GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

Part R Fire Protection, Detection and Extinction

Guidance for the Survey and Construction of Steel Ships
Part R **2014 AMENDMENT NO.3**

Notice No.68 19th December 2014
Resolved by Technical Committee on 29th July 2014

ClassNK
NIPPON KAIJI KYOKAI

Notice No.68 19th December 2014
AMENDMENT TO THE GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

"Guidance for the survey and construction of steel ships" has been partly amended as follows:

Part R FIRE PROTECTION, DETECTION AND EXTINCTION

Amendment 3-1

R4 PROBABILITY OF IGNITION

R4.2 Arrangements for Oil Fuel, Lubrication Oil and other Flammable Oils

R4.2.2 Arrangements for Oil Fuel

Sub-paragraphs -6 and -7 have been amended as follows.

6 With respect to the requirements of **4.2.2(3)(d), Part R of the Rules**, pneumatic remote shut-down devices (of the type that needs compressed air only at the time of closing) of main suction valves of fuel oil tanks are to comply with the following requirements:

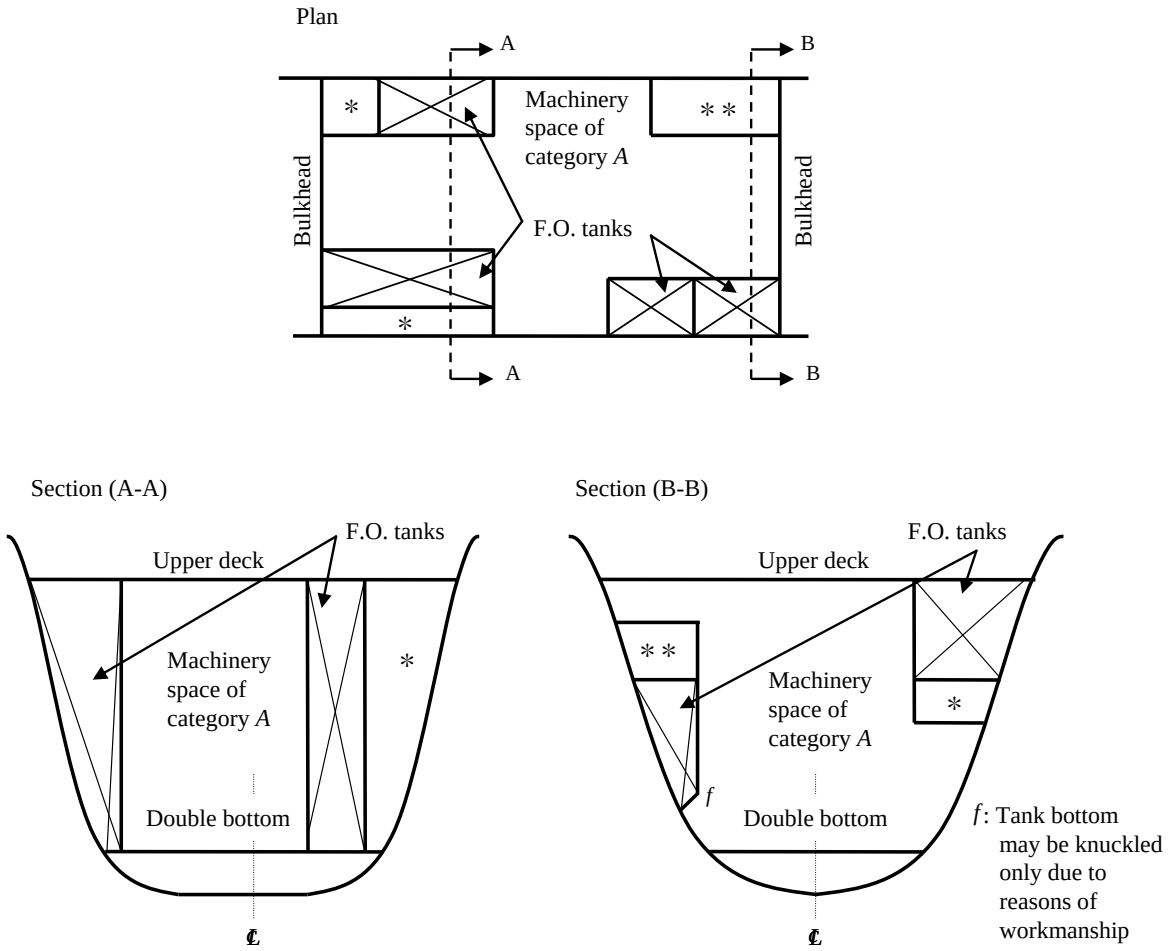
(1) An exclusive air bottle for remote shut-down is to be provided in an easily accessible position outside the compartment in which fuel oil tanks are situated.
(2) The capacity of air bottle is to be sufficient for closing all the main suction valves of fuel oil tanks at least ~~three times~~ twice.
(3) The air bottle is to be provided with a pressure indicating device at a position which can be easily seen from the position to operate.
(4) Air pipes from the air bottle to the main suction valve's actuators are not to be provided with any valve except for air outlet valves and blow-off valves for these pipes.
(5) Air pipes from the air bottle to the main suction valve's actuators are to be of steel or copper.
(6) Air charging pipes to the air bottle are to be provided with non-return valves.

