<u>Code of Practice – Safety Standard for Class IV Vessels</u> <u>Amendments update as at 14 July 2006</u>

Item	Ch/page	Description	Remarks
1.	Chapter I - Section 1.6 & 1.7	Update section number under reference of Survey Reg in relevant tables.	To align the section number in latest draft Survey Reg.
2.	Chapter I – Section 3 & 8.3	 (a) Amend the definition of "new vessel". (b) Add the definition of "Ordinance", "Recognized Authority", "Survey Regulation". (c) New section 8.3 – cleanliness of machinery space 	 (a) To clarify that the propulsion engine power increased not more than 10% will not become a new vessel. (b) To convey the latest draft Survey Regulation to CoP. (c) Convey existing requirement to CoP
3.	Chapter II	(17) Verification of principal dimensions, engine and machinery particulars.	In line with Class I,II & III CoP requirement for all local vessels
4.	Chapter III	2.1.1 Vessel shall not have false bottom or secret compartment.	This is existing requirement
		 3.15 Any engine fitted on a vessel should be properly maintained at all time free from dark smoke emission. In this regard, during the final survey for initial and periodic survey, engine performance condition check would include smoke emission test using Ringelmann Chart. Shade 2 of the Ringelmann Chart and a continuous period of 3 minutes are the upper limits. The emission beyond this limit is considered not acceptable. 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. 	In line with Class I, II & III CoP, dark smoke requirement for all local vessels
5.	Ch. IIIA	2.1 Certificate of Inspection Survey	Editorial amendment
6.	Ch. IV	1.6 Spaces where noise level exceeds 85 dB(A), measured at maximum operating speed of propulsion engine, should not be used as passenger space.	Requirements for space not for passenger due to noise.
		1.7 Glass or mirror shall be made of materials, which will not break into dangerous fragments if fractured.	Glass/mirror requirements for passenger vessel.
		2.4 (a) For any new Class IV vessel engaging in chartering, any compartment below main deck should not be used as passenger space, except	Existing requirement

		on a sunken deek which has scantlings equivalent to main deek, and is at least 150 mm above the deepest loaded waterline. No Class IV vessel that are let for hire or reward may carry passenger below deck.	
7.	Ch. V	4. Deck Areas Disallowed for Passengers (a) Amend section 2.1	(a) Copy the
7.	Cii. V		requirement from latest draft Survey Reg
		(b) Table 8, 1, & 3(c) Table 8 -Hydrant Capable of producing a jet of water having a throw of not less than 6 metres which can be directed on to any part of the ship through a hose and a 10 millimetre diameter nozzle.	(b)Editorial amendment and add consideration factors for fire fighting requirements for vessel's length over 75m
		(d) Table 8-Note 1 No fire extinguisher is required for a jetski.	(c) Clear implication In line with Survey Regulation
	CI TIT		(d) Added note
8.	Ch. VI	Amend section 2.1	Copy the requirement from latest draft Survey Reg
		Table 7, 1, 2,&3	Editorial amendment
9.	Annex 2	 the vessel's engine and fitted with proper air vents. petrol engine and fitted with air vent (if necessary, owner must submit supporting document issued by the manufacturer, e.g. invoice, sale receipt etc.). The portable container should be stored in a well ventilated place, if necessary, on the open deck. The containers and all valves and pipes leading from such containers should 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 should not have any fuel leaking, and should be readily accessible for checking of suspected leaks. Unless it is certain that the containers storage space is well ventilated, otherwise the containers and the petrol should be removed from the storage place which is expected to be unattended for a period of time. 	Clear explanation to the safety precautions on the proper storage & use of petrol
10.	Annex 9	Guidance Plan to Determine Passenger Space for a Class IV Vessels (enclosed deck design)	Requirements for passenger space calculation for vessel of enclosed deck design

1.6 Owner or agent of a Class IV vessel is required to observe and comply with relevant requirements relating to vessel safe operation and operator requirements specified in the Merchant Shipping (Local Vessels) (Safety and Survey) Regulation ("Survey Regulation"), (Merchant Shipping (Local Vessels) (General) Regulation ("General Regulation") and Merchant Shipping (Local Vessels)(Certification and Licensing) Regulation, in addition to requirements given in the following chapters and annexes of this Code.

