



Republic of the Philippines
Department of Transportation
MARITIME INDUSTRY AUTHORITY



MEMORANDUM CIRCULAR NO. SR 2021-04

TO : ALL PHILIPPINE SHIP OWNERS/ OPERATORS/ CHARTERERS/ MANAGERS OF PHILIPPINE REGISTERED SHIPS; ALL ACCREDITED MARINE SURVEYING COMPANIES/ RECOGNIZED ORGANIZATION, SHIPYARDS AND ALL OTHERS CONCERNED

SUBJECT : REVISED RULES AND REGULATIONS ON INTACT STABILITY REQUIREMENT FOR PHILIPPINE-REGISTERED SHIPS

Pursuant to the provisions of Presidential Decree No. 474, Executive Order No. 125/ 125-A, Republic Act No. 9295 and its amendments, Philippine Merchant Marine Rules and Regulations (PMMRR) '97, as amended, International Convention for the Safety of Life at Sea (SOLAS), and Intact Stability Code, 2008 (2008 IS Code) and its amendments, the following Rules and Regulations are hereby adopted and prescribed;

I. OBJECTIVES

The purpose of this rules and regulations is to foster the safe operation of Philippine- registered ships covered, by requiring compliance with the herein prescribed intact stability requirement, standards and criteria, thereby minimizing the risk to such ships, their personnel on board and to the marine environment.

It also serves the purpose of supplementing the implementation of the Code on Intact Stability 2008, and its amendments, to Philippine-registered ships.

II. COVERAGE

This Circular shall apply to all Philippine-registered ships, engaged in both domestic and international operations, except for the following;

- Warships;
- Government ships (not engaged in commercial operation);
- Ships that rely on outriggers for their stability;
- Ships carrying 12 passengers and below; and
- Ships 3GT and below

III. DEFINITION OF TERMS

The following definition of terms are used for the purpose of this Circular:

1. **"Administration"** refers to the Maritime Industry Authority (MARINA).
2. **"Alteration"** refers to the process of changing the configuration of ships or ships dimensions which affect the original approved plans; lengthening; and other similar process.
3. **"Certificate of Stability"** refers to a Certificate issued by the Administration after the ship in compliance with the minimum stability requirements of this Circular.
4. **"Conversion"** refers to the process of changing ship type and service; increasing maximum allowable draft; and, other similar process.
5. **"Domestic Trade or Voyage"** means a trade or voyage within the ports and places in the Philippines.
6. **"High-Speed Craft"** is a craft capable of a maximum speed, in metres per second (m/s), equal to or exceeding:

$$3.7 \times \nabla^{0.1667}$$

where: ∇ = displacement corresponding to the design waterline (m^3) excluding craft the hull of which is supported completely clear above the water surface in non-displacement mode by aerodynamic forces generated by ground effect.

7. **"Inclining Test"** involves moving a series of known weights, normally in the transverse direction, and then measuring the resulting change in the equilibrium heel angle of the ship. By using this information and applying basic naval architecture principles, the ship's vertical centre of gravity (VCG) is determined.
8. **"International Trade or Voyage"** means a trade or voyage from any port of entry in the Philippines to another country or conversely.
9. **"Length"** the length should be taken as 96% of the total length on a waterline at 85% of the least moulded depth measured from the top of the keel, or as the length from the fore side of the stem to the axis of the rudder stock on the waterline, if that be greater. In ships designed with a rake of keel the waterline on which this length is measured should be parallel to the designed waterline.
10. **"Lightweight Survey"** involves taking an audit of all items which should be added, deducted or relocated on the ship at the time of the inclining test so that the observed condition of the ship can be adjusted to the lightship condition.



11. **"MARINA-Accredited Marine Surveying Companies for Stability Calculation of ships"** refers to an organization authorized by the Administration to conduct inclining test and prepare the stability calculation booklet of ships (intact and damage) covered by this circular.
12. **"Modification"** refers to the process of replacing major propulsion machinery to include major auxiliaries; modifying the superstructure such as construction of additional deck above main deck; and other similar process.
13. **"Passenger Ships"** is a ship which carries more than twelve passengers as defined in the SOLAS Convention, as amended.
14. **"Rebuilding"** refers to an existing ship subjected to changes specifically the replating of its hull/ superstructure and replacement of its main engine in order to substantially prolong its operating life to such an extent of at least 85% of its total hull has been replaced including its main engine.
15. **"Recognized Organizations (ROs)"** refers to an organization that has been assessed by the Administration and has complied with MC 2018-01 and the RO Code and has entered into a Memorandum of Agreement (MOA) with the Administration.
16. **"RENA"** refers to the Registered Naval Architect.
17. **"Stability instrument"** is an instrument installed on board a particular ship by means of which it can be ascertained that stability requirements specified for the ship in the Stability Booklet are met in any operational loading condition. The stability instrument comprises hardware and software.
18. **"Ship or vessel"** refers to any craft or artificial contrivance capable of floating in water, designed to be used or capable of being used as a means of water transportation utilizing its own motive power or that of others.

