



## Marine Safety Center Technical Note

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MTN 01-98 CH-12  
16717/46CFR69/P009016  
August 1, 2014

Subj: TONNAGE ADMINISTRATIVE POLICY

1. Purpose: This Technical Note provides administrative requirements for certification of tonnages and dimensions by authorized measurement organizations acting under the provisions of Title 46, Code of Federal Regulations, Part 69 (46 CFR 69), *Measurement of Vessels*. It replaces MTN 01-98 CH-11.

2. Discussion: This Technical Note is organized into sections addressing specific tonnage measurement requirements, including Coast Guard oversight and tonnage file maintenance. These are followed by appendices that provide forms and sample documents, a listing of the authorized measurement organizations, and a discussion of the changes to the previous version of this document (MTN 01-98 CH-11). Sidebars are used throughout this Technical Note to identify substantive changes. The pages of this Technical Note are numbered sequentially from the beginning of the document to facilitate electronic use.

3. Applicability: The requirements of this Technical Note are used by authorized measurement organizations in certifying tonnages and dimensions for vessels for which the application of a law of the United States depends on the vessel's tonnage. Refer to Navigation and Vessel Inspection Circular (NVIC) 11-93 as amended, *Applicability of Tonnage Measurement Systems to U.S. Flag Vessels*, for information on tonnage measurement system applicability. Refer to MTN 01-99 as amended, *Tonnage Technical Policy*, for technical interpretations of the tonnage measurement regulations.

4. Action: Authorized measurement organizations are requested to implement this Technical Note change immediately. Any deviation from this Technical Note requires written approval from the Marine Safety Center (MSC).

5. Disclaimer: While the policy contained in this Technical Note may assist the industry, the public, the Coast Guard, and other Federal and State agencies in applying statutory and regulatory requirements, this policy is not a substitute for the applicable legal requirements, nor is it in itself a regulation. It is not intended to, nor does it impose legally binding requirements on any party, including the Coast Guard, other Federal agencies, the States, or the regulated community.

J. P. NADEAU

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## 1. TONNAGE CERTIFICATION PROCESS

### 1.1 PURPOSE

The purpose of this section is to delineate general requirements for the process by which authorized measurement organizations assign and certify vessel tonnages and registered dimensions under 46 CFR 69.

### 1.2 DESCRIPTION OF PROCESS

Vessel owners submit applications for measurement services, along with related drawings and supporting information, to an authorized measurement organization in accordance with 46 CFR 69.17. The measurement organization obtains dimensions and other information required in the vessel measurement process from the submitted information or other sources (such as additional drawings, or directly from the vessel itself). The measurement organization calculates the tonnages in accordance with the requirements of 46 CFR 69, Subparts B, C, or D, and associated interpretations provided by the MSC. After completing an onboard survey, the measurement organization issues the appropriate tonnage certificate(s) for the vessel. Requirements concerning individual aspects of this process are provided in the sections which follow.

### 1.3 GENERAL REQUIREMENTS

In providing measurement services, measurement organizations shall observe the following:

#### (a) ACCEPTANCE OF APPLICATIONS

Upon receipt of a completed application for measurement services form, the measurement organizations shall either accept the application subject to any specified conditions (e.g., issuance of certificates contingent on payment) and perform the requested services, or provide the applicant with written notification as to why the services will not be performed (e.g., incomplete information provided with the application). The measurement organization may rescind acceptance through written notification to the applicant. Effective August 1, 2015, measurement organizations shall accept only the application form of Appendix A, *Application for Formal Measurement Services*. Measurement organizations may obtain the electronic version of this form from the MSC.

#### (b) REMEASUREMENT SERVICES

In providing remeasurement services in accordance with 46 CFR 69.19(a), measurement organizations shall apply the remeasurement criteria of NVIC 11-93 as amended, taking into consideration the related criteria on substantial alterations. Should the measurement organization deem that the intended changes will require tonnage certificate reissuance, the measurement organization shall provide written notification to the vessel's owner, with instructions to submit an application for measurement services in accordance with 46 CFR 69.17(a).

#### (c) RESOLUTION OF DISCREPANCIES

Measurement organizations shall provide the MSC with written notification of tonnage violations, tonnage measurement errors affecting assigned tonnages and dimensions, and similar discrepancies reported or discovered in conjunction with tonnage measurement services provided under 46 CFR 69. The MSC will coordinate follow-up actions with the vessel owner, cognizant Coast Guard field unit(s), and the measurement organization, and establish timeframes for completion of such actions.

#### (d) TONNAGE CONSULTING

Tonnage consulting is defined as giving advice regarding the assignment of tonnages for a fee or consideration (i.e., other compensation). Providing advice under these circumstances on a vessel

for which tonnages will be certified by the same measurement organization raises the appearance of impropriety, since it could compromise the objectivity of tonnage certification in the event that the advice was incorrectly given or applied. As a consequence, a measurement organization shall not certify tonnages on a vessel for which either: 1) an employee of the measurement organization engaged in tonnage consulting; or 2) an employee of a contractor or subcontractor of the measurement organization engaged in tonnage consulting and also provided measurement services on the measurement organization's behalf on the same vessel.

#### **1.4 ONBOARD SURVEY**

Once all work on the vessel that could affect the assigned tonnages or registered dimensions has been completed, but before the appropriate tonnage certificate(s) is issued, the measurement organization shall conduct an onboard survey (physical inspection) of the vessel. The purpose of this survey is to obtain dimensions and other information required in the tonnage measurement process that is not readily available from other sources, and to verify that:

**(a) DIMENSIONAL INFORMATION**

Previously available dimensional information used in the tonnage measurement process is correct and of sufficient accuracy (e.g., drawings, computer models);

**(b) SPACE UTILIZATION**

Spaces which could have a bearing on the tonnage assignment according to their use are properly accounted for (e.g., all cargo spaces have been identified on vessels measured under the convention system);

**(c) LABELING / MARKING**

Tonnage-related labeling and marking of the vessel is correct;

**(d) EXCLUDED SPACES**

Excluded spaces (if applicable) meet the requirements of Section 69.61(g) of MTN 01-99 as amended (e.g., are not fitted with means designed for securing cargo or stores);

**(e) TONNAGE OPENINGS**

Tonnage openings and associated tonnage opening cover plates (if applicable) meet the requirements of Sections 69.117(d) and (e) of MTN 01-99 as amended.

**(f) BALLAST SPACES**

Ballast systems associated with exemptible water ballast tanks (if applicable) meet the requirements Section 69.117(f) of MTN 01-99 as amended.

#### **1.5 TONNAGE CERTIFICATE ISSUANCE**

The measurement organization prepares and issues tonnage certificates to certify tonnages and registered dimensions assigned in accordance with 46 CFR 69, Subparts B, C, or D as specified below. Tonnage certificates shall be issued within 30 days of the completion of the onboard survey, except where prior written authorization has otherwise been obtained from the MSC.

**(a) U.S. TONNAGE CERTIFICATE**

Issue a U.S. Tonnage Certificate if a vessel is assigned tonnages under the regulatory measurement system (46 CFR 69 Subparts C or D). In addition, issue a U.S. Tonnage Certificate if the vessel is assigned tonnages under the convention measurement system (46 CFR 69 Subpart B) and the vessel is not issued an International Tonnage Certificate (1969).

**(b) INTERNATIONAL TONNAGE CERTIFICATE (1969)**

Issue an International Tonnage Certificate (1969), also referred to as an “ITC69”, upon request of the vessel's owner if the vessel is 79 feet or over in convention length and is assigned tonnages under the convention measurement system (46 CFR 69 Subpart B). Refer to the most recent revision of Navigation and Vessel Inspection Circular (NVIC) 11-93 as amended, for the definition of convention length.

A tonnage certificate is not considered valid until it is signed by an authorized representative of the measurement organization. Detailed instructions on preparing tonnage certificates are provided in Sections 2 and 3 of this document. The signature on the tonnage certificate attests to the validity of the information provided thereon, including the correctness of any tonnages and dimensions assigned by the issuing measurement organization. *NOTE: Letters formerly used to certify tonnages of vessels measuring under 5 net tons are no longer authorized.*

**1.6 DISTRIBUTION OF ORIGINAL CERTIFICATES**

The measurement organization provides the original tonnage certificate(s) to the vessel's owner. There is no requirement to maintain the U.S. Tonnage Certificate on board the vessel; however, it is highly recommended that the original certificate, or a copy, be maintained on board the vessel at all times. The original International Tonnage Certificate (1969) shall be maintained onboard the vessel whenever the vessel is engaged on a foreign voyage.

**1.7 DISTRIBUTION OF COPIES**

The measurement organization shall send copies of tonnage certificates issued on the Coast Guard's behalf to the MSC under the reporting process described in Section 4. For vessels to be documented as vessels of the United States, the measurement organization shall also send a copy of the U.S. Tonnage Certificate (or the International Tonnage Certificate (1969), if a U.S. Tonnage Certificate is not issued) to the National Vessel Documentation Center (NVDC). This copy may either be in the form of a paper copy sent by conventional means (e.g., U.S. mail), or a copy transmitted electronically by fax or as an Adobe Portable Document Format (pdf) email attachment. If a paper copy is provided, the copy must be a certified true copy of the original that is marked to attest to this fact using any one of the following methods:

**(a) WRITTEN STATEMENT**

A statement attesting to the fact that the copy is a certified copy (e.g., “I certify this to be a true copy of the original.”), with the statement signed and dated by an authorized representative of the measurement organization, whose title is given.

**(b) STAMP WITHOUT SEAL**

A stamped impression providing the words “Certified True Copy”, “Certified Copy”, or equivalent, and including the signature of an authorized representative of the measurement organization, the date when signed, and the title of the authorized representative.

**(c) STAMP WITH SEAL**

A stamped impression providing the words “Certified True Copy”, “Certified Copy”, or equivalent, and including the official seal of the measurement organization.

**(d) EMBOSSED/WATERMARKED PAPER**

A stamped impression providing the words “Certified True Copy”, “Certified Copy”, or equivalent, with the paper watermarked or embossed with the official seal of the measurement organization.

## 1.8 REISSUANCE OF TONNAGE CERTIFICATES

The measurement organization reissues a tonnage certificate to update or correct information on a previously issued certificate. In addition to the requirements for initial issuance of tonnage certificates, the following requirements apply:

### (a) MANDATORY REISSUANCE

Reissue a tonnage certificate to: 1) reflect tonnage and/or dimension changes resulting from remeasurement; 2) reflect changes to applicability of tonnage measurement systems and (where applicable) associated grandfathering provisions; 3) correct errors in assigned tonnages and dimensions (other than those of a small magnitude, as described in Section 4.2(d)); and 4) replace a required lost original International Tonnage Certificate (1969) for a vessel that engages on foreign voyages. **NOTE: Under these criteria, a U.S. Tonnage Certificate shall be reissued in the case of a vessel that was assigned tonnage under only the regulatory measurement system, and is later additionally measured under the convention measurement system for the purpose of being issued an International Tonnage Certificate (1969).**

### (b) OPTIONAL REISSUANCE

At the option of the measurement organization/vessel's owner, reissue a tonnage certificate to: 1) update or correct information not addressed by Section 1.8(a) (e.g., changes to vessel identifying information such as the vessel's name or type); or 2) replace a lost original U.S. Tonnage Certificate for which a copy is available but an original document is desired.

### (c) RETURN OF SUPERSEDED CERTIFICATES

The MSC does not require a tonnage certificate to be returned to the issuing measurement organization or the Coast Guard when superseded by a later revision. However, a measurement organization may impose this requirement for a certificate that it issues.

### (d) CURRENT REQUIREMENTS

When a tonnage certificate is reissued, ensure that the certificate meets all current requirements. For example, a required remark cannot be omitted from a revised tonnage certificate on the basis that the remark was not required at the time the original certificate was issued.

