

# APPENDICES



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## **APPENDIX A**

### **GRANDFATHERING PROVISIONS**

#### **A.1 PURPOSE**

The purpose of this Appendix is to authorize specific circumstances under which interpretations of the tonnage regulations may be applied that predate the interpretations promulgated by changes to this MTN.

#### **A.2 DISCUSSION**

This MTN is intended to provide sufficient interpretive information to enable correct and consistent application of the tonnage measurement regulations. While the MSC's goal is to ensure the interpretive information is clear and keeps pace with the evolution of vessel designs, the MSC recognizes that designers and measurement organizations may apply reasonable interpretations of the regulations that are subsequently superseded by changes to the MTN. The MSC's position is that once tonnages have been certified using reasonable interpretations of the regulations, it is not necessary to remeasure a vessel for the purpose of applying later interpretations, unless requested by the vessel's owner. Further, in order to provide relief to owners who are having vessels designed or redesigned on the basis of interpretations that are subsequently superseded, the MSC considers that grandfathering should be extended to such vessels, and to identical sister vessels.

#### **A.3 GRANDFATHERING AUTHORIZATION**

Interpretations of the tonnage regulations that immediately predate the interpretations promulgated by a change to this MTN may be applied at the option of the vessel's owner, for vessels in any of the following three categories:

- (a) A vessel for which tonnages have not been certified and which was contracted for on or before the date of the MTN change.
- (b) A vessel for which tonnages have been certified, but which has undergone modifications that were contracted for on or before the date of the MTN change.
- (c) A sister vessel that is identical from the standpoint of tonnage measurement to a vessel described in either Section A.3(a) or Section A.3(b) above.

A vessel for which tonnages have already been certified should not be remeasured for the purpose of applying the latest interpretations of this MTN, except upon request by the vessel's owner and at the owner's expense.

#### **A.4 CONSIDERATION OF OTHER VESSELS**

The MSC recognizes that there may be unique circumstances under which grandfathering should be extended to vessels other than those described in Section A.3 above. The MSC will give consideration to requests to extend grandfathering to other vessels. Such requests must be made in writing to the Commanding Officer, MSC, and must be accompanied by information detailing the specific stage of design and/or construction of the vessel on the date of the MTN change that promulgated the superseded interpretations.

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## APPENDIX B

### DISCUSSION OF CHANGES

#### SUBPART B - CONVENTION MEASUREMENT

1. **Section 69.61(f) - Space Open to the Sea** This section was revised to more clearly reflect that spaces open to the sea are external hull spaces, consistent with interpretation provided in a decision letter dated 4/10/2003.
2. **Section 69.65(b)(5) - Linear Appendages Less Than 1 m<sup>2</sup> in Area** This section was added to address accepted calculation methods for linear hull appendages, as a result of feedback obtained during the Measurement Organization Conference held on December 3, 2002 in New Orleans, LA. Calculating volumes of linear appendages of restricted size using average sectional areas multiplied by average lengths provides sufficient accuracy and falls within the bounds of acceptable naval architectural practice. A one square meter size criterion was selected consistent with the criterion for ignoring smaller air trunks of International Maritime Organization (IMO) Circular TM.5/Circ.5 of June 10, 1994.
3. **Section 69.65(c)(1)(v) - Linear Appendages Less Than 1 m<sup>2</sup> in Area** This section was added to address accepted calculation methods for linear deckhouse appendages, consistent with new Section 69.65(b)(5).

#### SUBPART C - STANDARD MEASUREMENT

1. **Section 69.103 - Partial Decks** A definition of partial decks was added. The term was previously undefined. The definition is based in part on a decision letter dated 7/10/70, which addressed decks like orlop decks that do not run the full length of the vessel. It also provides for categorizing any deck that rests partly on floors ("ceiling on floors") as a partial deck, based on decision letters dated 1/1/19, 8/10/56, 7/20/64, 4/9/65, 4/21/65, 4/26/66, 7/24/68, 11/8/68, 5/2/69, 5/13/69, 10/27/72, 6/1/73, and 2/2/01.
2. **Section 69.103 - Uppermost Complete Deck** The definition was revised as indicated below.
  - (a) Existing paragraph (d) was revised to clarify that the "opening" referred to is a tonnage opening, since other hull openings cannot be used to disqualify a deck from being the uppermost complete deck.
  - (b) New paragraph (e) was added to require that the uppermost complete deck remain above the vessel's design waterline, based on decision letters dated 4/9/65, 10/18/95, 2/2/01, 3/29/01 and 3/25/02. This requirement is consistent with language in the underlying statute regarding treatment of space above the "upper deck". Submersibles, dockships and similar vessels are exempted from this requirement.
  - (c) New paragraph (f) was added to provide for disqualifying any deck resting directly on floors for over one half the tonnage length of the vessel, consistent with language contained in Section 69.109(o) and decision letters dated 4/26/66, 5/9/67, 11/8/68, 5/2/69, 5/13/69 (two letters), 11/13/69, 10/27/72, 6/1/73 and 12/31/80. A note was added to highlight the fact that there is only an indirect relationship between the number of zero area stations and the length of the portion of the deck that is considered "ceiling on floors".

