Maritime & Coastguard Agency

MARINE GUIDANCE NOTE

MGN XXX (M)

DRAFT - Guidance on the Merchant Shipping (High Speed Craft) Regulation 202* (SI 202*/****) and the High Speed Craft Codes 1994 and 2000

Notice to all Shipowners, Recognised Organisations, Shipbuilders, Shiprepairers, Ship Masters and Surveyors

This notice should be read with the High Speed Craft (HSC) Codes 1994 and 2000

Summary

This Marine Guidance Note provides guidance to clarify the application of certain requirements in Chapter X of the Annex to the International Convention for the Safety of Life at Sea, 1974 (SOLAS), including the High Speed Craft (HSC) Codes, 1994 and 2000.

1. Introduction/Background

1.1 This MGN provides guidance to assist with the understanding of certain aspects of the International Maritime Organization (IMO) High Speed Craft (HSC) Codes 1994 and 2000, applied in UK law by the Merchant Shipping (High Speed Craft) Regulation 2022 (SI 2022/****) ("the new Regulations"), which the Maritime and Coastguard Agency (MCA) considers do need clarification.

1.2 The new Regulations give effect to updates to Chapter X of the Annex to the International Convention for the Safety of Life at Sea, 1974 (SOLAS), including the HSC Codes, 1994 and 2000 since its last implementation into UK law (when amendments by the Merchant Shipping (Passenger Ships on Domestic Voyages) (Amendment) Regulations 2012 (SI 2012/2636) to the Merchant Shipping (High Speed Craft) Regulations 2004 (SI 2004/0302) came into force). The new Regulations also introduce an ambulatory reference provision to bring into force in UK law any future technical amendments to Chapter X and the Codes at the same time as they come into force internationally, without the requirement for additional secondary legislation. The UK government will retain the power to prevent any such amendments taking effect in UK law.

1.3 International instruments (including SOLAS) not only impose mandatory requirements on ships etc. but also allow discretion as to how to implement certain requirements (often in accordance with internally agreed guidance). Therefore, the international text does not in all cases provide sufficient clarity for the requirements to be fully understood and implemented

domestically. This includes situations, for example, where the international obligation provides that a ship builder, shipowner or operator does something to the satisfaction of the Administration. This MGN therefore provides additional guidance and clarification to assist the reader with compliance with the obligations contained in Chapter X (including the HSC Code 1994 and the HSC Code 2000) where this is considered necessary. However, it should also be borne in mind that the IMO has designed the HSC Codes so as to set risk-based standards. This approach provides additional flexibility over the more traditional, prescriptive approach, but means that fewer definite outcomes can be set out in this MGN. In cases of doubt, the reader should contact their local MCA Marine Office for further clarification.

1.4 This MGN does not cover Chapter X and the Codes provision by provision, but instead addresses only those provisions which are considered to require clarification. This includes some instances where the HSC Codes provide that something must be done to the "satisfaction of the Administration". Where we have not provided any such clarification, this is because there is no single prescriptive arrangement, or a sufficiently small number of options, which can be set out in this MGN.

2. General statement on High Speed Craft (HSC) Codes

2.1 The HSC Codes are risk-based; due to this the overall safety standard of the vessel is assessed holistically and this approach forms the basis for the HSC Codes throughout. The Codes marked a shift in stance by the IMO from wholly prescriptive regulation to a goal-based approach due to the unique and varying nature of these types of vessels. This is explained in the Preamble to each of the HSC Codes 1994 and 2000.

2.2 The Merchant Shipping (High Speed Craft) Regulations 2004 applied the HSC 1994 and 2000 Codes so as to enable updates to them to be given effect in UK law, and require high speed craft to comply with the Codes based on their construction date (or the dates on which they underwent major repairs etc.).

2.3 During the construction of HSC vessels, a significant number of items are required to be done "to the satisfaction of the administration". It is not possible or practical to prescribe all the matters in respect of which the Administration must be satisfied. The high speed craft as-a-whole is risk assessed and the intended aim of the new regulatory framework is assessed along with Failure Mode Effect and Analysis (FMEA) which must be undertaken. It is not prescriptive by intent and to make prescriptive would significantly defeat the intention of the Code and stifle innovation in the industry.

2.4 There are a significant number of intertwining factors that are assessed to decide whether an item which is not prescriptive is acceptable. The following tables identify the areas in respect of which an individual approach is not possible nor an interpretation that would be suitable nor possible to be used in all circumstances.

3. Guidance on the High Speed Craft Code 1994

Section No.	Obligation	Guidance for compliance in UK context
2.2.1	The Administration may require a larger reserve of buoyancy to permit the craft to operate in any of its intended modes. This reserve of buoyancy should be calculated by including only	This will be dealt with on a case-by-case basis. The owner/ builder will need to apply to the MCA at the setup build of the vessel; in consultation with the stability unit, the modes, number of persons, operational area and seasonal limits would be assessed and a risk-based analysis undertaken.

