RULES FOR HIGH SPEED CRAFT

GUIDANCE FOR HIGH SPEED CRAFT

Rules for High Speed Craft 2009 AMENDMENT NO.1
Guidance for High Speed Craft 2009 AMENDMENT NO.1

Rule No.20 / Notice No.21 15th April 2009
Resolved by Technical Committee on 4th February 2009
Approved by Board of Directors on 24th February 2009

ClassNK
NIPPON KAIJI KYOKAI

RULES FOR HIGH SPEED CRAFT

RULES

2009 AMENDMENT NO.1

Rule No.20 15th April 2009

Resolved by Technical Committee on 4th February 2009

Approved by Board of Directors on 24th February 2009

Rule No.20 15th April 2009
AMENDMENT TO THE RULES FOR HIGH SPEED CRAFT

"Rules for high speed craft" has been partly amended as follows:

Amendment 1-1

Part 2 CLASS SURVEYS

Chapter 3 PERIODICAL SURVEYS AND PLANNED MACHINERY SURVEYS

3.9 Propeller Shaft and Stern Tube Shaft Surveys

Paragraph 3.9.3 has been amended as follows:

3.9.3 Ordinary Surveys

1 The Ordinary Survey of propeller shafts and stern tube shafts (excluding main shafts of waterjet propulsion systems) consists of the examinations in **(1)** to **(9)** below under the condition of their propellers being removed from shaft.

(1) The shaft in way of the propeller fitting area is to be examined as follows:
   (a) Shafts having keyed propeller attachments are to be examined by an efficient crack detection method from the end of the cylindrical part of the shaft (or from the aft edge of the liner, if any) for one-third of the length of the aft shaft taper.
   (b) Shafts having keyless propeller attachments are to be examined by an efficient crack detection method for the forward portion of the aft shaft taper. When the propeller is force fitted to the shaft, it is to be ascertained that the pull-up length is within the upper and lower limits given by **5.2.4-1, Part 9**.
   (c) For shaft having coupling flanges at the after end, the flange fillet and coupling bolts are to be examined by an efficient crack detection method.

(2) Other parts of the shaft (anti-corrosion covers are to be removed for the shafts Kind 2) than required by **(1)**, the sleeves, the fillet of the coupling flange to the intermediate shaft or to the stern tube shaft and the coupling bolts are to be examined with the shaft drawn from the stern tube bearings. However, coupling bolts are to be examined by an efficient crack detection method, in cases where Surveyors consider such testing necessary based on the external examination results.

(3) The stern tube bearings (including the shaft bracket bearings, if any) are to be examined.

(4) The bearing wear down (including one for shaft bracket bearings, if any) are to be measured.

(5) Major parts of the stern tube sealing devices (including shaft bracket sealing devices, if any) are to be opened and examined.

(6) Propeller boss bore in way of the propeller shaft taper section is to be examined. For a controllable pitch propeller, the principal part of pitch control gear and working parts are to be opened and examined, and the propeller blade fixing bolts are to be examined by an efficient crack detection method.

(7) Where water-lubricated stern tube bearings are adopted, the sea water piping for lubrication is to be examined.

(8) Where oil-lubricated stern tube bearings are adopted, the low oil level alarms of lubricating oil tanks, oil temperature measuring devices and oil circulating pumps are to be examined.
(9) Where oil-lubricated stern tube bearings are adopted, the lubricating oil record book is to be examined.

2 Where waterjet propulsion systems are adopted, examinations specified in **(1)** to **(6)** below are to be carried out, the main shaft being drawn out from the forward main shaft bearing tube or sealing device tube.

(1) General examination of the main shaft and coupling bolts. However, coupling bolts are to be examined by an efficient crack detection method, in cases where Surveyors consider such testing necessary based on the external examination results.
(2) General examination of the main parts of the forward and after main shaft bearings
(3) General examination of the main parts of the forward main shaft sealing assembly
(4) Open-up examination of the thrust bearings
(5) Examination of the contacting faces of the impeller boss and the main shaft (when installed with a key or spline)
(6) General examination of the impeller

EFFECTIVE DATE AND APPLICATION (Amendment 1-1)

1. The effective date of the amendments is 15 April 2009.

Amendment 1-2

Part 9 MACHINERY INSTALLATIONS

Chapter 8 PIPING SYSTEMS

8.1 General

Paragraph 8.1.1 has been amended as follows:

8.1.1 Piping

Piping systems are to comply with the requirements specified in **13.2, Part D of the Rules for the Survey and Construction of Steel Ships**.