### (e) ONBOARD SURVEY

An onboard survey prior to tonnage certificate reissuance is required only if the certificate is being reissued to: 1) reflect measurement under an additional measurement system; 2) reflect tonnage and/or dimension changes resulting from remeasurement; or 3) correct errors for which the MSC has specified that an onboard survey is necessary. In the case of changes or error correction, the survey is limited to the portions of the vessel associated with the changes or errors requiring verification.

## 1.9 CANCELLATION OF TONNAGE CERTIFICATES

Tonnage certificates issued under the provisions of this document do not have expiration dates. However, tonnage certificates cease to be valid and are considered cancelled under any of the circumstances listed below. Once a certificate is cancelled, the measurement organization assigns tonnages and registered dimensions to the vessel as if it were being measured for the first time, using the latest measurement regulations and interpretations. The MSC does not require a cancelled tonnage certificate to be returned to the issuing measurement organization or the Coast Guard, although a measurement organization may impose this requirement for a certificate that it issues.

**(a) FLAG CHANGE**

The vessel changes flag to another State. Under the provisions of Article 10 of the International Convention on Tonnage Measurement of Ships, 1969, an International Tonnage Certificate (1969) issued under the provisions of this document remains valid for a period not exceeding three months following the change of flag State, or until the Administration of the new flag State issues an International Tonnage Certificate to replace it, whichever comes first.

**(b) MEASUREMENT UNDER SIMPLIFIED SYSTEM**

The vessel's owner elects to have the vessel measured only under 46 CFR 69 Subpart E, Simplified Measurement.

**(c) TONNAGE VIOLATIONS**

The vessel has been altered, undergone a change in the use of its spaces, or undergone a change in service that resulted in its operation in violation of the tonnage laws of the United States (e.g., was altered to the extent that the vessel should have been remeasured, per the requirements of 46 CFR 69.19).

**(d) TONNAGE LAWS OF THE U.S. NO LONGER APPLICABLE**

The tonnage laws of the United States no longer apply to the vessel (e.g., the vessel changed operations or service, was scrapped, or was otherwise rendered in such a condition that it no longer is considered a "vessel" as defined in Section 8).

**1.10 FEES AND FEE SCHEDULES**

Measurement organizations are authorized to charge fees for the measurement services they perform. These services may include the development of the necessary drawings, sketches and/or computer models in the event that required drawings are not included in the application package. The MSC does not review or control fees charged by authorized measurement organizations. However, measurement organizations shall provide copies of the current schedules of measurement fees and related charges to the MSC following any changes to those schedules.

## 2. PREPARING INTERNATIONAL TONNAGE CERTIFICATES (1969)

### 2.1 PURPOSE

The purpose of this section is to provide instructions for preparing International Tonnage Certificates (1969). The instructions are predicated on the use of a tonnage certificate form, approved by the MSC, that is based on the International Tonnage Certificate (1969) issued by the U.S. Coast Guard (formerly Department of Transportation, USCG Form 5343). A sample International Tonnage Certificate (1969) is included in Appendix A.

### 2.2 GENERAL

#### (a) DIMENSIONS

- (1) **Metric** - Express dimensions in meters, rounded to the nearest centimeter (e.g., “112.23 m”).
- (2) **English** - Express dimensions in feet, rounded to the nearest tenth of a foot (e.g., “368.2 ft”).

#### (b) VOLUMES

- (1) **Metric** - Express volumes in cubic meters, rounded to the nearest hundredth of a cubic meter (e.g., “45.88 m<sup>3</sup>”).
- (2) **English** - Express volumes in cubic feet, rounded to the nearest tenth of a cubic foot (e.g., “1620.1 ft<sup>3</sup>”).

### 2.3 FRONT SIDE OF CERTIFICATE

#### (a) CERTIFICATE NUMBER

Specify a unique serial number (including revision number/letter, as applicable).

#### (b) GENERAL INFORMATION

- (1) **Name of Ship** - Specify the vessel’s name. If a name has not been assigned, specify a dash (“-”).
- (2) **Distinctive Number or Letters** - Specify the following, as applicable:
  - (i) **IMO Number** - Specify the IMO number with the prefix IMO (e.g., “IMO 8712345”) as described in IMO Resolution A.600(15). The IMO number is a unique vessel identification number currently assigned by IHS Fairplay.
  - (ii) **Official Number** - If an IMO number is not available, specify the six or seven digit official number assigned by the USCG National Vessel Documentation Center (or its predecessors) with the prefix ON. Official numbers do not include letters (e.g., use “ON 234567” vice “ON D234567”).

(iii) **CG Number** - If neither of the above categories apply (e.g., in the event an IMO number or official number is not available), specify the vessel's Coast Guard (CG) number with the prefix CG (e.g., "CG 987923"). The MSC will assign a CG number upon request, if one is not already assigned. To obtain a CG number, forward a copy of the completed measurement application to the MSC. The MSC's service standard for response time is 2 business days from receipt of the request.

(3) **Port of Registry** - Specify the hailing port as defined in 46 CFR 67.119. Ensure that this agrees with the marking on the vessel's hull.

(4) **Date** - Specify the date as defined by the asterisk (\*) notation on the tonnage certificate. For the definition of "alterations or modifications of a major character", use the definition of "substantially altered" in NVIC 11-93 as amended. Specify the year only, unless that year is either 1982 or 1994, in which case specify the day and month as well. **Examples:** "1991" or "JULY 18, 1994."

**(c) MAIN DIMENSIONS**

Specify registered dimensions in both meters and feet. Place the letters "m" for meters and "ft" for feet to the right of the numerals. English units (feet) are specified in brackets "( )" and are placed either below or to the right of metric units. For vessels assigned registered dimensions using definitions different than those of 46 CFR 69.53 (e.g., semi-submersible drilling units), annotate the dimensions (e.g., "146.23 m (479.8 ft) \*"), and add a corresponding statement to the "REMARKS" block describing the dimensions used. **Example:** "\* Vessel is a semi-submersible drilling unit. Length and breadth are overall dimensions."

**(d) CONVENTION TONNAGES**

Truncate tonnages to the next lower whole numbers (e.g., a calculated gross tonnage of "99.5" appears as "99").

(1) **Gross Tonnage** - Specify the Gross Tonnage as defined in 46 CFR 69.57.

(2) **Net Tonnage** - Specify the Net Tonnage as defined in 46 CFR 69.63.

**(e) ISSUING INFORMATION**

Specify the following issuing information:

(1) **Issued at** - Specify the location where the certificate is issued as the town and state/territory (abbreviated) if located in the United States, or town, state/province/region (optional) and country (unabbreviated) if located abroad. **Example:** "NEW YORK, NY" or "PARIS, FRANCE".

(2) **Date** - Specify the date of issuance. **Example:** "this 16th day of February 1998."

(3) **Issuing Officer** - Specify the name of the issuing officer.

**(f) AUTHORIZATION SIGNATURE AND SEAL**

After all information has been correctly entered on the tonnage certificate, an exclusive employee of the measurement organization who has been designated as an authorized official signs the certificate on the appropriate line and places or embosses an official measurement organization seal in the location indicated. Omit the seal if the tonnage certificate has other features which

would identify it as an original document (e.g., special paper which does not facilitate photocopying).

## 2.4 REVERSE SIDE OF CERTIFICATE

### (a) SPACES INCLUDED IN TONNAGE (GROSS AND NET)

List under the appropriate heading those spaces defined in 46 CFR 69.59 as enclosed spaces and cargo spaces.

(1) **Name of Space** - Provide a brief description of the space. Abbreviations are acceptable (e.g., “FOCSL”). If the enclosed space contains excluded space, add an asterisk at the end of the description (e.g., “1ST TIER\*”), and include a description of the excluded space in the EXCLUDED SPACES block below.

(2) **Location** - Specify the longitudinal location of the space using the frame numbers at the extreme ends of the space, separated by a hyphen (e.g., “FR 3-10”). For the underdeck (the space bounded by the vessel’s hull and the upper deck), specify a dash or series of dashes (e.g., “-”). If frame numbers are not available, specify the location in terms of distance from any convenient reference point (e.g., “5-10 m aft of stem”) for all spaces except the underdeck.

(3) **Length** - Specify the length in meters (e.g., “123.44 m”) for all spaces except the underdeck. For the underdeck, specify a dash or series of dashes (e.g., “-”).

### (b) EXCLUDED SPACES

List spaces here that are defined in 46 CFR 69.61 as excluded spaces. Include a brief description of the space. **Examples:** “1st Tier Side Openings; 2nd Tier End Opening.” The preprinted statement concerning the asterisk does not apply to this block; it refers instead to items in the GROSS TONNAGE block above.

### (c) NUMBER OF PASSENGERS

Specify the number of passengers in each category as defined in 46 CFR 69.53. If there are no passengers in the associated category, use the number “0”, or the word “Nil”.

### (d) MOLDED DRAFT

Specify the draft as defined in 46 CFR 69.53.

### (e) DATE AND PLACE OF ORIGINAL MEASUREMENT

Specify the day, month and year of the original measurement (e.g., “JANUARY 10, 1994” or “10 JAN 1994”). Specify the place as town and state/territory (abbreviated) if measured in the United States, or town, state/province/region (optional) and country (unabbreviated), if measured abroad (e.g., “ST. LOUIS, MO” or “VICTORIA, CANADA”). This refers to the initial certification of tonnages and dimensions in accordance with the measurement system of the 1969 Tonnage Convention, regardless of flag State; it does not refer to measurement under the regulatory (standard or dual) system. **NOTE: the date and place of certification of tonnages and dimensions may or may not coincide with the date and place of the onboard survey of the vessel.**

### (f) DATE AND PLACE OF LAST PREVIOUS REMEASUREMENT

If the vessel has been remeasured multiple times under the convention measurement system (46 CFR 69, Subpart B), specify the date and place of the remeasurement of the vessel under the

convention measurement system prior to the vessel's present measurement under this system. Otherwise, leave this space blank. Use the same format for the date and place as used for the original measurement block.

**(g) REMARKS**

Include the following remarks, where applicable. Refer to NVIC 11-93 as amended, for definitions and details related to tonnage "grandfathering" eligibility. Additional remarks may be included only where specifically authorized by the MSC.

- (1) All Vessels** - For all vessels: "Overall length as defined under 46 CFR 69 Subpart E is VVVVV m (WWWWW ft). Vessel built by XXXXX. Hull number is YYYYY. Official number is ZZZZZ.", where VVVVV and WWWWW are the vessel's overall length as defined in 46 CFR 69 Subpart E (simplified measurement), in meters and feet, respectively, XXXXX is the name of the company or yard that originally constructed the vessel, YYYYY is the hull number or hull identification number assigned by the builder, and ZZZZZ is the official number assigned to the vessel. **Example:** "Overall length as defined under 46 CFR 69 Subpart E is 85.59 m (280.8 ft). Vessel built by Jones Iron and Steel Company. Hull number is 46. Official number is 123456." Omit a statement if it is not applicable, if the information appears elsewhere on the certificate, or if the information is not available (e.g., for an undocumented vessel, omit reference to the official number).
- (2) Vessels Reissued International Tonnage Certificate (1969)** - For those vessels being reissued an International Tonnage Certificate (1969) for any reason, a BRIEF remark explaining the reason why the International Tonnage Certificate (1969) was reissued. **Examples:** "Certificate reissued to reflect addition of new deck structure."; "Certificate reissued to replace lost original."; "Certificate reissued to correct error in net tonnage."
- (3) Vessels Grandfathered Under Article 3(2)(d)** - For any vessel eligible to retain regulatory tonnages under article 3(2)(d) of the 1969 Tonnage Convention: "The ship is remeasured according to article 3(2)(d) of the 1969 Tonnage Convention. The GROSS TONNAGE according to the measurement system previously in force to the measurement system of the International Convention on Tonnage Measurement of Ships, 1969, is ZZZZZ RT, according to the regulations of the United States.", where ZZZZZ is the gross tonnage assigned under the regulatory measurement system.
- (4) Vessels Grandfathered Under Interim Schemes** - For any vessel eligible to retain regulatory tonnages under any IMO Interim Scheme: "The ship is additionally measured according to IMO Resolution YYYYY. The GROSS TONNAGE according to the measurement system previously in force to the measurement system of the International Convention on Tonnage Measurement of Ships, 1969, is ZZZZZ RT, according to the regulations of the United States.", where YYYYY is any Interim Scheme Resolution that applies to the vessel (e.g., A.494XII or A.541(13)), and ZZZZZ is the gross tonnage assigned under the regulatory measurement system. **Example:** "The ship is additionally measured according to IMO Resolution A.494XII and A.541(13). The GROSS TONNAGE according to the measurement system previously in force to the measurement system of the International Convention on Tonnage Measurement of Ships, 1969, is 16903 RT, according to the regulations of the United States."
- (5) Vessels With Dedicated Clean Ballast Tanks** - For any vessel with dedicated clean ballast tanks not used for cargo which are excluded from the total volume of cargo spaces (Vc) in the tonnage calculations, and carrying a single IOPP Certificate: "This ship carries an IOPP

Certificate in conformity with regulation 13A, Annex I, MARPOL 73/78. The following tanks are dedicated solely to the carriage of clean ballast water: \_\_\_\_\_  
These tanks have been omitted from Vc.” List appropriate tanks in the blank space.