3. **Section 69.109(d) - Enumerating the Decks to Identify the Second Deck from the Keel** This section was revised for clarity and consistency with the changes that added the definition for “partial deck”, to reflect that no portion of an enumerated deck that is below the uppermost complete deck can rest on floors.
4. **Section 69.109(e) - Identifying the Line of the Tonnage Deck** This section was revised to clarify that tonnages of spaces between the line of the tonnage deck and the higher portions of that deck are included in the between-deck tonnage.
5. **Section 69.109(f) - Tonnage Length** This section was revised consistent with a decision letter dated 2/24/99, which established policy regarding the measurement treatment of stern frames. Clarifications have been added on establishing tonnage length termination points for situations involving complex geometry (e.g., bulbous bows), consistent with interpretations of Section 69.109(q)(2). For such situations, practice has varied. The approach of a decision letter dated 5/24/00, which addressed treatment of a vessel with a bulbous bow, is superseded.
6. **Section 69.109(h) - General** This section was revised to reflect that depth measurements are terminated at the lowest portion of an ordinary bottom frame or longitudinal, consistent with interpretations of Section 69.109(p)(4). Also, measurement to the skin was specified in the event that no qualifying ordinary bottom floors or frames are present, consistent with interpretations of Section 69.109(p)(2)(i).
7. **Section 69.109(o) - Open Vessels** This section was clarified to reflect that vessels without an uppermost complete deck are measured as open vessels. Without this clarification, the section suggests that a vessel without a “complete” deck running from stem to stern would not be measured as an open vessel provided the length of the partial decks was less than or equal to one-half the length of the tonnage deck. This is in conflict with language in 46 CFR 69.103 under the definition of the “uppermost complete deck”, which stipulates that the deck must run from stem to stern at all points of its length (in other words, without gaps caused by partial decks). In resolving this conflict, the following were considered:
  - (a) The language in 46 CFR 69.109(o) on partial decks was introduced in 1935 to address concerns over measurement of smaller vessels with cockpits and other openings that interrupted the uppermost complete deck. It provided for measuring a vessel as an open vessel if the length of such openings exceeded the one-half tonnage length criterion. By implication, a vessel with smaller interruptions in the deck were not measured as open vessels.
  - (b) The language on partial decks in 46 CFR 69.109(o) came into conflict with more recently introduced language in the definition of the “uppermost complete deck” in 46 CFR 69.103. The language in 46 CFR 69.103 precludes having an “uppermost complete deck” consisting of partial decks with gaps, even if the partial decks run for a length of more than one-half of the tonnage length.
  - (c) It appears that, notwithstanding this conflict, the regulations have generally been interpreted as prohibiting interruptions in the uppermost complete deck that would be caused by “partial decks”, but allowing “ceiling on floors” to constitute part of the uppermost complete deck. Refer to decision letters dated 12/1/64, 4/26/66, 7/24/68 and 10/27/72, all of which suggest that if “ceiling on floors” constituted less than one-half the tonnage length, the vessel would not be measured as an open vessel. On the other hand, a decision letter dated 4/9/65 stated that “ceiling on floors” cannot be “enumerated”. This could be interpreted to mean that under no circumstance could “ceiling on floors” be allowed to constitute part of an enumerated deck. However, at the time of the 4/9/65 letter, enumeration also referred to the counting of decks for the purpose of listing the number of decks on appropriate certificates, so this prohibition may have applied only in that context.

Based on the above, Section 69.109(o) was revised to clarify that an open vessel is one without an uppermost complete deck. The underlying requirements of the partial deck language were included in new subsection (f) under the definition of “uppermost complete deck” in Section 69.103. This new subsection stipulates that “ceiling on floors” may be considered as part of the uppermost complete deck, but that such “ceiling on floors” cannot exceed the “one-half the tonnage length” requirement. The net result of these changes is believed to be consistent with general practice at least since the mid-1960’s.