	those compartments which are: .1 watertight; .2 accepted as having scantlings and arrangements adequate to maintain their watertight integrity; and .3 situated in locations below a datum, which may be a watertight deck or equivalent structure of a non-watertight deck covered by a weathertight structure as defined in 2.2.3.1.	
2.6.4	Administrations may permit the use of low density foam or other media to provide buoyancy in void spaces, provided that satisfactory evidence is provided that any such proposed medium is the most suitable alternative and is: .1 of closed cell form if foam, or otherwise impervious to water absorption; .2 structurally stable under service conditions; .3 chemically inert in relation to structural materials with which it is in contact or other substances with which the medium is likely to be in contact (reference is made to 7.4.3.7); and .4 properly secured in place and easily removable for inspection of the void spaces.	The MCA will normally require approved foam or chemicals.
2.7.5	Following any inclining or lightweight survey the master should be supplied with amended stability	The UK administration will take into account any relevant factors including, but not necessarily limited to: a) control of weights and adjustments made; b) quantity of change; c) type of vessel;

	information if the Administration so requires. The information so supplied should be submitted to the Administration for approval, together with a copy thereof for their retention and should incorporate such additions and amendments as the Administration may in any particular case require.	d) the stability margins which were already present in the stability information for the vessel; e) whether damage criteria has been affected by the result; f) the reason for the including or lightweight text. From this and discussion with Stability Unit it may result in a new stability information book or only an addendum. If margins were included in the old Stability Information, the book would only be endorsed as remaining extant.
3.4	Cyclic loads, including those from vibrations which can occur on the craft should not: .1 impair the integrity of structure during the anticipated service life of the craft or the service life agreed with the Administration; .2 hinder normal functioning of machinery and equipment; and .3 impair the ability of the crew to carry out its duties.	The UK will require vessels to adhere to the Noise and Vibration Codes regardless. Where this is not possible, e.g. in a hovercraft cockpit, alternative means will be required, e.g. built in ear defenders with communications headsets used during operation. This decision would be based on the noise measurement results and monitored at future Surveys. If within acceptable limits, the UK would not prescribe a higher standard than that set out in the above Codes.
3.6	If the Administration considers it necessary, it should require full-scale trials to be undertaken in which loadings are determined. Cognizance should be taken of the results where these indicate that loading assumptions or structural calculations have been inadequate.	Full trials are dependent on the craft. If it is a novel design or material where Finite Element Analysis (FEA) could not be used, the UK may require trials with sensors to model actual stress levels. If it is a complex and innovative design, then FEA may be required. The decision would be made by the MCA on the basis of information received from the owner or builder.
7.2.4	"Non-combustible material" is a material which neither burns nor gives off flammable vapours in sufficient quantity for	The UK uses Resolution A.799(19) in this regard.

	self-ignition when heated to approximately 750°C, this being determined **to the satisfaction of the Administration** by an established test procedure.** Any other material is a combustible material. ** Refer to the Improved recommendation on test method for qualifying marine construction materials as non-combustible adopted by the Organization by resolution A.799(19).	
Note 2 to Table 7.4.2	Where adjacent spaces are in the same alphabetical category and a note 2 appears, a bulkhead or deck between such spaces need not be fitted **if deemed unnecessary by the Administration**. For example, a bulkhead need not be required between two store-rooms. A bulkhead is, however, required between a machinery space and a special category space even though both spaces are in the same category.	These cases will be considered by the MCA on a case-by-case basis.
7.7.2.1.8	Where the fire detection system does not include means of remotely identifying each detector individually, no section covering more than one deck within accommodation spaces, service spaces and control stations should	The number of enclosed spaces permitted in each section would depend on the General Arrangement (GA) of the vessel, surrounding spaces, operation, manning, craft type including material, and a risk-based approach would be taken.

	normally be permitted except a section which covers an enclosed stairway. In order to avoid delay in identifying the source of fire, the number of enclosed spaces included in each section should be limited as determined by the Administration. In no case should more than 50 enclosed spaces be permitted in any section. If the detection system is fitted with remotely and individually identifiable fire detectors, the sections may cover several decks and serve any number of enclosed spaces.	
7.7.2.1.9	In passenger craft, if there is no fire detection system capable of remotely and individually identifying each detector, a section of detectors should not serve spaces on both sides of the craft nor on more than one deck and neither should it be situated in more than one zone according to 7.11.1 except that the Administration, if it is satisfied that the protection of the craft against fire will not thereby be reduced, may permit such a section of detectors to serve both sides of the craft and more than one deck. In passenger craft fitted with individually identifiable fire detectors, a section may serve spaces on	The UK will consider this if requested by the vessel owner by assessing the GA of the vessel, surrounding spaces, operation, manning, craft type including material, and a risk-based approach would be taken. NB: "*The same section of detectors may serve spaces on more than one deck if such spaces are located in the fore or aft end of the craft or they are so arranged that they constitute common spaces on different decks (e.g. fan rooms, galleys, public spaces, etc.).*" MSC/Circ.911

	both sides of the craft and on several decks.	
7.7.2.1.11	Detectors should be operated by heat, smoke or other products of combustion, flame, or any combination of these factors. Detectors operated by other factors indicative of incipient fires may be considered by the Administration provided that they are no less sensitive than such detectors. Flame detectors should only be used in addition to smoke or heat detectors.	The UK will only consider detectors operated by factors other than heat, smoke or other products of combustion, or flame if they are no less sensitive than such detectors.
7.7.2.2.5	The Administration may require or permit other spacings based upon test data which demonstrate the characteristics of the detectors	The UK will make any decision based on evidence available.
7.7.2.3.2	Smoke detectors required by paragraph 7.7.2.2.2 should be certified to operate before the smoke density exceeds 12.5% obscuration per metre, but not until the smoke density exceeds 2% obscuration per metre. Smoke detectors to be installed in other spaces should operate within sensitivity limits to the satisfaction of the Administration having regard to the avoidance of detector insensitivity or over-sensitivity.	The UK will consider this if requested by the vessel owner by assessing the GA of the vessel, surrounding spaces, operation, manning, craft type including material, and a risk-based approach would be taken.
7.7.2.3.4	At the discretion of the Administration, the permissible	The UK allows this in such spaces where it is evidenced that the normal operating condition is above this temperature resulting in spurious false alarms and