IV. GENERAL PROVISIONS

1. The International Code on Intact Stability, 2008 (2008 IS Code) resolution MSC.267(85) and its subsequent amendments, are hereby adopted as an integral part of this Circular.
2. Every Philippine-registered ship covered by this Circular shall undergo an Inclining test and must have in possession on board an approved Intact Stability Booklet and valid original Certificate of Stability issued by the Administration for those engaged in domestic operations, or an Intact Stability Booklet issued by a Recognized Organization for those engaged in international operations.



3. The Inclining test shall be conducted by the MARINA-Accredited Marine Surveying Companies with the supervision of a Registered Naval Architect from the Administration. The MARINA-Accredited Marine Surveying Company conducted the inclining test shall submit the results of the stability calculation to the Administration for review, validation and approval. The Certificate of Stability shall be issued to domestic ships found to be in compliance with the herein adopted/prescribed rules and regulations, based on the result of the inclining test, together with the supporting plans, calculations, etc., subject to endorsement every five (5) years reckoned from the date the test/survey was conducted.
4. For brand new imported ships with Intact Stability Booklet approved by the Recognized Organizations to be used for domestic operation, the shipowner shall submit to the Administration the approved Intact Stability Booklet with other relevant plans which was approved by the Recognized Organization (RO) for the Issuance of Certificate of Stability.
 - 4.1 the reckoning date of endorsement of Certificate of Stability shall be the date of the inclining experiment conducted in the approved Stability Booklet.
 - 4.2 if the said vessel has undergone alterations, modifications, conversion and/or any changes which could affect its light condition or the position of the center of gravity, such ship shall be subjected to re-inclining test and its stability information amended.
5. The Administration may allow the inclining test of a ship to be dispensed with, provided that reliable stability information for such ship can be obtained from a basic data available, or there are available references to existing data for similar class of ships/sister ships and it is shown to the satisfaction of the Administration that reliable stability information for the exempted ship can be obtained from such basic data. A weight survey shall be carried out upon completion and the ship shall be inclined whenever, in comparison with the data derived from the sister ship, a deviation from the lightship displacement exceeding 1% for ships of 160m or more in length and 2% for ships of 50 m or less in length and as determined by linear interpolation for intermediate lengths or a deviation from the lightship longitudinal center of gravity exceeding 0.5% of L_s is found.
6. The Administration may also allow the inclining test of an individual ship or class of ships especially designed for the carriage of liquids or ore in bulk to be dispensed with when reference to existing data for similar ships clearly indicates that, due to the ship's proportions and arrangements, more than sufficient metacentric height will be available in all probable loading conditions.
7. Each ship operating in domestic trade shall be provided with a stability booklet, approved by the Administration, which contains sufficient information to enable the master to operate the ship in compliance with the applicable requirements contained in the Code. If a stability instrument is used as a supplement to the



stability booklet for the purpose of determining compliance with the relevant stability criteria such instrument shall be subject to the approval by the Administration. However, an approved stability instrument is not a substitute for the approved stability booklet, and is used as a supplement to the approved stability booklet to facilitate stability calculations.

8. In the case of a ship already issued with a Certificate of Stability, where alterations, modifications, conversion and/or rebuilding were made affecting its light condition or the position of the center of gravity, or both, such ship should be subjected to re-inclining test and its stability information amended.
9. The Intact Stability requirements for the High-Speed Craft shall be based on the minimum stability criteria and requirements of International Code of Safety for High Speed Craft (2000).
10. For Class Ships, respective Classification Societies shall be responsible to ensure that ships under their classed shall be compliant with the minimum stability requirements and criteria of the ISC Code 2008 or other applicable codes and conventions.

V. SPECIFIC PROVISIONS AND GUIDANCE FOR STABILITY DETERMINATION

1. The format of the stability booklet and the information included will vary dependent on the ship type and operation. The Administration adheres to the minimum requirements as prescribed in the Intact Stability Code, 2008 (2008 IS Code) resolution MSC.267(85). However, this Administration shall require the information regarding the details of Load Line Markings (if applicable) and Lines Plan to be present in the submitted Intact Stability Booklet for approval.
2. The Administration shall also require that the calculations for the limitations of ships to wave height that is capable to operate be reflected in the Trim and Stability Booklet. The value for the wave height limitations shall also be reflected in the Certificate of Stability.
3. Passenger ships regardless of size shall submit for approval to the Administration the Preliminary Stability Calculation Booklet of the proposed new construction, alteration and/or modification approved by the Classification Societies.
4. Newly constructed ships/ modifications/ alterations and re-building covered by this Circular shall be inclined upon its completion to determine the elements of its stability.
5. The ship should be almost completely equipped as far as practicable when the inclining test is conducted. Equipment used by the yard on board should be limited to the utmost extent possible. Prior to the inclining test, lists of all items which are to be added, removed, or relocated should be prepared. These weights and their locations should be accurately recorded.



