

GUIDANCE FOR HIGH SPEED CRAFT

Guidance for High Speed Craft

2013 AMENDMENT NO.1

Notice No.31 30th May 2013

Resolved by Technical Committee on 4th February 2013

ClassNK
NIPPON KAIJI KYOKAI

“Guidance for high speed craft” has been partly amended as follows:

Part 14 SPECIAL REQUIREMENTS FOR CRAFT ENGAGED IN INTERNATIONAL VOYAGE

Chapter 1 GENERAL

1.1 General

Paragraph 1.1.1 has been amended as follows.

1.1.1 Application

1 With regard to requirement stipulated in 7.3.1.3 of *THE INTERNATIONAL CODE OF SAFETY FOR HIGH SPEED CRAFT*, Stairway may be categorised as areas of minor fire hazard.

2 With regard to requirement stipulated in 7.4.2.3 of *THE INTERNATIONAL CODE OF SAFETY FOR HIGH SPEED CRAFT*, the following (1) through (4) are to be complied.

(1) Protection time

The structural fire protection time of main load bearing structures located within areas of major fire hazard (classified as A) and areas of moderate fire hazard (classified as B), and load bearing structures supporting control stations are to, as a minimum, be the same as that required by Tables 7.4-1 and 7.4-2 of *THE INTERNATIONAL CODE OF SAFETY FOR HIGH SPEED CRAFT* (as applicable), for the divisions enclosing the space where these supports are located. In accordance with 7.4.1.1 of *THE INTERNATIONAL CODE OF SAFETY FOR HIGH SPEED CRAFT* in no case is the structural fire protection time to be less than 30 minutes. Load bearing structures made of steel, other than those constituting the divisions dealt with in Tables 7.4-1 and 7.4-2 of *THE INTERNATIONAL CODE OF SAFETY FOR HIGH SPEED CRAFT* (as applicable), need not be insulated.

(2) Extent of structural fire protection

The structures considered are to be all load-carrying structures within areas of major and moderate fire hazard (classified as A or B) as well as all structures (irrespective of where they are located) which are necessary to support control stations. The vertical extent of structure supporting control stations is to be considered all the way down to and including spaces within the hull(s). However, all structures within voids in the hull can be exempted from this consideration.

(3) Fire testing

Approvals from the standard fire test according to the *IMO FTP Code*, Annex 1, Part 11 for a bulkhead or deck of a given material can be applied for protection of pillars of the same material. The structural fire protection time is to be considered to be the same as that achieved in the fire test.

(4) Load case

When load carrying capability calculations are performed for an assumed fire within a space, all insulated or un-insulated steel structures, including pillars, as well as fire insulated aluminium and *FRP* structures in the space may be included; un-insulated aluminium and *FRP* structures are not to be included. A single fire concept (the assumption that only one major fire

will occur at a time) can be applied where a fire is only presumed to originate in one enclosed space and not propagate to another enclosed space.

~~23~~ **23** With regard to requirement stipulated in 7.4.4.1 of *THE INTERNATIONAL CODE OF SAFETY FOR HIGH SPEED CRAFT*, Public spaces extending over 2 decks may be considered as one space, provided as follows.

- (1) the length and width of the openings area between lower and upper part is at least 25% of the mean length and width of the upper part of the whole space or at least of a corresponding area.
- (2) sufficient means of escape is provided from both levels of the space directly leading to an adjacent safe area or compartment.
- (3) the whole space is served by one section of sprinkler system with one relieve valve.

~~34~~ **34** With regard to requirement stipulated in Table 7.4-1 of *THE INTERNATIONAL CODE OF SAFETY FOR HIGH SPEED CRAFT*, Ventilation openings may be accepted in entrance doors to public toilets if positioned in the lower portion of such doors and fitted with closable grilles operable from the public space side and made of non-combustible or fire-restricting material.

~~45~~ **45** As for the requirements for dead craft condition and restoration from the dead craft condition specified in 9.1.5 of *THE INTERNATIONAL CODE OF SAFETY FOR HIGH SPEED CRAFT*, the following (1) through (3) are to be complied.

- (1) Dead craft condition for the purpose of Regulation 9.1.5 is to be understood to mean a condition under which the main propulsion plant and auxiliaries are not in operation and, in restoring the propulsion, no stored energy is assumed to be available for starting and operating the propulsion plant, the main source of electrical power and other essential auxiliaries. It is assumed that means are available at all times to start the emergency generator or one of the main generators when the main source is arranged according to paragraph 12.7.2.
- (2) Where the emergency source of power is an emergency generator which complies with section 12.4, or a main generator meeting the requirements of paragraph 12.7.2, it is assumed that means are available to start this generator and consequently this generator may be used for restoring operation of the main propulsion plant and auxiliaries where any power supplies necessary for engine operation are also protected to a similar level as the starting arrangements.
- (3) Where there is no emergency generator installed or an emergency generator does not comply with section 12.4, the arrangements for bringing main and auxiliary machinery into operation are to be such that initial charge of starting air or initial electrical power and any power supplies for engine operation can be developed on board the craft without external aid. If for this purpose an emergency air compressor or electric generator is required, these units are to be powered by a hand-starting oil engine or a hand-operated compressor. The arrangements for bringing main and auxiliary machinery into operation are to have a capacity such that the starting energy and any power supplies for engine operation are available within 30 *minutes* of a dead craft condition.

~~56~~ **56** As for the application of 9.8 of *THE INTERNATIONAL CODE OF SAFETY FOR HIGH SPEED CRAFT*, the following requirements are to be complied.

- (1) On monohulls, propeller shaft and bearings of at least one main engine, when passing through the aft machinery space, are to be protected as following requirements (a) or (b).
 - (a) Steel shaft bearings are to be protected by water spray.
 - (b) Shafts made of composite material (FRP) are to be protected by the following i) or ii).
 - i) Passive fire protection for 60 *minutes* duration
 - ii) A water spray system and able to transmit the full torque of the propulsion engine after a standard fire test of 7 *minutes*

EFFECTIVE DATE AND APPLICATION

1. The effective date of the amendments is 1 January 2014.
2. Notwithstanding the amendments to the Guidance, the current requirements may apply to ships the keels of which were laid or which were at *a similar stage of construction* before the effective date.

(Note) The term “*a similar stage of construction*” means the stage at which the construction identifiable with a specific ship begins and the assembly of that ship has commenced comprising at least 50 *tonnes* or 3% of the estimated mass of all structural material, whichever is the less.