	temperature of operation of heat detectors may be increased to 30°C above the maximum deckhead temperature in drying rooms and similar spaces of a normal high ambient temperature.	where a smoke alarm is not appropriate. This is normally deduced when the vessel is in operation and sea trials, but generally not before. It may however be expected from the planning stage in spaces such as the galley, drying rooms and Saunas. The temperature of operation of heat detectors in spaces as required by the Code may be 130°C, in saunas up to 140°C.
7.7.6.1.2	The use of a fire-extinguishing medium which, in the opinion of the Administration, either by itself or under expected conditions of use will adversely affect the earth's ozone layer and/or gives off toxic gases in such quantities as to endanger persons should not be permitted.	The medium in use would be Marine Equipment Directive (MED) and Recognised Organisation (RO) type approved and assessed under the Country Ozone depleting substances requirements. This would be required to meet MARPOL Annex VI.
7.7.8.5	Each fire hose should be of non-perishable material and have a maximum length approved by the Administration. Fire hoses, together with any necessary fittings and tools, should be kept ready for use in conspicuous positions near the hydrants. All fire hoses in interior locations should be connected to the hydrants at all times. One fire hose should be provided for each hydrant as required by .4.	Hose length will be assessed and tested during the sea trails and mandatory drill. An assessment will be made to establish that the hoses onboard are suitable for the space(s) they are intended to serve. For this reason no specific definition of what is acceptable is possible, however, MSC/Circ.911 states that *"Fire hoses should have a length of:* *- at least 10 m,* *- not more than 15 m in machinery spaces,* *- not more than 20 m for other spaces and open decks.* *Ships carrying dangerous goods should be provided with 3 additional hoses and 3 additional Nozzles"* The UK will use a common-sense approach to the satisfaction of the attending surveyor that the equipment can be used properly e.g. a situation where a hose is liable to kink would not be acceptable.
7.8.2	Fixed fire-extinguishing system* Each special category space should be fitted with an approved fixed pressure water-	Testing of systems will be considered as appropriate.

	spraying system for manual operation which should protect all parts of any deck and vehicle platform in such space, provided that the Administration may permit the use of any other fixed fire-extinguishing system that has been shown by full-scale test in conditions simulating a flowing petrol fire in a special category space to be not less effective in controlling fires likely to occur in such a space. * Refer to the Recommendation on fixed fire-extinguishing systems for special category spaces, adopted by the Organization by resolution A.123(V).	
7.10.1.3	The Administration may require additional sets of personal equipment and breathing apparatus, having due regard to the size and type of the craft.	The UK will make decisions on this on a case by case basis, considering any relevant factors. This may include: a) on a large vessel, if the minimum number of sets are a long way from a position, to save time additional sets may be required. This would be more critical depending upon the vessel material, function and service area; b) more sets may be required where there is the possibility of the Breathing Apparatus (BA) station becoming cut off or un useable in the event of a fire; c) depending on the type of craft involved, the loss of a system may result in the vessel have reduced capability to react to a fire and proceed to a port of refuge as quickly as under normal conditions. The above factors would feed into the FMEA Report.
7.10.3.2.1	A breathing apparatus of an approved type which may be either: .1 a smoke helmet or smoke mask which	The UK recognises clothing meeting the requirements of ISO 6942:2002 as meeting the necessary requirements.

	should be provided with a suitable air pump and a length of air hose sufficient to reach from the open deck, well clear of hatch or doorway, to any part of the holds or machinery spaces. If, in order to comply with this subparagraph, an air hose exceeding 36 m in length would be necessary, a self-contained breathing apparatus should be substituted or provided in addition as determined by the Administration;	MSC/Circ.911 - Interpretations of Fire Protection-Related Provisions of the HSC Code provides further guidance.
8.1.3	Before giving approval to life-saving appliances and arrangements, the Administration should ensure that such life-saving appliances and arrangements: .1 are tested to confirm that they comply with the requirements of this chapter, in accordance with the recommendations of the Organization;* or .2 have successfully undergone, to the satisfaction of the Administration, tests which are substantially equivalent to those specified in those recommendations	The UK requires compliance with MSC.226(82) - Adoption of Amendments to the Revised Recommendation on Testing of Life-Saving Appliances, as Amended. See also MSC/Circ.980 - Standardized Life-Saving Appliance Evaluation and Test Report Forms. Equivalence or Alternative Design Arrangements are assessed on a case-by-case basis.
8.1.4	Before giving approval to novel life-saving appliances or arrangements, the Administration should ensure that such appliances or arrangements: .1 provide safety standards at least equivalent to the requirements of this	The UK uses IMO guidance, in particular A.520(13) - Code of Practice for the Evaluation, Testing and Acceptance of Prototype Novel Life-Saving Appliances and Arrangement on a case by case basis.

	chapter and have been evaluated and tested in accordance with the recommendations of the Organization, or .2 have successfully undergone, to the satisfaction of the Administration, evaluation and tests which are substantially equivalent to those recommendations.	
8.1.6	Except where otherwise provided in this Code, life-saving appliances required by this chapter for which detailed specifications are not included in part C of chapter III of the Convention should be to the satisfaction of the Administration.	The UK will consider these on a case-by-case basis.
8.9.1.2	Before giving approval to novel life-saving appliances or arrangements, the Administration should ensure that such appliances or arrangements: .1 provide safety standards at least equivalent to the requirements of this chapter and have been evaluated and tested in accordance with the recommendations of the Organization;* or .2 have successfully undergone, to the satisfaction of the Administration, evaluation and tests which are substantially equivalent to those recommendations.	The UK will consider these on a case-by-case basis. See the IMO Life-Saving Appliances (LSA) Code.
8.9.2	Maintenance .1 Instructions for on-	The UK requires compliance with IMO Resolution MSC.81(70) - Revised Recommendation on Testing of