Item No.	Chapter & Annex of this Code	Section of Relevant Regulation
(a)	Para. 6 of Ch. I,	Section 46 under (Certification and Licensing) Regulation
	Ch. IX	
(b)	Para. 8 of Ch. I	Section 20 31 on "Construction and maintenance of local
		vessels" under Survey Regulation
(c)	Para. 12 of Chapter	Section 49 30 on "Certificate of Survey" and "Certificate of
	I, Annex 3	Inspection" under Survey Regulation
(d)	Para. 3 of Chapter	Section 34 33 "Notice stating maximum number of passenger
	4	to be posted" under (General) Regulation
(e)	Para. 5 of Chapter	Merchant Shipping (Prevention of Oil Pollution) Regulations,
	III	Cap. 413 Sub. leg.
(f)	Annex 7	Subject to enactment and enforcement of Merchant Shipping
		(Prevention of Air Pollution) Regulation, Cap 413 Sub-leg.

1.6 Accordance to the instruction of the paragraph 12 of this chapter and to satisfy the requirements specified in the Merchant Shipping (Local Vessels) (Safety and Survey) Regulation for the issuance of Certificates, the safety standards given in the following chapters and annexes of this Code are to be complied with: -

Item No.	Chapter	Section of Survey Regulation
(a)	I and II	Section 9 to 19 7 to 30 "Certificate of Survey" and "Certificate
		of Inspection"
(b)	Section 3 of	Section 20 31 on "Construction and maintenance of local
	III,IIIA and IV	vessels"
(c)	IV	Section 51 to 53 68 to 74 on "Carriage of Passenger"
(d)	VI	Section 21/32 on "Provision of Life-saving appliances on board
		of local vessels"
		Schedule 4 3 "Life Saving Appliances"
(e)	V	Section 22 33 on "Fire prevention measures and provision of
		fire-fighting apparatus on board local vessels
		Schedule 5 "Fire Protection and Fire-fighting Appliances"
(f)	VII	12 (2) (a) (vii) 18(2)(a)(viii) Collision Regulation

"new vessel" (新船隻) means -

- (a) a local vessel
 - that has never been licensed under Part IV of the Shipping and Port Control Ordinance (Cap. 313) before the commencement date of the Survey Regulation;
 and
 - (ii) in respect of which an application for an operating licence is made for the first time on or after the commencement date of the Survey Regulation, but does not include a vessel the keel of which is laid, or which is at a similar stage of construction, within 12 months immediately before that date and is still under construction on that date:
- (b) a local vessel that does not fall within paragraph (a) and undergoes, on or after the commencement date of the Survey Regulation, alteration
 - (i) of -
 - (A) its length, breadth or depth as recorded in the certificate of ownership issued or endorsed under the Merchant Shipping (Local Vessels) (Certification and Licensing) Regulation;
 - (B) the output of its main propulsion engine so that
 - (I) the output is increased by 10% or more than what is recorded in its certificate of inspection or certificate of survey; or
 - (II) particulars relating to the materials, scantlings or design of the propulsion shafting or stern tube, as shown in the plans approved under Part 3 of Survey Regulation, are no longer accurate; or
 - (C) its passenger capacity so that it increases from not more than 60 to more than 60, or from not more than 100 to more than 100; or
 - (ii) to an extent that it is no longer suitable
 - (A) to remain certificated for the particular class or type that it is certificated for under the Merchant Shipping (Local Vessels) (Certification and Licensing) Regulation; or
 - (B) to be categorized as a Category A vessel or a Category B vessel;

"Ordinance" or "LVO" (《商船(本地船隻)條例》或《條例》) means the Merchant Shipping (Local Vessels) Ordinance (Cap 548).

"Recognized Authority" (獲承認的當局) means a government authority recognized under section 7A of the Ordinance;

"Survey Regulation" or "Survey Reg" (《檢驗規例》) means the Merchant Shipping (Local Vessels) (Safety and Survey) Regulation (Cap 548).