- (6) Vessels with Space Reserved for Temporary Deck Equipment** - For vessels assigned tonnages based on an allowance for temporary deck equipment: “Assigned tonnages include YYYYYY cubic meters of enclosed space reserved for temporary deck equipment, located FR ZZZZZZ.”, where YYYYYY is the enclosed volume of the temporary deck equipment and ZZZZZZ is the longitudinal frame location of the equipment. If the vessel is assigned tonnage under the regulatory measurement system and the vessel is entitled to grandfathering remarks under Section 2.4 (g) (3) or (4), include the following additional statement: “This reserved space contributes AAAAAA tons of space to the regulatory measurement system gross tonnage.”, where AAAAAA is the tonnage, expressed in tons of 100 cubic feet, of the space associated with the temporary deck equipment (after exemptions are applied) when calculating the regulatory measurement system gross tonnage. **Example:** “Assigned tonnages include 103.68 cubic meters of enclosed space reserved for temporary deck equipment, located FR 61-73. This reserved space contributes 25.73 tons of space to the regulatory measurement system gross tonnage.” If frame numbers are not available, specify the location in terms of distance from any convenient reference point (e.g., “5-10 m aft of stem”).
- (7) Vessels Not Issued a U.S. Tonnage Certificate** - For vessels not issued a U.S. Tonnage Certificate: “A U.S. Tonnage Certificate was not issued for this vessel. The dimensions on the front of this certificate are the registered dimensions.”
- (8) Reduced Gross Tonnage for Vessels With Segregated Ballast** - For vessels with segregated water ballast that qualify under the provisions of IMO Resolution A.747(18), add the following remark upon request of the vessel's owner: “The segregated ballast tanks comply with regulation 13 of Annex I of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, and the total tonnage of such tanks exclusively used for the carriage of segregated water ballast is YYYYYY. The reduced gross tonnage which should be used for the calculation of tonnage based fees is ZZZZZZ.”, where YYYYYY and ZZZZZZ are the appropriate tonnages calculated in accordance with Resolution A.747(18).
- (9) Reduced Gross Tonnage for Open-Top Containerships** - For open-top containerships that qualify under the provisions of IMO Resolution MSC.234(82), add the following remark upon request of the vessel's owner: “In accordance with Resolution MSC.234(82), the reduced gross tonnage which should be used for the calculation of tonnage based fees is ZZZZZZ.”, where ZZZZZZ is the reduced gross tonnage calculated in accordance with MSC.234(82).

### 3. PREPARING U.S. TONNAGE CERTIFICATES

#### 3.1 PURPOSE

The purpose of this section is to provide instructions for preparing U.S. Tonnage Certificates. The instructions are predicated on the use of a tonnage certificate form, approved by the MSC, that is based on the U.S. Tonnage Certificate issued by the U.S. Coast Guard (formerly Department of Transportation, USCG Form 1414). A sample U.S. Tonnage Certificate is included in Appendix A.

#### 3.2 GENERAL

##### (a) DIMENSIONS

- (1) **Metric** - Express dimensions in meters, rounded to the nearest centimeter (e.g., “112.23 m”).
- (2) **English** - Express dimensions in feet, rounded to the nearest tenth of a foot (e.g., “368.2 ft”).

##### (b) VOLUMES

- (1) **Metric** - Express volumes in cubic meters, rounded to the nearest hundredth of a cubic meter (e.g., “45.88 m<sup>3</sup>”).
- (2) **English** - Express volumes in cubic feet, rounded to the nearest hundredth of a cubic foot (e.g., “1620.11 ft<sup>3</sup>”).

#### 3.3 FRONT SIDE OF CERTIFICATE

##### (a) CERTIFICATE NUMBER

Specify a unique serial number (including revision number/letter, as applicable).

##### (b) GENERAL INFORMATION

- (1) **Vessel Name** - Specify the vessel’s name. If a name has not been assigned, use a dash (“-”).
- (2) **Vessel Number** - Specify the following, as applicable:
  - (i) **Official Number** - Specify the six or seven digit official number assigned by the USCG National Vessel Documentation Center (or its predecessors) with the prefix “ON”. Official numbers do not include letters (e.g., use “ON 234567” vice “ON D234567”).
  - (ii) **IMO Number** - If an official number is not available, specify the IMO number with the prefix IMO (e.g., “IMO 8712345”) as described in IMO Resolution A.600(15). The IMO number is a unique vessel identification number currently assigned by IHS Fairplay.
  - (iii) **CG Number** - If neither of the above categories apply (e.g., in the event that the vessel is undocumented and an IMO number is not available), specify the vessel's Coast Guard (CG) number with the prefix CG (e.g., “CG 987923”). The MSC will assign a CG number upon request, if one is not already assigned. To obtain a CG number, forward a copy of the completed measurement application to the MSC. The MSC's service standard for response time is 2 business days from receipt of the request.

- (3) **Vessel Type** - Select the vessel type from the list which follows. For self-propelled vessels certificated under two or more categories, show the type as “Multiple Service”, and add a remark describing the services. **Example:** “Vessel to be certificated for service as both an offshore supply vessel and a freight vessel”. **NOTE:** *Vessel type is specified for identification purposes only, to assist in matching a tonnage certificate to a specific vessel. It shall not be used as evidence that a vessel has been certified to operate in any particular service.*
- (i) **Barge** - A non-self-propelled vessel. Unless otherwise provided for in this section, use the “Barge” descriptor for any non-self-propelled vessel, regardless of whether or not the vessel falls into any another vessel type category.
  - (ii) **Fishing Vessel** - A vessel that commercially engages in the catching, taking, or harvesting of fish or an activity that can reasonably be expected to result in the catching, taking, or harvesting of fish.
  - (iii) **Fish Processing Vessel** - A vessel that commercially prepares fish or fish products other than by gutting, decapitating, gilling, shucking, icing, freezing, or brine chilling.
  - (iv) **Fish Tender** - A vessel that commercially supplies, stores, refrigerates, or transports fish, fish products, or materials directly related to fishing or the preparation of fish to or from a fishing, fish processing, or fish tender vessel or a fish processing facility.
  - (v) **Freight Vessel** - A self-propelled vessel of more than 15 gross tons that carries freight for hire, except an oceanographic research vessel or an offshore supply vessel.
  - (vi) **Industrial Vessel** - A vessel which by reason of its special outfit, purpose, design, or function engages in certain industrial ventures. Included in this classification are such vessels as drill rigs, missile range ships, dredges, cable layers, pipe layers, construction and wrecking ships. Excluded from this classification are vessels carrying freight for hire or engaged in oceanography, limnology, or the fishing industry.
  - (vii) **Mobile Offshore Drilling Unit** - A vessel capable of engaging in drilling operations for the exploration or exploitation of subsea resources. Use this descriptor for non-self-propelled vessels as well as self-propelled vessels.
  - (viii) **Oceanographic Research Vessel / Research Vessel** - A vessel employed only in instruction in oceanography or limnology, or both, or only in oceanographic or limnological research, including those studies about the sea such as seismic, gravity meter, and magnetic exploration and other marine geophysical or geological surveys, atmospheric research, and biological research.
  - (ix) **Offshore Supply Vessel** - A vessel that regularly carries goods, supplies, individuals in addition to the crew, or equipment in support of exploration, exploitation, or production of offshore mineral or energy resources. “Crew Boats” that are inspected under 46 Code of Federal Regulations (CFR) Subchapter L are considered to be offshore supply vessels.
  - (x) **Oil Spill Response Vessel** - A vessel that is adapted to respond to a discharge of oil or a hazardous material.

- (xi) Passenger Vessel - A vessel that carries at least one passenger for hire, and does not fall into any other vessel type category.
  - (xii) Recreational Vessel - A vessel being manufactured or operated primarily for pleasure; or leased, rented, or chartered to another for the latter's pleasure.
  - (xiii) Tanker - A self-propelled tank vessel constructed or adapted primarily to carry oil or hazardous material in bulk in the cargo spaces.
  - (xiv) Towing Vessel - A commercial vessel engaged in or intending to engage in the service of pulling, pushing, or hauling along side, or any combination of pulling, pushing, or hauling along side.
  - (xv) Training Vessel - A vessel operated by or in connection with a nautical school or similar educational institution.
  - (xvi) Unclassified Vessel - A vessel that does not fall into any of the categories listed above.
- (4) **Builder** - Specify the name of the individual, company, or yard that originally constructed the vessel.
- (5) **Hull Number** - Specify the following, as applicable:
- (i) Hull Number - Use the vessel's hull number as assigned by the builder, if one is assigned and the vessel is not assigned a hull identification number.
  - (ii) Hull Identification Number - Use the vessel's hull identification number (HIN) if one is assigned (e.g., "TRU12345M84E"). Coast Guard regulations (33 CFR 181) require assignment of HIN's to recreational vessels.
  - (iii) "NONE" - Use "NONE" if a hull number or hull identification number was not assigned for the vessel.
  - (iv) "-" - Use a dash ("-") if a hull number or hull identification is not available.
- (6) **Where Built** - Specify the location described below, as applicable.
- (i) Town, State (abbreviated) - If the vessel was built in the United States, use the town and abbreviated state or territory where built. (e.g., "ST. LOUIS, MO").
  - (ii) Town, State/Province/Region (optional), Country - If the vessel was built in a foreign country, use the town, state/province/region(optional) and the country where built. Do not abbreviate. (e.g., "VICTORIA, CANADA").
- (7) **Propulsion** - Place an "X" in the appropriate block to indicate whether or not the vessel is self-propelled. Note that a vessel propelled by sail is a self-propelled vessel.
- (8) **Date Keel Laid/Vessel Altered** - Specify the keel laid date and, if applicable, the substantially altered date, separated from the keel laid date by a forward slash (e.g., "1981" or "1981 / 1992"). Refer to the definitions below. Specify the year only, unless that year is

either 1982 or 1994, in which case specify the day and month as well.  
(e.g., "JULY 18, 1994").

- (i) Keel Laid Date - The date that the vessel's keel was laid, or the vessel was at a similar stage of construction.
- (ii) Substantially Altered Date - If the vessel has undergone multiple substantial alterations since it was completed, use only the date that the last substantial alterations on the vessel were commenced.

**(c) MAIN DIMENSIONS**

For each set of dimensions assigned to the vessel, specify the length, breadth and depth in the appropriate block in terms of both meters and feet, and place an "X" in the applicable "Registered Dimensions" column, as follows. If a dimension is not assigned, the corresponding block is left blank.