~~**1** The piping systems are to comply with the requirements specified in **13.2.1, Part D of the Rules for the Survey and Construction of Steel Ships.**~~

~~**2** Connection and common use of pipes are to comply with the requirements specified in **13.2.2, Part D of the Rules for the Survey and Construction of Steel Ships.**~~

~~**3** Penetration of pipes is to comply with the requirements specified in **13.2.3, Part D of the Rules for the Survey and Construction of Steel Ships.**~~

~~**4** The use of slip joints is to comply with the requirements specified in **13.2.4, Part D of the Rules for the Survey and Construction of Steel Ships.**~~

~~**5** Bulkhead valves are to comply with the requirements specified in **13.2.5, Part D of the Rules for the Survey and Construction of Steel Ships.**~~

~~**6** Suitable measures are to be taken to the prevention of freezing for bilge pipes, air pipes, drain pipes, etc., passing through or arranged near the refrigerated chamber, where there is a risk of freezing on the inner surface of the pipes.~~

~~**7** When a drain pipe in the engine room is led to double bottom tank and when there is a danger of flood in the ship through the drain pipe in case that sea water flows in to the tank by grounding, etc., a stop valve or suitable device to stop the counterflow of sea water, which can be readily operable from the engine room floor is to be provided. However, the requirements do not apply to the ships of which length is less than 100 *m*.~~

EFFECTIVE DATE AND APPLICATION (Amendment 1-2)

1. The effective date of the amendments is 15 April 2009.
2. Notwithstanding the amendments to the Rules, the current requirements may apply to ships for which the date of contract for construction is before the effective date.

GUIDANCE FOR HIGH SPEED CRAFT

GUIDANCE

2009 AMENDMENT NO.1

Notice No.21 15th April 2009

Resolved by Technical Committee on 4th February 2009

Notice No.21 15th April 2009
AMENDMENT TO THE GUIDANCE FOR HIGH SPEED CRAFT

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

Amendment 1-1

Part 1 GENERAL RULES

Chapter 1 GENERAL

1.1 General

1.1.1 Application

Existing paragraph has been numbered to -1 and sub-paragraph -2 has been added as follows.

2 With respect to the provisions of the Rules, unless explicitly specified otherwise in the relevant requirements, distances regarding ship length, breadth, depth, and tank length, breadth, height, etc. are to be measured by using moulded dimensions. However, where the effects of plate thickness are not negligible, this requirement is not applicable. For the distance between an independent cargo tank and the hull construction, such distance is to be measured from the external face of the tank.

EFFECTIVE DATE AND APPLICATION (Amendment 1-1)

1. The effective date of the amendments is 1 April 2009.

2. Notwithstanding the amendments to the Guidance, the current requirements may apply to ships for which the date of contract for construction* is before the effective date.
*"contract for construction" is defined in the latest version of IACS Procedural Requirement(PR) No.29.

IACS PR No.29 (Rev.4)

1. The date of "contract for construction" of a vessel is the date on which the contract to build the vessel is signed between the prospective owner and the shipbuilder. This date and the construction numbers (i.e. hull numbers) of all the vessels included in the contract are to be declared to the classification society by the party applying for the assignment of class to a newbuilding.

2. The date of "contract for construction" of a series of vessels, including specified optional vessels for which the option is ultimately exercised, is the date on which the contract to build the series is signed between the prospective owner and the shipbuilder.
For the purpose of this Procedural Requirement, vessels built under a single contract for construction are considered a "series of vessels" if they are built to the same approved plans for classification purposes. However, vessels within a series may have design alterations from the original design provided:

(1) such alterations do not affect matters related to classification, or

(2) If the alterations are subject to classification requirements, these alterations are to comply with the classification requirements in effect on the date on which the alterations are contracted between the prospective owner and the shipbuilder or, in the absence of the alteration contract, comply with the classification requirements in effect on the date on which the alterations are submitted to the Society for approval.

The optional vessels will be considered part of the same series of vessels if the option is exercised not later than 1 year after the contract to build the series was signed.

3. If a contract for construction is later amended to include additional vessels or additional options, the date of "contract for construction" for such vessels is the date on which the amendment to the contract, is signed between the prospective owner and the shipbuilder. The amendment to the contract is to be considered as a "new contract" to which **1.** and **2.** above apply.

4. If a contract for construction is amended to change the ship type, the date of "contract for construction" of this modified vessel, or vessels, is the date on which revised contract or new contract is signed between the Owner, or Owners, and the shipbuilder.

Notes:

1. This Procedural Requirement applies to all IACS Members and Associates.
2. This Procedural Requirement is effective for ships "contracted for construction" on or after 1 January 2005.
3. Revision 2 of this Procedural Requirement is effective for ships "contracted for construction" on or after 1 April 2006.
4. Revision 3 of this Procedural Requirement was approved on 5 January 2007 with immediate effect.
5. Revision 4 of this Procedural Requirement was adopted on 21 June 2007 with immediate effect.

Amendment 1-2

Part 2 CLASS SURVEYS

Chapter 1 GENERAL

1.1 Surveys

Paragraph 1.1.3 has been deleted.

~~**1.1.3 Occasional Surveys**~~

~~For the occasional surveys specified in **1.1.3(5), Part 2 of the Rules**, the followings are to be complied with:~~

~~(1) Ship's identification number~~

~~For cargo craft not less than 300 *gross tonnage* and passenger craft not less than 100 *gross tonnage* engaged on international voyages which had been at beginning stage of construction before 1 July 2004, a survey is to be carried out for verification of the compliance with the requirements of **1.1.7, Part 1 of the Rules** by the date of the first scheduled dry-docking after 1 July 2004.~~

Chapter 3 PERIODICAL SURVEYS AND PLANNED MACHINERY SURVEYS

3.10 Planned Machinery Surveys

3.10.3 Planned Machinery Maintenance Scheme (PMS)

Sub-paragraph -4(7) has been amended as follows:

4 Approval of PMS

Conditions for approval of PMS are as follows:

((1) to (6) are omitted.)

