessel's structure, machinery, electrical, safety equipment installations and fittings comply with the requirements of this Code, including the examination when the vessel is on slip or dry-docking.

~~1.2 The competent surveyor should decide the extent of the examination based on the type and number of passengers to be carried (or age and history for existing vessel) and the intended plying limits of the vessel in a certification inspection. Upon satisfactory completion, a Certificate of Inspection shall be issued to the vessel for the permitted areas/ routes of operation. The validity period of the certificate will be decided by the competent surveyor in view of the intended purpose and condition of the vessel, and it shall not be more than 12 months. A format of the Certificate is available at the following URL:
http://www.mardep.gov.hk/en/forms/pdf/lvs_certin4.pdf~~

~~(Amended G.N. 1134 of 2017)~~

~~1.2 Surveyor should decide the extent 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 Class IV vessels let for hire that are licensed to carry not more than 60 passengers should pass the periodic survey carried out by Marine Department(MD) or Authorized Organizations(AO) or Authorized Surveyors(AS) before a Certificate of Inspection would be issued, see Periodic Survey Programme at Annex 13A of this Code.~~

~~A format of the Certificate is available at Annex 3 of this Code and the MD website: <http://www.mardep.gov.hk/en/forms/pdf/md626.pdf>. The validity period of the certificate will be decided by the competent surveyor in view of the intended purpose and condition of the vessel, and it shall not be more than 12 months. See Annex 4 of this Code for inspection record for a vessel that is issued with a Certificate of Inspection.~~

~~1.4 New Class IV vessels with length of 24m and above and gross tonnage of 150 and below ($L \geq 24m$ & $GT \leq 150$), should pass the periodic survey carried out by MD or AO or AS before a Certificate of Inspection would be issued, see Periodic Survey Programme at Annex 13B of this Code.~~

~~1.5 Class IV vessels holding a Certificate of Survey required by the Ordinance, including any Class IV vessels that are licensed to carry more than 60 passengers, existing Class IV vessels with gross tonnage over 150 ($GT > 150$) and new Class IV vessels with length of 24m and above and gross tonnage over 150 ($L \geq 24m$ & $GT > 150$), should pass the periodic survey carried out by MD or AO. See the relevant Survey Programme at Annex 13B of this Code.~~

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 fittings in compliance to the requirements of this Code are to be 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 ~~and, where appropriate, together with an inclining test report shall be kept onboard with the “Certificate of Inspection”.~~
- 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 ~~(1)~~ For any Class IV vessel, builder’s inspection reports or certificates and the ~~basic drawings inclining test report~~ are required for ~~assessment and~~ endorsement by a competent surveyor. The endorsed document shall be kept onboard with the Inspection Record.

~~(2) For any existing vessel which has one year or more record of safe operation^(Note) (before 2 January 2007) in the waters of Hong Kong or similar operating conditions, the requirements in (1) above can be waived and it will be considered to be adequate strength after a simple inclining test (Annex 5 refers), evaluation of a few basic drawings (which can be supplemented by photos) and satisfactory examination; and~~

~~(3) For any existing vessel which does not have one year record of safe operation as indicated in (2) above, technical assessment (including essential drawings, simple inclining test (Annex 5 refers), details of materials and construction) of the vessel by a competent surveyor is required to confirm the compliance of relevant safety requirements and structural soundness for the intended operation of the vessel.~~

~~Note : “record of safe operation” means that vessel in the past one year or more has not incurred any accidents on fire, collision or serious leaking. An oath declaration of the fact made and signed by owner in a specified form is acceptable.~~

~~3 Inspection of Hull, Machinery and Safety Equipment~~

~~3.1 The following inspections items are relevant for the vessel concerned:~~

~~Construction~~

- ~~(1) Structural continuity and strength of hull and deck, superstructure/deckhouse, connections and all localized reinforcement; etc.~~
- ~~(2) Buoyancy integrity and water tightness, closing and protective means;~~

- ~~(3) — Internal bulkheads strength and integrity, deck and hull fittings;~~
- ~~(4) — Assessing relevant document / certificate of construction and/or inclining test report where appropriate. (Refer to requirements in Chapter I/4.1, Chapter II/2.2 to 2.4 and Chapter III/1 and 2);~~

Machinery and Electrical

- ~~(5) — Main and auxiliary engines installation, functioning and performance of engines and control system;~~
- ~~(6) — Oil tanks and associated piping system;~~
- ~~(7) — Bilge piping system and fire fighting apparatus/system;~~
- ~~(8) — Ventilation arrangement and closing appliances of machinery space;~~
- ~~(9) — Safety for LPG installation and use of petrol;~~
- ~~(10) — Electric cables and electrical installations;~~
- ~~(11) — Insulation resistance of cables, overload protection and earthing of electrical installation;~~

Safety Equipment and Lights and Sound Signals

- ~~(12) — Life-saving appliances (number, stowage and working condition);~~
- ~~(13) — Fire fighting apparatus (number, stowage and working condition);~~
- ~~(14) — Lights, shapes and sound signals (installation, number and working condition);~~

Pollution Prevention System

- ~~(15) — Installation and functioning of oil pollution prevention system (for vessels of 400 gross tonnage or above);~~
- ~~(16) — Installation and functioning of air pollution prevention system (refer to MARPOL Annex VI and Annex 7 of this Code);~~

Passenger and Crew Cabins

- ~~(17) — Passenger and crew cabins requirement
 - ~~(a) — Means of escape;~~
 - ~~(b) — Means of protection such as guard rails, handrails and passageways;~~
 - ~~(c) — Ventilation arrangement and closing appliances of passenger accommodation;~~
 - ~~(d) — Passenger seating arrangement and carrying capacity markings;~~~~

Others

- ~~(18) — Verification of principal dimensions, engine and main machinery particulars;~~

~~(19) Other items considered necessary by the competent surveyor (to be indicated in separate list).~~

~~**Inspection on slip or drydocking (at interval of not more than two years after initial certification and thereafter)**~~

~~(20) Examine the internal and external condition of the hull (including fuel tank, water tank, void), bulkhead, sea chest, skeg and shaft bracket;~~

~~(21) Examine the condition of sea valve, jet nozzle, stabilizer, rudder, propeller shaft, propeller, underwater hull fittings and water/oil seals, etc. and submission of engine inspection reports from engine workshop.~~

~~3.2 The above inspection items are shown in Annex 4 and Annexes 13A and 13B for reference.~~

Chapter III

Hull, Machinery and Electrical Installations

(Unless otherwise expressly specified, this Chapter shall apply to all Class IV vessels.)

1 Standards for Construction and Installations etc.

1.1 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 ~~an authorized organization classification societies~~ for pleasure vessels or small craft or appropriate standards (such as CE standards) for equipment and material or any other equivalent standards.

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.
- 2.2 Bulwarks, guard/hand rails or equivalent protection/fixing shall be installed near the periphery of weather decks accessible to passengers and crew.
- 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 (1) For any new vessel, an inclining test shall be carried out in accordance with the standards of an authorized organization or equivalent standard.~~

~~(2) As alternative to (1) above, for any new vessel licensed to carry not more than 12 passengers, a simple inclining test shall be carried out with the objective to ascertain that no angle of heel exceeding 7° will arise when 2/3 of the passengers distributed on one side of the vessel and 1/3 on the other side. If the length of the new vessel is not exceeding 6 metres, an immersion test to prove its adequacy of buoyancy is also~~

~~acceptable as an alternative. (Amended G.N. 1134 of 2017)~~

~~2.7 For any existing vessel, a simple inclining test shall be carried out 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 is to ensure 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. If the vessel is not exceeding 6 metres, an immersion test to prove its adequacy of buoyancy is also acceptable. (Amended G.N. 1134 of 2017)~~

2.6 If any existing Class IV vessel not let for hire (i.e. licensed before x x 20xx) changes its use to let for hire, inclining test or calculation shall be conducted according to the standards of an authorized organization or their equivalent, or to provide relevant certificates (such as Class Certificates or CE Certificates), documents or declaration issued by an authorized classification society or maritime authority.

2.7 As alternative to Section 2.6 above, a simple inclining test can be conducted, refer to Annex 5 for detail –

(1) For Class IV vessels that are licensed to carry not more than 12 passengers (including open or enclosed deck vessels), by ascertaining that no angle of heel exceeding 7° will arise when 2/3 of the persons distributed on one side of the vessel and 1/3 on the other side. Test is to be carried out in accordance to details stated in Part 1.

(2) For Class IV vessels that are licensed to carry 13 to 60 passengers (including open or enclosed deck vessels), by ascertaining that the angle of heel when all passengers move from one side of the vessel to the other side shall not be greater than 10°. Test is to be carried out in accordance to details stated in Part 2.

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

2.8 If any new (i.e. licensed after x x 20xx) Class IV vessel not let for hire changes its use to let for hire, inclining test or calculation shall be conducted as per Chapter X of this Code.

3 Machinery Installations

3.1 Suitable means of protection or device shall be provided to machinery, equipment, winches, etc. so as to **avoid** ~~reduce to a minimum~~ any danger to person on board. Special attention shall be paid to moving parts, hot surfaces and other dangers.

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 deck vessel 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 deck vessel is rated with operating speed exceeding 17 knots or capable to achieve that speed, it is also termed as “high speed open deck vessel”

- 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. ~~For portable petrol containers, requirements in Annex 2 of this Code are to be followed.~~
- 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 $L \leq < 24$ m

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

(ii) for generator engine and engine room ventilation fans - means to stop

(iii) for bilge water in engine room - high level audible alarm. ^(Note)

~~(vi) for existing vessels, 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.~~

(iv) ~~for new vessels,~~ a fixed fire detection (operated by smoke detectors) and fire alarm system for engine room are to be installed. ^(Note)

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 $L > \geq 24$ m

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. (Amended G.N. 1134 of 2017)

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 receiver of new vessel or air receiver newly installed in existing vessel shall meet the standards stated below and under the survey of relevant maritime administration/institution, authorized surveyor or person:

- (i) standard of a maritime administration's national standard or a classification society or other recognized international standard such as ASME Standard or CE Standard, issued with appropriate certificates and have a comprehensive maintenance and survey program, or
- (ii) approved and certified by an authorized person who can inspect, test and issue a certificate for a pressurized gas installation under the Dangerous Goods (General) Regulations.

~~(1) Construction of air receivers shall meet the standard of a maritime administration's national standard or a classification society, and be subject to the approval of the Director. The air receivers are classified according to the following table:-~~

Class I	Class II	Class III
$P > 39.2$	$39.2 \geq P \geq 17.2$	$P < 17.2$
or $S > 38$	or $38 \geq S \geq 16$	or $S < 16$
or $T > 350$	or $350 \geq T \geq 150$	or $T < 150$

~~where P = maximum design or working pressure (bar)
 S = shell thickness (mm)
 T = working temperature ($^{\circ}\text{C}$)~~

~~(2) Air receivers of new vessel^{Note1} shall be built under the survey of one of the abovementioned maritime institutions, and issued with appropriate certificates.~~

(32) Each air receiver shall be provided with the following fittings:

- (i) Stop valve and pressure gauge
- (ii) Drain valve
- (iii) Safety valve

~~(4) The following information shall be submitted in duplicate for approval:~~

- ~~(i) Air receiver construction (including details of welded connections, attachments, dimensions and supports etc.)~~
- ~~(ii) Construction of pressure parts (cylindrical shell, end plates, etc.)~~
- ~~(iii) Arrangement of mountings and fittings~~
- ~~(iv) Mechanical properties of material~~
- ~~(v) Test pressure.~~

^{Note1} ~~A vessel which is a new vessel when the reference to “the commencement date” in the definition of “new vessel” under section 2 of the Survey Regulation is substituted by “3 March 2017”.~~

~~(Added G.N. 1134 of 2017)~~

3.17.6 ~~Every air receiver shall be tested at pressure according to the following table:~~

Type of Construction	Maximum Working Pressure (MWP)	Test Pressure
Riveted or Fusion welded	$MWP \leq 7 \text{ bar}$	$2 \times MWP$
Riveted	$7 \text{ bar} < MWP \leq 20 \text{ bar}$	$1.5 \times MWP + 3.5$
Riveted	$MWP > 20 \text{ bar}$	$MWP + 14$
Fusion welded	$MWP > 7 \text{ bar}$	$1.5 \times MWP + 3.5$

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

- 5.1 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); ~~and~~
 - (2) Merchant Shipping (Control of Harmful Anti-Fouling Systems on Ships) Regulation, (Cap. 413 sub. leg. N);
 - (3) Merchant Shipping (Prevention of Pollution by Garbage) Regulations, (Cap. 413 sub. leg. O); and
 - (4) The Merchant Shipping (Prevention of Air Pollution) Regulation (Cap. 413P) applicable to any pleasure vessel (Refers to Annex 7 ~~and 7A~~ of this Code).

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.

(Amended G.N. 1134 of 2017)

7 Shipboard passenger lift

7.1 Factory Certificate:

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, CE Standards, etc). A certificate issued by a Recognised Organisation or 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. Relevant inspection work and reports may also be carried out and issued by the registered lift contractors of the Electrical and Mechanical Services Department.

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

8 Alteration

Before making any major alteration of the vessels, the shipowner/agent/competent surveyor shall follow the guidelines in Marine Department Notice No. 86 of 2010 "Alterations to Local Vessels". Competent Surveyor shall also follow the requirements of "Instruction to Competent Surveyors No. 2/2010".

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 onboard **as far as it is practicable, and to consider the actual operational needs (e.g. voyages exceeding 30 minutes)**.
- 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 deck vessel^{(Note (i))}

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

- (2) closed deck vessel^{(Note (ii))}

$$\text{total number of persons} = L_d \times B \times 0.4$$

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

L_d = vessel deck overall length (m)

B = vessel maximum breadth (m)

Note (i): “Open deck vessel” means vessel without the enclosed superstructure or compartment for personnel sheltered from weather. ~~The existing Class IV vessels of~~

~~open deck type may retain its licensed passenger numbers by submitting to Licensing and Port Formalities Section the relevant supporting document, such as inclining testing report issued by shipbuilder or recognized classification society or competent surveyor indicating the maximum number of carrying capacity.~~

Note (ii): Jetski is not included. “Enclosed deck vessel” means vessel provided with enclosed superstructure or compartment for personnel sheltered from weather.