8. **Section 69.109(p)(2)(ii) - Different Sized Framing** This section was revised to clarify that alternating deep frames must qualify as ordinary frames if they are to be used as the basis for establishing the line of ordinary frames.
9. **Section 69.109(p)(2)(iii) - Openings** This section was revised for purposes of clarity to eliminate references to “maximum size criteria”. Instead, the term “oversized” is used to refer to ordinary frame openings which exceed the specified size criteria.
10. **Section 69.109(p)(2)(iv) - Vertical Continuity of Framing** To eliminate confusion, the two figures in this section were replaced with a single figure that combines all of the information from the two.
11. **Section 69.109(p)(3)(i) - General Requirements** This section was clarified to reflect that a terminating transverse frame must be an ordinary frame. Also, the section was corrected consistent with the third figure of this section to reflect that the 4 foot criterion for the uppermost ordinary longitudinal frame is referenced to the line of the tonnage deck (instead of the line of the uppermost complete deck).
12. **Section 69.109(p)(3)(v) - Requirements for Terminating Transverse Frames** This section was revised to include requirements regarding openings in the terminating transverse frame, based on a decision letter dated 9/23/02.
13. **Section 69.109(p)(4) - Bottom Floors and Framing** - This section was restructured and clarified to highlight the distinction between bottom frames and side frames, for both longitudinal and transverse framing systems.
14. **Section 69.117(b)(8) - Water Closets** This section was revised to clarify that an exempted water closet space need not be able to accommodate more than one person at any given time, and that shower areas that are part of water closet spaces may also be exempted. This is based on language that appeared in the regulations prior to 1989, and decision letters dated 7/7/19, 1/1/20, 12/3/21, 1/26/29, 10/5/32, 11/4/46 (three letters) and 1/23/99. Also, the section was clarified to reflect that sink areas that are part of water closet spaces may also be exempted, consistent with past practice.
15. **Section 69.117(c)(4) - Exemption as Open Space** The section was revised to delete the prohibition against exempting passenger berthing spaces on the uppermost complete deck as open space. This prohibition conflicts with language of the underlying U.S. statute, dating to 1895, which states: “nothing shall be added to the gross tonnage for any sheltered space above the upper deck which is under cover and open to the weather; that is not inclosed (sic).” The passenger berthing space language in 46 CFR 69.117(c)(4) dates to at least the 1919 version of the tonnage regulations. This language stems from British Board of Trade instructions of 1913, which allowed the exemption of those open spaces used for “the shelter of deck passengers,” but precluded passenger berthing spaces from being exempted as open space. In a decision letter dated 3/21/02, the MSC concluded that the passenger berthing space prohibition of 46 CFR 69.117(c)(4) is in error. Removal of this prohibition from the regulations will be addressed in a future rulemaking.
16. **Section 69.117(e)(1) - General** This section was revised to delete reference to “submerging the uppermost complete deck”. This requirement is now covered by the changes to the definition of “uppermost

complete deck” in Section 69.103, which ensure that the uppermost complete deck remains above the vessel’s design waterline.

17. **Editorial Clarifications and Corrections** - Editorial clarifications and corrections were incorporated throughout the document.

## **SUBPART D - DUAL MEASUREMENT**

1. **General** The section on dual measurement interpretations, which was previously under development, was added, for which specific interpretations are discussed below.

2. **Section 69.169(e) - Additional Exemptions for Low Tonnage** Headings were added to each subsection of this section, for clarity.

3. **Section 69.175(a) - General** This section was revised to clarify that when a two deck vessel is assigned a single tonnage, the tonnage corresponds to the lower tonnage. This is consistent with language in the 1964 IMCO Recommendations on Treatment of Shelter-Deck and Other Open Spaces, as well as language included in the regulations prior to 1989.

4. **Section 69.175(c) - Only Low Tonnage Assigned** This section was revised to clarify that when a two deck vessel is assigned a single tonnage, a load line mark must be assigned, and that mark must be below the line of the second deck. This is consistent with language in the 1964 IMCO Recommendations on Treatment of Shelter-Deck and Other Open Spaces, and with the following statement in the legislative history: “If the tonnage mark is so placed as to be effectively prohibited by the load line mark from being lawfully submerged, only one set of tonnages, reflecting all exemptions applicable in any specific case, is to be shown”. It is also consistent with language included prior to 1989 in 46 CFR 69.15-17(c), and which is currently included in 46 CFR 69.175(c).

5. **Section 69.177(a) - Tonnage Mark** A table was added, summarizing the tonnage marking requirements of this section. Headings were also added to each subsection of this section, for clarity.

6. **Section 69.177(a)(6) - Vertical Placement (Only Low Tonnages Assigned)** This section was revised to clarify that it applies only to vessels with one gross and one net tonnage assigned, consistent with the changes discussed above.

7. **Section 69.177(d) - The Line of the Second Deck** This section was revised to clarify that a freeboard deck line mark can be placed at the level of the second deck if the load line assigning authority is using the second deck as the actual freeboard deck. Based on a review of relevant documents, it appears that this scenario was not envisioned by the authors of the tonnage mark scheme, even though it is acceptable.

8. **Section 69.179(a) - Measurement Organization Certification** This section was revised to provide specific minimum certification requirements for tonnage marking.

9. **Section 69.183 - Figures** Headings were added to each subsection of this section, for clarity. Also, subsections (b) and (c) were revised for clarity to reflect that in the cases shown, the freeboard deck for load line purposes is the uppermost complete deck.

## **SUBPART E - SIMPLIFIED MEASUREMENT**

1. **Section 69.209(a)(4) - Gross Tonnage** This section was revised to include criteria for evaluating whether an open deck structure should be included in tonnage. These criteria are based on criteria for excluded spaces found in the convention measurement system. Unlike the criteria for open spaces used in the standard and dual measurement systems, the convention measurement system criteria are reasonably straightforward, difficult to circumvent, will provide consistent and accurate results for most of the vessels to which simplified measurement applies, and are in keeping with the underlying principles of the simplified measurement system. Use of these criteria will also yield results consistent with the outcome of decision letters dated 8/2/95 and 9/10/2002. Specific information regarding treatment of open structures on pontoon boats was also included.