

SUB-COMMITTEE ON SHIP SYSTEMS AND EQUIPMENT
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UNIFIED INTERPRETATION OF PROVISIONS OF IMO SAFETY, SECURITY AND ENVIRONMENT-RELATED CONVENTIONS

Draft unified interpretation regarding the fitting of a small-diameter self-closing control cock on sounding pipes of tanks for flammable oils other than oil fuel and lubricating oil

Submitted by IACS

SUMMARY

Executive summary: This document proposes a unified interpretation regarding the fitting

of the small-diameter self-closing control cock required by SOLAS

regulation II-2/4 on sounding pipes in certain tanks.

Strategic direction,

if applicable:

Output: 7.1

Action to be taken: Paragraph 8

7

Related documents: None

Introduction

- SOLAS regulation II-2/4 contains requirements pertaining to oil fuel tanks and lubricating oil tanks, in particular, regarding sounding pipes and oil-level gauges. Specifically, SOLAS regulation II-2/4.2.2.3.5.1.3 requires a small-diameter self-closing control cock to be fitted at the terminations of sounding pipes, as follows:
 - ".3 the termination of sounding pipes are fitted with self-closing blanking devices and with a small-diameter self-closing control cock located below the blanking device for the purpose of ascertaining before the blanking device is opened that oil fuel is not present. Provisions shall be made so as to ensure that any spillage of oil fuel through the control cock involves no ignition hazard."
- 2 IACS members have witnessed PSC detentions of ships caused by a missing small-diameter self-closing control cock on the sounding pipe of oily bilge water tanks. The reference "SOLAS regulation II-2/4.2.2.3.5.1.3" was recorded as the reason for such detentions on the basis of reported applicability of that regulation to oily bilge water tanks.



That reported determination was made based on SOLAS regulation II-2/4.2.4 which reads as follows:

"2.4 Arrangements for other flammable oils

The arrangements for the storage, distribution and utilization of other flammable oils employed under pressure in power transmission systems, control and activating systems and heating systems shall be such as to ensure the safety of the ship and persons on board. Suitable oil collecting arrangements for leaks shall be fitted below hydraulic valves and cylinders. In locations where means of ignition are present, such arrangements shall at least comply with the provisions of paragraphs 2.2.3.3, 2.2.3.5, 2.2.5.3 and 2.2.6 and with the provisions of paragraphs 2.2.4 and 2.2.5.1 in respect of strength and construction."

Discussion

- 3 IACS considers that a clarification should be issued regarding the intent of requirements and the identification of tanks whose sounding pipes should not necessarily be fitted with a small-diameter self-closing control cocks required by SOLAS regulation II-2/4.
- It is the understanding of IACS that the intent of the requirement to fit a small-diameter self-closing control cock below the blanking device is to prevent spillage of flammable liquid from the sounding pipe when the blanking device is opened. In that respect, IACS opines that the consideration of the risk of spillage through the sounding pipe is only relevant for tanks where the content may be under static pressure caused either by a pump discharge head or by a static pressure head from other tanks with pipes leading into the tank. Spillage may also result from liquid accelerations due to ship motions, however, the fire risk related to such limited amount of spillage is considered negligible.
- Further, IACS understands that SOLAS regulation II-2/4 is applicable to oils and flammable liquids. The content of tanks collecting liquid spillages in general, such as oily bilge water tanks, may be contaminated with oil and other flammable liquids, however, in general that content is non-flammable and the fire risk is considered negligible. Meanwhile, the content of some other tanks dedicated for collecting leakages, spillages and drainage of oils and other flammable liquids may contain water or other particles, however, the content of such tanks is likely to be flammable and is considered to represent a fire risk.
- 6 Considering the above, IACS concludes that the following tanks do not need to be fitted with the small-diameter self-closing control cock at the termination of the sounding pipes:
 - .1 tanks which do not normally contain flammable concentrations of the above-mentioned oils, for example, oily bilge water tank;
 - .2 tanks such as:
 - .1 fuel oil drain tanks;
 - .2 sludge oil tanks; or
 - .3 lubricating oil and other flammable oil drain tanks,

provided they are not likely to be pressurized by a static pressure head from other tanks with pipes leading into the tank or by a pump discharge head.

Proposal

7 Based on the above discussion and conclusion, IACS has developed a draft unified interpretation providing the list of tanks for which the fitting of the small-diameter self-closing control cock to the sounding pipes should not be necessary. The annex to this document contains the draft of that unified interpretation for the consideration of the Sub-Committee.

Action requested of the Sub-Committee

The Sub-Committee is invited to consider the foregoing, the proposal in paragraph 7 and the draft unified interpretation as set out in the annex and take action, as appropriate.

ANNEX

UNIFIED INTERPRETATION REGARDING THE FITTING OF A SMALL-DIAMETER SELF-CLOSING CONTROL COCK ON SOUNDING PIPES OF TANKS FOR FLAMMABLE OILS OTHER THAN OIL FUEL AND LUBRICATING OIL

SOLAS regulation II-2/4.2.4 reads as follows:

"2.4 Arrangements for other flammable oils

The arrangements for the storage, distribution and utilization of other flammable oils employed under pressure in power transmission systems, control and activating systems and heating systems shall be such as to ensure the safety of the ship and persons on board. Suitable oil collecting arrangements for leaks shall be fitted below hydraulic valves and cylinders. In locations where means of ignition are present, such arrangements shall at least comply with the provisions of paragraphs 2.2.3.3, 2.2.3.5, 2.2.5.3 and 2.2.6 and with the provisions of paragraphs 2.2.4 and 2.2.5.1 in respect of strength and construction."

Interpretation

The fitting of a small-diameter self-closing control cock at the termination of sounding pipes should not be required when those sounding pipes belong to the following tanks:

- 1 tanks, which do not normally contain flammable concentrations of the above-mentioned oils, for example, oily bilge water tanks; or
- 2 tanks such as:
 - .1 fuel oil drain tanks;
 - .2 sludge oil tanks; or
 - .3 lubricating oil and other flammable oil drain tanks,

provided they are not likely to be pressurized by a static pressure head from other tanks with pipes leading into the tank or by a pump discharge head.