(7) Computer

Computers used for condition monitoring and diagnosis systems are to satisfy the following requirements specified in **(a)** through **(e)**:

(a) Computers are to be configured so that the effects of a system failure in part of the circuits or devices can be limited to a certain range as far as possible.

(b) Each system component is to be protected against overvoltages (electrical noise) likely to enter through input/output terminals.

(c) Central processing units and important peripheral devices are to have a self-monitoring function.

(d) Important programmes and data are not to be deleted in the event of a temporary failure of the external source of power supply.

(e) Spare parts for important system components that require specialist services for repairs are to be supplied in readily replaceable part units.

(f) It is recommended that the software is approved in accordance with **Annex B9.1.3-4 "PROCEDURES FOR APPROVAL OF PMS MANAGEMENT SOFTWARE", Part B of the Guidance for the Survey and Construction of Steel Ships.**

EFFECTIVE DATE AND APPLICATION (Amendment 1-2)

1. The effective date of the amendments is 15 April 2009.

Amendment 1-3

Part 2 CLASS SURVEYS

Chapter 3 PERIODICAL SURVEYS AND PLANNED MACHINERY SURVEYS

3.10 Planned Machinery Surveys

3.10.2 Continuous Machinery Surveys (CMS)

Sub-paragraph -6 has been amended as follows:

6 Confirmatory Survey

~~Where machinery or equipment was overhauled and inspected as a routine maintenance work at sea with its maintenance record kept in order, the confirmatory survey mentioned below may be substituted for open-up examinations for the machinery or equipment, provided that the results of the confirmatory survey are satisfactory.~~

~~If machinery and equipment are overhauled in a port where it is difficult to call in the Surveyor, such a case may be dealt with in the same manner as above.~~

In ships deemed by the Society as maintaining their machinery and equipment well, overhaul inspections by the shipowner (or the ship management company) may forgo the open-up examination performed in the presence of Surveyors by conducting the following confirmatory surveys, provided that the machinery and equipment are overhauled as part of the ship's maintenance practices and the records from such overhauls are kept in good order. In this case, the date of the next open-up examination is to be within a 5-*year* period from the date of its last overhaul and inspection.

(1) Procedure of the confirmatory survey

(a) ~~When~~In case of any machinery ~~or~~and equipment specified in **(2)** below ~~was~~ overhauled ~~at sea~~ and inspected by the Chief Engineer as a routine maintenance work, one copy of the inspection report including the items mentioned below is to be submitted to, and reviewed by the attending Surveyor. Also, the Chief Engineer's profile is to be confirmed by the attending Surveyor.

i) Signature of the Chief Engineer and licence number
ii) Date and place of the inspection
iii) Inspection items and their results
iv) Operating conditions before and after the inspection

(b) Parts replaced with spares or repaired are to be ~~ascertained to be in good order~~ verified by visual examinations on them or photographs of them.

(c) Visual examinations are to be carried out for ~~the~~ main propulsion machinery, and examinations under operating conditions, as well as visual inspections are to be carried out for ~~the~~ other machinery.

(d) As a result of the confirmatory survey ~~stated~~stiplated in **(a)** to **(c)** above, open-up examinations and/or re-examinations may be required when deemed necessary by the Surveyor.

(2) Items applicable to the confirmatory survey

Items of machinery and equipment applicable to the confirmatory surveys are as follows:

(a) Main diesel engines
However, crankshafts, main bearings, crank pin bearings, crank pin bolts, camshafts, and camshaft driving gears are to be excluded. Note that the number of items of the confirmatory surveys is to be restricted to half the number of total survey items for the main diesel engine within one cycle of CMS.

(b) Diesel engines used for driving generators, auxiliary machinery essential for main propulsion or auxiliary machinery for the manoeuvring and the safety of the ship
However, an open-up examination of the diesel engine for driving the main generator is to be carried out in the presence of the Surveyor ~~by the Surveyor is to be carried out at least for one of the diesel engines used for driving main generators within one cycle of CMS~~in cases where a single unit of such engines is fitted on ship.

(c) Auxiliary machinery (air compressors, pumps, heat exchangers, deck machinery and distilling plants)

(3) Timing of the confirmatory survey
A confirmatory survey is~~, as a rule, to be carried out within at least five months~~ by the time of next periodical survey from the day the item of the machinery ~~or~~and equipment intended for the confirmatory survey was overhauled and inspected at sea.

EFFECTIVE DATE AND APPLICATION (Amendment 1-3)

1. The effective date of the amendments is 15 April 2009.

2. Notwithstanding the amendments to the Guidance, the current requirements apply to the surveys for which the application is submitted to the Society before the effective date.