	board maintenance of life-saving appliances complying with the requirements of regulation III/52 of the Convention should be provided and maintenance should be carried out accordingly. .2 The Administration may accept, in lieu of the instructions required by .1, a shipboard planned maintenance programme which includes the requirements of regulation III/52 of the Convention.	Life-Saving Appliances as amended, and also requires LSA items to be included in the planned maintenance system.
8.9.7.2	In addition to, or in conjunction with, the servicing intervals of marine evacuation systems (MES) required above, each marine evacuation system should be deployed from the craft on a rotational basis at intervals to be agreed by the Administration provided that each system is to be deployed at least once every six years.	See MGN 558 (M) Life-Saving Appliances - Marine Evacuation Systems (MES) - Servicing and Deployments states our requirements.
8.10.2	Where the Administration considers it appropriate, in view of the sheltered nature of the voyages and the suitable climatic conditions of the intended area of operations, the Administration may permit the use of open reversible inflatable liferafts complying with annex 10 on category	The UK uses the criteria within Annex 10 of the HSC Code 1994 in line with factors stated i.e. the nature of voyage etc.
10.2.4.7.2	Other oil-level gauges may be used in place of sounding pipes.	The UK will assess this on a case-by-case basis.

	Such means should be subject to the following conditions: .1 In passenger craft, such means should not require penetration below the top of the tank and their failure or overfilling of the tanks will not permit release of fuel. .2 The use of cylindrical gauge glasses should be prohibited. In cargo craft, the Administration may permit the use of oil-level gauges with flat glasses and self-closing valves between the gauges and fuel tanks. Such other means should be acceptable to the Administration and should be maintained in the proper condition to ensure their continued accurate functioning in service.	
10.2.4.9	Oil fuel pipes and their valves and fittings should be of steel or other approved material, except that restricted use of flexible pipes should be permissible in positions where the Administration is satisfied that they are necessary. Such flexible pipes and end attachments should be of approved fire-resisting materials of adequate strength and should be constructed to the satisfaction of the Administration.	The UK uses ISO 15540:2016(en) Ships and marine technology — Fire resistance of non-metallic hose assemblies and non-metallic compensators — Test methods, and ISO 15541:2016, Ships and marine technology — Fire resistance of non-metallic hose assemblies and non-metallic compensators — requirements for the test bench to prove equivalence.
10.3.7	Internal diameters of suction branches	The UK will consider good engineering practices and evidence through provided calculations.

	should meet the requirements of the Administration but should not be less than 25 mm. Suction branches should be fitted with effective strainers.	
12.2.9	The main busbars should normally be subdivided into at least two parts which should be connected by a circuit-breaker or other approved means. So far as is practicable, the connection of generating sets and any other duplicated equipment should be equally divided between the parts. Equivalent arrangements may be permitted to the satisfaction of the Administration	The UK would consider accepting circuit breakers or fuses of suitable rating and characteristics as a suitable means for subdivision of switchboards.
12.6.1.2	The Administration may require additional precautions for portable electrical equipment for use in confined or exceptionally damp spaces where particular risks due to conductivity may exist.	The voltage of electrical supplies to portable and transportable electrical apparatus in all such spaces should be as low as is practicable for the application. General guidance is given in BS 8450:2006, Annex A, Code of practice for installation of electrical and electronic equipment in ships.
12.6.2	Main and emergency switchboards should be so arranged as to give easy access, as may be needed, to apparatus and equipment, without danger to personnel. The sides and the rear and, where necessary, the front of switchboards should be suitably guarded. Exposed live parts having voltages to earth exceeding a voltage	The voltage referred to should be taken as 50V. Platforms at the front and rear of switchboard must have non-slip surfaces. Where access to live parts within switchboard is normally possible, the surfaces must, in addition be insulated by non-conducting mat or gratings.

	to be specified by the Administration should not be installed on the front of such switchboards. Where necessary, nonconducting mats or gratings should be provided at the front and rear of the switchboard.	
12.6.3	When a distribution system, whether primary or secondary, for power, heating or lighting, with no connection to earth is used, a device capable of continuously monitoring the insulation level to earth and of giving an audible or visual indication of abnormally low insulation values should be provided. For limited secondary distribution systems the Administration may accept a device for manual checking of the insulation level.	Where visual indication only is provided, it must be in a position where it will be included in routine checks, or will be apparent to the crew within 24 hours.
12.6.4.1	Except as permitted by the Administration in exceptional circumstances, all metal sheaths and armour of cables should be electrically continuous and should be earthed.	The UK allows relaxation for limited instrumentation circuits where the manufacturers of the devices require cable sheaths not to be earthed.
12.6.4.3	All electric cables and wiring external to equipment should be at least of a flame-retardant type and should be so installed as not to impair their original flame-retarding properties. Where necessary for particular applications, the Administration may	Cable runs should, as far as practicable, avoid routes which pass over or near the top of diesel engines and oil-fired equipment, or near to hot surfaces e.g. diesel engine exhaust systems. Where there is no alternative route, cables should be protected from heat and fire damage. Such fire protection may be in the form of a steel plate or trunk, due account being taken of the effects on cable rating, if appropriate.

