UI SC240 "Closing device for ventilation of battery rooms (SOLAS II-2/5.2.1.1)"

Part A. Revision History

Version no.	Approval date	Implementation date when applicable
Corr.1 (Sept 2011)	27 September 2011	-
New (Oct 2010)	27 October 2010	1 July 2011

- **Corr. 1 (Sept 2011)**

.1 Origin of Change:

☑ Suggestion by IACS Statutory Panel

.2 Main Reason for Change:

To clarify the implementation notes by including reference to IACS PR No.29.

.3 List of non-IACS Member classification societies contributing through the TC Forum and/or participating in IACS Working Group:

None

.4 History of Decisions Made:

This issue was considered by IACS Statutory Panel under the long-standing Task 4 - Interpretation of IMO instruments.

Statutory Panel unanimously agreed that the amendment should be treated as a correction.

Also, it is decided that there is no need to submit UI SC240 (Corr.1 Sept 2011) to IMO.

.5 Other Resolutions Changes:

None

.6 Dates:

Original Proposal: *13 September 2011 Made by Statutory Panel*
GPG Approval: *27 September 2011 (Ref: 10124aIGc)*

- **New (Oct 2010)**

.1 Origin of Change:

☑ Suggestion by an IACS member

.2 Main Reason for Change:

Reg. 5.2.1.1 of SOLAS Chapter II-2 reads:

"*The main inlets and outlets of all ventilation systems shall be capable of being closed from outside the spaces being ventilated. The means of closing shall be easily accessible as well as prominently and permanently marked and shall indicate whether the shut-off is open or closed.* "

SOLAS requires all main ventilation openings to be capable of being closed from outside the space; however battery rooms pose a significant hazard due to the possible accumulation of explosive gasses. This interpretation mitigates the overriding hazard of the battery room ventilation.

.3 List of non-IACS Member classification societies contributing through the TC Forum and/or participating in IACS Working Group:

None

.4 History of Decisions Made:

The issue was raised within the Statutory Panel, and discussed at the 11th Statutory Panel Meeting in March 2010 during which a consensus was reached. The UI was prepared based on the discussions of the group.

.5 Other Resolutions Changes

None

.6 Dates:

Original Proposal: *July 2010 Made by the Statutory Panel*
Panel Approval: *16 October 2010 (Ref: 10124_PSb)*
GPG Approval: *27 October 2010 (Ref: 10124_IGe)*

Part B. Technical Background

List of Technical Background (TB) documents for UI SC240:

Annex 1. **TB for New (Oct 2010)**

See separate TB document in Annex 1.

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There is no separate Technical Background (TB) document for Corr.1 (Sept 2011).

Technical Background for UI SC240 New, Oct 2010

1. Scope and objectives

This UI is intended to clarify the scope of applicability of SOLAS Chapter II-2 Reg. 5.2.1.1 with regard to the particular issue of ventilation of battery rooms.

2. Engineering background for technical basis and rationale

Reg. 5.2.1.1 of SOLAS Chapter II-2 reads:

"The main inlets and outlets of all ventilation systems shall be capable of being closed from outside the spaces being ventilated. The means of closing shall be easily accessible as well as prominently and permanently marked and shall indicate whether the shut-off is open or closed. "

In this regulation, SOLAS requires main ventilation openings to be capable of being closed from the outside. This regulation does not take into account the specific hazards associated with battery rooms.

The possible build up of explosive gasses (most notably hydrogen) is of primary safety concern and so a closing device need not be provided for ventilation openings on battery rooms, or if there is one present then there should be a clearly visible sign stating, for example, "This closing device is to be kept open and only closed in the event of fire or other emergency – Explosive gas"

There are other critical safety factors to take into account when considering the closing device to the battery room. Where a closing device is required for the vessel to comply with the appropriate intact and/or damage stability requirements, or where a weather-tight closing device is required to satisfy conditions of assignment according to the Load Line Convention, or where a fixed gas fire extinguishing system is provided. In all these cases a closing device may be necessary. In these cases the ventilation opening should have a clear notice stating, for example, "This closing device is to be kept open and only closed in the event of fire or other emergency – Explosion risk".

Generally the battery room is an isolated compartment which does not contribute to the buoyancy of the vessel; also it is normally located at least 4.5m above the deck in position 1 or 2.3m above the deck in position 2 and not usually fitted with a fixed gas fire extinguishing system. The ventilation for the battery room does not normally connect to any other space. Therefore a closing device is not generally required, however the above scenarios should be considered when examining the ventilation arrangement of the battery room. If one of the above scenarios is encountered then a closing device must be provided with a warning notice as per the instructions in the UI.

3. Source / derivation of the proposed IACS Resolution

Class societies experience of the potential hazard from incidents involving battery room fires.

4. Summary of Changes intended for the revised Resolution:

Not applicable

5. Points of discussions or possible discussions

None

6. Attachments if any

None