

# GUIDANCE FOR HIGH SPEED CRAFT

**Guidance for High Speed Craft**

**2012 AMENDMENT NO.1**

Notice No.86      15th November 2012  
Resolved by Technical Committee on 27th July 2012

**ClassNK**  
NIPPON KAIJI KYOKAI

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

## **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 -1 has been amended as follows.

##### **1 Application of CMS**

- (1) (omitted)
- (2) Auxiliary machinery prescribed in item 5 of **Table 3.10.1** in **Part 2 of the Rules** are as follows:
  - ((a) to (f) are omitted)
  - (g) Coolers
    - Main fresh water coolers (for cylinder jackets and pistons), F.O. valve cooling fresh water/oil coolers, fresh water coolers for turbochargers, cooling fresh water coolers for generator engines, F.O. coolers, main L.O. coolers, turbocharger L.O. coolers, camshaft L.O. coolers, reduction gear L.O. coolers, hydraulic oil coolers, coolers for C.P.P., stern tube L.O. coolers
  - ((h) to (m) are omitted)

Sub-paragraph -5 has been amended as follows.

##### **5 Substitution for open-up examinations**

For the machinery and equipment listed below, open-up examinations may be exempted by carrying out the following examinations, provided the satisfactory condition of these items is ascertained by examining records such as the logbooks. However, when defects are found during the examinations, or if the maintenance condition is judged to be questionable as a result of an examination of the logbooks or other records, open-up examinations may be requested.

- (1) (omitted)
- (2) Oil tanks, F.O. coolers and oil heaters
  - Visual examinations of general conditions
- (3) (omitted)
- (4) (omitted)

Sub-paragraph -6 has been amended as follows.

## 6 Confirmatory Survey

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) In case of any machinery and equipment specified in (2) below overhauled 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 verified by visual examinations on them or photographs of them.
- (c) Visual examinations are to be carried out for main propulsion machinery, and examinations under operating conditions, as well as visual ~~examinations inspections~~ are to be carried out for other machinery and auxiliary machinery, etc.
- (d) Visual examinations of lubricating oil conditions are to be carried out through open-up inspections, etc. of the lubricating oil filters of crankshafts, main bearings, crankpin bearings, crankpin bolts as well as the camshafts and camshaft driving devices of main diesel engines.
- (e) Visual examinations to confirm the current conditions and lubricating oil maintenance conditions of intermediate shafts, thrust shafts and bearings are to be carried out as far as possible.
- (f) Confirmation of the open-up inspection and adjustment records of safety valves (excluding fusible plugs) is to be carried out for air reservoirs.
- (~~g~~) As a result of the confirmatory survey stipulated in (a) to (~~ef~~) 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 in cases where a single unit of such engines is fitted on ship.~~

#### (c) Intermediate shafts, thrust shafts and bearings

- (~~e~~d) Auxiliary machinery (air compressors, pumps, heat exchangers, air reservoirs, deck machinery and distilling plants)
- (3) Timing of the confirmatory survey  
A confirmatory survey is by the time of next periodical survey from the day the item of the machinery and equipment intended for the confirmatory survey was overhauled and inspected at sea.

### 3.10.3 Planned Machinery Maintenance Scheme (PMS)

Sub-paragraph -4 has been amended as follows.

#### 4 Approval of PMS

Conditions for approval of PMS are as follows:

((1) and (2) are omitted)

#### (3) Survey Schedule Table

The machinery maintenance scheme is to cover the maintenance plan for all the machinery as (1) above. For machinery, equipment and parts with a condition monitoring system which complies with the following requirements, the inspection intervals may be prolonged until an abnormal condition is observed. In this case, the machinery maintenance scheme for PMS is also to cover all condition monitoring functions, criteria for judgment and procedures for monitoring, analysis and handling (including reporting observed abnormal conditions to the Society) of the system.

~~(a) Crank pins and their bearings and crank journals and their bearings for main diesel engine~~

(~~b~~a) Rotors, casings, main bearings, couplings between turbine and reduction gear, nozzle valves and manoeuvring valves for main steam turbine

(~~e~~b) Auxiliary steam turbine for main generator

~~(d) Thrust shaft and the bearings for main propulsion~~

(~~e~~c) Reduction gears for main propulsion

(~~f~~d) Flexible couplings for main propulsion

(~~g~~e) Other items deemed necessary by the Society.

When this survey schedule table is amended, the amended survey schedule table is to be submitted to the Society for approval.

#### (4) Machinery Maintenance Records

Machinery maintenance records are to include at least the following items, and are to be programmed and maintained by the Maintenance management system. These records are to be retained on board the ship at all times.

(a) Date of maintenance work

(b) Signature by the Chief Engineer

(c) Details of maintenance work and results

(d) Total running hours (parts replacement intervals and overhaul intervals)

(e) Names of parts replaced

(f) Measuring data (including original design dimensions and allowable tolerance)

(g) The condition of damage and repair method

(h) Results of visual examinations of lubricating oil conditions carried out through open-up examinations of the lubricating oil filters, etc. of crankpins, crank journals, thrust shafts and bearings of main diesel engines (in cases where the principle components of such engines were inspected through independent open-up surveys conducted by chief

engineers)  
((5) to (7) are omitted)

#### EFFECTIVE DATE AND APPLICATION

1. The effective date of the amendments is 15 November 2012.
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.
3. Notwithstanding the provision of preceding **2.**, the amendments to the Guidance may apply to the surveys for which the application is submitted to the Society before the effective date upon request by the owner.