- (1) **Convention** - These are the dimensions assigned under the definitions of 46 CFR 69.53. Place an "X" in the "Registered Dimensions" block in all cases where registered dimensions are assigned and the "X" block is not checked for the "Pre-1990" category.
- (2) **Overall** - These are the registered dimensions assigned under the definitions of 46 CFR 69.203. If the vessel is assigned optional regulatory measurement system tonnages under the simplified measurement system, specify the length, breadth and depth; otherwise, specify only the length, and leave the breadth and depth blocks blank. In either case, leave the "Registered Dimensions" block blank.
- (3) **Pre-1990** - These are the dimensions assigned under the definitions of 46 CFR 69.03-13 through 17, as they appeared in Code of Federal Regulation prior to October 12, 1989 (e.g., the registered length was taken at the line of the tonnage deck). Show the Pre-1990 dimensions only if the registered dimensions were assigned while these definitions were in effect, and the vessel has not undergone changes which affect any of the dimensions or has not been remeasured at the request of the owner to reflect the new definitions. For vessels being assigned tonnages only for the purpose of issuance of an International Tonnage Certificate (1969), retain the Pre-1990 dimensions in the appropriate blocks. If Pre-1990 dimensions are shown, place an "X" in the "Registered Dimensions" block.

**(d) TONNAGES**

Specify all tonnages assigned to the vessel in the appropriate blocks, truncated to the next lower whole number (e.g., a calculated gross tonnage of 99.95 appears as 99), along with the corresponding Subpart of 46 CFR 69 (i.e., B, C, D, or E). If two tonnages are assigned under 46 CFR 69 Subpart D, list the higher tonnage first and separate the two tonnages by a forward slash (e.g., "1600 / 400"). If tonnages are not assigned, leave the corresponding blocks blank. Following each assigned tonnage, provide the appropriate acronym, as follows:

Convention Gross	-	GT ITC
Convention Net	-	NT ITC
Regulatory Gross	-	GRT
Regulatory Net	-	NRT

**(e) CERTIFICATION AND ISSUING INFORMATION**

- (1) Issued at** - Specify the location where the certificate is issued as the town and state/territory (abbreviated) if located in the United States, or town, state/province/region (optional) and country (unabbreviated) if located abroad. **Example:** “NEW YORK, NY” or “PARIS, FRANCE”.
- (2) Date** - Specify the date the certificate is issued (e.g., “FEBRUARY 16, 1994”).
- (3) Issuing Officer** - Specify the name of the issuing officer.

**(f) AUTHORIZATION SIGNATURE AND SEAL**

After all information has been correctly entered on the tonnage certificate, an exclusive employee of the measurement organization who has been designated as an authorized official signs the certificate on the appropriate line, and places or embosses an official measurement organization seal in the location indicated. Omit the seal if the tonnage certificate has other features which would identify it as an original document (e.g., special paper which does not facilitate photocopying).

**3.4 REVERSE SIDE OF CERTIFICATE**

**(a) CONVENTION MEASUREMENT SYSTEM INFORMATION**

Complete this block only if the vessel is assigned tonnages under the convention measurement system.

- (1) Enclosed Spaces and Cargo Spaces** - List under the appropriate heading, those spaces defined in 46 CFR 69.59 as enclosed spaces and cargo spaces.
  - (i) Name of Space** - Provide a brief description of the space. Abbreviations are acceptable (e.g., “FOCSL”). If the enclosed space contains excluded space, add an asterisk at the end of the description (e.g., “1ST TIER\*”), and include a description of the excluded space in the Excluded Spaces block below.
  - (ii) Location** - Specify the longitudinal location of the space using the frame numbers at the extreme ends of the space, separated by a hyphen (e.g., “FR 3-10”). For the underdeck (the space bounded by the vessel’s hull and the upper deck), specify a dash or series of dashes (e.g., “-”). If frame numbers are not available, specify the location in terms of distance from any convenient reference point (e.g., “5-10 m aft of stem”) for all spaces except the underdeck.
  - (iii) Length** - Specify the length in meters (e.g., “123.44 m”) for all spaces except the underdeck. For the underdeck, specify a dash or series of dashes (e.g., “-”).
- (2) Excluded Spaces** - List spaces that are defined in 46 CFR 69.61 as excluded spaces. Include a brief description of the space. **Examples:** “1st Tier Side Openings; 2nd Tier End Opening.” The preprinted statement concerning the asterisk does not apply to this block; it refers instead to items in the Enclosed Spaces block.
- (3) Number of Passengers** - Specify the number of passengers in each category as defined in 46 CFR 69.53. If there are no passengers in the associated category, use the number “0”, or the word “Nil”.

- (4) **Molded Draft** - Specify the molded draft as defined in 46 CFR 69.53 in terms of both meters and feet.
- (b) **MEASUREMENT HISTORY**  
The following requirements apply. In this context, “measurement” means the certification of tonnages and dimensions by the responsible measurement organization, which may or may not coincide with the onboard survey of the vessel or the issuance of the tonnage certificate.
- (1) **Date and Place of Original Measurement** - Specify the day, month and year of the original measurement (e.g., “JANUARY 10, 1994” or “10 JAN 1994”). Specify the place as town and state/territory (abbreviated) if measured in the United States, or town, state/province/region (optional) and country (unabbreviated), if measured abroad (e.g., “ST. LOUIS, MO” or “VICTORIA, CANADA”). This refers to the initial certification of tonnages and dimensions under the laws of the United States.
- (2) **Date and Place of Last Previous Remeasurement** - If the vessel has been remeasured multiple times under the laws of the United States, specify the date and place of the last remeasurement of the vessel under the laws of the United States prior to the vessel’s present measurement under these laws, regardless of whether or not the convention tonnages changed. Otherwise, leave this space blank. Use the same format for the date and place as is used for the original measurement block.

For vessels assigned tonnages under the simplified measurement system (46 CFR 69 Subpart E), use the date and issuance location indicated on the tonnage certificate or other tonnage certifying document, if such a document was issued. If such a document was not issued, use the date on which the simplified application or builder's certificate was signed, and show the location as “Unspecified - Simplified Measurement”. If no date was provided on the simplified application, show the date as “Unspecified”.

- (c) **REMARKS**  
Include the following remarks, where applicable. Additional remarks may be included only where specifically authorized by the MSC.
- (1) **Vessels issued an International Tonnage Certificate (1969)** - For those vessels issued an International Tonnage Certificate (1969) by an authorized U.S. measurement organization: “International Tonnage Certificate (1969) issued for this vessel.”
- (2) **Vessels Reissued U.S. Tonnage Certificate** - For those vessels being reissued a U.S. Tonnage Certificate for any reason: a BRIEF statement explaining the reason for reissuing the certificate. **Examples:** “Certificate reissued to reflect addition of new deck structure.”; “Certificate reissued to replace lost original.”; “Certificate reissued to correct error in net tonnage.”; “Certificate reissued to reflect assignment of tonnages under the convention measurement system.”
- (3) **Vessels with Great Lakes Restrictions** - For vessels which are exempt from the requirement to be measured under the convention measurement system because they operate exclusively on the Great Lakes: “Assigned tonnages valid for Great Lakes voyages only.”
- (4) **Vessels with Space Reserved for Temporary Deck Equipment** - For vessels assigned tonnages based on an allowance for temporary deck equipment: “Assigned tonnages include

YYYYY cubic meters of enclosed space reserved for temporary deck equipment, located FR ZZZZZ.”, where YYYYY is the enclosed volume of the temporary deck equipment and ZZZZZ is the longitudinal frame location of the equipment. If the vessel is assigned tonnage under the regulatory measurement system, include the following additional statement: “This reserved space contributes AAAAA tons of space to the regulatory measurement system gross tonnage.”, where AAAAA is the tonnage, expressed in tons of 100 cubic feet, of the space associated with the temporary deck equipment (after exemptions are applied) when calculating the regulatory measurement system gross tonnage. **Example:** “Assigned tonnages include 103.68 cubic meters of enclosed space reserved for temporary deck equipment, located FR 61-73. This reserved space contributes 25.73 tons of space to the regulatory measurement system gross tonnage.” If frame numbers are not available, specify the location in terms of distance from any convenient reference point (e.g., “5-10 m aft of stem”).

- (5) **Vessels with Water Ballast Exemption in Excess of 30%** - For vessels for which the water ballast exemption exceeds 30% of the gross tonnage, thereby requiring approval of a water ballast exemption under the provisions of 46 CFR 69.117(f): “Water ballast in excess of 30% of regulatory gross tonnage. Regulatory tonnages valid for XXXX service only.”, where XXXX is the service as stated in the water ballast justification approval letter.
- (6) **Vessels Measured Under Dual Measurement System** - For vessels which are assigned tonnages under the dual measurement system, one of the following remarks, as appropriate:
- (i) Two Deck Vessel With High/Low Tonnage Assigned “Tonnage mark is assigned, located XXXX feet below the mark at the uppermost complete deck.”, where XXXX is the appropriate distance in feet and tenths of a foot as certified under the provisions of 46 CFR 69.179.
  - (ii) Two Deck Vessel With Single Low Tonnage Assigned “Tonnage mark and Load Line Mark are assigned, located XXXX feet below the mark at the uppermost complete deck. Submerging these marks will invalidate regulatory measurement system tonnages and necessitate remeasurement.”, where XXXX is the appropriate distance in feet and tenths of a foot as certified under the provisions of 46 CFR 69.179.
  - (iii) One Deck Vessel “Vessel measured as single deck vessel. Exceeding a draft of YYYYY feet will invalidate regulatory measurement system tonnages and necessitate remeasurement.”, where YYYYY is the draft at which any portion of the line of the uppermost complete deck is submerged.
- (7) **Vessels With IMO Number Assigned (Optional)** - In cases where the IMO number does not appear on the front side of the certificate and at the option of the measurement organization: “IMO number is XXXXXXX.”, where XXXXXXX is the IMO number as described in IMO Resolution A.600(15). The IMO number is a unique vessel identification number currently assigned by IHS Fairplay.
- (8) **Vessels  $\geq$  24 Meters /  $<$  79 Feet in Length** - For vessels that are 24.0 meters or more but less than 79 feet in convention length: “Under United States interpretations, the 1969 Tonnage Convention does not apply to this vessel, regardless of voyage type, based on its length as expressed in English units.”

## 4. MEASUREMENT ORGANIZATION OVERSIGHT

### 4.1 PURPOSE

The purpose of this section is to supplement the requirements of MTN 04-03 as amended, *Technical Support and Oversight of Authorized Classification Societies*, for tonnage measurement work performed by authorized measurement organizations on behalf of the Coast Guard.

### 4.2 REGULAR OVERSIGHT ASSESSMENTS

The MSC conducts regular oversight assessments of tonnage files to ensure that the requirements of regulations, policy documents, and other guidance on tonnage matters are being properly applied. The specific procedure by which the MSC conducts oversight assessments is as follows:

#### (a) NOTIFICATION OF COMPLETED WORK

Measurement organizations shall notify the MSC by e-mail as they complete each tonnage work item, in accordance with MTN 04-03 as amended. An electronic Adobe Portable Document Format (pdf) copy of each issued tonnage certificate shall be attached to the associated notification e-mail.

#### (b) FILE SELECTION

The MSC will select files to receive an oversight assessment, and notify the measurement organization accordingly.

#### (c) FILE TRANSFER

The measurement organization shall transfer the selected file(s) to the MSC, or shall provide the MSC with a complete electronic or paper copy of the file. Should the measurement organization require a vessel file during the time it is in the custody of the MSC, the MSC will ensure that it is returned to the measurement organization by the fastest available means. The measurement organization is then responsible for returning the file to the MSC as soon as possible after its use is no longer required.

#### (d) OVERSIGHT ASSESSMENTS AND REPORTING OF RESULTS

The MSC will conduct oversight assessments of selected files submitted by the measurement organization in accordance, and will provide notification of the results via formal correspondence in accordance with MTN 04-03 as amended. A major nonconformity is considered to be one that affects assigned tonnages, assigned dimensions, or tonnage measurement system applicability to a vessel, or that indicates a systemic failure negatively affecting the quality of the measurement work. Examples of major nonconformities include errors of more than 5% in the assigned gross or net tonnage, errors of more than 1% in the registered length, or authorization for tonnage measurement grandfathering (e.g., use of Interim Schemes) in cases where it is not allowed.