6. Procedures, conditions, guidelines, criteria and standards for the conduct of inclining test and stability calculation/ determination shall be based from applicable provisions of the Code on Intact Stability 2008 as amended and Chapter IV, Reg. IV/3 of the PMMRR '97, as amended.
7. Safety Certificates shall not be issued/renewed to a ship which has no Certificate of Stability, or if such Certificate ceases to be valid.
8. If the Certificate of Stability/ Intact Stability Booklet is invalidated by the Administration or its recognized organization after due process, the Safety Certificate(s) issued to such ship shall automatically be suspended, and the ship shall be under "no sail condition".
7. The Master of a ship under "no sail condition" shall be under obligation to warrant that such ship shall not proceed to sea and undertake a voyage.
8. Non-possession onboard of the required original Certificate of Stability shall be considered as major deficiency/ major non-conformity warranting immediate suspension/ cancellation/ non-issuance of other ship safety certificates and authority to operate.
9. At periodical intervals not exceeding five years, a lightweight survey shall be carried out on all passenger ships to verify any changes in lightship displacement and longitudinal centre of gravity. The ship shall be re-inclined whenever, in comparison with the approved stability information, a deviation from the lightship displacement exceeding 2% or a deviation of the longitudinal centre of gravity exceeding 1% of L_s , is found or anticipated.
10. During the endorsement of Certificate of Stability other than passenger ships, copies of the two (2) latest drydocking reports shall be submitted for review, evaluation and verification by the Administration that there are no evidence from such reports of changes, alterations or deterioration from the ship to affect its stability and its lightship condition.
11. Every ship shall have scales of draughts marked clearly at the bow, midship and stern. In the case where the draught marks are not located where they are easily readable, or operational constraints for a particular trade make it difficult to read the draught marks, then the ship shall also be fitted with a reliable draught indicating system by which the bow, midship and stern draughts can be determined. Ship owners/representative shall also present to the Administration for the calibrated draft marks certified by the Shipyards prior to the conduct of the Inclining Test.



12. The Administration may adopt or approve other inclining test procedure for ships below 24 meters in length, provided special precautions are taken to ensure the accuracy of the test procedure.

VI. IMPLEMENTATION

1. The Administration, shall henceforth principally undertake the supervision of inclining test, review and approval of stability information booklet and Issuance of Certificate of Stability, through its duly RENA.
2. The inclining test report and analysis, combined with the report or separately, should be submitted to the Administration for review and acceptance of results as the basis for approval of the stability information of the ship and Issuance of Certificate of Stability.
3. Upon completion of the needed surveys, tests, calculations, etc., undertaken by the MARINA-Accredited Marine Surveying Companies with the supervision of the RENA from the Administration, and submission of all requirements, the Certificate of Stability shall be issued by the Administration.
4. The shipyard, representative of owner and/or the MARINA-Accredited Marine Surveying Companies shall be responsible for the preparation of the conduct of inclining test. The Instruction, containing the information of date and location of the test, responsible person, calibrated inclining test weights, schemes of inclining weight positions etc., should be presented and submitted to the Administration one (1) week prior to the schedule of the conduct Inclining Test.
5. The following information should be available at the time of the inclining test as necessary:
 - 5.1 General arrangement drawing;
 - 5.2 Tank capacity plan;
 - 5.3 Hydrostatic curves; and,
 - 5.4 Draft marks locations.
6. Measurement of Inclining Test data is to be as accurate as possible and to the satisfaction of the attending Surveyor. The ship should be as upright as possible; with inclining weights in the initial position, up to one-half degree of list is acceptable. The total weight used should be sufficient to provide a minimum inclination of one degree and a maximum of four degrees of heel to each side. At least two (2) pendulums and should be located in an area protected from the wind.
7. Re-Issuance of Certificate of Stability includes the following cases;
 - 8.1 Change of Name of Ship
 - 8.2 Change of Homeport/ Port of Registry
 - 8.3 Change of Ownership
 - 8.4 Loss of Original Certificate



VII. DOCUMENTARY REQUIREMENTS

1. Application for the Issuance of Certificate of Stability
 - 1.1 Letter of Application
 - 1.2 Triplicate Copy of Stability Calculation Booklet
 - 1.3 Copy of Load Line Certificate, if necessary
 - 1.4 Copy of Certificate of Philippine Registry and Ownership, if necessary
2. Application for Endorsement of Certificate of Stability
 - 2.1 Letter of Application
 - 2.2 Original Copy of Certificate of Stability
 - 2.3 At least two (2) copies of latest of Dry-docking Certificate and Work Done

Note: Passenger ships are required to submit lightweight survey report during the endorsement of Certificate of Stability

3. Application for the Re-Issuance of Certificate of Stability
 - 3.1 Letter of Application
 - 3.2 Copy of Original Certificate of Stability
 - 3.3 Copy of Certificate of Philippine Registry and Ownership, if necessary
 - 3.4 Affidavit of Loss, if applicable

VIII. FEES AND CHARGES

The following fees and charges shall be imposed for purposes of implementing the herein rules and regulations.