8 Duties relating to Class IV vessels

- 8.2 It is the responsibility of the owner, agent and the coxswain of any Class IV vessel to observe applicable duties as indicated in the Merchant Shipping (Local Vessels)(General) Regulation and Merchant Shipping (Local Vessels)(Certification and Licensing) Regulation, and in particular relating to restrictions imposed under section 6 and operators holding relevant certificates of competency etc. required on any Class IV vessel specified under sections 47, 48 and 50 of the latter Regulation. These are extracted in Annex 1A and Annex 1B for reference.
- 8.3 The master 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.

9 Documentary Information on Compliance of this Code

- 9.1 For any Class IV vessel carrying not more than 60 passengers and engaging in chartering, owner or agent of the vessel may request builder to propose vessel's design, construction and safety standards and arrangements for certification by an authorized surveyor/organization.
- 9.2 Any vessel carrying more than 60 passengers whether engaging in chartering or not, its design, construction and safety requirements are to be certified by an officer of Marine Department in accordance with relevant requirements prescribed in Chapter I and III-A of this Code.

10 Equivalent

10.1 Any requirements of this Code which cannot be fully met for one reason or another by any Class IV vessel carrying not more than 60 passengers and engaged in chartering should be justified and arranged with suitable "equivalence". Where necessary, the owner or agent of the vessel may invite a builder to propose alternative or "equivalence" to the requirements

Passenger Accommodation

- (16) Passenger and crew accommoda nents:-
 - (a) Means of escape for passengers (including any obstruction).
 - (b) Means of protection such as guard rails, handrails and passageways (including maintained in good condition).
 - (c) Ventilation fans for passenger accommodation (including closing mechanism in working condition).
 - (d) Passenger seats and markings.
 - (e) Lifejackets stowage.

Others

- (17) Verification of principal dimensions, engine and major machinery particulars.
- (18) Other items considered necessary by the authorized surveyor/organization (to be indicated in separate list).

Inspection on slip or dry-docking (at interval not more than two years after initial certification)

- (19) Bottom shell plates, side shell plates, spray strips and stern transom plates (including whether or not any damage or cracking).
- (20) Sea valves, propeller shaft, propeller and water/oil seals (including whether or not maintained in good condition).
- 3.2 The above inspection items list is indicated in Annex 4 for ready application.

CHAPTER III

CONSTRUCTION, MACHINERY AND ELECTRICAL INSTALLATIONS

(For any vessel carrying not more than 60 passengers and engaged in chartering)

1 Standards on 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. should 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 for pleasure vessels or small craft or appropriate standards for equipment and material or any other equivalent open standards.

2 Hull Construction and Marking

- 2.1 The vessel should 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.

2.1.1 No local vessel is allowed to construct or altered to have false bottom or secret compartment.

- 2.2 Bulwarks, guard/hand rails or equivalent protection/fixing should be installed near the periphery of weather decks accessible to passengers and crew.
- 2.3 In any vessel of other than wooden construction, and as far as practicable on wooden vessel, the bulkheads should be of watertight construction.
- 2.4 Every enclosed space should be provided with suitable ventilation and lighting. Every such space for regular entrance by crew or working personnel should be suitably mechanically ventilated and illumination.
- 2.4.1 Every deck house should be provided with appropriate insulation to avoid from abnormal heat.
- 2.5 The Certificate of Ownership number of a vessel should be painted and mounted in accordance with section 40 of the Merchant Shipping (Local Vessels) (Certification and Licensing) Regulation.
- 2.6 (a) For any new vessel, an inclining test should be carried out in accordance with the standards of an authorized organization or equivalent standard.
 - (b) As alternative to (a) above, for any new vessel carrying less than 12 passengers, a simple inclining test should 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 that vessel is not exceeding 6 metres, an immersion test to prove its adequacy of buoyancy is also
- 3.12 When petrol is stowed onboard for use in outboard engines or portable generator engines, safety precautions as indicated in Annex 2 should be strictly followed.
- 3.13 Every vessel of gross tonnage 400 and above should 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.
- 3.14 Engine Room & Wheelhouse Communication and Safety Arrangement
 - (a) On any vessel with manned engine rooms, a suitable system of communication between wheelhouse and engine room should be provided.
 - (b) Any vessel with length or propulsion power as indicated below, operating in unattended machinery spaces mode, should be provided with the following installation in the proximity of the position of helmsman:
 - (I) Vessel of L \leq 24 m or total propulsion power \leq 1,000kW
 - (i) for main engine- essential control (such as means of start and stop, control of speed and clutch), indicators, 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 <u>existing vessels</u>, a fixed fire detection (operated by smoke detectors) and fire alarm system for engine room are advisable to owners. If these fittings are not installed, regular surveillance to be exercised from outside engine room or control station by the coxswain or a crewmember.
 - (v) for <u>existing vessels</u>, a fixed fire detection (operated by smoke detectors) and fire alarm system for engine room are advisable to owners. If these fittings are not installed, regular surveillance to be exercised from outside engine room or control station by the coxswain or a crewmember. (Note)
 - Note: For the purpose of "combined coxswain" operation, vessel length less than 12 m, if regular surveillance (such as through tale-tell pipe or transparent glass view-hole fittings etc.) can be exercised from outside engine room or control station by the coxswain or a crewmember, these requirements can be waived.
 - (II) Vessel of L>24 m or total propulsion power> 1,000kW same as (I) above but in addition, provided with a fixed fire detection (operated by smoke detectors) and fire alarm system for engine room.
- Any engine fitted on a vessel should be properly maintained at all time free from dark smoke emission. In this regard, during the final survey for initial and periodic survey, engine performance condition check would include smoke emission test using Ringelmann Chart. Shade 2 of the Ringelmann Chart and a continuous period of 3 minutes are the upper limits. The emission beyond this limit is considered not acceptable.

- 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.
- 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 should 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" should be earthed if they are supplied at a voltage exceeding 55V, except arranged with double insulation internally.
- 4.4 Electrical apparatus should 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 should not be less than the nominal voltage.
- 4.6 Every conductor of a cable, flexible cable or flexible cord should 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 should be selected so as to avoid action from condensed moisture or drips. Cables should, as far as possible, be remote from sources of heat, such as hot pipes, resistors, etc., and should be protected from avoidable risks of mechanical damage.
- 4.8 Circuits should be protected against short circuit and overload.
- 4.9 The current rating of circuit breakers should not exceed the current rating of the smallest size of cable in the circuit protected by the circuit breaker.
- 4.10 Lighting fittings should be so arranged as to prevent temperature rises which could damage the wiring and to prevent surrounding material from becoming excessively hot.

CHAPTER III -A

DESIGN, CONSTRUCTION, INSPECTION AND CERTIFICATION

(For any vessel carrying more than 60 passengers)

1 Design, Construction and Inspection

- 1.1 Subject to the following paragraph 1.2, the requirements of any vessel relating to design, construction, safety equipment installations and fittings, and inspection are to be in accordance with those relevant requirements for Class I vessel of same carrying passenger capacity specified in "Code of Practice Safety Standards for Class I, II and III Vessels".
- 1.2 For an existing vessel licensed with carrying capacity of more than 60 passengers before the commencement of the Ordinance, the requirements on design, construction, machinery and electrical installations and fittings are to be in accordance with the standards and requirements indicated in Chapter III of this Code.

2 Certification

2.1 A "Certificate of Inspection Survey", with contents or format similar to the certificate for Class I vessel, shall be issued by Marine Department after satisfactory completion of the necessary items for examination and inspection.