2.2 An increased capacity may be considered ~~when subject to~~ a satisfactory **inclining** test **stated below** being conducted and the maximum carrying capacity required exceeds the upper limit of the calculated value in Section 2.1 above. Such increase shall take into consideration of 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 ~~above section 2.1 and refer to~~ Annex 4A of this Code.

(1) For any existing Class IV vessel (i.e. licensed before x x 20xx), to conduct the inclining test or calculation in accordance with the requirements of Section 2.6 or 2.7 of Chapter III of this Code of Practice and the result is satisfactory.

(2) For any new Class IV vessel (i.e. licensed after x x 20xx), to conduct the inclining test or calculation in accordance with Chapter X of this Code of Practice and the result is satisfactory.

2.3 All passengers shall be arranged with seating or resting facilities 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 Class IV vessel that is let for hire or reward shall not carry passenger below main deck.

(2) For any new Class IV vessel not let for hire or reward or any existing Class IV vessel let for hire or reward; 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.

(Amended G.N. 1134 of 2017)

2.5 For any Class IV vessel that is let for hire or reward, a “Seating plan” and a passenger capacity assessment form of format indicated in Annex 4A are to be submitted and verified by competent surveyor / Marine Department.

3 Marking of carrying capacity in Passenger Space

3.1 For any Class IV vessel that carries more than 12 passengers and is let for hire or reward, 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 Class IV vessel that carries not more than 12 passengers and is let for hire or reward, 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.

4 ~~Deck Areas Disallowed for Passengers~~ Protection of Passengers and Crew

4.1 Bulwark, 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 under normal condition will not walk or work at ship side during sailing, bulwark or guardrails are not required to be fitted at main deck ship side.

~~4.1 The following spaces are not permitted to carry passengers:~~

- ~~(1) the area abaft the fore side of the rudder stock on the main deck, unless bulwark or guardrails are installed near the periphery of the deck;~~
- ~~(2) the portion of a compartment or of a deck used for the purpose of navigation and fire fighting;~~
- ~~(3) machinery compartments, casings and skylights;~~
- ~~(4) decks or part of a deck set apart exclusively for the carriage of motor vehicles, luggage; etc.~~
- ~~(5) the forward part of the vessel, where the look-out of the coxswain could be obstructed; and, up to one metre aft of the seating for the windlass or any other necessary equipment for the operation of the anchors, etc. located forward;~~
(Amended G.N. 1134 of 2017)
- ~~(6) areas of stairways, stairway landings, hatchways and ventilators;~~
- ~~(7) areas permanently occupied by equipment and fittings e.g. inflatable liferafts, hatches, ventilation trunkings; etc.~~
- ~~(8) cabins and spaces allocated for the accommodation of the crew;~~
- ~~(9) galley/pantry and other service spaces.~~

4.2 An outline guidance plan showing areas to be excluded for designating as passengers

space is indicated in Annex 9 of this Code.

5. Inflatable Boat

- 5.1 The construction of inflatable boat shall meet the standard of International Standard 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. ~~The relevant certificate (CE certificate) provided by the certification body is acceptable.~~
- 5.2 ~~An application for the increase of The maximum carrying capacity (including passenger and crew) of vessel may be considered subject to the vessel's compliance shall comply with the requirements of ISO 12217-1 (appropriate to vessel's design category) and ISO 14946 for the number of persons intended. An inclining test may be required for confirmation, using test weights representing the total weight of persons.~~

~~(Added G.N. 1134 of 2017)~~

CHAPTER V

FIRE PROTECTION

(This Chapter shall apply to all Class IV vessels)

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 their country of manufacture or equivalent (such as CE approved), are acceptable. In any vessel carrying not more than 12 passengers, fire fighting apparatus approved by the national maritime authority of their country of manufacture, or equivalent, are acceptable.~~

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)	$L \leq 9$	$9 < L < 15$	$L \geq 15$
Media			
Foam, water (litres)	2.8	4.6	9
CO ₂ (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 CO₂ 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 CO₂ 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 ~~such tests as prescribed~~ conducted according to the provision in Note^{*5} of Annex ~~13A or~~ 13B. (Added G.N. 1134 of 2017)

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.

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 in Survey Regulation Schedule 4. The electronic version of which is available at URL –

[http://www.legislation.gov.hk/blis_pdf.nsf/6799165D2FEE3FA94825755E0033E532/4B0D89C173F9FB2F482575EF0018F44D/\\$FILE/CAP_548G_e_b5.pdf](http://www.legislation.gov.hk/blis_pdf.nsf/6799165D2FEE3FA94825755E0033E532/4B0D89C173F9FB2F482575EF0018F44D/$FILE/CAP_548G_e_b5.pdf)
<https://www.elegislation.gov.hk/hk/cap548G!en-zh-Hant-HK/sch4?>

(Amended G.N. 1134 of 2017)

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.

3.3 Provisions of fire-fighting apparatus in Survey Regulation Schedule 4 (Table 8) are quoted below:

Quote

Table 8

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

Fire-fighting apparatus		Vessel length (L)(m)				
		L < 5.5	5.5 ≤ L ≤ 9	9 < L < 15	15 ≤ L < 24	L ≥ 24
portable fire extinguisher ⁽²⁾	1.4 kg	1 ⁽¹⁾	2	-	-	-
	2.3 kg	-	-	2	-	-
	4.5 kg	-	-	-	2	2
	engine room	-	-	2 ⁽³⁾	2 ⁽³⁾	2 ⁽³⁾
fire bucket with lanyard ⁽⁴⁾		1 (or 1 bailer)	2	2	2	3
main fire pump	power	-	-	-	1 ⁽¹⁾	1
	manual	-	-	-		-
emergency fire pump	power	-	-	-	-	1 ⁽⁵⁾
	manual	-	-	-		
hydrant		-	-	-	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 diameter nozzle	
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

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

Fire-fighting apparatus		Vessel length (L)(m)			
		(L)<15	15≤(L)<24	24≤(L)<60	60≤(L)<75 ⁽¹⁾
portable fire extinguisher	passenger accommodation space	1 on each deck (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 part thereof of the power output of the engine and electric motor, but at least 3 and not more than 6 in each room	
	machinery space	1 within each space			
<fixed CO ₂ fire extinguishing system> ^{(2) and (3)}	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 detection and alarm system> ⁽³⁾		-		quantity, type, location and arrangement shall be in accordance with the relevant plans approved under Part 3 of Survey Regulation	
main fire pump	power	-	1 ⁽⁴⁾	1 ⁽⁵⁾	1
	manual			-	-
emergency fire pump	power	-	-	1 ⁽⁴⁾	1 ⁽⁴⁾
	manual				
fire main + hose + hydrant + jet nozzle		1 set		1 set to be provided for each pump ⁽⁶⁾	
fireman's axe		-		1	

Notes:

- (1) 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.
- (2)
 - (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 CO₂ fire extinguishing system may be substituted by a non-portable fire extinguisher (45 L foam or equivalent CO₂ 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, one 45 L foam or 16 kg CO₂ fire extinguisher shall be provided in the engine room.
- (3) Requirements in angle brackets (“<>”) are for new vessels 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 Class IV vessel that is let for hire or reward and of length less than 24 m, 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

(H) Class IV vessels that are licensed to carry not more than 12 passengers but are let for hire or reward

Fire-fighting Apparatus		Vessel length (L)(m)		
		L < 12	12 ≤ L < 24	24 ≤ L < 75 (note)
portable fire extinguisher	accommodation space	1 on each deck		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

Chapter VI

Life-Saving Appliances and Arrangements

(This chapter shall apply to all Class IV vessels)

1 General

1.1 All life-saving appliances (other than lifejackets) shall be of 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.

(Amended G.N. 3790 of 2015)

1.1A 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 local 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);

(ii) for a local 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 ISOⁱ; 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.

(Added G.N. 3790 of 2015)

ⁱ For complying the requirement in Chapter X Part 2 Sec 1.2(ii), the passengers onboard open decked pleasure vessels let for hire that operating in water sports activities could wear a lifejacket that at least complies with 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). Such additionally provided and worn lifejacket shall not replace any of the lifejackets required to be provided onboard in accordance with the maximum persons licensed to be carried.

1.2 Very high frequency (VHF) radio equipment shall **obtain the Ship Station License issued be of a type approved** by the Communications Authority (CA), Hong Kong. ~~(Amended G.N. 1134 of 2017)~~

1.3 **One Each** lifebuoy ~~of 760 mm diameter~~ **complies with the standards** is deemed to support two persons.

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 shall 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 shall be –

- (a) in working order;
- (b) ready for immediate use; and
- (c) placed in a position easily accessible.

2.2 Lifebuoys shall 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 unsecured to allow them to float-free as necessary.

2.3 Lifejackets shall be stowed in racks or under seats and be clearly marked. They shall 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) if the plastic bag is completely transparent, the plastic bag shall be easily ripped open; and
- (b) if the plastic bag is opaque or is not completely transparent –
 - (i) the plastic bag shall be easily ripped open; and
 - (ii) there shall be clear indication at a conspicuous place on the outside of the plastic bag that the plastic bag contains a lifejacket.

(Added G.N. 4986 of 2016)

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 shall be clear indication at a conspicuous place on the outside of the enclosed space that the enclosed space contains

a lifejacket.

(Added G.N. 4986 of 2016)

- 2.6 Crew, passengers and persons on board open cruisers or similar type of vessels, where the risk of falling overboard is high, are recommended to wear lifejackets at all times.

(Added G.N. 1134 of 2017)

3 Safety Briefing

When a Class IV vessel engaged in chartering, coxswain shall 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 are prescribed in Survey Regulation Schedule 3, the electronic version of which is available at URL –

[http://www.legislation.gov.hk/blis_pdf.nsf/6799165D2FEE3FA94825755E0033E532/4B0D89C173F9FB2F482575EF0018F44D/\\$FILE/CAP_548G_e_b5.pdf](http://www.legislation.gov.hk/blis_pdf.nsf/6799165D2FEE3FA94825755E0033E532/4B0D89C173F9FB2F482575EF0018F44D/$FILE/CAP_548G_e_b5.pdf)

<https://www.elegislation.gov.hk/hk/cap548G!en-zh-Hant-HK/sch3?> or

<https://www.elegislation.gov.hk/hk/cap548G!en-zh-Hant-HK.assist.pdf>

(Amended G.N. 1134 of 2017)

- 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	
lifejacket	100% ⁽¹⁾	
lifebuoy	Vessel length (L)(m)	Number
	(L) <12	1
	12 ≤ (L) <21	2
	21 ≤ (L) <37	4
	(L) ≥ 37	6
buoyant lifeline ⁽²⁾	1	

Notes:

- (1) Where the required quantity of life-saving appliances is expressed as a percentage, it means the percentage of the total number of persons on board.

(2) The minimum length of buoyant lifeline is :

For $(L) < 21$ m 18 m

For $(L) \geq 21$ m 27.3 m

4.3 Provisions of live-savings appliances in Survey Regulation Schedule 3 (table 1 and table 2) are quoted below:

Table 1

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

Operation area Life-saving appliances	Specified sheltered waters	Anywhere within waters of Hong Kong
lifejacket	any number)	100% adult lifejacket + 5% children lifejacket
lifebuoy	minimum number per Table 2) Total 100% ⁽¹⁾)	minimum number per Table 2
buoyant lifeline ⁽²⁾	1 for vessel (L)<12 m 2 for vessel (L)≥12 m	
self-igniting light ⁽³⁾	2	

Notes:

- (1) Where the required quantity of life-saving appliances is expressed as a percentage, it means the percentage of the total number of persons on board.
- (2) 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)<21 m	18 m
For (L)≥21 m	27.3 m

- (3) 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 ≤ (L) < 18	6
18 ≤ (L) < 21	8
21 ≤ (L) < 24	10
(L) ≥ 24	12

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

Table 3

(ii) Class IV vessels that are licensed to carry not more than 12 passengers but are let for hire or reward

Life-saving appliances \ Operation area	Specified Sheltered Waters	Anywhere within waters of Hong Kong
lifejacket	any number) Total	100% adult lifejacket + <5% children lifejacket> ⁽¹⁾⁽²⁾
lifebuoy	any number) 100% ⁽¹⁾	minimum number per Table 5
buoyant lifeline ⁽³⁾	1 for vessel (L)<12 m 2 for vessel (L)≥12 m	
<self-igniting light (for vessel (L)≥ 37 m)> ⁽²⁾	2	

Notes:

- (1) Where the required quantity of life-saving appliances is expressed as a percentage, it means the percentage of the total number of persons on board.
- (2) Requirements in angle brackets (“< >”) are for new vessels only.
- (3) 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 ≤ (L) < 24	2
24 ≤ (L) < 37	4
(L) ≥ 37	6

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

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) ~~with effect from 1 July 2016~~.

(Added G.N. 1134 of 2017)

- 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. 369 sub. Leg. N, 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 the Marine Department, or the Maritime Administration of a convention country.

All lanterns and sound signals fitted on new vessel^{Note 1}; or replacement of these lights/signals on existing vessel shall be of the type approved/certified by the 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 ~~with unique serial number~~.

(Added G.N. 1134 of 2017)

- 1.4 ~~Other than Section 1.3 above, the lights, shapes and sound signals that meet the relevant provisions of the above-mentioned Regulations for Preventing Collisions, comply with the European Product Directive and mark with 'CE' are also acceptable.~~

2 Definitions

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

- (a1) The words "length (L)" and "breadth" of a vessel mean her length overall and greatest breadth (definition in Ch. I/3 refers).
- (b2) 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.

^{Note 1} Applicable to a vessel which is when the reference to "the commencement date" of the Survey Regulation in the definition of "new vessel" under section 2 of the Survey Regulation is substituted by "3 March 2017".