7 In case where air bottles specified in **-6** above are used commonly for remote shut-down of the fuel tank valves for the emergency generator, remote opening of the sea water suction valve of the emergency fire pump, remote shut-down of dampers for the ventilating fans for machinery spaces, etc, the following requirements are to be complied with:

(1) The capacity of the air bottle is to be capable of operating simultaneously all remote controls belonging to at least ~~for three times~~ twice.
(2) The air piping for the remote shut-down of fuel oil tank main suction valve is to be arranged separately from pipings for other purposes, and the air outlet valve from the air bottle is to be fitted with a name tag for clear identification of the intended service.
(3) The air piping system for remote shut-down of the fuel tank valves for the emergency generator is to comply with **(2)** mentioned above and to be independent from the other air piping system.

Fig. R4.2.2-1 has been amended as follows.

Fig. R4.2.2-1



Notes

* Cofferdams complying with the following requirements;

1. to be gas-tight; and
2. to be provided with sounding devices, air escape pipes and fittings for drainage (drain plug, etc.).
3. cofferdams provided under fuel oil tanks are to have sufficient depth~~, and equipment that is highly combustible or flammable is not to be arranged under said cofferdams~~.

* * Void spaces having sufficient depth are to be provided on the tops of fuel oil tanks, and are permitted to have openings. However, in cases where pipe passages for other than flammable liquids, and/or auxiliary machinery rooms having little fire risk, such as fan rooms, conditioning machinery rooms, refrigerating machinery rooms and rooms for hydraulic systems, are provided on the top of fuel oil tanks, it is not necessary to provide the aforementioned void space.

EFFECTIVE DATE AND APPLICATION (Amendment 3-1)

1. The effective date of the amendments is 19 December 2014.

Amendment 3-2

R9 CONTAINMENT OF FIRE

R9.7 Ventilation Systems

R9.7.1 Duct and Dampers

Sub-paragraph -1 has been amended as follows.

1 With respect to the provisions of **9.7.1, Part R of the Rules**, a short length, not exceeding 600 *mm*, of flexible bellows constructed of combustible material may be used for connecting fans to the ducting in air conditioning room, except the extent specified in **-2**.

R13 MEANS OF ESCAPE

R13.4 Means of Escape from Machinery Spaces

Paragraph R13.4.4 has been amended as follows.

R13.4.4 Emergency Escape Breathing Devices

With respect to the requirements of **13.4.4, Part R of the Rules**, ~~the emergency escape breathing devices (*EEBD*s) are required for machinery spaces of category *A* where crew is normally employed or may be present on a routine basis. T~~the location of *EEBD*s is to ~~such as shown in below, taking into account the layout of the machinery space and the number of persons normally working in the space~~ comply with the following requirements;

(1) In machinery spaces of category *A* containing internal combustion machinery used for main propulsion
   (a) One *EEBD* in the engine control room, if located within the machinery space.
   (b) One *EEBD* in the workshop areas~~;~~. ~~I~~If ~~any~~ there is, however, a direct access to an escape way from the workshop, an *EEBD* is not required.
   (c) One *EEBD*~~, in principle,~~ on each deck or platform level near the escape ladder constituting the second means of escape from the machinery space (the other means being ~~than a fire shelter,~~ an enclosed escape trunk or ~~a~~ watertight ~~access~~ door ~~to safe spaces~~ at the lower level of the space).
   (d) Notwithstanding the provisions of **(a)** to **(c)** above, ~~*EEBD*s may be omitted in the following cases, provided that total number of the device in the space is three or more.~~ different number or location may be determined by the Administration taking into consideration the layout and dimensions or the normal manning of the space.
      ~~i) Where the engine control room is located adjacent to the work shop, either device may be omitted.~~
      ~~ii) Where the engine control room and/or the work shop is located adjacent to an escape route form the engine room, the device for such control room and/or work shop may be omitted.~~

(2) In machinery spaces of category *A* other than those of **(1)**
   One *EEBD*, ~~in principle~~ as a minimum, on each deck or platform level near the escape ladder constituting the second means of escape from the space (the other means being ~~than a fire shelter,~~ an enclosed escape trunk or ~~a~~ watertight ~~access~~ door ~~to safe spaces~~ at the lower level of the space). ~~Where easy escape to a safe space is surely granted, *EEBD*s may not be required.~~

(3) For machinery spaces other than those of **(1)** and **(2)**, the number and location of *EEBD*s are to be determined by the Administration.

EFFECTIVE DATE AND APPLICATION (Amendment 3-2)

1. The effective date of the amendments is 19 December 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 1% of the estimated mass of all structural material, whichever is the less.