	permit the use of special types of cables such as radio frequency cables, which do not comply with the foregoing.	
12.6.4.4	Where cables which are installed in hazardous areas introduce the risk of fire or explosion in the event of an electrical fault in such areas, special precautions against such risks should be taken to the satisfaction of the Administration.	Cable for non-intrinsically safe circuits in the hazardous areas should be either: .1 of the mineral insulated metal covered type; or .2 protected by electrically continuous metal sheathing or metallic wire armour, braid or Tape; or .3 enclosed in screwed heavy gauge steel solid drawn or seam welded and galvanised conduit. The conduit should be made gas tight with respect to hazardous areas.
12.6.5.1	Each separate circuit should be protected against short circuit and against overload, except as permitted in 12.5, or where the Administration may exceptionally otherwise permit.	The UK will consider this on a case by case basis using justification by calculation and assessment of risk and mitigation.
12.7.4.4.1	For a period of 12h; the navigational equipment as required by chapter 13. Where such provision is unreasonable or impracticable, the Administration may waive this requirement for craft of less than 5,000 gross tonnage.	The UK would consider this for short, restricted voyages only i.e., if the normal operating crossing is 4 hours, search and rescue facilities are close and depending on the business of the shipping lane it may be possible to reduce this criteria based on evidence provided.
12.7.4.6	For a period of 10 min, power drives for directional control devices including those required to direct thrust forward and astern, unless there is a manual alternative acceptable to the Administration as complying with 5.2.3.	The UK may consider manual alternatives to hand operated solenoids, valves, tillers, air driven pumps which are connected in an emergency. These are assessed on a case by case basis and must be proven during sea trials.

13.1.1 – 13.1.3	13.1.1 This chapter covers equipment which relates to the navigation of the craft as distinct from the safe functioning of the craft. The following paragraphs represent the minimum requirements for normal safe navigation unless it is demonstrated to the Administration that an equivalent level of safety is achieved by other means. 13.1.2 The equipment and its installation should be to the satisfaction of the Administration. 13.1.3 The Administration should determine to what extent the provisions of this chapter do not apply to craft below 150 gross tonnage.	The UK would consider alternative means on a case by case basis. Only Marine Equipment Directive (MED) (in accordance with the Merchant Shipping (Marine Equipment) Regulations 2016) or UK equivalent approved equipment will be permitted. A flux gate compass may be considered in lieu of magnetic compass with duplication.
13.7.1	A rate-of-turn indicator should be provided unless the Administration determines otherwise. Means should be provided to warn the operator if an operationally dictated maximum rate of turn is being reached.	The UK would consider this on a case by case basis.
13.16.1	All equipment to which this chapter applies should be of a type approved by the Administration. Subject to 13.13.2, such equipment should conform to performance standards not inferior to those adopted by the Organization.	MED equipment or UK equivalent is required by the UK on HSC.

15.3.1	The operating station should be placed above all other superstructures so that the operating crew are able to gain a view all-round the horizon from the navigating workstation. Where it is impractical to meet the requirements of this paragraph from a single navigating workstation, the operating station should be designed so that an all-round view of the horizon is obtained using two navigating workstations combined or any other means to the satisfaction of the Administration.	The UK requires compliance with the prescriptive requirements of the Code.
15.3.4	Where it is considered necessary by the Administration, the field of vision from the navigating workstation should permit the navigators from this position to utilize leading marks astern of the craft for track monitoring.	The UK requires compliance with the prescriptive requirements of the Code.
15.4.10	In craft where the Administration considers the provision of a safety belt necessary for use by the operating crew, it should be possible for those operating crew members, with their safety belts correctly worn, to comply with 15.4.4 except in respect of controls which it can be shown will only be required on very rare occasions and which are not associated	The UK will assess the situation including the effect on crew on a case by case basis during heavy weather trials.

	with the need for safety restraint.	
15.5.8	If considered necessary by the Administration, the operating compartment should be provided with a suitable table for chart work. There should be facilities for lighting the chart. Chart table lighting should be screened.	If the backup arrangement to ECDIS is nautical paper charts, the UK will require a suitable chart table to be fitted.
18.1.1	The High Speed Craft Safety Certificate, the Permit to Operate High Speed Craft or certified copies thereof, and copies of the route operational manual, craft operating manual, and a copy of such elements of the maintenance manual as the Administration may require, should be carried on board.	The UK will require the items stated and the maintenance manual records.
18.1.3.17	Arrangements to ensure that equipment is maintained in compliance with the Administration's requirements, and to ensure co-ordination of information as to the serviceability of the craft and equipment between the operating and maintenance elements of the operator's organization;	The MCA requires the equipment to be maintained in accordance with the manufacturer's instructions, plus in compliance with any other relevant UK legislation relating to it where this imposes additional requirements.
18.2.1.17	…in particular, the manual should provide information, in clearly defined chapters approved specifically by the Administration, relating to:	The UK would not require anything other than what is stated in the paragraph.

	.17.1 indication of emergency situations or malfunctions jeopardizing safety, required actions to be taken and any consequential restrictions on operation of the craft or its machinery; .17.2 evacuation procedures; .17.3 operating limitations including the worst intended conditions; .17.4 limiting values of all machinery parameters requiring compliance for safe operation. In regard to information on machinery or system failures, data should take into account the results of any FMEA reports developed during the craft design.	
18.3.1	The level of competence and the training considered necessary in respect of the master and each crew member should be laid down and demonstrated in the light of the following guidelines to the satisfaction of the Administration in respect of the particular type and model of craft concerned and the service intended. More than one crew member should be trained to perform all essential operational tasks in both normal and emergency situations.	The type rating training revalidation and requirements are set out MSN 1740 (M) - Training and Certification of Officers and Crew on High-Speed Craft. These must be approved by the MCA. MSN 1740(M): https://www.gov.uk/government/publications/msn-1740-training-and-certification-of-officers-and-crew-on-high-speed-craft
18.3.2	The Administration should specify an appropriate period of operational training	The Master and all officers having an operational role should hold a Route and Craft specific Type Rating Certificate issued on behalf of the MCA (for UK Flag vessels) and all other crew members should complete

	for the master and each member of the crew and, if necessary, the periods at which appropriate re-training should be carried out.	type rating training before being employed on a craft – refer to MSN 1740(M) Training and Certification of Officers and Crew on High Speed Craft and MGN 26(M) High Speed Craft Training – Further Guidance on Course Approval and Certification. MGN 26(M): https://www.gov.uk/government/publications/mgn-026-hsc-further-guidance-on-course-approval-certification
18.3.5	The type rating certificate should be re-validated every two years and the Administration should lay down the procedures for re-validation.	See MSN 1740 (M) - Training and Certification of Officers and Crew on High-Speed Craft:https://www.gov.uk/government/publications/msn-1740-training-and-certification-of-officers-and-crew-on-high-speed-craft cover type rating training and the approval.
18.3.7	The Administration should specify standards of physical fitness and frequency of medical examinations having regard to the route and craft concerned.	Advice on UK medical certification requirements can be found in MSN 1887(M): https://www.gov.uk/government/publications/msn-1887-maritime-labour-convention-medical-certification and on GOV.UK at the following link: https://www.gov.uk/guidance/seafarers-medical-certification-guidance
18.5.8	The date when musters are held, details of abandon craft drills and fire drills, drills of other life- saving appliances, enclosed space entry and rescue drills, and onboard training should be recorded in such logbook as may be prescribed by the Administration.	Vessels must carry Log Books in accordance with the Merchant Shipping (Official Log Books) Regulations 1981 (SI 1981/569).
19.2.1 – 19.2.2	.1 routine preventive inspection and maintenance should be performed to a schedule approved by the Administration, which should have regard at least in the first instance to the manufacturer's schedule; .2 in the performance of maintenance tasks, due regard should be paid to maintenance manuals, service bulletins acceptable to the Administration	The MCA requires the equipment to be inspected and maintained in accordance with the manufacturer's instructions, maintenance manuals, service bulletins, and notices / instructions issued by the MCA, plus in compliance with any other relevant UK legislation relating to it where this imposes additional requirements.

	and to any additional instructions of the Administration in this respect;	

4. Guidance on the High Speed Craft Code, 2000

Section No.	Obligation	Guidance for compliance in UK context
2.2.7.1	…Conformity with the requirements of organizations recognized by the Administration in accordance with regulation XI/1 of the Convention may be considered to possess adequate strength.	The UK will accept compliance with the Class Rules of any UK approved Recognised Organisation (RO).
2.2.7.2	For doors in weathertight superstructures, hose tests shall be carried out with a water pressure from the outside in accordance with specifications at least equivalent to those acceptable to the Organization.	Arrangements complying with ISO 6042 will be deemed satisfactory by the UK.
2.2.8.4.2	Ventilators the coamings of which extend to more than one metre above the deck or which are fitted to decks above the datum need not be fitted with closing arrangements unless they face forward or are specifically required by the Administration.	The UK does not normally require closings in this situation, however, in the instance of a down flooding point a form of closing arrangement would be expected. This would be reviewed on a case by case basis.
2.8	... The Administration may accept the use of an electronic loading and stability computer or equivalent means for this purpose.	The UK accepts the use of electronic loading and stability. The MCA's Instructions to Surveyors (MSIS 34) refer: https://www.gov.uk/government/publications/international-hsc-code-2000-2008-edition-msis-34 and MSIS 3 section 5.5 has further information: https://www.gov.uk/government/publications/passenger-ship-construction-classes-i-ii-and-ii-a-msis-3 In certain cases, it may be possible for vessels to be exempted from the requirement to calculate loading and stability prior to departure. Examples of where an exemption may be considered are as follows:

		1. Where a vessel makes regular voyages to and from the same place in conditions of loading which correspond closely to conditions in the approved Stability Information Booklet. 2. Where the maximum deadweight which a ship is capable of carrying does not exceed x tonnes / y % lightship displacement. Values of x and y can be attained from MCA Survey and Inspection. 3. Where the actual draught / deadweight does not exceed z % of the subdivision draught / maximum. Values of z can be attained from MCA Survey and Inspection. In cases 1 - 3 the following procedures should be put in place: - Before the ship departs port, confirmation will be required that the actual condition of loading corresponds closely to one of the approved loading conditions contained in the Stability Information Book. - The approved loading condition corresponding to the actual loading condition is to be recorded in a book retained on board for this purpose. - The approved loading conditions should reflect the vessels normal operating pattern and should display sufficient reserve below the maximum allowable KG to account for minor variations in trim, cargo distribution and free surface moment etc. (KG is the vertical distance (along the ship's centreline) between the keel and the Vertical Centre of Gravity (VCG)) 4. Where the approved loading conditions assume a pessimistic (high) VCG for cargo and it is shown that the maximum allowable VCG cannot be exceeded in any practical loading condition. - In these cases, it will be sufficient for the Master to determine the draught and trim prior to departure and confirm that these lie within the limiting range. - The actual draught and trim should be recorded in a book retained onboard for this purpose. It should be noted that when the vessel carries cargo items which cannot readily be confirmed as having a VCG below the cargo VCG assumed in the approved loading conditions, a full calculation of the intended loading condition must be made prior to departure, using the procedure contained in the approved Stability Information Booklet. Owners wishing to exercise these options are advised to refer their proposals to MCA Survey and Inspection and Stability Unit.
4.2.2	…….. The public address system and its performance standards shall be	The UK will assess arrangements in accordance with MSC/Circ.808 and the Code on Alerts and Indicators, 2009 in Resolution A.1021(26)*

	approved by the Administration having regard to the recommendations developed by the Organization.*	
7.5.6.8	……. The use of cylindrical gauge glasses is prohibited, except for cargo craft where the use of oil-level gauges with flat glasses and self-closing valves between the gauges and fuel tanks may be permitted by the Administration. ……	The UK will assess this on a case by case basis**.**
7.10.1.3	The Administration may require additional sets of personal equipment and breathing apparatus, having due regard to the size and type of the craft.	The UK will make decisions on this on a case by case basis, considering any relevant factors. This may include: a) on a large vessel, if the minimum number of sets are a long way from a position, to save time additional sets may be required. This would be more critical depending upon the vessel material, function and service area; b) more sets may be required where there is the possibility of the Breathing Apparatus (BA) station becoming cut off or un useable in the event of a fire; c) depending on the type of craft involved, the loss of a system may result in the vessel have reduced capability to react to a fire and proceed to a port of refuge as quickly as under normal conditions. The above factors would feed into the Finite Element Analysis (FEA) Report.
7.17.3.1.2	The quantity of water delivered shall be capable of simultaneously supplying the arrangements required by 7.17.3.1.3 for the largest designated cargo space and the four nozzles of a size and at a pressure as specified in 7.7.5, capable of being trained on any part of the cargo space when empty. This	This will be assessed on a case by case basis and will be based on a number of factors to review the risk holistically.