#### (e) FILE RETURN

Following completion of its assessment, the MSC will return the vessel file(s) to the measurement organization, if applicable.

#### (f) FOLLOW-UP ACTIONS

The measurement organization shall complete follow-up actions in accordance with MTN 04-03 as amended, with a measurement organization response required only when specifically requested by the MSC. Unless otherwise directed by the MSC, correction of nonconformities not requiring tonnage certificate reissuance may be deferred at the measurement organization's option until the next time the vessel is remeasured and/or an associated tonnage certificate is reissued, provided appropriate documentation is included in the vessel's tonnage file to this effect. In such cases,

nonconformities affecting assigned tonnages or registered dimensions need be corrected at the time of remeasurement only if the portion of the vessel to which the nonconformity applies is being remeasured.

#### **4.3 OTHER OVERSIGHT ASSESSMENTS**

The MSC may perform other oversight assessments in addition to the assessments identified above. These assessments can consist of, but are not limited to, on-site inspections of tonnage files at measurement organizations and onboard surveys of vessels. The MSC will provide written notice at least two (2) weeks prior to conducting any such assessment.

## 5. COPIES OF MSC TONNAGE MEASUREMENT RECORDS

### 5.1 PURPOSE

The purpose of this section is to provide procedural requirements applicable to measurement organizations seeking copies of MSC tonnage measurement records for use in the remeasurement, or possible remeasurement, of a vessel as authorized by the vessel's owner/agent under the provisions of 46 CFR 69.19. Refer to MSC Tonnage Guide 3 as amended, *Tonnage Measurement Records*, for information on obtaining copies of tonnage measurement records under other circumstances.

### 5.2 GENERAL

In this context, MSC tonnage measurement records consist of tonnage calculations, certificates and/or water ballast justification approval letters issued by the Coast Guard (or predecessor agencies) and for which the MSC remains responsible. The records are collectively referred to as the vessel's "tonnage file". The records may reside at the MSC, a Federal Records Center (FRC), or a measurement organization in original, copy and/or microfiche form. All requests under this section shall be submitted by a measurement organization representative to the MSC (even for records that do not reside at the MSC).

### 5.3 SUBMITTALS TO THE MSC

To obtain copies of MSC tonnage measurement records under the provisions of this section, submit a written request to the MSC referencing this section. Include the vessel's name and a unique vessel identification number (e.g., official number, IMO number or CG number), if such a number is available. If such a number is not available, specify other identifying information to assist the MSC in locating the vessel's file (e.g., vessel type, builder's name and hull number, place and year built), or that of a sister vessel. A sample request in email format is included in Appendix A. For information on obtaining copies of tonnage measurement records from entities other than the MSC, refer to Tonnage Guide 3 as amended.

### 5.4 MSC RESPONSE

The MSC will provide written responses to requests for copies of records under this section. The MSC's service standard for response time is 2 business days from receipt of the request, for records maintained on-site at the MSC. For records maintained off-site, additional time is required for the record to be transferred to the MSC.

### 5.5 RECORD TRANSFERS

The MSC no longer transfers original MSC tonnage measurement records to measurement organizations. Refer to Section 6.4 for additional information about records which had previously been transferred.

## 6. TONNAGE FILE CONTENT AND MAINTENANCE

### 6.1 PURPOSE

The purpose of this section is to delineate minimum requirements for the content and maintenance of tonnage files. These requirements are effective for all vessels measured or remeasured subsequent to promulgation of this Technical Note change.

### 6.2 FILE CONTENTS

The tonnage file is the record of principal information used by measurement organizations to assign and certify tonnages and dimensions for a given vessel. Measurement Organizations are not subject to the Freedom of Information Act (FOIA), and all releases of information from tonnage files are at the discretion of the measurement organization, subject to the constraints of Section 6.4 regarding release of Coast Guard tonnage records. Specific requirements are as indicated below.

#### (a) VESSELS BEING INITIALLY MEASURED

For vessels assigned tonnages for the first time under U.S. regulations, the tonnage file consists of the following:

(1) **Tonnage Calculations** - The complete calculations used to arrive at tonnages which appear on associated tonnage certificates. If tonnage calculations from a sister vessel are used as the basis for establishing tonnages, include a copy of the complete calculations from the sister vessel. Specify in the calculations the vessel's name and official number (or IMO number or Coast Guard number if an official number is not assigned) and provide a location in the vessel to at least the nearest frame (or equivalent) for all dimensions used in volume calculations. The following calculation format requirements apply:

(i) Convention Measurement System Measurement organizations may use any calculation format that meets the minimum requirements of this section. If tonnages are generated using computer modeling tools, include written or electronic output showing all dimensions involved in the calculations and their locations (e.g., hull and superstructure offsets, or an equivalent geometrical description as reflected in a *International Graphics Exchange Interface (IGES)* or *Standard for the Exchange of Product Model Data (STEP)* file, or any similar computer aided design format authorized by the National Records Administration for permanent electronic records).

(ii) Standard/Dual Measurement Systems Effective September 1, 2012, measurement organizations must use a calculation format, approved by the MSC, that corresponds to that provided in the tonnage calculations sample included in Appendix A. Calculations generated using the latest version of the MSC's *TonCalc* software application, available from the MSC, are considered compliant with this formatting requirement, without the need for further MSC approval.

(2) **Tonnage Certificates** - Copies of the U.S. Tonnage Certificate and/or International Tonnage Certificate (1969) issued for the vessel.

(3) **Water Ballast Justification Information** - Copies of water ballast justification submittal and approval letters, along with all supporting calculations and drawing information.

(4) **Graphical Representations** - Copies of drawings or other graphical representations (e.g., sketches or scaled photographs) reflecting the vessel's as-measured configuration, as described below. Where dimension labeling is required, include dimension lines with

associated dimensional values. Graphical representations under this section need not be to scale, unless the measurement organization finds such scaling necessary for accuracy or to ensure against claim of error.

- (i) Vessel Profile An outboard or inboard profile, identifying the location of the rudder stock axis (if applicable), the waterline at 85 percent of the least molded depth, and the termination points of the vessel's overall length, registered length, and registered depth. Label all dimensions.
  - (ii) Transverse Section The transverse section at amidships (as defined under 46 CFR 69 Subpart B), identifying the termination points of the vessel's registered breadth and registered depth. Label all dimensions.
  - (iii) Under-Deck Graphical Representations For measurement under 46 CFR 69 Subparts C or D, the tonnage drawing and graphical representations of relevant under-deck framing such as ordinary side and bottom frames or floor timbers. Label all tonnage drawing dimensions. The tonnage drawing is a graphical representation of the vessel's under-deck inboard profile, which identifies the termination points of the tonnage length, and shows the location of the tonnage stations and the transverse sections at each, including the breadth or half-breadth and depth dimensions.
  - (iv) Other Graphical Representations Other graphical representation(s), as needed to supplement those required above, from which all dimensions used in volume calculations may be ascertained (e.g., lines plan, deck arrangement plans, and other applicable arrangement or construction plans). If volumes were calculated directly with computer modeling tools, a profile, overhead and isometric view generated from these tools may be used to fulfill this requirement.
- (5) **Molded Draft Records** - Copies of Load Line Certificates, stability letters, or other records used as the basis for the assigned molded draft that appears on the reverse of the International or U.S. Tonnage Certificate.
- (6) **Tonnage Mark Certification Documents** - Copies of documents required under 46 CFR 69.179(a) for certifying dual measurement system markings.
- (7) **Applications for Measurement Services** - Copies of applications for measurement services submitted in accordance with 46 CFR 69.17(a) and written notifications provided to the applicant regarding the status of an application as required under Section 1.3(a).

**(b) VESSELS BEING REMEASURED**

For vessels being remeasured, the tonnage file requirements for vessels being initially measured also apply. Copies of superseded tonnage records for the vessel that were created by the measurement organization, as well as copies of any written notifications required under Section 1.3(b), shall be included in the tonnage file. Copies of tonnage records that were created by other measurement organizations and the Coast Guard (or predecessor agencies) may be included in the tonnage file at the discretion of the measurement organization. The requirements of Section 6.2(a)(4) only apply to the portions of the vessel being remeasured.

### **6.3 RETENTION OF TONNAGE RECORDS**

Requirements on retention of information in the tonnage file are as follows:

#### **(a) LONG-TERM RECORDS**

Copies of tonnage calculations, tonnage certificates, remeasurement notifications, water ballast justification approval letters, and tonnage mark certification records are considered long-term records, and shall be retained until such time that the measurement organization's Memorandum of Agreement (or equivalent) with the Coast Guard is terminated. At that time, copies of International Tonnage Certificates (1969) and associated tonnage calculations for those vessels whose International Tonnage Certificates (1969) are still in effect shall be provided to the MSC to meet requirements under Article 10(3) of the International Convention on Tonnage Measurement of Ships, 1969. Once these copies have been provided to the MSC, disposition of the long-term records is at the discretion of the measurement organization.

#### **(b) OTHER INFORMATION**

Vessel file material other than that described in Section 6.3(a) shall be retained, as a minimum, for one year following issuance of the associated tonnage certificate, or until the measurement organization's Memorandum of Agreement (or equivalent) with the Coast Guard is cancelled, whichever comes first.

### **6.4 COAST GUARD TONNAGE RECORDS**

Between 1993 and 2003, the Coast Guard transferred MSC tonnage measurement records to measurement organizations for vessels that were being remeasured by the measurement organization, or for which the parent classification society had classed the vessel. These records are designated as "Permanent" records and remain the property of the Coast Guard. The measurement organization may return these records to the MSC at any time. They shall be returned to the MSC following termination of the governing Memorandum of Agreement (or equivalent) or upon request by the MSC. Information from these records shall not be released to other parties without prior authorization from the MSC. Parties interested in obtaining information from these records shall be directed to the MSC.

## 7. APPROVAL OF WATER BALLAST JUSTIFICATIONS

### 7.1 PURPOSE

The purpose of this section is to delineate minimum requirements for approving water ballast justifications submitted under the provisions of 46 CFR 69.117(f)(4).

### 7.2 GENERAL

Water ballast justifications meeting all of the requirements of 46 CFR 69.117(f)(4) shall be approved by a letter issued by the measurement organization and addressed to the water ballast justification submitter. A copy of the letter shall be retained in the tonnage file.

### 7.3 APPROVAL LETTER CONTENTS

As a minimum, the water ballast justification approval letter shall contain the following information:

- (a) **Vessel Name** The vessel's name, if available.
- (b) **Vessel Number** The vessel's official number, IMO number, or CG Number, as described in Section 3.3(b)(2) of this document.
- (c) **Purpose of Water Ballast** A brief statement identifying the applicable purpose(s) for carrying the water ballast that is(are) listed in 46 CFR 69.117(f).
- (d) **Ballast Tank Information** A listing of all ballast tanks in the water ballast system, their approximate location by frame number, and the fluid capacity (e.g., cubic feet of volume available for water ballast) of each. If frame numbers are not available, specify the location in terms of distance from any convenient reference point (e.g., "5-10 m aft of stem").
- (e) **Service** The vessel service for which the approval applies (e.g., fishing service).

## **8. VESSEL DETERMINATIONS ON NON-TRADITIONAL WATERCRAFT**

### **8.1 PURPOSE**

The purpose of this section is to provide requirements on obtaining vessel determinations on non-traditional watercraft.

### **8.2 DISCUSSION**

The legally operative definition for the word “vessel” as it is used in the tonnage measurement regulations (46 CFR 69), is found in Title 1, United States Code, Section 3 (1 U.S.C. 3). This definition reads: *“The word ‘vessel’ includes every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water.”* The U.S. Supreme Court has asserted that in determining whether a particular craft is also a vessel, “the question remains in all cases whether the watercraft’s use ‘as a means of transportation on water’ is a practical possibility or merely a theoretical one” (Willard Stewart v. Dutra Construction Company, 2005). To conform to the Supreme Court’s decision, the Coast Guard will assess whether a non-traditional watercraft is considered a vessel when applying the tonnage measurement regulations, through a process referred to as a “vessel determination”. On May 11, 2009, the Coast Guard published a notice of policy in the Federal Register (74 FR 21814) addressing this process for craft that routinely operate dockside and do not usually get underway.