CHAPTER IV

PASSENGER AND CREW ACCOMMODATION

(For any vessel carrying not more than 60 passengers)

1 Accommodation

- 1.1 Accommodation spaces should be maintained in a clean, suitable lighting, well-ventilated and habitable condition with efficient means of escape.
- 1.2 There should 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 and etc., should be securely fastened in place to prevent movement when the vessel is underway.
- 1.4 All vessels should ensure the boarding for crew and passengers is safe.
- 1.5 For vessels carrying more than 12 persons, sanitary apparatus or wash room should be provided on onboard.
- 1.6 Spaces where noise level exceeds 85 dB(A), measured at maximum operating speed of propulsion engine, should not be used as passenger space
- 1.7 Glass or mirror shall be made of materials which will not break into dangerous fragments if fractured (such as BS6206 or equivalent).

2 Maximum Carrying Capacity and Seating

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

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

(ii) enclosed deck vessel (Note (b))

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

where

L = vessel's (deck) length overall in metres

B = vessel's maximum breadth in metres

Note (a): "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 submission to Licensing Section relevant supporting document, such as inclining testing certificates issued by Builder or recognized classification society or authorized surveyor or authorized organization indicating the maximum number of carrying capacity.

Note (b): "Enclosed deck vessel" means vessel provided with enclosed superstructure or compartment for personnel sheltered from weather.

- 2.2 An increased capacity may be considered subject to a satisfactory inclining test being conducted. Such increase should 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 paragraph 2.1 and format indicated in Annex 4A.
- 2.3 All passengers should be arranged with seating or resting facilitates 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.
- 2.4 (a) For any new Class IV vessel engaging in chartering, any compartment below main deck should not be used as passenger space, except on a sunken deck which has scantlings equivalent to main deck, and is at least 150 mm above the deepest loaded waterline. No Class IV vessel that are let for hire or reward may carry passenger below deck.
 - (b) For any new Class IV vessel not engaging in chartering or any existing Class IV vessel; any compartment below main deck should not be used as passenger space as far as practicable, except on a sunken deck which has scantlings equivalent to main deck, provided these spaces are clearly marked the accessible escape route and fitted with flooding alarms.
- 2.5 For any Class IV vessel that are 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 an officer of Marine Department.

3. Marking in Passenger Space for any vessel of carrying capacity more than 12

3.1 For any Class IV vessel carrying more than 12 passengers and engaging in chartering, 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:-

Upper level	XXX
Main Deck	XXX
Etc.	XXX
Total number of passengers	XXX
Minimum number of crew	
Minimum number of crew	XXX

Total number of person permitted (Note) x x x

Note: Total number of person permitted is determined by Length x Width x factor. There is no specific rule indicating for each deck. This may be decided by the owner after consulting authorized surveyor / organization on the stability. The seating dimension should be not less than 300 mm x 450 mm and above deck for 150 mm.

3.2 For any Class IV vessel carrying more than 12 passengers and not engaging in chartering, owner is advised to mark spaces as indicated in para 3.1 above or at least the maximum number of passengers and the maximum carrying capacity, in a conspicuous location where most passengers will be accommodated, in Chinese and English.

- 3.3 Lifejacket stowage location should be clearly marked.
- 4 Deck Areas Disallowed for Passengers
- 4.1 The following spaces are not permitted to carry passengers:
 - (a) the area abaft the fore side of the rudder stock on the main deck;
 - (b) the portion of a compartment or of a deck used for the purpose of navigation and fire fighting;
 - (c) machinery compartments, casings and skylights;
 - (d) decks or part of a deck set apart exclusively for the carriage of motor vehicles, luggage, etc;
 - (e) the forward part of the vessel up to the forward bulkhead of the deckhouse or if there is no deckhouse, 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;
 - (f) areas of stairways, stairway landings, hatchways and ventilators;
 - (g) areas permanently occupied by equipment, fittings e.g. inflatable liferafts, hatches, ventilation trunkings, etc;
 - (h) cabins and spaces allocated for the accommodation of the crew;
 - (i) galley/pantry and other service spaces;
 - (j) sanitary spaces;
 - (k) open deck without awning;
 - (1) Spaces where noise level exceeds 85 dB(A), measured at maximum operating speed of propulsion engine, should not be used as passenger space.
- 4.2 An outline guidance plan showing areas to be excluded for measuring passenger space is at Annex 9.