	requirement shall be met by the total capacity of the main fire pump(s) not including the capacity of the emergency fire pump, if fitted. This amount of water may be applied by equivalent means to the satisfaction of the Administration.	
7.17.3.1.5	The requirements of 7.17.3.1.1 to 7.17.3.1.4 may be fulfilled by a water spray system approved by the Administration based on the standards developed by the Organization* , provided that the amount of water required for fire-fighting purposes in the largest cargo space allows simultaneous use of the water spray system plus four jets of water from hose nozzles in accordance with 7.17.3.1.2.	The UK refers to paragraphs 9.2, 9.3 and 9.4 of the Interim guidelines for open-top containerships (MSC/Circ.608/Rev.1) for standards developed by the Organization. Case by case basis for alternatives / innovative solutions will be considered.
8.1.2	Except where otherwise provided in this Code, the life-saving appliances and arrangements required by this chapter shall meet the detailed specifications set out in chapter III of the Convention and the LSA Code and be approved by the Administration.	LSA meeting the requirements of Chapter III of SOLAS and the LSA Code will be accepted by the UK administration.
8.1.6	Except where otherwise provided in this Code, life-saving appliances required by this chapter for which detailed specifications are not included in the LSA Code shall be to	The UK will consider these situations on a case by case basis. The UK uses IMO MSC.1/Circ.1455 Guidelines For The Approval Of Alternatives And Equivalents as provided for in various IMO Instruments and Guidelines on alternative design and arrangements for SOLAS Chapters II-1 and III (MSC.1/Circ.1212) can be used as a basis for application.

	the satisfaction of the Administration.	
8.1.8	Procedures adopted by the Administration for approval shall also include the conditions whereby approval would continue or would be withdrawn.	This is for novel arrangements.
8.6.1	The Administrations may permit the use of adjustable securing and/or bowsing lines at exits where more than one survival craft is used.	The UK permits this on domestic HSC where Open Reversible Liferafts (ORL) are used, and may so permit in other places as multiple ORLs are "stacked". Further guidance is contained in the MCA's Instructions to Surveyors MSIS 24: https://www.gov.uk/government/publications/high-speed-craft-international-safety-code-msis-24
10.3.7	Internal diameters of suction branches shall meet the requirements of the Administration but shall not be less than 25 mm.	The UK will consider good engineering practices and evidence through provided calculations.
12.6.3	…For limited secondary distribution systems the Administration may accept a device for manual checking of the insulation level.	Where visual indication only is provided, it must be in a position where it will be included in routine checks, or will be apparent to the crew within 24 hours.
12.6.4.4	Where cables which are installed in hazardous areas introduce the risk of fire or explosion in the event of an electrical fault in such areas, special precautions against such risks shall be taken to the satisfaction of the Administration.	Cable for non-intrinsically safe circuits in the hazardous areas should be either: .1 of the mineral insulated metal covered type; or .2 protected by electrically continuous metal sheathing or metallic wire armour, braid or Tape; or .3 enclosed in screwed heavy gauge steel solid drawn or seam welded and galvanised conduit. The conduit should be made gas tight with respect to hazardous areas.
12.6.10	The following additional requirements from .1 to .7 shall be met, and requirements from .8 to .13 shall be met also for non-metallic craft: .1 The electrical distribution voltages throughout the craft may be either direct current or alternating current and shall not	Higher voltages would be accepted for propulsion only as per 12.6.10.2 to 13 of the MCA's Instructions to Surveyors MSIS 24: https://www.gov.uk/government/publications/high-speed-craft-international-safety-code-msis-24 . For other items, the MCA would consider them on a case-by-case basis.

	exceed: .1.1 500 V for cooking, heating and other permanently connected equipment; and .1.2 250 V for lighting, internal communications and receptacle outlets. The Administration may accept higher voltages for propulsion purposes.	
12.8.2.2.5	…for a period of 10 min, power drives for directional control devices, including those required to direct thrust forward and astern, unless there is a manual alternative acceptable to the Administration as complying with 5.2.3.	The UK may consider manual alternatives to hand operated solenoids, valves, tillers, air driven pumps which are connected in an emergency. These are assessed on a case by case basis and must be proven during sea trials.
13.1.2	The equipment and its installation shall be to the satisfaction of the Administration. The Administration shall determine to what extent the provisions of this chapter do not apply to craft below 150 gross tonnage.	The UK would consider alternative means on a case by case basis. Only Marine Equipment Directive (MED) equipment will be permitted. A flux gate compass may be considered in lieu of magnetic compass with duplication.
13.17.1	All equipment to which this chapter applies shall be of a type approved by the Administration. Such equipment shall conform to performance standards not inferior to those adopted by the Organization.	MED equipment is required by the UK on a HSC.
13.17.2	The Administration shall require that manufacturers have a quality control system audited by a competent authority to ensure continuous compliance with the type approval	This is undertaken as part of what was the Marine Equipment Directive (MED) approval process which must be from a UK approved Recognised Organisation (RO). But see MIN 590(M+F) Amendment 4 for UK conformity assessment procedures for marine equipment following the transition period: https://www.gov.uk/government/publications/min-590-amendment-4-mf-uk-conformity-assessment-

