

Meeting: International Maritime Organization (IMO) Sub-Committee on Stability, Load Lines and Fishing Vessels Safety
50th session (SLF 50)

Meeting period: April 30 to May 4, 2007

Meeting venue: International Coffee Organization, London, UK

Attendances from NMRI

Harukuni TAGUCHI, Dr. (Left in photo)
Marine Dynamics Research Group

Yoshitaka OGAWA, Dr. (Right in Photo)
Ship Structural Research Group



Contributions to this meeting

Dr. H. Taguchi and **Dr. Y. Ogawa** participated in the technical discussion in terms of the development of explanatory notes for harmonized SOLAS chapter II-1, the passenger ship safety and the revision of Intact Stability Code (IS-Code).

Dr. Y. Ogawa also made efforts for the reflection of Japan's opinion in terms of main agenda items of this session. He contributed to submit the paper of Japan (SLF 50/3/4) for the clarification of the guidance on the term "any single compartment" in the regulation 8-1 in SOLAS chapter II-1. In terms of the requirement for the safe return to port of damaged passenger ships in a seaway when returning to port by own power or under tow, he also took the initiative in the Sub-Committee for the provision of the stability requirement, which is based on the damage scenario, and the guidance for ship masters. In terms of the revision of IS-Code, he contributed to submit the paper of Japan (SLF 50/4/6) for the proposing modifications of the criterion requiring that the maximum righting lever shall occur at an angle of heel not less than 25° in the IS-Code.

Outcomes of this meeting

Development of explanatory notes for harmonized SOLAS chapter II-1

In accordance with the instruction by 82nd session of Maritime Safety Committee (MSC 82), the term "any single watertight compartment" in the regulation 8-1 in the revised SOLAS chapter II-1 was discussed in this session. As a result of the extensive debate, the Sub-Committee agreed that the term "any single watertight compartment" means all onboard spaces below the bulkhead deck within watertight boundaries. The Sub-Committee noted that regulation 8-1 was established only for redundancy of the system capabilities and, in this connection, the placement of regulation 8-1 in the revised SOLAS chapter II-1, part B-1 (Stability), is at present not logical. However, the Sub-Committee recalled that stability requirements could be developed separately, pending the outcome of the work under the future agenda item on "Stability and sea-keeping characteristics of damaged passenger ships in a seaway when returning to port by own power or under tow".

Passenger ship safety

After having considered comments by Japan and following an extensive debate on how best to proceed on this issue, the Sub-Committee agreed to establish a correspondence group to develop design and damage stability criteria for passenger ships and guidelines for operational information for masters of passenger ships for safe return to port by own power or under tow.

Review of the Intact Stability Code (IS-Code)

In terms of the criterion in part A of the draft revised IS-Code requiring that the maximum righting lever shall occur at an angle of heel not less than 25°, the Sub-Committee agreed to add the following text at the end of paragraph 2.2.3 of part A: "If this is not practicable, alternative criteria, based on an equivalent level of safety, as set out in the explanatory notes, may be applied subject to the approval of the Administration". Having agreed to these changes and other proposals, the Sub-Committee prepared the draft International Code on Intact Stability to submit to MSC 83 for approval and subsequent adoption.

In terms of long term tasks, the Sub-Committee agreed to develop enhanced framework for the development of new

generation intact stability criteria and to develop procedures for direct assessment (as part of an alternative for published criteria) for the identified phenomena listed below;

1. Stability failures under dead ship conditions
2. Stability failures in following seas associated with matters related to stability variation in waves, in particular reduced righting levers of a ship situated on a wave crest
3. Stability failures caused by parametric resonance, including consideration of matters related to large accelerations and loads on cargo and stability variation in waves
4. Stability failures caused by broaching including consideration of matters related to manoeuvrability and course keeping ability as they affect stability.

Next Meeting Schedule

The next session (SLF 51) will meet from July 14 to 18 at the headquarters of International Maritime Organization in London UK.