

# Testing Procedures of Watertight Compartments

## Amended Rules and Guidance

Rules for the Survey and Construction of Steel Ships Part B  
Guidance for the Survey and Construction of Steel Ships Parts B, and C

## Reason for Amendment

Requirements related to hydrostatic tests being used as the initial testing of watertight bulkheads, etc. are specified in SOLAS regulation II-1/11. Such requirements have been in place since the establishment of the SOLAS Convention in 1914. These requirements, however, were intended to apply to ships constructed using rivets, the primary method of construction at the time, and are not always proper as the initial test for today's ships. Therefore, IACS established and put into practice Unified Requirements (UR) S14 in 1996. This UR specifies requirements related to testing procedures of watertight compartments as more reasonable requirements which take into account the latest technologies used for ship construction.

IACS submitted the draft "Guidelines for Procedures of Testing Tanks and Tight Boundaries", based upon the proven track record of UR S14, to the 86th Session of the IMO Maritime Safety Committee (MSC86) held in August 2009. In addition, IACS suggested amending relevant SOLAS regulations so that the aforementioned Guidelines are regarded as an alternative procedure by SOLAS regulation II-1/11.

The content of draft Guidelines was subsequently revised based upon discussions held by an IMO sub-committee, so IACS revised UR S14 in order to reflect these changes. The revised version of the UR was approved as UR S14(Rev.5) in January 2015. This new version specifies the minimum requirements which classification societies are to apply with respect to watertightness tests for boundaries and weathertightness tests for hatch covers, etc. as well as the detailed procedures for such tests.

Therefore, relevant requirements were amended in accordance with IACS UR S14(Rev.5)

In addition, the IMO decided at MSC95 held in June 2015 to not amend SOLAS and not to issue the draft Guidelines as an MSC Circular; It was, however, recorded in the official record of the discussions some members expressed that UR S14, the contents of which are the same as the draft Guidelines, is available for any Administration to use on a case-by-case basis.

## Outline of Amendment

The main contents of this amendment are as follows:

- (1) Specified the definition of each test for watertight boundaries.
- (2) Specified the tanks requiring structural tests to be carried out with respect to tanks having structural similarity and tanks of sister ships.
- (3) Amended requirements related to testing procedures and water head for each space.
- (4) Amended requirements related to design (water) head so that they are in accordance with the requirements for test (water) heads.