	conditions. Alternatively, the Administration may use final product verification procedures where compliance with the type approval certificate is verified by a competent authority before the product is installed on board craft.	procedures-for-marine-equipment-following-the-transition-period The MED also covers testing of one-off products.
14.15.6	On craft engaged on voyages in sea areas A1 and A2, the availability shall be ensured by using such methods as duplication of equipment, shore-based maintenance or at-sea electronic maintenance capability, or a combination of these, as may be approved by the Administration.	The UK will consider these on a case by case basis.
14.15.7	On craft engaged on voyages in sea areas A3 and A4, the availability shall be ensured by using a combination of at least two methods, such as duplication of equipment, shore-based maintenance or at-sea electronic maintenance capability, as may be approved by the Administration, taking into account the recommendations of the Organization.**	The UK will consider these on a case by case basis. Guidance already exists within the High Speed Craft Code 2000 (which is cross-referenced in the 1994 Code) in the footnote to 14.15.7 – *"Administrations should take account of the Radio maintenance guidelines for the global maritime distress and safety system (GMDSS) related to sea areas A3 and A4, adopted by the Organization by resolution A.702(17)".*
14.15.8	However, for craft operating solely between ports where adequate facilities for shore-based maintenance of the radio installations are available and provided no journey between two such ports exceeds six hours,	The UK will consider exemptions on a case by case basis.

	then the Administration may exempt such craft from the requirement to use at least two maintenance methods. For such craft at least one maintenance method shall be used.	
14.16.1	Every craft shall carry personnel qualified for distress and safety radiocommunication purposes to the satisfaction of the Administration.	Requirements are specified in the Safe Manning Document, and are dependent on the size and area of operation of the vessel. In the event it is not shown on the Safe Manning document, the Permit to Operate would contain this information. The UK will expect a General Operator's Certificate in this situation.
14.17	A record shall be kept, to the satisfaction of the Administration and as required by the Radio Regulations, of all incidents connected with the radiocommunication service which appear to be of importance to safety of life at sea.	The UK requires vessels to maintain a radio log in a format to allow verification. There is no specified format for this.
15.3.1	Where it is impractical to meet the requirements of this paragraph from a single navigating workstation, the operating station shall be designed so that an all-round view of the horizon is obtained by using two navigating workstations combined or by any other means to the satisfaction of the Administration.	The UK requires compliance with the prescriptive requirements of the Code.
15.3.4	Where it is considered necessary by the Administration, the field of vision from the navigating workstation shall permit the navigators from this position to utilize leading marks astern of the craft for track monitoring.	The UK requires compliance with the prescriptive requirements of the Code.

15.5.8	If considered necessary by the Administration, the operating compartment shall be provided with a suitable table for chart work. There shall be facilities for lighting the chart. Chart-table lighting shall be screened.	If the vessel's backup arrangement to ECDIS is the use of nautical paper charts, the UK will require a suitable chart table to be fitted.
18.1.1	The High-Speed Craft Safety Certificate, the Permit to Operate High-Speed Craft or certified copies thereof, and copies of the route operational manual, craft operating manual, and a copy of such elements of the maintenance manual as the Administration may require shall be carried on board.	The UK will require the items stated and the maintenance manual records.
18.1.3.17	…arrangements to ensure that equipment is maintained in compliance with the Administration's requirements, and to ensure co-ordination of information as to the serviceability of the craft and equipment between the operating and maintenance elements of the operator's organization;	The MCA requires the equipment to be maintained in accordance with the manufacturer's instructions, plus in compliance with any other relevant UK legislation relating to it where this imposes additional requirements.
18.1.4	The Administration shall determine the maximum allowable distance from a base port or place of refuge after assessing the provisions made under 18.1.3.	The UK will determine this on a case by case basis.
18.3.2	The Administration shall specify an appropriate period of operational training for the master and each member of the crew	UK requirement is in accordance with the Merchant Shipping (Standards of Training, Certification and Watchkeeping) Regulations 2015 (SI 2015/782). See MSN 1740(M) https://www.gov.uk/government/publications/msn-1887-maritime-labour-convention-medical-certification

	and, if necessary, the periods at which appropriate retraining shall be carried out.	and GOV.UK pages: https://www.gov.uk/topic/working-sea/training-certification
18.3.5	The type rating certificate shall be re-validated every two years and the Administration shall lay down the procedures for re-validation.	The UK requirement is in accordance with the Merchant Shipping (Standards of Training, Certification and Watchkeeping) Regulations 2015 (SI 2015/782) and https://www.gov.uk/government/publications/msn-1740-training-and-certification-of-officers-and-crew-on-high-speed-craft and GOV.UK pages: https://www.gov.uk/topic/working-sea/training-certification
18.3.7	The Administration shall specify standards of physical fitness and frequency of medical examinations, having regard to the route and craft concerned.	The UK requirement is as per the Merchant Shipping (Maritime Labour Convention) (Medical Certification) Regulations 2010 (SI 2010/737) and MSN 1887(M): https://www.gov.uk/government/publications/msn-1887-maritime-labour-convention-medical-certification and GOV.UK pages: https://www.gov.uk/guidance/seafarers-medical-certification-guidance
18.5.8.1	The date when musters are held, details of abandon craft drills and fire drills, drills of other life-saving appliances, enclosed space entry and rescue drills, and onboard training shall be recorded in such log-book as may be prescribed by the Administration.	Vessels must carry Log Books in accordance with the Merchant Shipping (Official Log Books) Regulations 1981 (SI 1981/569) as amended.

More Information

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