4.1 Power Driven Vessels $L \geq 50$ m

Item	No. Req'd	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 m \leq L < 75 m 1 n. mile 75 m \leq L < 200 m 1.5 n. mile	
Bell	1	0.3 m mouth diameter	
Gong	1		for L \geq 100 m

4.2 Power Driven Vessels $20 \text{ m} \leq L < 50 \text{ m}$

Item	No. Req'd	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 $12 \text{ m} \leq L < 20 \text{ m}$

Item	No. Req'd	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.

(Added G.N. 4986 of 2016)

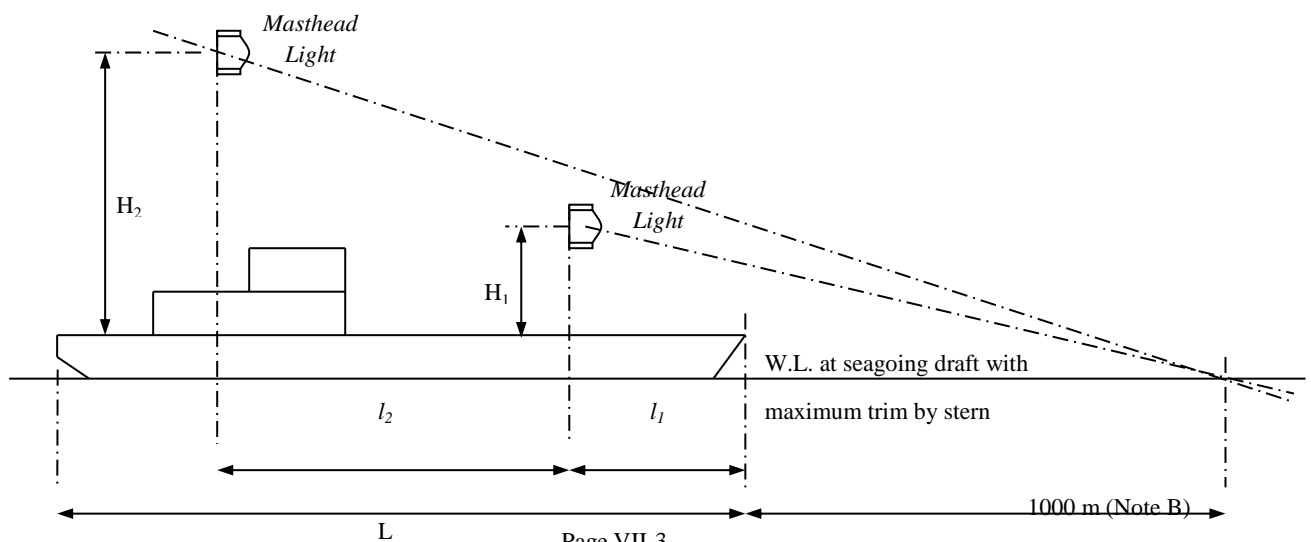
4.5 Power driven vessel with $L < 7$ m and maximum speed not exceeding 7 knots may in lieu of the lights prescribed in 4.4 above, exhibit an all round white light and shall, if practicable, also exhibit sidelights.

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



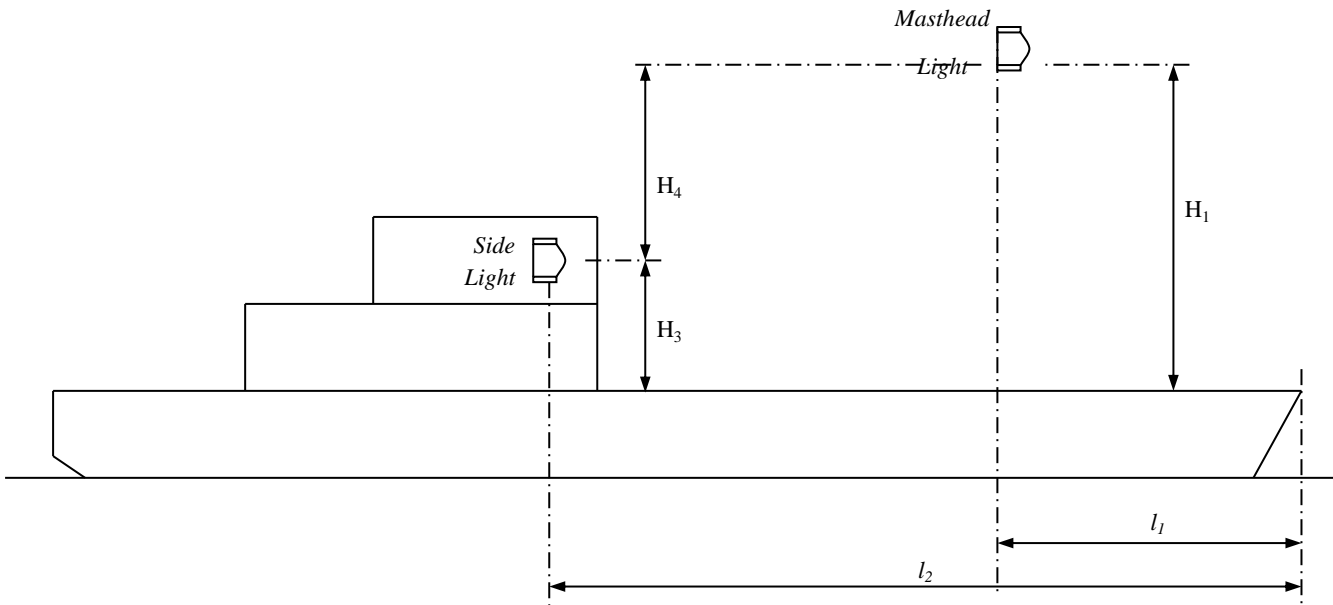
Ship Length L (m)	L < 12 (Note A)	12 ≤ L < 20 (Note A)	20 ≤ L < 50 (Note A)	L ≥ 50
l_1	As far forward as is practicable	As far forward as is practicable	≤ 0.5L	≤ 0.25L
l_2	--	--	--	≥ 0.5 L
H_1	may be < 2.5 m (Note D,F)	≥ 2.5 m (Note C,F)	≥ 6 m or ship's breadth (whichever is greater), but need not > 12 m (Note F)	
H_2	--	--	--	≥ (H ₁ +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 $12 \text{ m} \leq L < 20$ 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_1 , 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 $L \geq 50$ m, paragraph 13 in Annex I of the Schedule to Merchant Shipping (Safety) (Signals of Distress and Prevention of Collisions) Regulations refers. (Added G.N. 4986 of 2016)

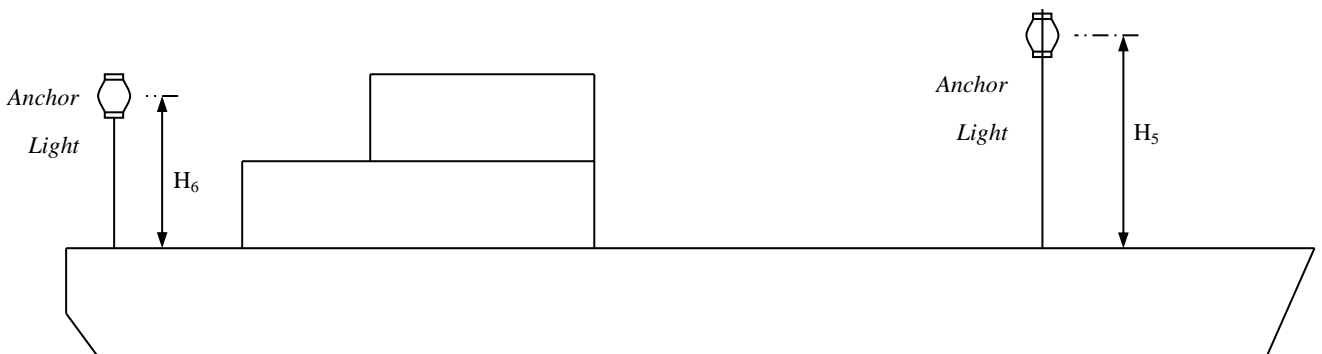
5.2 Side Light

- 5.2.1 The side lights of vessels of $L \geq 20$ 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. (Amended G.N. 1134 of 2017)
- 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. (Added G.N. 1134 of 2017)



Length (m)	$L < 20$	$20 \leq L < 50$	$L \geq 50$
l_3	no requirement	$> l_1$ (i.e. side light not to be in front of masthead light)	$> l_1$ (i.e. side light not to be in front of forward masthead light)
H_3	$\leq 0.75 H_1$		
H_4	in the case of combined lantern, $\geq 1\text{m}$	--	--

5.3 Anchor Light



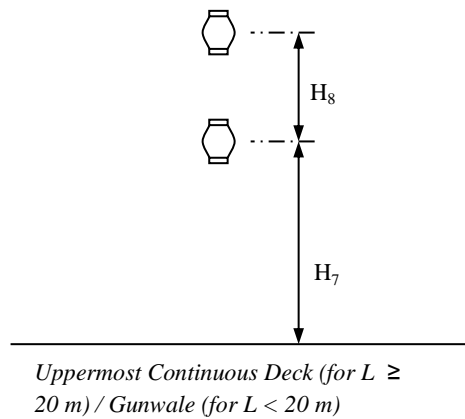
Length (m)	$L < 50$ (Note)	$L \geq 50$
H_5	Position can best be seen	$\geq 6\text{ m}$
H_6		$\leq (H_5 - 4.5)$

Note

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

5.4 Vertical Spacing of Lights fitted in a Vertical Line

(Amended G.N. 1134 of 2017)



Length (m)	$L < 20$	$L \geq 20$
H_7	≥ 2 m (except where a towing light is fitted) ^{Note A}	≥ 4 m (except where a towing light is fitted) ^{Note A}
H_8 ^{Note B}	≥ 1 m	≥ 2 m

Note

- (A) In the case of after masthead light, H_7 shall be at least 4.5 m higher than the forward masthead light.
- (B) 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 5^0 above to 5^0 below the horizontal; and
- (ii) at least 60% of the required minimum intensity is maintained from 7.5^0 above to 7.5^0 below the horizontal.

(Added G.N. 1134 of 2017)

Chapter VIII

DOMESTIC LIQUEFIED PETROLEUM GAS INSTALLATION

(This Chapter shall apply to all Class IV vessels)

Note: 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.

1 Marking

1.1 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 adjoining 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 shall be of type approved by Gas Authority, EMSD and marked with “GU” on them. Existing Gas consuming appliances (e.g. stove, water heater etc.) are recommended to be fitted with automatic gas shut-off device to stop the gas supply in the event of flame failure.



批准氣體用具GU標誌

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

- 6.1 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

(Unless otherwise expressly specified, this Chapter shall apply to all Class IV vessels.)

1 General

- 1.1 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 :

http://www.mardep.gov.hk/en/pub_services/pdf/examrules_ploc.pdf

http://www.mardep.gov.hk/en/pub_services/pdf/cocrules.pdf

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

Item	Other Certificates issued under Cap. 548	Equivalent Grade of Pleasure Vessel Operator Certificate	Type of local vessels that the certificate holder may operate
(a)	Coxswain Grade 1 Certificate or Coxswain Grade 2 Certificate <u>Plus</u> Engine Operator Certificate (without restriction)	Pleasure Vessel Operator Grade 1 Certificate	Any pleasure vessel
(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 vessel <u>Plus</u> Engine Operator Certificate (without restriction)	Pleasure Vessel Operator Grade 2 Certificate	A pleasure vessel of not more than 15 m in length overall

(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 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
(a)	Local certificate of competency as Pleasure Vessel Master Grade I <u>Plus</u> Any pleasure vessel engineer certificate of competency, or equivalent	Pleasure Vessel Operator Grade 1 Certificate	Any pleasure vessel
(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” <u>Plus</u> 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

(c)	<p>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</p> <p style="text-align: center;">Plus</p> <p>Any pleasure vessel engineer certificate of competency, or equivalent</p>	Pleasure Vessel Operator Grade 1 Certificate	Any pleasure vessel
(d)	<p>Local certificate of competency as master of a fishing vessel (without restriction)</p> <p style="text-align: center;">Plus</p> <p>Any pleasure vessel engineer certificate of competency, or equivalent</p>	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 or having vessel length less than 12 metres can be operated by:

- (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) if the vessel is let for hire or reward **with length over 8 metres and licensed to carry more than 10 persons**, an additional crew member **is required** (refer to Annex 1 of this Code).

3.2 For any Class IV vessel carrying more than 12 passengers but not more than 60 passengers or having vessel length on 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:

- (1) the vessel is appropriately equipped for unattended machinery space operation. For **Class IV** vessels ~~that are~~ let for hire ~~or reward~~, these requirements are indicated in

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.
- 3.4 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
(NEW CHAPTER)
ADDITIONAL REQUIREMENTS APPLICABLE TO
CERTAIN TYPES OF CLASS IV VESSELS

PART 1A

This part shall apply to the following types of new vessels^{Note1}

- (a) Class IV vessels not let for hire with length of 24m or above, or
- (b) Class IV vessels let for hire with any length and that are licensed to carry not more than 60 passengers (except open deck vessels let for hire that are licensed to carry not more than 12 passengers)

1 Vessels shall be built to acceptable standards

- 1.1 Each vessel must be designed and built to the Classification Society's standards specified in Annex 14 or equivalent standards (e.g. CE/ISO Standards) based on its size, building materials and intended purpose. However, in the case of any inconsistency between this Code and any of the standards of the classification society or CE/ISO etc, the requirements of this Code shall be complied with.
- 1.2 Relevant certificates, documents or declaration provided by ship builder/ shipyard or other certification bodies is acceptable,

2 Ship builder/ shipyard

- 2.1 Shipyards should be recognised by relevant authorities or international certification bodies, or obtain ship building approval document/permit/license endorsed by classification societies, relevant authorities, quality certification bodies or to inspect by AS and submit report (see sample report in Annex 16) and upon satisfactory with the following aspects:
 - (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 equivalent measure), material storage, quality monitoring and reporting, material certificates (chopped strand mat, resin, paint, etc.);
 - (3) production process: e.g. tools and using instructions, hull inspection and repair records, method statement of mold loft, procedures of ship building process; and
 - (4) competency of staff / workman: e.g. experience of management staff and technician or provision of relevant certificates

^{Note1} A vessel which is a new vessel when the reference to "the commencement date" in the definition of "new vessel" under section 2 of the Survey Regulation is substituted by "x x 201x". (Added G.N. xxxx of 201x)

2.2 A copy of the supporting documents mentioned in Section 2.1 above shall be submitted to the Marine Department (MD) for record.