### **8.3 NON-TRADITIONAL WATERCRAFT**

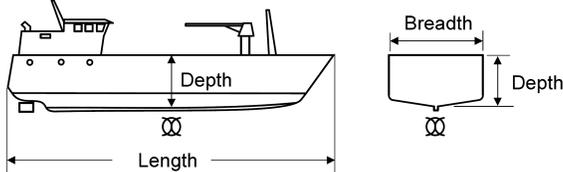
In this context, non-traditional watercraft are those that either by design or intent do not usually get underway and/or do not possess the practical capability or equipment for being used as a means of transportation on water. These include, but are not limited to, craft that are in fact permanently or semi-permanently moored and/or are otherwise prevented as a practical matter from getting underway (e.g., are not fit for underway service, routinely operated dockside, surrounded by cofferdams, etc.).

### **8.4 VESSEL DETERMINATION PROCEDURE**

Before accepting an application for measurement of a non-traditional watercraft, the measurement organization shall contact the Tonnage Division (MSC-4) staff for instructions as to whether a vessel determination is required, and if so, the process for obtaining such a determination. Per the May 11, 2009 Federal Register notice, vessel determinations for craft that routinely operate dockside and do not usually get underway are made by the cognizant Coast Guard Officer in Charge, Marine Inspection (OCMI).

**APPENDIX A**  
**FORMS AND SAMPLE DOCUMENTS**

APPLICATION FOR FORMAL MEASUREMENT SERVICES – FRONT

U.S. TONNAGE REGULATIONS APPLICATION FOR FORMAL MEASUREMENT SERVICES		MTN 01-98 as amended																																
<b>I. APPLICABILITY</b>																																		
<p>A U.S. flag vessel is eligible to be measured under the Convention system (46 CFR 69 subpart B) if it is 79 feet or more in overall length. Also, any U.S. flag vessel, regardless of length, may be measured under the Standard system (46 CFR 69 subpart C) or Dual system (46 CFR 69 subpart D). Some vessels, including those that are less than 79 feet in overall length, are eligible to be measured under the Simplified system (46 CFR 69 subpart E), without the need for formal measurement. Refer to section 69.11 of 46 CFR 69 for complete measurement eligibility details.</p>																																		
<b>II. APPLICATION INFORMATION</b>																																		
<p><b>*1. REQUESTED SERVICE</b> (see instructions on reverse)</p> <p><input type="checkbox"/> <b>INITIAL MEASUREMENT</b> (indicate measurement system(s))</p> <p style="margin-left: 20px;"><input type="checkbox"/> Subpart B - Convention system (GT ITC/NT ITC)</p> <p style="margin-left: 20px;"><input type="checkbox"/> Subpart C - Standard system (GRT/NRT)</p> <p style="margin-left: 20px;"><input type="checkbox"/> Subpart D - Dual system (GRT/NRT)</p> <p><input type="checkbox"/> <b>REMEASUREMENT</b> (indicate reason(s))</p> <p style="margin-left: 20px;"><input type="checkbox"/> Configuration changes</p> <p style="margin-left: 20px;"><input type="checkbox"/> Change in passengers or draft</p> <p style="margin-left: 20px;"><input type="checkbox"/> Correction of measurement errors</p> <p style="margin-left: 20px;"><input type="checkbox"/> Other (describe in remarks)</p> <p><input type="checkbox"/> <b>OTHER</b> (describe in remarks)</p> <p><b>*2. REQUESTED TONNAGE CERTIFICATE(S):</b>    <input type="checkbox"/> US    <input type="checkbox"/> ITC69</p> <p><b>*3. VESSEL NAME</b> _____</p> <p><b>*4. VESSEL NUMBER</b> _____</p> <p><b>5. HAILING PORT</b> _____</p> <p><b>6. BUILDER'S NAME</b> _____</p> <p><b>7. HIN OR HULL NUMBER</b> _____</p> <p><b>8. PLACE BUILT</b> _____</p> <p><b>9. KEEL LAID / ALTERATION DATE</b> _____</p> <p><b>10. DELIVERY DATE</b> _____</p> <p><b>11. VESSEL TYPE</b></p> <table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> Barge</td> <td><input type="checkbox"/> Passenger</td> </tr> <tr> <td><input type="checkbox"/> Fishing</td> <td><input type="checkbox"/> Recreational</td> </tr> <tr> <td><input type="checkbox"/> Fish Processing</td> <td><input type="checkbox"/> Research</td> </tr> <tr> <td><input type="checkbox"/> Fish Tender</td> <td><input type="checkbox"/> Tanker</td> </tr> <tr> <td><input type="checkbox"/> Freight</td> <td><input type="checkbox"/> Towing</td> </tr> <tr> <td><input type="checkbox"/> Industrial</td> <td><input type="checkbox"/> Training</td> </tr> <tr> <td><input type="checkbox"/> Mobile Offshore Drilling Unit</td> <td><input type="checkbox"/> Unclassified</td> </tr> <tr> <td><input type="checkbox"/> Offshore Supply</td> <td><input type="checkbox"/> Warship</td> </tr> <tr> <td><input type="checkbox"/> Oil Spill Response</td> <td></td> </tr> </table>	<input type="checkbox"/> Barge	<input type="checkbox"/> Passenger	<input type="checkbox"/> Fishing	<input type="checkbox"/> Recreational	<input type="checkbox"/> Fish Processing	<input type="checkbox"/> Research	<input type="checkbox"/> Fish Tender	<input type="checkbox"/> Tanker	<input type="checkbox"/> Freight	<input type="checkbox"/> Towing	<input type="checkbox"/> Industrial	<input type="checkbox"/> Training	<input type="checkbox"/> Mobile Offshore Drilling Unit	<input type="checkbox"/> Unclassified	<input type="checkbox"/> Offshore Supply	<input type="checkbox"/> Warship	<input type="checkbox"/> Oil Spill Response		<p><b>12. OVERALL HULL DIMENSIONS</b></p> <p>Length = _____ ft    Breadth = _____ ft    Depth = _____ ft</p> <div style="text-align: center;">  </div> <p><b>13. ADDITIONAL VESSEL INFORMATION</b></p> <p>a. <b>PROPULSION:</b>    <input type="checkbox"/> Self-Propelled    <input type="checkbox"/> Non-Self-Propelled</p> <p>b. <b>NUMBER OF PASSENGERS:</b></p> <p style="margin-left: 20px;">Total: _____    Accommodated in cabins for 8 or fewer: _____</p> <p>c. <b>NUMBER OF CARGO SPACES:</b> _____</p> <p>d. <b>NUMBER OF PORTABLE ENCLOSED SPACES:</b> _____</p> <p>e. <b>DRAFT RESTRICTIONS:</b>    <input type="checkbox"/> Load Line    <input type="checkbox"/> Other</p> <p style="margin-left: 40px;"><input type="checkbox"/> Stability Letter</p> <p>f. <b>INTENDED VOYAGES:</b>    <input type="checkbox"/> Domestic    <input type="checkbox"/> Great Lakes</p> <p style="margin-left: 40px;"><input type="checkbox"/> Foreign</p> <p><b>14. SUBMITTED DRAWINGS</b> (check all submitted with application)</p> <table style="width: 100%; border: none;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;">General Arrangements</th> <th style="text-align: left; border-bottom: 1px solid black;">Construction</th> <th style="text-align: left; border-bottom: 1px solid black;">Miscellaneous</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> Outboard Profile</td> <td><input type="checkbox"/> Midship Section</td> <td><input type="checkbox"/> Lines</td> </tr> <tr> <td><input type="checkbox"/> Inboard Profile</td> <td><input type="checkbox"/> Framing Plans</td> <td><input type="checkbox"/> Cargo</td> </tr> <tr> <td><input type="checkbox"/> Deck Arrangements</td> <td><input type="checkbox"/> Shell Expansion</td> <td><input type="checkbox"/> Tonnage</td> </tr> <tr> <td><input type="checkbox"/> Bow/Stern/Topside</td> <td><input type="checkbox"/> Other</td> <td><input type="checkbox"/> Other</td> </tr> </tbody> </table> <p><b>*15. POINT OF CONTACT</b></p> <p><b>16. REMARKS</b></p>	General Arrangements	Construction	Miscellaneous	<input type="checkbox"/> Outboard Profile	<input type="checkbox"/> Midship Section	<input type="checkbox"/> Lines	<input type="checkbox"/> Inboard Profile	<input type="checkbox"/> Framing Plans	<input type="checkbox"/> Cargo	<input type="checkbox"/> Deck Arrangements	<input type="checkbox"/> Shell Expansion	<input type="checkbox"/> Tonnage	<input type="checkbox"/> Bow/Stern/Topside	<input type="checkbox"/> Other	<input type="checkbox"/> Other
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<input type="checkbox"/> Industrial	<input type="checkbox"/> Training																																	
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<input type="checkbox"/> Offshore Supply	<input type="checkbox"/> Warship																																	
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<input type="checkbox"/> Bow/Stern/Topside	<input type="checkbox"/> Other	<input type="checkbox"/> Other																																
<b>III. STATEMENT OF REPRESENTATION</b>																																		
<p>I understand that under the provisions of 46 CFR 69.25, a person making a false statement or representation in this application may be fined up to \$30,000 and that the vessel also is liable in rem for the penalty. I also acknowledge that I am required by 46 CFR 69.19 to report immediately to an authorized measurement organization any intent to structurally alter the vessel or to change its service or the use of its space. I certify that the information provided by me on this application, or in any attachments thereto, is correct.</p> <p>Owner's printed name _____ Owner's signature _____ Date _____</p>																																		

APPLICATION FOR FORMAL MEASUREMENT SERVICES - REVERSE

APPLICATION FOR FORMAL MEASUREMENT SERVICES - INSTRUCTIONS

Use this form to apply to an authorized measurement organization for formal tonnage measurement services pursuant to section 69.17 of Title 46, Code of Federal Regulations, part 69 (46 CFR 69.17), for the Convention Measurement System (subpart B) and/or the Standard or Dual Regulatory Measurement System (subpart C or D, respectively). Measurement services are provided for a fee payable to the measurement organization. Instructions for completing the form follow. Complete all items marked with an asterisk (\*), and others as applicable.

**\*1. REQUESTED SERVICE**

Indicate the service requested in this application. Provide the following additional information for this item, as appropriate.

**INITIAL MEASUREMENT:** This refers to initial tonnage assignment under the tonnage regulations. Indicate the system(s) under which the vessel is to be measured, and complete all items.

**REMEASUREMENT:** This refers to tonnage reassignment following vessel changes, error correction, or the addition of a measurement system. Indicate the reason(s) for remeasurement in Item 16.

*Configuration changes:* These include alterations, modifications and changes to the use of spaces which could affect tonnage. Complete all items that are related to the changes (e.g., submit only those drawings that are related to the changed portion of the vessel). Provide a brief description of the changes in Item 16.

*Change in passengers or draft:* Complete Items 13.b or 13.e.

*Correction of measurement errors:* Describe the error, and provide supporting information in Item 16. Submit other documentation, as needed.

*Other:* This includes measurement under an additional measurement system. Complete all items, as appropriate.

**OTHER:** Specify the requested service in Item 16, and complete all items, as appropriate. Requested services include:

*Certifying substantial alterations:* Describe the alterations, and refer to the measurement organization determination, in Item 16.

*Changing the vessel's name:* See instructions for Item 3.

*Changing the hailing port:* Specify the new hailing port in Item 5.