Chapter V

FIRE PROTECTION

(For any vessel carrying not more than 60 passengers)

1 General Requirements

- 1.1 Fire-fighting appliances should be of an approved type. Appliances 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) are acceptable. In any vessel carrying not more than 12 persons, fire-fighting appliances approved by the national maritime authority of their country of manufacture are acceptable.
- 1.2 Portable Fire Extinguishers
- 1.2.1 The approximate fire-extinguishing capabilities of each type of portable fire extinguisher are as shown in the following table: -

L (m) Media	L <mark>≤←</mark> 9	9 <mark>≤ <</mark> L<15	L≥15
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. should 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 should 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 should be stowed near the entrance inside that space.
- 1.2.5 The use of CO_2 fire extinguishers in a confined space is not recommended.
- 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 should not be situated in the same compartment as the main fire pump.
- 1.3.2 A manually operated pump should 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 should be positioned so as to allow at least one jet of water from a single length of fire hose to reach any par Page V-1 normally accessible during navigation. If only one hydrant is provided for the engine room it should be located outside that space and near the entrance.
- 1.4.2 The nozzles should be appropriate to the delivery capacity of the fire pumps fitted, but in any case should have a diameter of not less than 10 mm.

2 Ready availability and Maintenance of Appliances

- 2.1 The appliances should be kept in good order and available for immediate use at all times. 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 appliances should be inspected at intervals of not more than 12 months.

3 Scale of Fire-fighting Appliances

3.1 Provisions of fire-fighting appliances in Survey Regulation Schedule 4 (table 8) are quoted as 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

Vessel registered le			0 < (I) <	157 (I) /		
Fire-fighting apparatus		(L) < 5.5	5.5≤ (L) ≤9	9<(L)< 15	24	(L)≥24
	1.4 kg	1 ⁽¹⁾	2	-	-	-
portable fire extinguisher ⁽²⁾	2.3 kg	-	-	2	-	-
extinguisher ⁽²⁾	4.5 kg	-	-	-	2	2
	engine room	-	-	$2^{(3)}$	$2^{(3)}$	2 ⁽³⁾
		1 (or 1 bailer)	2	2	2	3
main fire numn	power	-	-	-	1 ⁽⁵⁾	1
main fire pump	manual	-	-	-	1	-
emergency fire pump	power	-	-	-	-	1 ⁽⁵⁾

	manual	-	-	-	-	
hydrant		-	-	-	capable of one jet of having a th less than 6 can be dire any part of through a half mozzle	water row of not m which cted on to the vessel lose with a
hose		-	-	-	1	2
nozzle	jet	-	-	-	1	2
HOZZIC	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 should 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.

UNQUOTE

Note: The above quoted content are subjected to the final version of the Survey Regulation after legislation.

3.2 Provisions of fire-fighting appliances in Survey Regulation Schedule 4 (table 1) are quoted as below:-

QUOTE

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

			I			
Vessel : Fire-fighting apparatus	registered length (L)(m)	(L)<15	15≤(L)<24	24≤(L)<60	60≤(L)< 75 ⁽¹⁾	
	passenger accommodation space	1 on each of the contract of t		1 within not more than 10 m walking distance, but at least 2 on each deck		
	wheel house			1		
	galley			1		
portable fire extingui- sher	engine control room			1		
	engine room	3	4	1 for each 750 kW or part thereof of the power outpu of the engine and electric motor, but at least 3 and n more than 6 in each room		
	machinery space	1 within each space				
<fixed co<sub="">2 fire extinguishing system>⁽²⁾ and</fixed>	engine room	-		gas quantity, storage, piping, nozzle, alarm, location and arrangement shall be in accordance with the relevant plans approved under Part 3 of this Regulation		
<fire detection<br="">and alarm system>⁽³⁾</fire>		-		quantity, type arrangement accordance w plans approve of this Regul	e, location and shall be in with the relevant ed under Part 3	
main fire	power		1 ⁽⁴⁾	1 ⁽⁵⁾	1	
pump	manual	-	I C	-	-	
emergency	power			1 ⁽⁴⁾	1 ⁽⁴⁾	
fire pump	manual	-		1	1	
fire main + hose + hydrant + jet nozzle		1 set		1 set to be provided for each pump ⁽⁶⁾		
fireman's axe	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 I vessel or 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