3 Submission of Plans and Data for approval

3.1 Plans and information shall be submitted for approval based on the items listed in the table below.

3.2 If the plans and information are submitted to the MD for approval, the first of a series of sister ships shall submit 3 copies of each plan and 2 copies of each plan for the remaining sister ships. If the plans and information are submitted to the AO/AS for approval, 1 copy of the approved plans and information shall be submitted to the MD for record.

3.3 Plans shall be drawn in appropriate scale of legibly quality.

3.4 The plans and information of vessels with length of 24m and above and gross tonnage over 150 ($L \geq 24m$ & $GT > 150$) (for both Class IV vessels let for hire or private use) shall be submitted to MD or AO for approval;

The plans and information of vessels with length of 24m and above and gross tonnage of 150 and below ($L \geq 24m$ & $GT \leq 150$) or pleasure vessels let for hire may be submitted to MD or AO or AS for approval.

No.	Plans and Data
(1)	General Arrangement
(2)	Safety equipment plan, including: (a) life saving appliances
	(b) fire fighting apparatus, emergency controls and structural fire protection arrangement
	(c) light, light and sound signals
	(d) means of escape, escape installation and arrangement, etc.
(3)	Structures and Scantlings, Watertight / Weathertight Closing Appliances ^{*1}
(4)	Machinery Installation ^{*2}
(5)	Electrical Installation ^{*2}
(6)	Installation for Prevention of Oil and Air Pollution ^{*2}
(7)	Inclining test report ^{*3, *4}
(8)	Intact Stability Information Booklet (after inclining experiment) ^{*3, *4}
(9)	Damage Stability Information Booklet (after inclining experiment)(for any pleasure vessels let for hire that carry more than 12 passengers) ^{*3, *4}

Note

*1 If ship builder/ shipyard or other certification bodies provide relevant certificates, documents or declaration on their construction standards, plan requirement for this item can be waived.

*2 The required vessel information in the form of Annex 15 may be filled in lieu of plan requirement for this item.

*3 Only one report is required for the same ship model of the same shipyard;

(Note: If the new built vessel is of the same design as found in database (i.e.same mold and material, watertight bulkhead arrangement and position, essential machineries installation, carrying capacity of persons, water and fuel. If there are changes in machineries arrangement, inclining test to be carried out to ascertain that the variance of light ship weight and VCG are less than 2%, and the variance of LCG is less than 1%) , the survey and plan approval requirement of intact and damage(if applicable) can be waived.)

*4 One of the following methods in lieu of the plan requirement for this item:

i) Inspection report or certificate or declaration issued by the vessel builder/shipyard or third party professional bodies (e.g. CE notify body, competent surveyor, IACS member societies, etc); or

ii) Calculation obtained data of inclining test with relevant reports endorsed by the competent surveyor with; or

iii) On-site verification by a competent surveyor to comply with Section 5.5(b), that to confirm the vessel could meet the equivalence of intact stability.

5 Intact Stability

5.1 Except vessels of Section 5.5 below, the intact stability of any vessel shall meet the following requirements in both lightship and full load condition.

(a) Section 5.1.1 – 5.1.4; or

(b) Section 5.2; or

(c) Section 5.3

5.1.1 Criterion of righting levers (GZ) curve characteristics

(1) Initial transverse metacentric height (initial GM_T) ≥ 0.15 m ;

(2) Area under righting levers (GZ) curve :

(i) ≥ 0.055 m-rad up to an angle of 30° ,

(ii) ≥ 0.090 m-rad up to an angle of 40° or the angle at which the lower edges of any openings in the hull, superstructures or deckhouses, being openings which cannot be closed weathertight, are immersed if that angle be less ;

(iii) ≥ 0.030 m-rad between the angles of heel of 30° and 40° or such referred to in ii) above ;

- (3) the righting lever (GZ) shall be at least 0.20 metres at an angle of heel equal to or greater than 30°; and
- (4) the maximum righting lever (GZ_{max}) shall occur at an angle of heel not less than 25° but preferably over 30°.

5.1.2 Crowding (This section shall apply to any vessels carrying more than 12 passengers)

The angle of heel due to the effect of crowding of passengers shall not be greater than 10°. The passengers shall be assumed to be congregated at 0.25m² per person on the uppermost deck(s), with all passengers distributed on one side of the vessel. The vertical centre of gravity of each person shall be taken as a standing passenger.

5.1.3 Turning (This section shall apply to any vessels carrying more than 12 passengers)

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

$$M_R = 0.2 V_o^2 \Delta (KG - d/2) / L_{wl}$$

where

M_R = heeling moment (kN-m)

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

L_{wl} = length of vessel on the waterline (m)

Δ = displacement (tonnie)

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

d = mean draft (m)

5.1.4 Wind Moment (This section shall apply to any vessels carrying more than 12 passengers)

As calculated according to section 2.3 Severe Wind and Rolling Criterion (weather criterion) of 2008 IS Code (International Code on Intact Stability, 2008) published by IMO in respect of wind moment effect. The wind pressure factor shall be taken to be 500 Pa. (Ref:

[http://www.imo.org/en/KnowledgeCentre/IndexofIMOResolutions/Pages/Assembly-\(A\).aspx](http://www.imo.org/en/KnowledgeCentre/IndexofIMOResolutions/Pages/Assembly-(A).aspx), Resolution A749(18))

5.2 For vessels with length less than 20m (L<20m) and licensed to carry not more than 100 passengers, MD accepts the standard 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 Maritime Safety Administration of the People's Republic of China (MSA), or the equivalent. For vessels with length of 20m or above (L≥20m) and licensed to carry not more than 100 passengers, MD accepts the standard appropriate for vessels operating in Hong Kong waters, as promulgated by the MSA.

5.3 Other standards (such as CE) with equivalent criteria on intact stability that appropriate for vessels operating in Hong Kong waters are also acceptable.

5.4 Every vessel shall be inclined according to the standards of AO or equivalent to confirm the vessel's displacement, vertical centre of gravity (VCG) and longitudinal centre of gravity (LCG) in lightship condition when on completion or close to completion of construction (new vessels) or modification (existing vessels). Inclining test report shall be submitted for approval.

5.5 For vessels operating solely under favourable weather^{Note2} and sea condition, only the following requirements are to be complied with:

(a) Section 5.1.1(1), 5.1.2 & 5.1.3, and to carry out inclining test in accordance with Sec 5.4.

(b) Alternative to intact stability calculation:

(i) On-site simple inclining test carried out by a competent surveyor in accordance with the procedures set out in Annex 5:

(1) For Class IV vessels that are licensed to carry not more than 12 passengers, by ascertaining that no angle of heel exceeding 7° will arise when 2/3 of the persons distributed on one side of the vessel and 1/3 on the other side. Test is to be carried out in accordance to details stated in Part 1; or

(2) For Class IV vessels that are licensed to carry 13 to 60 passengers (including open or enclosed deck vessels) by ascertaining that the angle of heel when all passengers move from one side of the vessel to the other side is not greater than 10°. Test is to be carried out in accordance to details stated in Part 2; and

(ii) A sea trial in full load condition to be carried out to the satisfaction of a competent surveyor.

6 **Damage stability** (This section shall apply to any Class IV vessels let for hire that are licensed to carry more than 12 passengers)

6.1 Subdivision standard:

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

6.2 The final condition of the vessel after damage shall be as follows-

(a) in the case of symmetrical flooding there shall be a positive residual metacentric height of at least 50 mm 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°.

^{Note2} Refer to the interpretation under section 3 of Chapter 1 of this Code of Practice.

(c) in no case shall the main deck be submerged in the intermediate stages or final stage of flooding.

7 Bulkheads, closing appliances

7.1 Any vessel applicable to part 1A shall be fitted with the following watertight bulkheads:

- (1) collision bulkhead;

- (2) fore and after bulkhead of engine room;

- (3) watertight doors below main deck (if any) to be fitted with visual and audio alarms in the wheelhouse to give alerts when watertight doors are open.

7.2 On every vessel, air pipes, ventilators, small hatchways, manholes, skylights and doors leading to a space below main deck shall be fitted with weathertight or watertight closing appliance. If it is weathertight design, there should have suitable sill height to avoid ingress of water.

8 Emergency control

8.1 Means for Stopping Machinery, Shutting Off Oil Fuel Suction Pipes and Closing of Openings.

8.1.1 In every vessel there shall be provided –

- (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 and which would not be made inaccessible by a fire within such spaces.

8.1.2 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 such spaces.

8.1.3 A pipe connected to any oil fuel or lubricating oil storage, not being a double bottom tank, which if damaged would permit discharge of the contents so as to cause a fire hazard, shall be fitted with a valve or cock which shall be secured to the tank to which it is connected and which shall be capable of being closed from a readily accessible position outside the space in which the tank is situated.

9 Structural fire protection, escape installation, etc

- 9.1 In all spaces –
- (a) paints, varnishes and other finishes used on exposed surfaces shall not contain nitrocellulose or other highly flammable base products 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 be led to open deck.
- 9.2 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. Such door and hatch cover shall be operable from either side; and
 - (d) dead-end corridor shall not be more than 7 metres in length.
- 9.3 In vessels with hull constructed of non-steel materials, fire retarding material shall be applied in the hull, deck and bulkhead structures of engine room boundaries, and is capable to maintain its required strength for a period of 30 min. For hull structures below waterline the insulation shall extend to at least 300 mm below the lightest waterline.
- 9.4 Any deck or bulkhead, or part of a deck or bulkhead, which separates a passenger or crew space from any machinery space, galley, or spaces used for the storage of flammable goods, shall be of gastight construction.

10 Stairway, Passageway, Door and Exit in Passenger Spaces

- 10.1 Any stairways and passageways in way of the escape route shall be kept unobstructed at all time, with 400mm minimum width or of a design meeting the standards of a maritime authorities recognized by MD (for example, AMSA or CE).
- 10.2 The clear width of every passageway, door and exit in way of the escape route shall be at least as wide as the required width of the stairway.
- 10.3 The opening direction of doors of any enclosed passenger space shall be such that it would not obstruct the route of escape. The doors shall not be locked during the voyage.

PART 1B

This part shall apply to open deck vessels let for hire that are licensed to carry not more than 12 passengers:

1. Hull construction

- 1.1 The design and construction of the vessel shall:
- (a) provide sufficient structural strength suitable for the intended use of the vessel;
 - (b) maintain adequate freeboard and stability;
 - (c) prevent the easy entry of sea water; and
 - (d) not be provided with a false bottom or concealed space.

2 Vessels 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 declaration provided by ship builder/ shipyard or other certification bodies is acceptable,

3 Ship builder/ shipyard

- 3.1 Shipyards should be recognised by relevant authorities or international certification bodies, or obtain ship building approval document/permit/license endorsed by classification societies, relevant authorities, quality certification bodies or to inspect by AS and submit report (see sample report in Annex 16) and upon satisfactory with the following aspects:
- (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 equivalent measure), material storage, quality monitoring and reporting, material certificates (chopped strand mat, resin, paint ,etc.);
 - (3) production process: e.g. tools and using instructions, hull inspection and repair records, method statement of mold loft, procedures of ship building process; and
 - (4) competency of staff/ workman: e.g. experience of management staff and technician or provision of relevant certificates
- 3.2 A copy of the supporting documents mentioned in Section 3.1 above shall be provided to the Marine Department (MD) for record.

4. Submission of Plans and Data

- 4.1 Plans and information must be submitted for approval based on the items listed in the table below.
- 4.2 If the plans and information are submitted to the MD for approval, the first of a series of sister ships shall submit 3 copies of each plan and 2 copies of each plan for the remaining sister ships. If the plans and information are submitted to the AO/AS for approval, the approved plans and information shall be submitted to the MD for record.
- 4.3 Computer drawings or hand sketches must be clear and concise. Plans shall be drawn in appropriate scale of legibly quality.
- 4.4 The plans and information of vessels may be submitted to MD or AO or AS for approval.

No.	Plans and Data (can refer to the simple plans in Annex 6)
(1)	General Arrangement (including lights, shapes & sound signals installations)
(2)	LSA & FFA Installation and Arrangement Diagram (incl. escape route)
(3)	Vessel Particulars and Basic Hull and Deck Plate Thickness Diagram ^{*1}
(4)	Machinery / Electrical Installation Plans
(5)	Inclining Experiment Report / Simple Inclining - Test Report

Note

*1 Hull and Deck Plate Thickness may make reference to information provided by ship builder/ shipyard or other certification bodies.

5. Stability

- 5.1 Any open deck vessels that are licensed to carry not more than 12 passengers shall conduct simple inclination test. The simple inclining test is to ascertain that no angle of heel exceeding 7° will arise when 2/3 of the persons distributed on one side of the vessel and 1/3 on the other side (See Annex 5 of this Code of Practice). If the new vessel is not exceeding 6 metres in length, an immersion test to prove its adequacy of buoyancy is also acceptable as an alternative.
- 5.2 Inclining test or calculation in accordance with the standard of recognised Classification Societies or equivalent, or relevant certificates (such as Class Certificates or CE Certificates), documents or declaration issued by an authorized classification society or maritime authority could be in lieu of the requirement in Sec 5.1 above.