*Dropping a measurement system.*

*Dropping regulatory tonnage (GRT) for international use.*

*Invalidating a water ballast justification due to change in service.*

*Replacing a lost tonnage certificate.*

**\*2. REQUESTED TONNAGE CERTIFICATE(S)**

Indicate the certificate(s) to be issued or reissued. A U.S. Tonnage Certificate is required if the vessel is measured under the Standard or Dual system. An International Tonnage Certificate (1969) (ITC69) is required if the vessel is 79 feet or over in registered length (Convention measurement) and will engage on foreign voyages.

**\*3. VESSEL NAME**

Specify the vessel's name. For a vessel being renamed, specify the vessel's new name, and specify the old name in Item 16 (e.g., "Former vessel name: JOHNNY K"). For a newly constructed vessel without an assigned name, specify the name as "NEW CONSTRUCTION". Note that for a vessel documented as a vessel of the United States under 46 CFR 67, the name must be composed of letters of the Latin alphabet or Arabic or Roman numerals (e.g., no special characters).

**4. VESSEL NUMBER**

Specify a unique vessel identification number (VIN) assigned to the vessel (e.g., official number, IMO number, or Coast Guard number, in that order of precedence), if available, along with the corresponding prefix (e.g., "ON 234567", "IMO 8712345", "CG 987923").

**5. HAILING PORT**

Specify the name of the port that is marked, or will be marked, on the vessel under 46 CFR 67.119. Specify the equivalent if the vessel is undocumented and will be issued an ITC69.

**6. BUILDER'S NAME**

Specify the name of the individual, company, or yard that originally constructed the vessel.

**7. HIN OR HULL NUMBER**

Specify a unique hull number assigned to the vessel (i.e., hull identification number (HIN) or builder's hull number, in that order of precedence), if available (e.g., "XZY12345L485" or "106"). Use "None" if no such number has been assigned.

**8. PLACE BUILT**

Specify the city and state where the vessel was built. If the vessel was built in a foreign country, specify the town, state/province/region (optional), and the country where built (e.g., "Victoria, British Columbia, Canada"), without abbreviation.

**9. KEEL LAID / ALTERATION DATE**

Specify the year that the vessel's keel was laid or was at a similar stage of construction, or that substantial alterations commenced. If the year is 1982 or 1994, specify the day and month as well. A "similar stage of construction" is the stage at which construction identifiable with a specific vessel began, and assembly of this vessel commenced comprising at least 50 metric tons or one percent of the estimated mass of all structural material, whichever is less.

**10. DELIVERY DATE**

Specify the scheduled (or actual) day, month and year on which the vessel will be (or was) delivered following its initial construction, or completion of changes, as applicable.

**11. VESSEL TYPE**

Indicate the vessel type by checking the single box that best describes the vessel. While the vessel type appears on the U.S. Tonnage Certificate, it is used only to help identify the vessel. For any non-self-propelled vessel regardless of category, indicate "Barge" unless the vessel is a mobile offshore drilling unit.

**12. OVERALL HULL DIMENSIONS**

Specify the estimated or actual overall hull dimensions to the nearest tenth of a foot (e.g., 93.0 ft), excluding pulpits, rub-rails, and other fittings and attachments. For more details, refer to the overall length, breadth, and depth definitions in 46 CFR 69.203.

**13. ADDITIONAL VESSEL INFORMATION**

- a. **Propulsion** Indicate whether or not the vessel is self-propelled.
- b. **Number of passengers** Specify the total number of passengers, and the number of passengers accommodated in cabins having 8 or fewer berths (zero if none). A passenger means a person on board a vessel, other than: (a) the master, a member of the crew, or other person employed or engaged in any capacity in the business of the vessel; and (b) a child under one year of age.
- c. **Number of cargo spaces** Specify the number of spaces that are appropriated for the transport of cargo to be discharged from the vessel. Identify all these spaces on submitted drawings, or other documentation that lists the spaces and their locations.
- d. **Number of portable enclosed spaces** Specify the number of portable enclosed spaces (e.g., portable quarters units or temporary deck equipment). Identify all these spaces on submitted drawings, or other documentation that lists the spaces and their locations.
- e. **Draft restrictions** For vessels measured under the Convention system, indicate any draft restrictions by checking the applicable box(es). Describe the draft restrictions in Item 16, and enclose supporting documentation (e.g., copy of the stability letter).
- f. **Intended voyages** Indicate the intended voyage type(s), by checking the applicable box(es).

**14. SUBMITTED DRAWINGS**

Indicate all drawings submitted with the application by checking the applicable boxes. If other drawings are submitted, describe them in Item 16. Note that drawing submission for initial measurement and remeasurement following configuration changes is required by the tonnage regulations. Measurement organizations may assess additional fees to develop, or otherwise obtain, required drawings that are not included as part of the application package.

**\*15. POINT OF CONTACT**

Specify contact information (e.g., name, address, and telephone number) for an individual knowledgeable of the vessel's configuration.

**16. REMARKS**

Specify remarks, as appropriate. Use additional sheets if needed.

**SAMPLE INTERNATIONAL TONNAGE CERTIFICATE (1969) - FRONT**



Certificate Number:  
**CXX-111-ITC**

**International  
 Tonnage Certificate (1969)**

Issued under the provisions of the International Convention on Tonnage Measurement of Ships, 1969,  
 under the authority of the Government of the

**UNITED STATES OF AMERICA**

for which the Convention came into force on February 10, 1983, by the

**CLASS SOCIETY NAME**

Name of Ship	Distinctive Number or Letters	Port of Registry	*Date
Sample	7202554	Seattle, WA	2001

\*Date on which the keel was laid or the ship was at a similar stage of construction (Article 2(6)), or date on which the ship underwent alterations or modifications of a major character (Article 3(2)(b)), as appropriate.

**MAIN DIMENSIONS**

Length (Article 2(8))	Breadth (Regulation 2(3))	Molded Depth amidships to Upper Deck (Regulation 2(2))
102.11 m ( 335.0 ft )	21.31 m ( 69.9 ft )	8.69 m ( 28.5 ft )

**THE TONNAGES OF THE SHIP ARE:**

GROSS TONNAGE 9720  
 NET TONNAGE 3477

This is to certify that the tonnages of this ship have been determined in accordance with the provisions of the International Convention on Tonnage Measurement of Ships, 1969.

Issued at Washington, DC this 17th day of April 2002

The undersigned declares that he/she is duly authorized by the United States Government to issue this certificate.

*T. G. Akins*

T. G. AKINS

Issuing Officer

(SEAL)

**SAMPLE INTERNATIONAL TONNAGE CERTIFICATE (1969) - REVERSE**

SPACES INCLUDED IN TONNAGE					
GROSS TONNAGE			NET TONNAGE		
Name of Space	Location	Length (m)	Name of Space	Location	Length (m)
<b>Underdeck</b>	----	----	<b>Proc 1st Tier</b>	<b>Fr 15-50</b>	<b>6.29</b>
<b>1st Tier</b>	<b>Fr 15-16</b>	<b>8.71</b>	<b>Proc 2nd Tier</b>	<b>Fr 15-50</b>	<b>6.29</b>
<b>2nd Tier*</b>	<b>Fr 16-60</b>	<b>8.71</b>	<b>Cargo Hold 1</b>	<b>Fr 5-9</b>	<b>2.42</b>
<b>3rd Tier</b>	<b>Fr 16-60</b>	<b>4.05</b>	<b>Cargo Hold 2</b>	<b>Fr 30-35</b>	<b>2.73</b>
<b>4th Tier</b>	<b>Fr 16-23</b>	<b>2.77</b>	<b>Cargo Hold 3</b>	<b>Fr 60-65</b>	<b>2.73</b>
<b>P/S Funnel</b>	<b>Fr 65-67</b>	<b>0.79</b>			
<b>Crane Posts</b>	<b>Fr 56</b>	<b>0.40</b>			
<b>Crane Cab</b>	<b>Fr 55-56</b>	<b>0.69</b>			
<b>Seasonal Trailers</b>	<b>Fr 52-58</b>	<b>3.72</b>			
			<b>NUMBER OF PASSENGERS</b> (Regulation 4(1))		
			Number of passengers in cabins with not more than 8 berths: <b>0</b>		
			Number of other passengers: <b>0</b>		
<b>EXCLUDED SPACES</b> (Regulation 2(5)) <b>2nd Tier Overhang</b>  An asterisk (*) should be added to those spaces listed above which comprise both enclosed and excluded spaces.			<b>MOULDED DRAUGHT</b> (Regulation 4(2))  <p style="text-align: right;"><b>6.52 m</b></p>		
Date and place of original measurement: <b>July 13, 1994 at Washington, DC</b>					
Date and place of last previous remeasurement:					
<b>REMARKS:</b> Overall length as defined under 46 CFR 69 Subpart E is 105.10 m (344.8 ft). Vessel built by Southeastern Steel and Iron Works. Official number is 123456.  Certificate reissued to reflect new midbody section and reserved space for temporary deck equipment.  Assigned tonnages include 579.93 cubic meters of temporary deck equipment, located FR 52-58.					

**SAMPLE U.S. TONNAGE CERTIFICATE - FRONT**



**UNITED STATES OF AMERICA**

Certificate Number:  
**CXX-111-US**

*CLASS SOCIETY NAME*

**TONNAGE CERTIFICATE**

**GENERAL INFORMATION**

Vessel Name <b>Sample</b>	Vessel Number <b>123456</b>	Vessel Type <b>Fish Processing Vessel</b>
Builder <b>Southeastern Steel and Iron Works</b>	Hull Number <b>None</b>	Propulsion <input checked="" type="checkbox"/> Self-Propelled <input type="checkbox"/> Non-Self-Propelled
Where Built <b>Savannah, GA</b>	Date Keel Laid/Altered <b>1944 / 2001</b>	

**MAIN DIMENSIONS**

Definition Used	Registered Dimensions	Length		Breadth		Depth	
Convention	X	102.11 m	335.0 ft	21.31 m	69.9 ft	8.69 m	28.5 ft
Overall		105.10 m	344.8 ft	m	ft	m	ft
Pre - 1990		m	ft	m	ft	m	ft

**TONNAGES**

Measurement System	46 CFR 69 Subpart	Gross Tonnage	Net Tonnage
CONVENTION	<b>B</b>	<b>9720 GT ITC</b>	<b>3477 NT ITC</b>
REGULATORY	<b>C</b>	<b>4879 GRT</b>	<b>4313 NRT</b>

I CERTIFY that I am duly authorized by the United States Government to issue this certificate:

Issued at: **Washington, DC**

*T. G. Akins*  
 Issuing Officer: **T. G. AKINS**

(SEAL)

Date: **April 17, 2002**

**SAMPLE U.S. TONNAGE CERTIFICATE - REVERSE**

<b>CONVENTION MEASUREMENT SYSTEM INFORMATION</b>					
ENCLOSED SPACES			CARGO SPACES		
Name of Space	Location	Length (m)	Name of Space	Location	Length (m)
<b>Underdeck</b>	----	----	<b>Proc 1st Tier</b>	<b>Fr 15-50</b>	<b>6.29</b>
<b>1st Tier</b>	<b>Fr 15-16</b>	<b>8.71</b>	<b>Proc 2nd Tier</b>	<b>Fr 15-50</b>	<b>6.29</b>
<b>2nd Tier*</b>	<b>Fr 16-60</b>	<b>8.71</b>	<b>Cargo Hold 1</b>	<b>Fr 5-9</b>	<b>2.42</b>
<b>3rd Tier</b>	<b>Fr 16-60</b>	<b>4.05</b>	<b>Cargo Hold 2</b>	<b>Fr 30-35</b>	<b>2.73</b>
<b>4th Tier</b>	<b>Fr 16-23</b>	<b>2.77</b>	<b>Cargo Hold 3</b>	<b>Fr 60-65</b>	<b>2.73</b>
<b>P/S Funnel</b>	<b>Fr 65-67</b>	<b>0.79</b>			
<b>Crane Posts</b>	<b>Fr 56</b>	<b>0.40</b>			
<b>Crane Cab</b>	<b>Fr 55-56</b>	<b>0.69</b>			
<b>Seasonal Trailers</b>	<b>Fr 52-58</b>	<b>3.72</b>			
			<b>NUMBER OF PASSENGERS</b>		
			Number of passengers in cabins with not more than 8 berths: <span style="float: right;"><b>0</b></span>		
			Number of other passengers: <span style="float: right;"><b>0</b></span>		
<b>EXCLUDED SPACES</b> <b>2nd Tier Overhang</b>			<b>MOLDED DRAFT</b>		
An asterisk (*) should be added to those spaces listed above which comprise both enclosed and excluded spaces.			<b>6.52 m                      21.4 ft</b>		
<b>MEASUREMENT HISTORY</b>					
Date and place of original measurement: <b>July 5, 1945 at Savannah, GA</b>					
Date and place of last previous remeasurement: <b>July 13, 1994 at Washington, DC</b>					
<b>REMARKS</b>					
<b>International Tonnage Certificate (1969) issued for this vessel.</b>					
<b>Certificate reissued to reflect new midbody section and reserved space for temporary deck equipment.</b>					
<b>Assigned tonnages include 579.93 cubic meters of temporary deck equipment, located FR 52-58.</b>					