- [Note: (A) The above quoted content are subjected to the final version of the Survey Regulation after legislation.]
 - (B) The fire fighting requirement for a local vessel of 75 m or more in length will be considered based on 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 appliances in Survey Regulation Schedule 4 (table 3) are quoted as below:-

QUOTE

Table 3

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

Vessel Fire- fighting apparatus	registered length (L)(m)	(L)<12	12≤(L)<24	24≤(L)<75 ⁽²⁾		
	accommodation space	1 on each deck		2 on each deck		
	wheel house		1			
portable fire	galley		1			
extingui- sher ⁽³⁾	engine control room	1				
	engine room	2 3		4		
	machinery space	1 within each space				
fire bucket wi	ith lanyard ⁽⁴⁾	1	2	3		
main fire	power	1 ⁽⁵⁾	1 ⁽⁵⁾	1 ⁽⁶⁾		
pump	manual	1	1	-		
emergency	power	_	_	1 (5) and (7)		
fire pump	manual	_	-	1		
fire main + hose + hydrant + jet nozzle		quantity, size, length, type, location and arrangement shall be in accordance with the relevant plans approved under Part 3 of this Regulation		quantity, size, length, type, location and arrangement shall be in accordance with the relevant plans approved under Part 3 of this Regulation ⁽⁸⁾		

Notes:

- (1) (a) A flat-top work barge, a landing pontoon and any other type of local vessel having no engine, oil fuel tank, electrical switchboard and combustible materials on board is not required to be provided with any fire-fighting apparatus.
 - (b) A local vessel that is used or to be used for carrying any dangerous goods other than oil shall be provided with such additional fire-fighting apparatus as the Director may specify in writing.

- (2) 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.
- (3) A Class II vessel that falls within paragraph (b) of Schedule 2 is not required to be provided with any portable fire extinguisher. Instead, such a vessel shall be provided with 1 fire bucket with lanyard.
- (4) Applicable to Category B vessels only. If a fire main is provided, then no fire bucket is required.
- (5) The fire pump and its sea suction shall be situated outside the engine room.
- (6) The fire pump may be propulsion engine driven, provided it can be readily engaged to the engine.
- (7) Only for a Class II vessel that is fitted with any propulsion engine.
- (8) A Class II 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

- [Note: (A) The above quoted content are subjected to the final version of the Survey Regulation after legislation.]
 - (B) The fire fighting requirement for a local vessel of 75 m or more in length will be considered based on 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.

Item 8

2 Stowage of Appliances

2.1 Life saving appliances should be stowed so as to be readily accessible to all persons on

Whenever a local vessel is being used or operated, every life-saving appliance carried on board the vessel shall be –

- in working order;
- (b) ready for immediate use; and
- placed in a position easily accessible. (c)
- 2.2 Lifebuoys should 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 should be stowed in racks or under seats and be clearly marked. They should be evenly distributed according to the disposition of persons on board.

5.1 Provisions of life-saving appliances in Survey Regulation Schedule 3 (table 7) are quoted as below:-

QUOTE

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⁾			
	Vessel registered length (L)(m)	Number		
	(L) < 12	1		
lifebuoy	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.
- The minimum length of buoyant lifeline is -(2)

For (L)<21 m18 m For $(L) \ge 21 \text{ m}$ 27.3 m.

UNQUOTE

[Note: The above quoted content are subjected to the final version of the Survey Regulation after legislation.]