PART II

1 Additional Life-saving appliances requirements

1.1 For existing Class IV vessels of gross tonnage over 150 (GT>150) or existing Class IV vessels let for hire (except open deck vessels let for hire), the quantity of life saving appliances should increase suitably, so as to let the crew and passengers onboard to rapidly evacuate in case of any emergency. The total amount of life saving appliances (i.e. including the number of lifebuoy required based on the vessel length stipulated in the Survey Regulation), such as lifebuoys^{Note} after the increase should be sufficient for the total number of persons licensed to carry onboard.

1.2 Any(new or existing) open deck vessels let for hire that are licensed to carry not more than 60 passengers, shall comply with the following requirement.

(i) complies with Sec1.1 above, to provide lifebuoys^{Note} that is sufficient for the total number of persons licensed to carry onboard; or

(ii) All passengers shall wear a suitable lifejacket when the vessel is underway. Such lifejacket shall at least comply with the performance standards and requirements set out in CoP Chapter VI Sec1.1A.

(Note: Lifebuoys can be replaced by inflatable liferaft, buoyant apparatus, lifebuoys and its combination. Each lifebuoy complies with the standards is deemed to support two persons.)

2 VHF (This section shall apply to any pleasure vessels let for hire that are licensed to carry more than 12 passengers)

2.1 The vessels applicable for this section should be installed with a VHF. The VHF should obtain the Ship Station License issued ~~be of the type approved~~ by the Communications Authority (CA) and has a licence issued by the CA.

2.2 VHF operator must receive training on the equipment and obtain an operator certificate issued by the CA; the operator certificate issued by the authority in the Mainland or other countries would be recognised.

3 AIS (This section shall apply to any pleasure vessels let for hire that are licensed to carry more than 100 passengers)

The vessels applicable for this section should be installed with an AIS. For the specification of the AIS system, the Code of Practice for Class I vessel is referred.

4 Radar (This section shall apply to any pleasure vessels let for hire that are licensed to carry more than 100 passengers)

The vessels applicable for this section should be installed with a radar which can determine the collision risk, including those equipment that can detect collision risk by long distance scanning and issues early warning signals. For specifications of the

radar, annex I-4 of the Code of Practice for Class I vessel is referred.

5 First Aid Kit (This section shall apply to any pleasure vessels let for hire that are licensed to carry more than 12 passengers)

The vessels applicable for this section should be provided with a first aid kit, each box equipped with medicines in the following table.

	Name	Description	Quantity
1	Triangular of Calico	110cm x 110 cm x 127 cm	8 offs
2	Conforming bandage	5cm x 2m	2 rolls
3	Bandage (ordinary or elastic type)	5cm x 5.5m	2 rolls
4	Bandage (ordinary or elastic type)	7.5cm x 5.5m	2 rolls
5	Tape	Assorted, sterile, adhesive	20 offs
6	Dressings	Sterile paraffin gauze	10 offs
7	Dressing strip	2.5cm x 5m	2 rolls
8	Absorbent cotton wool	35 gm	2 packs
9	Safety pins	Rustless, size 5cm	1 dozen
10	Scissors	Stainless steel throughout	1 pair
11	Disinfectant		0.2 Litre

Safety Briefing for Class IV Vessels That Are Let for Hire or Reward

- 1 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.
- 2 In addition to the requirements of section 1, the coxswain shall brief at least one assistant (if applicable) who will be sailing with the vessel regarding the following:
 - (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 Merchant Shipping (Local Vessels)(Certification and Licensing) Regulation on Matters Relating to Restrictions on Class IV Vessels That Are Let for Hire or Reward and the Arrangement of MD's Prior Approval for Class IV Vessel That Is Let for Hire or Reward and the Arrangement of Audit Checks

(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;
 - (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. (Amended G.N. 1134 of 2017)

- (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 MD’s Prior Approval for Class IV Vessel That Is Let for Hire or Reward

- **Prior Approval from the Marine Department** for Class IV vessels let for hire will be added to the procedures for issuing operating licence by the Marine Department.

- Arrangement:

To obtain such approval, vessel owners shall indicate their intention to let their vessels for hire or reward at the time of application for operation licence and submit copies of valid CoS or CoI, and a third party risks insurance policy for MD’s verification and approval.

(C) Arrangement of Audit Check

- Under section 7 of the Merchant Shipping (Local Vessels) Ordinance (Cap 548), the Director of Marine (DM) may authorize any person to be a surveyor for the purposes of this Ordinance subject to such conditions as the Director thinks fit and specified in the authorization to carry out the relevant provisions of Chapter 548, including the inspection of local vessels or the approval of plans.
- Under section 7(4) of Cap. 548, 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 Cap. 548. 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.

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.
- 2 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.
- 3 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.

(本附件適用於任何運載不超過 60 名乘客的出租遊樂船)

(This annex shall apply to any pleasure vessels let for hire that carry not more than 60 passengers)

檢查證明書

Certificate of Inspection

商船(本地船隻)條例

Merchant Shipping (Local Vessels) Ordinance

本證明書是就《商船(本地船隻)(安全及檢驗)規例》(第 548 章 附屬法例) 的條文而擬備
in respect of the provisions of the Merchant Shipping (Local Vessels) (Safety and Survey) Regulation, Cap. 548 sub. leg.

擁有權證明書號碼 Certificate of Ownership No.	船名 Name of Vessel	證書編號 Cert. No.	
船體物料 Material of Hull	總長度 (米) Length Overall (m)	長度 (米) Length (m)	最大寬度 (米) Extreme Breadth (m)
總推進功率 (千瓦) Total Propulsion Power : (kW)	總噸位 Gross Tonnage	淨噸位 Net Tonnage	

乘客及船員 Passenger and Crew	出租以收取租金或報酬 Let for Hire or Reward	運作牌照顯示 As Displayed in Operating Licence
總乘客人數 Total No. of Passengers		
最少船員人數 Minimum No. of Crew		
允許運載總人數 Total No. of Persons Permitted		

茲證明上述船隻已由合資格驗船師進行檢驗

This is to certify that the above-named vessel was examined by Competent Surveyor

機構/公司名稱
Name of Institution/Company

於 日期
at on

並顯示已符合相關規例 (包括《商船(防止空氣污染)規例》) 及 “工作守則-第 IV 類別船隻安全標準” 的相關規定。夾附的檢驗紀錄與核證最高可運載量(包括乘客與船員)等紀錄, 連同安全設備清單, 包括消防設備、救生設備、燈號、號型及聲號經核實確定有設置、適當維修及存放船上。

and found to be in accordance with the relevant regulations including Merchant Shipping (Prevention of Air Pollution) Regulation and relevant requirements of the “Code of Practice – Safety Standards for Class IV vessels”. Attached are the Inspection Record, record on the certified maximum carrying capacity of persons (including passengers and crew) etc. and the listed items of safety equipment including fire-fighting apparatus, life-saving appliances and lights & sound signals, which are confirmed, equipped, properly maintained and kept onboard.

最近一次上排/乾塢檢驗日期 上一次最後檢查日期
Date of last slip / docking inspection on Date of last final inspection on

本證書有效期至..... 但船隻、其機器及設備應保持有效維修及按上述安全工作守則的規定檢驗, 並符合下列條件:

This certificate will remain valid until subject to the vessel, its machinery and equipment being efficiently maintained and examined in accordance with the above-mentioned Code, and to the following conditions:

上述船隻只適合在良好天氣下在香港水域範圍內操作及下列限制(如有):
The above-named vessel is only for operating within Hong Kong waters in favourable weather condition and with restrictions as follows (if any):

驗船師姓名
Name of Surveyor :

印章/飾章
Seal/Crest

簽發地點
Issued at :

簽發日期
Issued Date :

簽署
Signature

註： 此證書須時刻展示於該船隻上的顯眼處。

Note: This Certificate shall be displayed at all times in a conspicuous place on the vessel.

(本附件適用於任何運載不超過 60 名乘客的出租遊樂船)

(This annex shall apply to any pleasure vessels let for hire that carry not more than 60 passengers)

簽發第 IV 類別船隻檢查證明書之檢驗紀錄

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

船名 Name of Vessel :	擁有权證明書號碼 Certificate of Ownership No:	證書編號 Cert. No. :	
檢驗項目 Inspection Items (詳情參見本守則附件 13A Details refer to Annex 13A of this Code)		備註 Remark	
今次定期檢驗周期為第 [一/二*] 年度檢驗 Periodic (Annual / Biennial *) survey conducted in this survey		結果 Result	跟進項目 Items to follow up
船體結構 Hull Construction			
1. 船體外部(水線上)、甲板及上層建築 Hull external (above waterline), decks and superstructure			
2. 船體水密性 Water-tight integrity of hull			
3. 客艙及內部佈置 Cabin and internal arrangement			
4. 審查適當的建造文件/證書及/或傾斜測試報告等(參照第 IV 類別船隻安全標準—工作守則內有關的要求)。批核文件須與本檢驗紀錄放置在船上 Assessing relevant document /certificate of construction and/or inclining test report etc, where appropriate (Refers to relevant requirements of Code of Practice for Safety Standard for Class IV Vessels). The endorsed document should be kept onboard with this Inspection Record.			
機械及電器 Machinery and Electrical			
5. 主機、輔機(如適用)及其操控系統 Main and auxiliary engines (if applicable) and control system			
6. 油柜及其管道系統 Oil tank and associated piping system			
7. 艙底水管系統及消防管系統 Bilge piping system and fire fighting piping system			
8. 機艙通風系統及其關閉裝置 Ventilation arrangement and closing appliance of machinery space			
9. 石油氣裝置及使用汽油之安全 Safety for LPG Installation and Use of Petrol			
10. 電纜及電器裝置 Electric cables and electrical installations			
11. 電纜絕緣電阻、電器過載保護和接地裝置。由合資格人仕簽發的電氣系統絕緣測試報告(經合資格驗船師批註,是可接受的。) Insulation resistance of cables, overload protection and earthing of electrical installation.(Electrical system insulation test reports from competent person endorsed by competent surveyor, are acceptable.)			
安全設備與燈號及聲號 Safety Equipment and Lights and Sound Signals			
12. 救生設備的數量、裝置及使用狀態 Quantity, installation and serviceability of life-saving appliances			
13. 滅火設備/系統的數量、裝置及使用狀態 Quantity, installation and serviceability of fire-fighting apparatus / system			
14. 號燈、號型及聲號設備的數量、裝置及使用狀態 Quantity, installation and serviceability of lights, shapes and sound signals			

* 刪除不適用處 Delete where as appropriate

檢驗項目 Inspection Items	備註 Remark	
	結果 Result	跟進項目 Items to follow up
防止污染系統 Pollution Prevention System		
15. 防油污裝置 Oil pollution prevention installation		
16. 防止空氣污染 (須符合《商船 (防止空氣污染) 規例》的規定) Air pollution prevention (comply with the requirements of MS (Prevention of Air Pollution) Regulation)		
客艙 Passenger Accommodation		
17. 乘客及船員艙要求 Passenger and crew accommodation requirements:- (a) 通道及逃生裝置的狀態 Condition of passage and escape means (b) 安全保護設施裝置及工作狀態 Installation and condition of safety protection means (c) 通風及關閉裝置的狀態 Installation and condition of ventilation means with closing appliances (d) 乘客座位、載客量及其他指示或標記 Passenger seats, carrying capacity and other notice or markings		
其他 Others		
18. 確認主要尺度，主機及輔機資料。 Verification of particulars of principal dimensions, main and auxiliary engines		
19. 合資格驗船師認為需要檢驗的項目，表列於另外紙張。 Other items considered necessary to be inspected by the competent surveyor as listed in separate sheet		
在船排/乾塢檢驗項目 Inspection Items on Slip or Dry-docking		
20. 船體外部及內部、艙壁、海水箱、呆木及軸支架 Hull external and internal, bulkheads, sea-chests, skeg and shaft bracket		
21. 海底閘門、噴水推進器、減搖裝置、舵、螺旋槳軸、螺旋槳、船底裝置 Sea valves, steering nozzle, stabilizer, rudder, propeller shaft, propeller, underwater hull fittings		
22. 主機及齒輪箱 (需遞交檢查紀錄) Main engines and gearboxes (submission of inspection record)		

不適用項目請填寫 " N.A. " Items not applicable should be marked "N.A."

備註 (如有需要可另加頁數)

Remark (additional sheet if required)

合資格驗船師 (機構/公司名稱)

Competent Surveyor (Name of Institution/Company)

驗船師姓名

Name of Surveyor

印章/飾章

Seal/Crest

簽發於

Issued at

日期

Date

簽署

Signature

第 IV 類船隻的最高可載運人數的計算 及/或 檢驗證明裝置是適合“無人值班機艙”運作

Determination of Maximum Number of Persons to be Carried and / or Survey for Certification on Installation Suitable for “Unattended Machinery Space” Operation of a Class IV Vessel

(本附件適用於所有第 IV 類別船隻)

(This annex shall apply to all Class IV vessels)

船名 Name of Vessel.....	權證明書號碼 Certificate of Ownership No :.....												
1 (a) 最高可載運量和座椅 Maximum Carrying Capacity and Seating													
船隻的最高可載運量(包括乘客和船員在內)的計算方法如下: The maximum carrying capacity (including passengers and crew) are determined as follows:													
[] (i) 開敞式甲板船隻 open deck vessel (L x B =)													
或/or	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:30%;">L x B 所得數 numeral</th> <th style="width:30%;">總人數 Total No. of Persons</th> <th style="width:40%;">計算總人數 Determined Total No. of Persons</th> </tr> </thead> <tbody> <tr> <td style="text-align:center;">≤ 5</td> <td style="text-align:center;">2</td> <td style="text-align:center;">()</td> </tr> <tr> <td style="text-align:center;">>5 to ≤ 10</td> <td style="text-align:center;">3</td> <td style="text-align:center;">()</td> </tr> <tr> <td style="text-align:center;">> 10</td> <td style="text-align:center;">4</td> <td style="text-align:center;">()</td> </tr> </tbody> </table>	L x B 所得數 numeral	總人數 Total No. of Persons	計算總人數 Determined Total No. of Persons	≤ 5	2	()	>5 to ≤ 10	3	()	> 10	4	()
L x B 所得數 numeral	總人數 Total No. of Persons	計算總人數 Determined Total No. of Persons											
≤ 5	2	()											
>5 to ≤ 10	3	()											
> 10	4	()											
[] (ii) 圍蔽式甲板船隻 enclosed deck vessel	計算總人數 Determined Total No. of Persons												
及/and	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:60%;">總人數 total number of persons = L_d × B × 0.4</td> <td style="width:40%;"></td> </tr> <tr> <td>(iii) 船東要求最少船員名額 Owner's requested minimum number of crew</td> <td style="text-align:right;">= ()</td> </tr> <tr> <td>程式中 where L_d : 船隻(甲板)的總長(米) vessel's (deck) length overall in metres</td> <td style="text-align:right;">= ()</td> </tr> <tr> <td>B : 船隻的最大寬度(米) vessel's maximum breadth in metres</td> <td style="text-align:right;">= ()</td> </tr> </table>	總人數 total number of persons = L _d × B × 0.4		(iii) 船東要求最少船員名額 Owner's requested minimum number of crew	= ()	程式中 where L _d : 船隻(甲板)的總長(米) vessel's (deck) length overall in metres	= ()	B : 船隻的最大寬度(米) vessel's maximum breadth in metres	= ()				
總人數 total number of persons = L _d × B × 0.4													
(iii) 船東要求最少船員名額 Owner's requested minimum number of crew	= ()												
程式中 where L _d : 船隻(甲板)的總長(米) vessel's (deck) length overall in metres	= ()												
B : 船隻的最大寬度(米) vessel's maximum breadth in metres	= ()												
(b) 所有乘客應有足夠的座椅或休息設施可供擬定的用途。作指引之用，應有不少於總載客人數 50% 固定座位，餘數可採用另外的形式或類別，但必須相對地穩妥及安全，符合擬定用途。 All passengers should be arranged with seating or resting facilities adequate for the intended purpose. As a guidance, the number of fixed seats should 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.	不適用 Not applicable 足夠 / 不足夠 Adequate / Not Adequate												
(c) 載運超過 12 名乘客及出租以收取租金或報酬的船隻之乘客艙室的標記 Marking in Passenger Space for vessel let for hire or reward and carrying capacity more than 12													
須在乘客上船的顯眼位置，以中、英文註明每層甲板可載運的乘客人數，如以下所示 The number of passengers in which each deck can accommodate should be indicated, in a conspicuous location, at all spaces where passengers will be embarking, in Chinese and English :-													
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:60%;">上層甲板 Upper level</td> <td style="width:40%; text-align:right;">()</td> </tr> <tr> <td>主甲板 Main Deck</td> <td style="text-align:right;">()</td> </tr> <tr> <td>其他 Others</td> <td style="text-align:right;">()</td> </tr> <tr> <td>總乘客人數 Total number of passengers</td> <td style="text-align:right;">()</td> </tr> <tr> <td>最少船員人數 Minimum number of crew</td> <td style="text-align:right;">()</td> </tr> <tr> <td>允許運載總人數 Total number of persons permitted</td> <td style="text-align:right;">()</td> </tr> </table>	上層甲板 Upper level	()	主甲板 Main Deck	()	其他 Others	()	總乘客人數 Total number of passengers	()	最少船員人數 Minimum number of crew	()	允許運載總人數 Total number of persons permitted	()	不適用 Not applicable / 已標記 / 未有標記 Marking Completed / Marking Not Done
上層甲板 Upper level	()												
主甲板 Main Deck	()												
其他 Others	()												
總乘客人數 Total number of passengers	()												
最少船員人數 Minimum number of crew	()												
允許運載總人數 Total number of persons permitted	()												
2 證明這船隻裝置是適合“無人值班機艙”運作 Certification on installation suitable for “unattended machinery space” operation for this vessel													
以此證明這船隻設有“無人值班機艙”運作配備並經檢驗及測試滿意，包括艙底水警報，主要的主機控制、儀錶、主機及發電機故障警報裝置，主機、發電機及抽氣扇的遙控關閉，煙霧偵測及警報裝置等裝置。(參照第 III 章第 3.14 節相關的要求) This is to certify that this vessel has appropriately equipped, inspected and tested satisfactory, including fittings of bilge alarm, essential main engine controls, indicators and main / generator engines abnormal warning alarms, remote shutdown of main / generator engines and ventilation fans, and a fire or smoke detection system etc., as appropriate, for unattended machinery space operation. (Refers to relevant requirements in section 3.14 of Chapter III.) - 裝置/ 額外詳細資料 Installation / Additional Details:													
不適用 Not applicable/ 適合 / 不適合 Suitable / Not suitable													

備註 Remark : (如有需要可另加頁數 Additional sheet if required)

.....
合資格驗船師(機構/公司)名稱及其驗船師姓名

Name of Competent Surveyor (Institution/Company) and name of surveyor

.....

簽署 Signature 日期 Date

Approximate Determination of Stability by Simple Inclining Test

Simple Inclining Test

Part 1

1 General

- 1.1 The simple inclining test is to ascertain the angle of heel a vessel would occur when 2/3 of the persons 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 persons 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 persons should be taken as congregated at 0.3 m² each on the uppermost deck or decks to which they have access.
- 2.3 The test should be carried out in the following manner:
- (1) The vessel is to be loaded with weights as described above,
 - (2) Calculate a heeling moment equal to the weight of the persons (W) multiplied by the extreme breadth (B) of the vessel and divided by 12 (=WB/12),
 - (3) 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.
 - (4) Restore all the weights to their original positions and record angle of heel when they are restored,
 - (5) Repeat (3) moving weights from opposite side,
 - (6) Repeat (4),
 - (7) If the angle of heel exceeds 7° during the test, the owner might add ballast weight and to repeat the test procedures (3), (4), (5) and (6). 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.
- 3.2 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 persons is 4 persons per square metre;
 - (2) Each person has a mass of 68 kg or <75 kg>;
 - (3) Vertical centre gravity of seated persons is 0.3 m above seat;
 - (4) Vertical centre gravity of standing persons is 1.0 m above deck;
 - (5) Persons and luggage should be considered to be in the space normally at their disposal

Note: < > applicable for new vessels calculation only.

(Amended G.N. 1134 of 2017)

Part 2

According to the procedure of Part 1, with the value of the heeling moment equal to WB, ensure that the ship's heel angle will not exceed [10°] when all (100%) persons are distributed on one side of the ship. To ensure safety, 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.

A rolling period test to derive the vertical center of gravity can be in lieu of the requirement 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, 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 water 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 is 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 and 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_0 is to be determined from the following formula:

$$GM_0 = (0.77 B/T)^2$$

where

B = extreme breadth of vessel in metres

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

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

(本附件適用於所有第 IV 類別船隻)

(This annex shall apply to all Class IV vessels)

擁有權證明書號碼： Certificate of Ownership no.	船名： Name of Vessel
審批圖則 / Approval Plans 檢查證明書編號 Certificate of Inspection No	備註/Remark
<p><u>一般圖則/ General Plans</u></p> <ol style="list-style-type: none"> 簡單圖則 Plan(Simple)-G -01 一般佈置圖則 (包括號燈、號型、聲號佈置) General Arrangement Plan (incl. lights, shapes & sound signals installations) 簡單圖則 Plan(Simple)-HS-02 船隻特別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 Thickness Diagram 簡單圖則 Plan(Simple)-HS-03 傾斜試驗 / 橫搖週期 / 簡單傾斜- 測試報告 Inclining Experiment Report/Rolling Period / Simple Inclining - Test Report 簡單圖則 Plan(Simple)- HS -04 救生及救火設備及佈置示意圖則 (包括逃生示意圖) LSA & FFA Installation and Arrangement Diagram (incl. escape route) 簡單圖則 Plan(Simple)-ME-05 機器/電器設備圖則 Machinery / Electrical Installation Plans 	<p>有 / 沒有 / 不需 *</p> <p>Yes / No / Not Applicable *</p> <p>有 / 沒有 / 不需 *</p> <p>Yes / No / Not Applicable *</p> <p>有 / 沒有 / 不需 *</p> <p>Yes / No / Not Applicable *</p> <p>有 / 沒有 / 不需 *</p> <p>Yes / No / Not Applicable *</p>
<p>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)。</p> <p>Note : Owner must submit additional plans to supplement for deficient information if necessary (please refer to relevant Code of Practice or regulation).</p> <p>* 刪去不需要處 / Delete where not appropriate</p>	

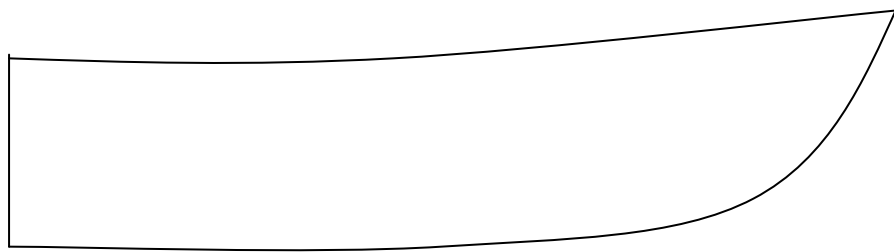
簡單圖則 Plan(Simple)-G-01

General Arrangement Plan (incl. lights, shapes & sound signals installations)

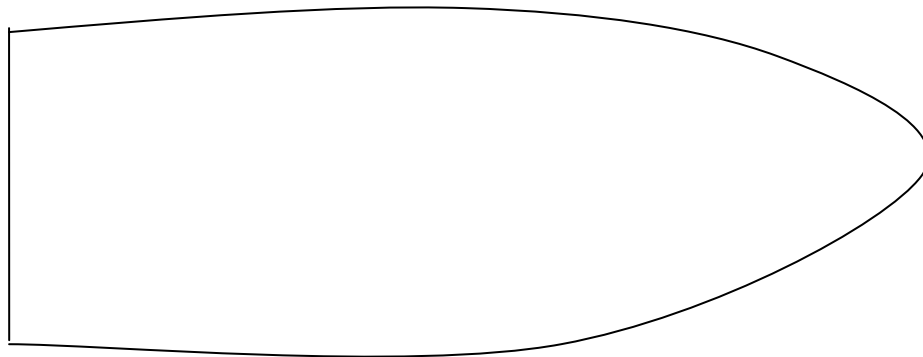
一般佈置圖則 (包括號燈、號型、聲號佈置)

(Note : A copy of this diagram must be kept onboard)

(註 : 一份此圖則必須存放在船上)



側面圖
Side View Profile



甲板
DECK

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 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. Length Overall 總長度	
5. Extreme Breath 最大寬度	
6. Depth 深度	
7. No. of decks 甲板層數	
8. Lights, Shapes & Sound Signals installations 號燈、號型、聲號設備 (Please show location / 請顯示位置)	
Approved by 經辦審批 :	Date 日期 :

簡單圖則 Plan(Simple)-HS-02

Vessel Particulars and Basic Hull and Deck Plate Thickness Diagram

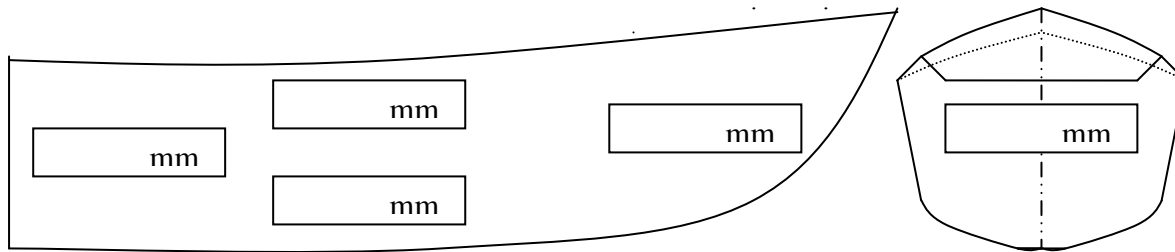
船隻特別資料及基本船殼和甲板之板厚示意圖則

(Note : A copy of this diagram must be kept onboard)

(註 : 一份此圖則必須存放在船上)

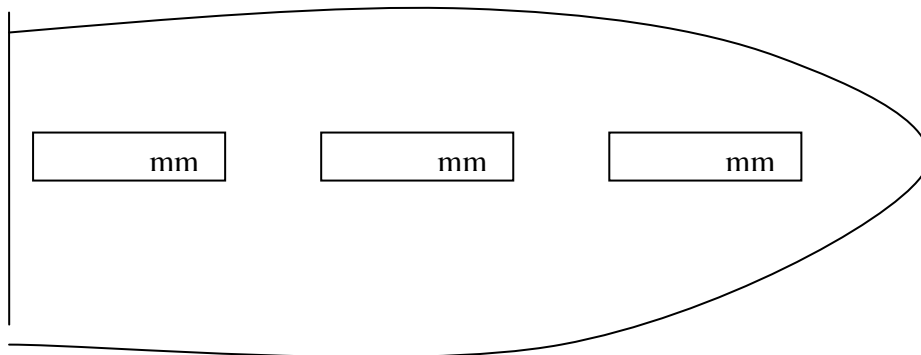
Remarks 備註:

1. If there is 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 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.



