



Damage Stability of Ships

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Message from the Guest Editors

Ensuring sufficient damage stability of ships and, thus, their safety in case of flooding of watertight spaces is essential for ship survivability and for the safety of life at sea. During the past century, modeling and calculation methods have been developed, as well as assessment criteria, ranging from simple floodable length analyses to extensive probabilistic damage stability assessments, such as in the frame of the current international SOLAS regulations. More recently, novel numerical simulations methods have been also developed, with focus on the modeling of the physics of the ensuing physical phenomena, namely, the flooding process of damaged ships, employing both simple hydraulic models and advanced CFD, while also considering the effects of the surrounding sea state. In addition, improvements to the damage stability assessment framework and accident statistics, as well as decision support in flooding emergency, are being developed.





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Message from the Editor-in-Chief

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