5.2 Provisions of live-savings appliances in Survey Regulation Schedule 3 (table 1) are quoted as below:-

QUOTE

Table 1

(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 shelter waters	red Anywhere within waters of Hong Kong		
lifejacket	any number)	100% adult lifejacket + 5% children lifejacket		
lifebuoy	minimum) 100 number per) Table 2)	minimum number per Table 2		
buoyant lifeline ⁽³⁾	1 for vessel (L)<12 m 2 for vessel (L)≥12 m			
self-igniting light ⁽⁴⁾	2			
VHF (very high frequency) radio installation ⁽⁵⁾	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 scale for a floating restaurant may be reduced by 50% if it is
 - (a) attached to the shore and provided with adequate gangways; or
 - (b) not attached to the shore, but provided with
 - (i) above-water flotation in the form of a steel embarkation pontoon moored alongside; or
 - (ii) steel tenders at both ends capable of being towed to a safe place away from the floating restaurant.
- (3) The minimum length of buoyant lifeline for a Class I vessel or 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.

- (4) Required for a Class I vessel or Class IV vessel that carries more than 100 passengers.
- (5) Required for a ferry vessel that plies outside the Victoria port.

Table 2 Minimum number of lifebuoys as required in Table 1

Vessel registered 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		

UNQUOTE

[Note: The above quoted content are subjected to the final version of the Survey Regulation after legislation.]

5.3 Provisions of live-savings appliances in Survey Regulation Schedule 3 (table 3) are quoted as below:-

QUOTE

Table 3

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

Operation area Life-saving appliances	Specified sheltered waters		Anywhere within waters of Hong Kong	
lifejacket ⁽¹⁾)	Total 100% ⁽³⁾ and (4)	100% adult lifejacket + <5% children lifejacket> (3), (4) and (5)	
lifebuoy ⁽¹⁾	any) number)		minimum number per Table 5	
buoyant	1 for vessel (L)<12 m			
lifeline ⁽⁴⁾ and (6)	2 for vessel (L)≥12 m			
<pre><self-igniting (for="" (l)="" <math="" light="" vessel="">\geq 37 m)>⁽⁵⁾</self-igniting></pre>	2			

Notes:

- (1) (a) For a transportation sampan that falls within paragraph (b) of Schedule 2, at least 1 lifejacket for every person on board and 1 lifebuoy are required.
 - (b) For a work boat that falls within paragraph (b) of Schedule 2, at least 1 lifebuoy is required.
- (2) Lifejacket is not required for
 - (a) a landing platform;
 - (b) a landing pontoon; and
 - (c) a stationary vessel that is a separation barge.
- (3) 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.
- (4) Special requirements for a floating dock
 - (a) 100% lifejacket is required only when any of the tropical cyclone warning signals commonly referred to as No. 8NW, 8SW, 8NE, 8SE, 9 or 10 is in force and any person is staying on board;
 - (b) the total number of lifebuoy provided shall not be less than that required in Table 5, or 1 lifebuoy for every 26 m or part thereof of each of the side wall, whichever is the greater;
 - (c) 4 buoyant lifelines shall be provided and placed at each corner of the dock; and
 - (d) if the dock is not attached to the shore, 1 or more launches shall be provided to carry the workmen to shore

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

UNQUOTE

[Note: The above quoted content are subjected to the final version of the Survey Regulation after legislation.]

SAFETY PRECAUTIONS ON THE PROPER STORAGE AND USE OF PETROL

- 1. No excessive quantity of petrol should be carried on board a vessel.
- 2. If portable container is used to carry petrol, the containers should be of a type approved by the manufacturer of the vessel's engine and fitted with proper air vents, petrol engine and fitted with air vent (if necessary, owner must submit supporting document issued by the manufacturer, e.g. invoice, sale receipt etc.).
- 3. The portable container should be stored in a well ventilated place, if necessary, on the open deck. The containers and all valves and pipes leading from such containers should 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 should not have any fuel leaking, and should be readily accessible for checking of suspected leaks.
- 4. Sources of heat should be kept clear of the storage spaces and caution notices "不准 吸煙 No Smoking" and "不准明火 No Naked Lights" should be displayed in a prominent position when necessary.
- 5. Petrol should 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 should be removed from the storage place which is expected to be unattended for a period of time.

ANNEX 9

Guidance Plan to Determine Passenger Space for Class IV Vessels

(enclosed deck design)
(Area as shown thus be excluded)