**船旁及船底板
SIDE & BOTTOM PLATING**

**船尾板圖
TRANSOM**



甲板 DECK PLATING

Vessel Particulars & Basic Hull information 船隻特別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 橫架數目	
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:

1. Details can be supplemented by photos or separate sheets.
詳細可以相片補充或另加紙張.
2. 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

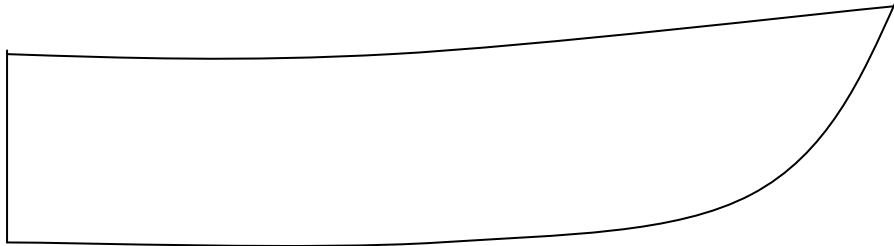
Vessel Particulars & Basic Hull information 船隻特別資料及基本船殼資料	Content 資料內容
1. File No. 檔案號碼	
2. Certificate of Ownership no. 擁有權證明書號碼	
3. Vessel Class / Type 船隻 類別 / 類型	
4. Length Overall 總長度	
5. Extreme Breath 最大寬度	
6. Depth 深度	
7. Material 構造材料	
8. Number of Transverse Frame 橫架數目	
9. Number of Long. Girder/Keelson/ 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 -04

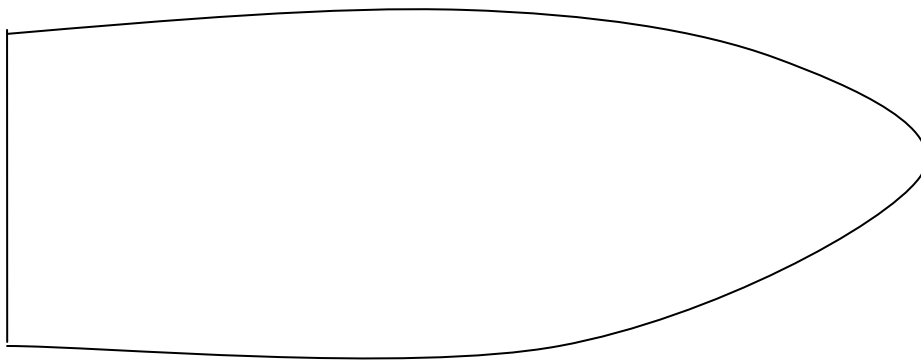
LSA & FFA Installation and Arrangement Diagram (incl. escape route)

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)



側面圖
Side View Profile



甲板
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. 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

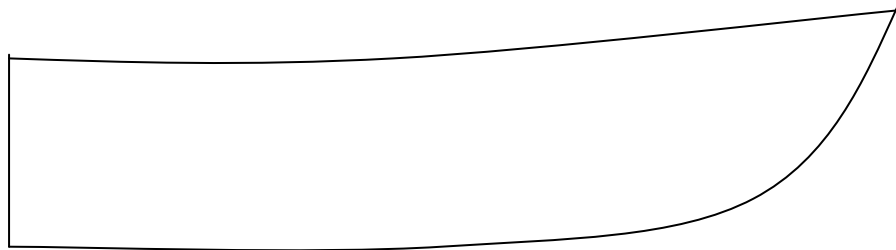
簡單圖則 Plan(Simple)-ME-05

Machinery & Electrical Installation Plans

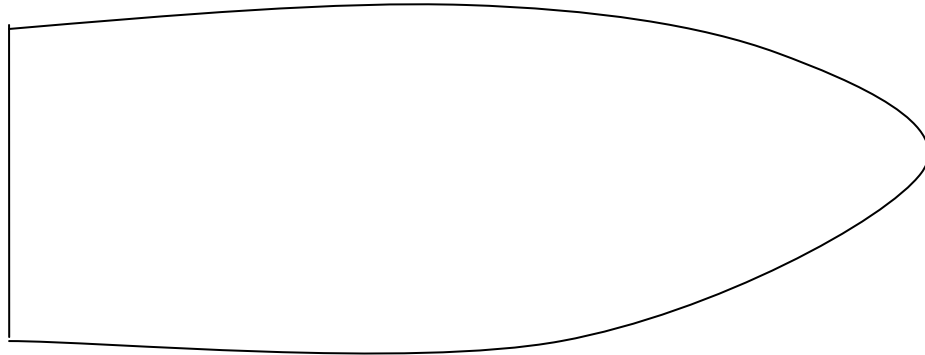
機器與電器設備圖則

(Note : A copy of this diagram must be kept onboard)

(註 : 一份此圖則必須存放在船上)



側面圖
Side View Profile



甲板
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)	
(Please show location/ 請顯示位置)	
Approved 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, sub. leg. 413P)

The new Merchant Shipping (Prevention of Air Pollution) Regulation, CAP 413P has entered into force on 1 July 2016. 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 promulgated on 6 April 2016 gives details of the relevant requirements applicable to local vessels under the regulation. The MDN 39 of 2016 is available at the following URL:

<http://www.mardep.gov.hk/en/notices/pdf/mdn16039.pdf>

(Amended G.N. 4986 of 2016)

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

-- Inspection Checklist for Local Vessels

Certificate of Ownership number:

Date of Survey:

Place of Survey:

Name of Surveyor:

		Inspection Details	Inspection Items	Inspection Results		Remarks
1	Division 2, Part 3 - Ozone-depleting substance (ODS)	Records (if any) and management guidelines for installations containing ODS	ODS that may be emitted aboard, mainly from air conditioning systems, refrigeration equipment, halon fire extinguishers, etc. To check management guidelines and relevant records (if applicable) are displayed on board.	Requirement met	Requirement not met	
			To ensure no new installations containing ODS are fitted on board, except that new installations containing hydrochlorofluorocarbons (HCFCs) may be allowed until 1 January 2020.	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	To check if "existing vessels" are fitted with "existing diesel engines" or if engines on "new vessels" comply with NOx emission requirements (document proof is acceptable).	Requirement met	Requirement not met	Requirement for control of NOx emissions not applicable to "existing vessels" fitted with "existing engines".
			Tier 1 Ship built after 1 June 2008 but before 1 July 2016	Requirement met	Requirement not met	
			Tier 2 Ship built on or after 1 July 2016	Requirement met	Requirement not met	
3	Division 6, Part 3 - Shipboard incinerators	Shipboard incinerators (incl. type, manual, training & record) meeting IMO requirements.	Incinerators	Available	Not available	Incinerators not meeting IMO requirements are not permitted to operate.
			IMO specifications	Requirement met	Requirement not met	
			IMO approved incinerator operated in Hong Kong: Operation (manual, training & record) of incinerators meeting relevant requirements.	Yes	No	
4 4.1	Division 4, Part 3 & Section 87, Part 6 - Fuel oil quality	Vessels of 400 gross tonnage or above: bunker delivery notes shall be kept on board for at least half year.	Bunker delivery note kept on board.	Yes	No	Some vessels may already have obtained the exemption document from HKMD.
			Bunker delivery note issued by a local supplier or recognized/recorded supplier in the Mainland.	Yes	No	
	Sulphur oxides (SOx)	Vessels of less than 400 gross tonnage: bunker delivery note not required.	Not Required	Not applicable		
			Sulphur content of fuel oil not exceeding 3.5% m/m (before 1 January 2020)	Yes	No	

Note: Paragraph 4.2 deleted as only ships engaged in international voyage are required to retain bunker oil samples, in accordance with Cap. 413P Part 6 Section 87 Para. (1)(c).

(Amended by G.N. 4986 of 2016)

Tonnage Measurement for Class IV Vessels

(This annex shall apply to all Class IV vessels)

PART 1 General

1 Application

1.1 Subject to section 1.2, this chapter shall apply to –

- (1) new vessel (see definition in Ch. I/3.1); and
- (2) at the request of the owner for re-measurement of tonnage, an existing vessel^{Note¹}

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.

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, such as split-hull barges and dredgers, shall be retained in V and V_c notwithstanding that the space within the hull is temporarily open to the sea when

Note¹: Existing vessels which are not to be re-measured, their previous methods of tonnage are still applied and tonnage expression may be in decimals.

- discharging cargo. (Amended G.N. 1134 of 2017)
- 2.6 Enclosed spaces above the main deck not exceeding 1 m³, air trunks having a cross-sectional area not exceeding 1 m² shall not be measured. (Added G.N. 1134 of 2017)
- 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. (Added G.N. 1134 of 2017)

PART 2 Ascertainment of Tonnage

3 Vessels of 24 Metres in Length and Above

- 3.1 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.

3 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 m³; which shall be obtained from section 4.2.2 (in catamaran, $V_1 = 2 \times V_H$).

V_2 = total volume of all enclosed spaces above the main deck, in m³; which shall be obtained from section 4.2.3 below.

- 4.2.2 V_1 shall be determined by the following formula:

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

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.);

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)	
ship	monohull	0.55
	catamaran	0.50
junk	0.60	
box	0.90	

4.2.3 V_2 shall be determined by the following formula:

$$V_2 = \Sigma l \times b \times h \quad \text{m}^3$$

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

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.

~~Guidance Plan to Determine Passenger Space for Class IV Vessels~~

(Repealed)

Installation, Document and Certification for Prevention of Oil Pollution

(This annex shall apply to all Class IV vessels operating in Hong Kong Waters)

The installation, documentation and certification required on board, and information required to submit for approval for vessel of gross tonnage (GT) ≥ 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 = daily fuel oil consumption (m^3); 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.

(Added G.N. 1134 of 2017)

- (c) Standard discharge connection.
- (d) For Class IV vessels ≥ 400 GT, 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, and
 - (ii) wiring diagram of electrical installation.
- (g) Sludge tank and discharge arrangement plans include:
 - (i) construction, size and location of sludge tank; and
 - (ii) piping diagram of sludge tank from machinery spaces to reception facility via

standard discharge connection.

- (h) Shipboard oil pollution emergency plan.

Certificates Relevant to Local Vessels

(Repealed) (廢除)

- ~~1—Apart from the certificates listed in section 2.3 of Chapter I, the following plan approval, surveys and/or issuance of certificates or record document, which may be for operational purpose or requirements specified under legislations outside the Ordinance, Cap 548, are also relevant to local vessels if applicable:~~
- ~~(1)—International Oil Pollution Prevention Certificate;~~
 - ~~(2)—International Air Pollution Prevention Certificate or Hong Kong Air Pollution Prevention Certificate under Merchant Shipping (Prevention of Air Pollution) Regulations, Cap. 413 sub. leg.—~~
- ~~2—For items 1(1) and (2) the indicated International Convention certificates 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.~~

(Amended G.N. 1134 of 2017)

~~Towing a Banana Boat or Similar Vessel~~

~~(Repealed) (廢除)~~

~~Any vessel engaged in towing of a banana boat or similar vessel must possess the relevant permission from the Director of Marine. For details refer to Marine Department Notice No. 124/2007, which is available at the following URL:-
<http://www.mardep.gov.hk/en/notices/pdf/mdn07124.pdf>~~

~~(Amended G.N. 1134 of 2017)~~

**Periodic Survey Programme for Class IV Vessels That
Are Let for Hire or Reward and Are Issued with a Certificate of Inspection**

(This annex shall apply to any pleasure vessels that carry not more than 60 passengers)

Pursuant to the Merchant Shipping (Local Vessels) (Safety and Survey) Regulation, Cap. 548G, all class IV vessels that carry 60 passengers or less and are let for hire or reward 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 CO₂ 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 CO₂ 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)
- (h) An inspection of ventilation arrangement and closing appliance of machinery space, if applicable;
- (i) Air Pollution Prevention installation (if applicable);
- (j) Verification of principal dimensions, engine and major machinery particulars;
- (k) Checking the domestic LPG system, if fitted;
- (l) Safety valve of air receiver functioning test (if fitted); and

(m) Checking the relevant document/certificate of the vessel.

(B) Open deck GRP vessel 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 found good, a maximum of one survey cycle can be extended, i.e. conduct once every 4 years); if the air receivers meet the standard of a maritime administration's national standard or a classification society or other international recognized standards such as ASME Standard or CE Standard and issued with appropriate certificates, survey can be conducted by relevant maritime institutions/ authorized surveyors/ persons according to the standard of the institution or standard survey scheme (including interval).
- (g) Items in Section (I)(A) above.

(B) Open deck GRP vessel 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.

(Amended G.N. 1134 of 2017)
- (3) An appropriate inspection/maintenance is subject to the engine maker's periodical maintenance schedule, an inspection/maintenance record issued by engine workshop or shipyard or ship owner as appropriate should be submitted for competent surveyor's endorsement.
- (4) Inspection record declared by ship owner / shipyard / competent surveyor is also acceptable.