1. Conduct of Lightweight Survey by the MARINA
(Inclusive of related evaluations and calculations)

<i>Ship's Tonnage</i>	<i>Non-Propelled (Php)</i>	<i>Self-Propelled (Php)</i>
Under 35 GT	4,200.00	5,000.00
35 and under 200 GT	12,000.00	15,000.00
200 and under 400 GT	18,000.00	20,000.00
400 and under 700 GT	24,000.00	30,000.00
700 and under 1000 GT	30,000.00	35,000.00
1000 and under 1500 GT	36,000.00	45,000.00
1500 and under 2500 GT	48,000.00	60,000.00
2500 and under 3500 GT	54,000.00	70,000.00
3500 and under 5000 GT	60,000.00	80,000.00
5000 and under 6500 GT	66,000.00	95,000.00
6500 and under 8000 GT	72,000.00	100,000.00
8000 and under 10000 GT	78,000.00	120,000.00
10000 and under 12000 GT	84,000.00	130,000.00



12000 and under 15000 GT	90,000.00	140,000.00
15000 GT and over	96,000.00	150,000.00

2. Supervision of Inclining Test/Experiment

Particulars	
50 GT or less	Php 1,200.00
Above 50 GT - 500 GT	Php 1,200.00 + 1.80/GT in excess of 50 GT
Above 500 GT- 1,500 GT	Php 2,400.00 + 1.80/GT in excess of 500 GT
Above 1,500 GT	Php 6,000.00 + 1.80/GT in excess of 1,500 GT

3. Approval of Intact Stability Booklet

Particulars	
2.1 50 GT or less	Php 1,200.00
2.2 Above 50 GT - 500 GT	Php 1,200.00 + 1.80/GT in excess of 50 GT
2.2 Above 500 GT- 1,500 GT	Php 2,400.00 + 1.80/GT in excess of 500 GT
2.4 Above 1,500 GT	Php 6,000.00 + 1.50/GT in excess of 1,500 GT

4. Issuance Certificate of Stability/ Endorsement without Lightweight Survey

Php 1,000.00

5. Re-issuance of Certificate

Php 1,000.00

IX. FINES AND PENALTIES

1. Operation/ Navigation of a vessel without a Certificate of Stability/ an approved Intact Stability Booklet, late application and unendorsed/cancelled Certificate of Stability and failure to secure approval recalculation of Intact Stability Booklet due to conversion/modification/alteration/re-building shall be penalized as follows:

Size Ranges	Fines and Penalties
50 GT or less	50,000 + plus suspension of the ship safety certificate involved in the violation / no sail condition until compliance
Above 50GT-500GT	100,000 + plus suspension of the ship safety certificate involved in the violation / no sail condition until compliance
Above 500GT-1500GT	150,000 + plus suspension of the ship safety certificate involved in the violation / no sail condition until compliance
Above 1500GT	200,000 + plus suspension of the ship safety certificate involved in the violation / no sail condition until compliance

X. TRANSITION CLAUSE

This Circular shall take effect immediately to all ships for new construction, alteration, conversion, modification and re-building upon effectivity of this circular.

All existing ships covered shall be given the following dates to comply from the effectivity of this Circular.

Type of Ships		Date of Compliance
1	Passenger Ships	within one (1) year upon effectivity of this Circular.
2	Other Type of ships (<u>less than 500GT</u>)	within two (2) years upon effectivity of this Circular or the next drydocking schedule of the ship whichever comes first.

XI. REPEALING CLAUSE

MARINA MC 2007-05 is hereby repealed and other issuances which are inconsistent herewith are hereby repealed and modified accordingly.

XII. EFFECTIVITY

This MARINA Circular shall take effect fifteen (15) days after its publication once in a newspaper of general circulation in the Philippines.

Manila, Philippines, this 3rd day of January 2022.

BY AUTHORITY OF THE MARINA BOARD:


VADM ROBERT A EMPEDRAD AFP (Ret)
Administrator

SECRETARY'S CERTIFICATE

This is to certify that MARINA Circular No. SR-2021-04 has been approved by the MARINA Board in its 287th Regular Board Meeting held on 28 September 2021.



ATTY. MAXIMO I. BAÑARES, JR.
Corporate Board Secretary

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Date of Submission to ONAR:

