



Date: April 14, 2015

To: Ship Owners / Managers / Operators | Flag Administrations | Surveyors | Builders

Subject: " Steering Gear test on sea trials is required after January 1, 2016 "

Reference: Amendments to SOLAS Regulation II-1/29 MSC.365 (93).

SOLAS Regulation II-1/29 has been amended to include requirements for ships that it is impractical to demonstrate compliance with the requirement for deepest seagoing draught during the test of steering gear.

For a number of ship types, such as container ships, it is impractical to demonstrate compliance with the requirement during sea trials at its deepest seagoing draught and running ahead at the speed corresponding to the number of maximum continuous revolutions of the main engine and maximum design pitch.

Through MSC.365 (93), the IMO has adopted the alternative way to demonstrate the requirements of steering gear. Where it is impracticable to demonstrate the requirement for steering gear with the ship at its deepest seagoing draught, ships may demonstrate compliance with the requirement by one of the following methods:

1. The ship is at even keel and the rudder fully submerged whilst running ahead at the speed corresponding to the number of maximum continuous revolutions of the main engine and maximum design pitch; or
2. Where full rudder immersion during sea trials cannot be achieved, an appropriate ahead speed shall be calculated using the submerged rudder blade area in the proposed sea trial loading condition. The calculated ahead speed shall result in a force and torque applied to the main steering gear which is at least as great as if it was being tested with the ship at its deepest seagoing draught and running ahead at the speed corresponding to the number of maximum continuous revolutions of the main engine and maximum design pitch; or
3. The rudder force and torque at the sea trial loading condition have been reliably predicted and extrapolated to the full load condition. The speed of the ship shall correspond to the number of maximum continuous revolutions of the main engine and maximum design pitch and propeller.

On all occasions when trials are conducted with the ship not at the deepest seagoing draught, the loading condition can be accepted on the conditions that either the rudder is fully submerged (at zero speed waterline) and the ship is in an acceptable trim condition, or the rudder load and torque at the trial loading condition have been reliably predicted and extrapolated to the full load condition, to the satisfaction of our attending Surveyor.



In any case, for the main steering gear trial, the speed of the ship corresponding to the number of maximum continuous revolution of main engine and maximum design pitch applies.

It was agreed to apply the above amendments to ships regardless of date of construction. Although the amendments will come into effect as from 1 January 2016, MSC.1/Circ.1482 was approved to enable its early implementation of the amendments before the effective date.

If you have any questions and/or concerns, please feel free to contact me directly at nbmarine.consultant.com, +1(504) 520-9540 or visit our web site at www.nbmarine-consultants.com

Respectfully Yours,

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