Survey Programme for Class IV Vessels That Are Issued with a Certificate of Survey

Periodic Survey Programme for Other Class IV Vessels That Are Issued with a Certificate of Survey
or Certificate of Inspection

Table 1 Periodic Survey Programme

No	Survey Items	Vessel carrying more than 60 passengers			New vessel with length (L)≥24m or existing vessel that is of more than 150 gross tonnage and is let for hire or reward; or of novel type			New vessel with length (L)≥24m or existing vessel that is of more than 150 gross tonnage but is not let for hire or reward		
		1	2	4	1	2	4	1	2	4
A	General and safety equipment									
1	Fixed Fire Extinguishing Installation CO ₂ system - blowing test Sprinkler System - function test		✓				✓ (*5d)			✓ (*5d)
2	Fixed Fire Extinguishing Installation - hydraulic test	(*4)								
3	Fire Extinguisher, CO ₂ Bottle - refill and hydraulic test (*5)	✓			✓			✓		
4	Buoyancy Apparatus – submerging test (for air case not filled with buoyant material)			✓			✓ (*3)			✓ (*3)
B	Hull and fittings									
1	Hull - external (incl. Ship bottom) inspection	✓				✓			✓	
2	Hull - internal (including tanks and voids) inspection		✓				✓			✓
3	Gauging thickness of deck, shell and bulkhead plating (for steel/aluminium vessel) (*2)			✓			✓			✓ (*3)
4	Sea Suctions, Discharging Valves - stripped down inspection		✓				✓			✓ (*3)
5	Anchors, Cables- ranged out for inspection		✓				✓			✓ (*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)
3	Main Engine and Gear Box - stripped down for inspection)		✓ (*3a)			✓ (*3a)				✓ (*103a)
4	Generator engine- stripped down for inspection			✓			✓ (*3)			✓ (*10)
5	Main fire pump and emergency fire pump		✓				✓ (*3)			✓ (*3)
6	Bilge pump and windlass - stripped down for inspection		✓				✓ (*3)			

No	Survey Items	Vessel carrying more than 60 passengers			New vessel with length (L)≥24m or existing vessel that is of more than 150 gross tonnage and is let for hire or reward; or of novel type			New vessel with length (L)≥24m or existing vessel that is of more than 150 gross tonnage but is not let for hire or reward		
		1	2	4	1	2	4	1	2	4
7	Independent fuel oil tank – internal & hydraulic test			✓			✓ (*3)			✓ (*3)
8	Air Receiver (P<17.2 bar) - internal inspection (*10)			✓			✓			✓
9	Air Receiver (P<17.2 bar) -hydraulic test (*11)			✓			✓			✓
10	Air Receiver (P≥17.2 bar) - internal inspection (*11)		✓			✗	✓		✗	✓
11	Air Receiver (P≥17.2 bar)- hydraulic test (*11)		✓			✗	✓		✗	✓
12	Tail Shaft, Propeller, Rudder and Rudder Stock - inspection		✓ (*3b)				✓ (*3b)			✓ (*3b)
13	Steering System – stripped down for inspection			✓			✓ (*3)			✓ (*3)
14	AC electrical circuit –main circuit breaker load test (*7)			✓						
15	Oil Pollution Prevention Installation (for vessel with IOPP/HKOPP certificate)	(*9)								
16	Oil Pollution Prevention Installation (for vessel do not require IOPP/HKOPP certificate) – hydraulic test of independent sludge tank			✓			✓ (*3)			✓ (*3)
17	Relevant requirements of Merchant Shipping (Prevention of Air Pollution) Regulation (Cap. 413 sub. leg. P)	(*8) and (*9)								

Remarks in Table 1

* The length (L) demarcation applies to new vessel; the Gross Tonnage (GT) demarcation applies to new vessel.

*1 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 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 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.

- *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 recognised classification society or the plan accepted by the Department; and shall submit records and declarations.
- *4 Hydraulic test for CO₂ 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 CO₂ system high pressure manifold should not be less than 125 bar.
- *5 Inspection for portable fire extinguishers and CO₂ 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.

Water, Foam, Dry Powder Fire Extinguisher		CO ₂ Fire Extinguisher, CO ₂ Fixed Installation Bottle		
Refill / Weighting (*a)	Hydraulic Test (*b)	Weighting	Refill	Hydraulic Test (*b)
Owner (*c) /FSIC(*d)	FSIC(*d)/MD	FSIC(*d)/MD	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
 CO₂ bottles/propellant cartridges - 10 years (Amended G.N. 1134 of 2017)
- (*c) MD officers may examine the owner's competence on carrying out the servicing and conduct random checks including function test of the portable fire extinguishers.
- (*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, please refer to Annex 7 & 7A of this code of practice.
- *9 For renewal of HKOPP/HKAPP certificate, surveys should be carried out by MD officer only. For renewal/endorsement of IOPP/IAPP certificate, surveys to be conducted by relevant Classification Society only and report to be submitted for reference.
- *10 For the survey interval for engine, maker's recommended maintenance practices can be referred. Inspection/maintenance record issued by engine workshop or shipyard or ship owner as appropriate should be submitted for record purpose.
- *11 If the air receiver complies with the national standards of the maritime authority or the classification society or other internationally recognised standards such as ASME Standard or CE Standard and is issued with the relevant certificate, it may also be inspected by relevant maritime institution or authorised surveyor/ person according to the inspection plan of the institution or standard inspection plan (including the interval).

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 ₂ 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	Verificatiof principal dimensions, engine and major machinery particulars
B	MACHINERY AND ELECTRICAL INSTALLATION
1	Main Engines, Generator Engines, Steering Gears - running test
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, by Marine Department officer.

*2 Where practicable the listed items may be presented for inspection prior to the final inspection.

*3 ~~Electric circuits insulation test reports issued by an EMSD registered electrical worker (REW) or registered electrical contractor (REC) are also acceptable. (Amended G.N. 1134 of 2017)~~

A valid EMSD registered electrical contractor (REC) issued 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) is acceptable in lieu of the insulation resistance test inspection responsible by MD officer or authorized inspection personnels. A valid electrical system insulation test report shall include the relevant necessary information. A valid electrical system insulation test report issued by an authorized inspection personnel is acceptable.

*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 FOR CLASSIFICATION OF VESSELS
APPLICABLE TO CLASS IV VESSELS**

適用於第 IV 類別船隻的船級社規範

(To be revised/updated in latter stage)

1 美國船級社 (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 法國船級社 (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 中國船級社 (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 GL 船級社

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

5 英國勞氏船級社 (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 日本海事協會 (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

註

上文載述船級社/獲承認當局發出適用於本地船隻的現行規範。未有載述之其他特許機構的規範; 及其他標準亦可考慮接受。

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

船隻資料記錄 Records of Vessel Particulars

(1) 船隻基本資料 Vessel Basic Particulars

船體類型 Type of Hull	單體 / 雙體 Monohull / Catamaran
船體材料 Material of Hull	鋼 / 鋁 / 木質 / 玻璃纖維 / (其他) Steel / Aluminum / Wood / GRP / (Others)
上層建築材料 Material of Superstructure	鋼 / 鋁 / 木質 / 玻璃纖維 / (其他) Steel / Aluminum / Wood / GRP / (Others)
建造地 Place of Build	香港 / 中國大陸 / 歐洲 / (其他) HK / Mainland China / Europe / (Others)
建造年份	
建造標準	船級社: 規範: 其他:
設計操作航區 Designed Flying Limits	香港海域 / 沿海 / 遠洋
總噸 Gross Tonnage	
船長 Length (m)	
總長度 Length Overall (m)	
滿載水線長度 (m) Length Loaded Waterline	
兩柱間長度(m) Length Between Perpendicular	
型寬 (m)	
型深 (m)	
設計吃水Designed Draft (m)	
設計航速 Designed Speed (knots)	
推進裝置 Means of Propulsion	螺旋槳 / 噴水器 (數目)

(2) 機械裝置資料 Machinery Installation

(2-1) 主機 Main Engine

No.	Manufacturer and Model 製造廠和型號	Serial Number 產品編號	製造日期	Location 位置 Frames 肋骨 (from) - (to) (自) - (至)		Rated Speed 額定轉速 (RPM)	Power Output 輸出功率 (kW) (千瓦)
1							
2							
3							
4							
Total Power Output (kW) 總輸出功率 (千瓦)							

(2-2) 齒輪箱 Gear Box

	Manufacturer and Model 製造廠和型號	Serial Number 產品編號	Remarks 附註
1			
2			
3			
4			

(2-3) 電動馬達 Electric Motor (for diesel electric propulsion system 適用於柴油機電力推進系統)

No.	Manufacturer and Model 製造廠和型號	Serial Number 產品編號	Location 位置 Frames 肋骨 (from) - (to) (自) - (至)		Rated Speed 額定轉速 (RPM)	Power Output 輸出功率 (kW) (千瓦)
1						
2						
3						
4						
Total Power Output (kW) 總輸出功率 (千瓦)						

(2-4) 發電機柴油機 Generator Engine

No.	Manufacturer and Model 製造廠和型號	Serial Number 產品編號	製造日期	Location 位置 Frames 肋骨 (from) - (to) (自) - (至)		Rated Speed 額定轉速 (RPM)	Power Output 輸出功率 (kW) (千瓦)
1							
2							
3							
4							
Total Power Output (kW) 總輸出功率 (千瓦)							

(2-5) 螺旋槳軸系

No.	螺旋槳軸			軸承 (潤滑形式)	Remarks 附註
	直徑 (mm)	材料	材料試檢 發證機構		
1				水 / 油	
2				水 / 油	

(2-6) 壓縮空氣裝置

No.	Serial Number of Air Receiver 空氣瓶編號	Relief Valve / Safety Valve set pressure 安全閥工作壓力	Remarks 附註
1			
2			

(2-7) 燃油艙櫃

No.	燃油櫃名	Location 位置 Frames 肋骨 (from) - (to) (自) - (至)		載量 (立方米)	Remarks 附註
1					
2					
3					
4					
5					
6					
Total Capacity 總載量(立方米)					

(2-8) 防止油類污染裝置

No.	油水分離器			淤渣櫃	艙底水 集存艙櫃
	Manufacturer and Model 製造廠和型號	Serial Number 產品編號	容量 (PPM)	容量 (立方米)	容量 (立方米)
1					
2					

(2-9) 附加主要裝置資料 Additional particulars of key installations

GRP Yards Inspection Report (Sample)

Name of shipyard	ABC shipyard
Address :	Tung Chung XXX...
Contact Person :	/
Date :	/

Inspection Report

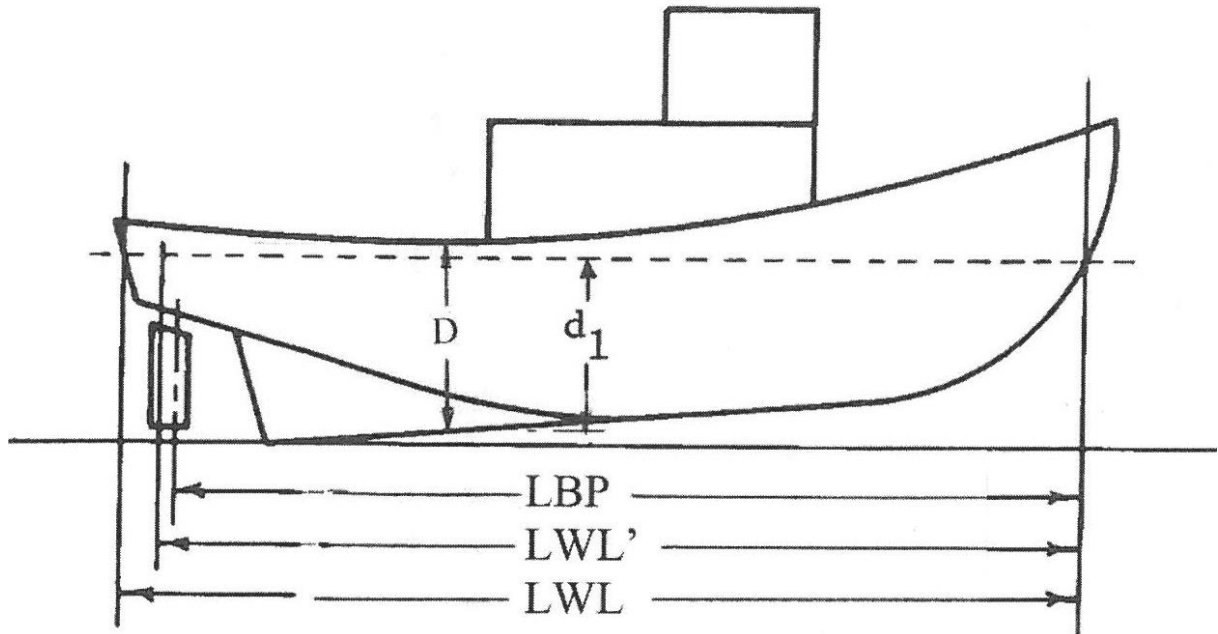
General description	<p>ABC船廠 約有 三十多年建造開敞式甲板船隻經驗，玻璃纖維工場約二千平方尺，每年約制造二十多條玻璃纖維小船，包括漁船舢舨。用於生產的模具有九尺長至三十二尺長多款。</p> <p>ABC shipyard had over 30 years experience in open cruiser building. The GRP workshop is around 2000feet, they produce 20 GRP small vessels annually, including fishing sampans. There were various moulds with a size range from 9 feet to 32 feet.</p>
Personnal :	<p>船廠因規模比較細，所以工作人員只得兩至三人，視符工作量而定。從交談中所得，船廠工作人員對制造玻璃纖維船的工藝常識、施工程序、材料認識、維修工作... 等等 都達到滿意情度。</p> <p>Since the shipyard is in small scale, there are 2-3 workers in usual, depending on the actual workload. From the conversation with the workers, the workers were of satisfactory standard of GRP construction knowledge, procedures of ship building process, understanding of materials, maintenance and repair skills, etc.</p>
Workshop condition	<p>工廠位於東涌馬灣涌村，東涌灣岸邊，工場周邊環境很空曠，自然通風，加上有足夠通風設備，例如大型風扇、抽氣扇等。處理塵埃方面，有足夠馬力的吸塵機應對。</p> <p>The shipyard was located at the east coast of Tung Chung, with open area and natural ventilation. In addition, mechanical fans and dust extracting system were installed for ventilation. The capacity of dust control was sufficient.</p>
Material handling	<p>玻璃纖維材料來自台灣 (TGI FIBERGLASS)，備用時貯存在通風位置，但比較亂。</p>

	The TGI Figerglass was produced from Taiwan, stowed in space with proper ventilation. A bit messy though.
Fire safety :	<p>在施工地方，有足夠防火設備，例如水喉、滅火筒等。</p> <p>There were sufficient Fire-fighting apparatus, such as fire hose, fire extinguisher, etc.</p>
Mould condition:	<p>大小模具共十多個。貯存在陰涼地方或用帆布蓋著。</p> <p>There were over 10 moulds, stored and covered properly.</p>
Conclusion :	<p>工廠環境可接受，工藝常識足夠，工作地方比較細，施工船隻太接近，容易發生危險。工具放置凌亂，材料剪裁無系統。整體上合格。</p> <p>The working environment of shipyard was acceptable. With sufficient shipbuilding knowledge, the working space is a bit small, resulting that the vessels under construction were too compacted, with potencial hazard. Tools were messy, material cutting was not systemetic. The shipyard is acceptable in overall.</p>

Attachments : 1. Photos
 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” “(L)” 為下述LBP和LWL’兩項距離中的較大者 —

is the greater of the two distances 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%(d₁)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 (d₁) 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)