Subject

Periodical inspection, maintenance and tests of fire extinguishing system etc. on board the Hong Kong flag ships (partly amended for the requirements of CO_2/Halon Fixed Fire-fighting Installation Systems)

ClassNK
Technical Information

No. TEC-0602
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To whom it may concern

The Hong Kong Government has notified ClassNK of the new requirements for periodical inspection, maintenance and tests of the CO_2/Halon fixed fire-fighting installation systems on board Hong Kong flag ships as follows.

This ClassNK Technical Information supersedes the previous ClassNK Technical Information No. TEC-0490 dated 15 November 2002.

For your reference, the requirements as mentioned following paragraph 1. to 4. have been remained same with ClassNK Technical Information No. TEC-0490.

1. Fire extinguishers
   (1) Fire extinguishers should be examined annually by a competent person, who in this case may be taken to be the ship's senior deck and engineer officers.
   (2) Each extinguisher should be provided with a sign indicating that it has been examined.
   (3) Containers of permanently pressurised fire extinguishers and propellant bottles of non-pressurised fire extinguishers should be hydraulic pressure tested every 10 years. Container of non-permanently pressurised fire extinguishers should be also hydraulic pressure tested every 10 years.
   (4) Portable CO2/Halon extinguishers should not be located in accommodation spaces.
   (5) Where portable gas fire extinguishers are provided in rooms at switchboards etc., the volume of any space containing one or more extinguishers are should be such as to limit the concentration of vapour that can occur due to discharge to not more than 5% of the net volume of space.

2. Air cylinders for compressed-air-operated breathing apparatus
   CABA cylinders other than those of a lightweight type should be hydraulic pressure tested at intervals not exceeding 5 years. Cylinders of lightweight type should be tested after a period not exceeding 3 years from the date of initial manufacturing test and thereafter at 2 yearly intervals.

3. Air bottles for air supply in totally enclosed lifeboats
   Air bottles in totally enclosed lifeboats should be internally and externally inspected and hydraulic pressure tested at intervals not exceeding 5 years.

(To be continued)

4. Foam fire-extinguishing systems
Foam concentrates stored on board, the first periodical control should be performed after a period of 3 years and after that, every year. A record of the age of the foam concentrates and of subsequent controls should be kept on board.

5. CO2/Halon cylinders for fixed fire-fighting installation systems
(1) The first examination and hydraulic pressure testing of CO2/Halon cylinders after the initial manufacturing test should be carried out after a period of 10 years. This requirement however, can be relaxed to 20 years if one of the following conditions is fulfilled:
(i) Cylinders were serviced (with past records) by a competent service station recognised by a Recognised Organisation (RO): or
(ii) External examination of the cylinders and examination for loss of content were carried out by a competent person at intervals not greater than one year in the past 10 years. The external examination shall involve checking for mechanical damage and excessive corrosion, and the results shall be properly recorded. A competent person is taken as one of the senior officers/engineers on board:
(2) For ships without records to support that the cylinders were examined or serviced in accordance with (i) or (ii) of above paragraph (1), either one the following arrangements should be made:
(i) If the next dry docking is within the next 12 months, all cylinders are to be hydraulic pressure tested during the dry docking period; or:
(ii) If the next dry docking is over 12 months but less than 18 months, hydraulic pressure testing of the cylinders will be considered on a case by case basis: or
(iii) If the next dry docking is beyond 18 months' time, 30% of the cylinders are to be hydraulic pressure tested as soon as possible. If the cylinders tested are found in good condition, hydraulic pressure testing for the remaining cylinders can be arranged during the dry docking period.
(3) The relaxation of hydraulic pressure testing to 20 years does not apply to any cylinder which had been discharged, showed a loss of pressure or weight (gas content remaining is less than 90% of the stated capacity) or was excessively corroded externally. It should note that no cylinder is allowed to stay beyond 20 years without being hydraulic pressure tested.
(4) Subsequent hydraulic pressure testing of the cylinders after 20 years would be at intervals of 5 years.
(5) Regardless of the above conditions, hydraulic pressure testing is required at 5 years intervals if a cylinder is discharged as refilled.

For any questions about the above, please contact:

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