



SUB-COMMITTEE ON FIRE PROTECTION 54th session Agenda item 10 FP 54/10/1 23 October 2009

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## CONSIDERATION OF IACS UNIFIED INTERPRETATIONS

# Unified interpretation of SOLAS regulation II-2/10.5.6.3.1

**Submitted by the International Association of Classification Societies (IACS)** 

#### **SUMMARY**

Executive summary: This document discusses differing interpretations of SOLAS

regulation II-2/10.5.6.3.1 concerning the fitting of fixed local

application fire-fighting systems

Strategic direction: 1.1

*High-level action:* 1.1.2

**Planned output:** 1.1.2.1

Action to be taken: Paragraph 6

Related documents: 1974 SOLAS Convention, as amended; FP 41/8/2; FP 43/8/1; and

FP 44/4/2

### **Background**

- 1 SOLAS regulation II-2/10.5.6.3 requires that fixed local application fire-fighting systems (FLAFFS) are to be fitted:
  - "... to protect areas such as the following without the necessity of engine shutdown, personnel evacuation, or sealing of the spaces:
    - .1 the fire hazard portions of internal combustion machinery used for the ship's main propulsion and power generation;
    - .2 boiler fronts;
    - .3 the fire hazard portions of incinerators; and
    - .4 purifiers for heated fuel oil."

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On various occasions, some IACS members have experienced different interpretations of regulation II-2/10.5.6.3.1 by port State control, particularly for the extent that diesel engine-driven hydraulic power packs, used solely for cargo operations, are required to be protected by a FLAFFS.

#### **Discussion**

- 3 IACS considers that differences in the interpretation of SOLAS regulation II-2/10.5.6 arise due to the following:
  - regulation II-2/10.5.6.2 specifies the <u>type of machinery space</u> (greater than 500 m<sup>3</sup> containing internal combustion machinery used for purposes other than main propulsion where such machinery has in aggregate a total power output of not less than 375 kW) that is required to be fitted with FLAFFS, but does not indicate the extent of protection to be provided by FLAFES within that machinery space; and
  - .2 regulation II-2/10.5.6.3 specifies the extent of protection by FLAFFS, but only by example (i.e. "such as" is used and the examples provided do not, in IACS view, provide sufficient clarity for uniform implementation).
- In light of paragraph 3 above, particularly paragraph 3.2, two different interpretations arise as to the application of SOLAS regulation II-2/10.5.6.3.1, i.e. internal combustion machinery (located in a category A machinery space greater than 500 m<sup>3</sup>):
  - which is not used for the ship's main propulsion or for power generation associated with propulsion and ship manoeuvrability (e.g., diesel engine-driven hydraulic power packs, used solely for cargo operations), is not required to be protected by a FLAFFS; or
  - .2 regardless of its use, is required to be protected by a FLAFFS.

# Historical developments of SOLAS regulation II-2/10.5.6.3.1

- 5 The following references, relative to the development of SOLAS regulation II-2/10.5.6, appear to address high risk areas, which may suggest that a FLAFFS should be limited to the interpretation expressed in paragraph 4.1, above:
  - .1 Denmark (FP 41/8/2) proposed the original version of what now appears as SOLAS regulation II-2/10.5.6.3.1 and it focused on specific areas of high fire risk:
    - "Areas of high fire risk are areas of internal combustion engines, at boiler fuel oil units, at heating systems using fuel oil and over areas where fuel oil and lubricating oil cleaning takes place.";
  - .2 in the report of the Correspondence Group on Fire-Fighting Systems (FP 43/8/1), after taking into account document FP 41/8/2, the group proposed the following revision:
    - "Protection is to be provided to areas around the following without the necessity of engine shut down, personnel evacuation, or sealing of the spaces:

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- .1 fuel oil, lubricating oil and hydraulic pipes located near exhaust manifolds, turbo chargers or similar heated surfaces on main and auxiliary internal combustion engines; and
- .2 boiler fronts or roof firing areas and oil fuel units."

but no decision was reached at FP 43.

- .3 At FP 44, the Sub-Committee agreed with the proposal by the Correspondence Group on Comprehensive Review of SOLAS Chapter II-2, provided in its report (FP 44/4/2), which introduced the phrase "such as" and is the same text as that which appears today in SOLAS regulation II-2/10.5.6.3:
  - "Fixed local application fire-fighting systems are to protect areas such as the following without the necessity of engine shutdown, personnel evacuation, or sealing of the spaces:
    - .1 the fire hazard portions of internal combustion machinery used for the ship's main propulsion and power generation;
    - .2 boiler fronts;
    - .3 the fire hazard portions of incinerators; and
    - .4 purifiers for heated fuel oil.".

## **Action requested of the Sub-Committee**

- 6 The Sub-Committee is invited to consider:
  - .1 the historical developments of SOLAS regulation II-2/10.5.6.3.1, as summarized in paragraph 5 above;
  - .2 the two different interpretations as provided in paragraph 4 above; and
  - .3 take action as appropriate so as to clarify the extent of protection to be provided by a FLAFFS according to SOLAS regulation II-2/10.5.6.3.