**SAMPLE TONNAGE CALCULATIONS**

Version 2.0.1
<p><b>TONNAGE CALCULATIONS</b>  <b>Standard / Dual Measurement System</b>  <b>GENERAL INFORMATION SECTION</b></p>

Vessel Name..... SAMPLE  
 Official Number.....  
 IMO Number.....  
 CG Number..... CG 0000000  
 Hull Number.....45  
 Vessel Type..... Fishing Vessel  
 Builder..... Southeastern Steel and Iron Works  
 Where Built..... Savannah, GA  
 Date Keel Laid..... July 12, 2011  
 Date Substantially Altered.....  
 Date Completed..... Mar 17, 2012  
 Passengers (cabins <= 8 berths).... 0  
 Other Passengers..... 0  
 Convention Msmt (B).....  
 Regulatory Msmt (C, D, E)..... C  
 Self Propelled (Y/N) ?..... Y

(m)            (ft)

L stem/stern on 85% wl.....    21.72    71.3  
 L stem/rudder stock on 85% wl.... 20.94    68.7  
 Other L (add remark).....  
 Extreme Breadth (for Panama).....  
 Max Allowed Draft.....  
 Moulded Draft.....

	Reg Dim	Length		Breadth		Depth	
	Ind (X)	(m)	(ft)	(m)	(ft)	(m)	(ft)
Convention	X	20.94	68.7	6.74	22.1	3.54	11.6
Hull (Overall)		22.46	73.7				
Pre-1990							

**REMARKS**

Dimensions from drawings submitted with Formal Measurement Application dated April 16, 2012.

Tonnage Surveyor T. S. Elliot    Org USCG    Date 05-04-2012

**SAMPLE TONNAGE CALCULATIONS (contd)**

**CALCULATION RESULTS SECTION**

**Enclosures Included in Tonnage**

Under-Deck	94.00
Between-Deck	
Superstructure	
Break	
1st Tier	15.16
2nd Tier	
3rd Tier	
4th Tier	
5th Tier	
6th Tier	
Other Enclosure	
Hatchways (Measured)	
Excess Hatchways (Included)	
Gross Register Tonnage (unrounded)	109.16
<b>Gross Register Tonnage (GRT)</b>	<b>109</b>
Water Ballast Percent	0.9%

**Spaces Exempted From Tonnage (Except Water Ballast)**

Anchor Gear	
Companions	0.73
Dry Cargo and Stores	
Galley	4.06
Light and Air (over prop)	0.51
Open Spaces	
Other Machinery Spaces	0.43
Passenger Spaces	
Skylights/Air (Non Prop Mach)	
Steering Gear	
Water Closets	2.38
Wheelhouse	4.99
Other	



**SAMPLE TONNAGE CALCULATIONS (contd)**

**CALCULATIONS SECTION**

Enclosure Category: \*Under-Deck

SIMPSON'S CALCULATION: 3-DIMENSIONAL FIVE BREADTHS									
Space category & frame location (or equivalent)						Lgth (ft)	Mid Dep (ft)	Mult Fact	Tonnage
*Hull Fr A-72						71.70	11.10	1.00	94.95
Station No.	Breadths (ft) with "1" as uppermost					Dpth (ft)	Sect Area (sqft)		
	1	2	3	4	5				
1	0.00	0.00	0.00	0.00	0.00	0.00	0.0		
2	11.90	9.10	6.30	3.20	0.00	10.60	65.1		
3	18.70	16.10	13.50	7.70	0.00	11.85	139.1		
4	21.00	19.50	18.00	12.40	0.00	11.30	173.8		
5	21.40	20.45	19.50	14.60	0.00	11.10	185.6		
6	21.10	20.20	19.30	16.50	0.00	10.65	183.3		
7	20.40	19.80	19.20	18.60	0.00	9.30	164.6		
8	19.30	18.90	18.50	18.10	0.00	7.50	127.7		
9	0.00	0.00	0.00	0.00	0.00	0.00	0.0		

Under-Deck Tonnage As Measured: 94.95

SIMPSON'S CALCULATION: 3-DIMENSIONAL FIVE BREADTHS									
Space category & frame location (or equivalent)						Lgth (ft)	Mid Dep (ft)	Mult Fact	Tonnage
*Forepeak Water Ballast: Fr A-5						6.30	7.20	1.00	0.95
Station No.	Breadths (ft) with "1" as uppermost					Dpth (ft)	Sect Area (sqft)		
	1	2	3	4	5				
1	0.00	0.00	0.00	0.00	0.00	0.00	0.0		
2	3.20	2.40	1.70	0.90	0.00	8.10	13.4		
3	7.60	5.80	4.00	2.10	0.00	9.30	36.6		

Under-Deck Exemptions: 0.95

RECTANGULAR CALCULATION										
Space category & frame location (or equivalent)						Lgth (ft)	Wdth (ft)	Hght (ft)	Mult Fact	Tonnage
*Propelling Machinery: Fr 45-77						12.00	11.00	11.20	1.00	14.78

Under-Deck Deductions: 14.78

**SAMPLE TONNAGE CALCULATIONS (contd)**

**Enclosure Category: \*1st Tier**

<b>RECTANGULAR CALCULATION</b>					
<b>Space category &amp; frame location (or equivalent)</b>	<b>Lgth (ft)</b>	<b>Wdth (ft)</b>	<b>Hght (ft)</b>	<b>Mult Fact</b>	<b>Tonnage</b>
*Deckhouse: Fr 12-19	6.90	9.62	9.00	1.00	5.97
*Deckhouse: Fr 19-21	2.00	11.80	2.15	1.00	0.51
*Deckhouse: Fr 21-41.5	21.60	14.20	7.10	1.00	21.78

**1st Tier Tonnage As Measured:** 28.26

<b>RECTANGULAR CALCULATION</b>					
<b>Space category &amp; frame location (or equivalent)</b>	<b>Lgth (ft)</b>	<b>Wdth (ft)</b>	<b>Hght (ft)</b>	<b>Mult Fact</b>	<b>Tonnage</b>
*Wheelhouse: Fr 12-19	6.90	9.62	6.75	1.00	4.48
*Wheelhouse: Fr 19-21	2.00	11.80	2.15	1.00	0.51
*Galley: Fr 21-26 P	5.20	11.00	7.10	1.00	4.06
*Companion: Fr 26-28 C	1.70	2.90	2.20	1.00	0.11
*Companion: Fr 28-33 C	3.00	2.90	7.10	1.00	0.62
*Water Closet: 26-35 P	8.70	3.85	7.10	1.00	2.38
*Light & Air: Fr 36.5-38.5 S	1.70	0.70	7.10	1.00	0.08
*Light & Air: Fr 38.5-41.5 S	3.00	2.00	7.10	1.00	0.43
*Other Machinery: Fr 38.5-41.5 P	3.00	2.00	7.10	1.00	0.43

**1st Tier Exemptions:** 13.10

<b>RECTANGULAR CALCULATION</b>					
<b>Space category &amp; frame location (or equivalent)</b>	<b>Lgth (ft)</b>	<b>Wdth (ft)</b>	<b>Hght (ft)</b>	<b>Mult Fact</b>	<b>Tonnage</b>
*Boatswain's Stores: Fr 35-38.5 P	3.80	3.85	7.10	1.00	1.04

**1st Tier Deductions:** 1.04

**END OF CALCULATION SHEET**

**SAMPLE REQUEST FOR COPIES OF TONNAGE MEASUREMENT RECORDS**

*(For Use By Authorized Measurement Organizations Only)*

**Akins, Thomas**

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**From:** Akins, Thomas  
**Sent:** Thursday, January 15, 2009 11:42  
**To:** msc@uscg.mil  
**Subject:** Tonnage File Request: LISA M (ON 123456)

Per Section 5 of MTN 01-98, please provide a copy of the MSC tonnage file for the subject vessel.

Sincerely,

T.G. Akins  
Tonnage Measurement Staff  
Class Society Name

## **APPENDIX B**

### **MEASUREMENT ORGANIZATIONS**

Organizations currently authorized to perform tonnage measurement on behalf of the U.S. Coast Guard under the provisions of Title 46, Code of Federal Regulations, Part 69 are listed below. Current addresses, phone numbers, and points of contact for these organizations are available on the MSC's web site.

**American Bureau of Shipping (ABS)**

**Bureau Veritas (BV)**

**Det Norske Veritas (DNV)\***

**Germanischer Lloyd (GL)\***

**Lloyd's Register of Shipping (LR)**

**Nippon Kaiji Kyokai (ClassNK)**

**RINA S.p.A (RINA)**

\* These organizations are listed separately pending completion of administrative actions to reflect their recent merger into DNV GL. Pursuant to MSC letter Serial C3-1401908 dated June 27, 2014, DNV GL is authorized to perform tonnage measurement on behalf of the U.S. Coast Guard under the Coast Guard's current agreements with DNV and GL.

## APPENDIX C

### DISCUSSION OF CHANGES

1. **Section 1.3(a) - Acceptance of Application** This section was revised to require use of the *Application for Formal Measurement Services*, included in Appendix A, when applying for measurement services under 46 CFR 69.17. This standardized form was developed to help eliminate nonconformities stemming from incomplete submissions and to provide a means for owners to certify certain vessel characteristics, such as spaces for carriage of cargo, that could have a bearing upon the tonnage assignment, and also permits owners to apply for services to different measurement organizations using the same form. The form draws on elements of the Coast Guard's *Application for Simplified Measurement* form (form CG-5397) and application forms currently used by authorized measurement organizations, for which the MSC solicited input via MSC letters Serial C3-1000773, C3-1000774, C3-1000775, C3-1000776 and C3-1000777, all dated March 26, 2010. These revisions allow for a one year phase-in period to facilitate implementation, during which previously used application forms may continue to be accepted at the measurement organization's option. Measurement organizations may obtain an Adobe Portable Document Format (pdf) version of the *Application for Formal Measurement Services* from the MSC. This version allows electronic data entry, and includes error checking features.
2. **Section 1.5(b) - International Tonnage Certificate (1969)** This section was revised to identify the term "ITC69" as an acronym for the International Tonnage Certificate (1969), which is widely used in International Maritime Organization's (IMO) documents associated with IMO's recent work on interpretations of the 1969 Tonnage Convention. Also, for correctness and completeness, the expression "(1969)" has been added following the term "International Tonnage Certificate" within this section, and other sections throughout the MTN, in all instances where it appears.
3. **Section 2.4(f) - Date and Place of Last Previous Remeasurement** This section was revised to clarify that the term "last previous remeasurement" refers to the remeasurement previous to the vessel's current measurement, and therefore the associated block on the ITC69 need be completed only if the vessel has undergone multiple remeasurements. During IMO's recent work on tonnage interpretations, historical documents that provide the rationale behind this block came to light (see TM/CONF/C.2/WP.45 dated June 15, 1969), which describes the intent to show the "initial, present and last previous" tonnage certifications). In addition, the section's title was corrected.
4. **Section 3.3(b)(3) - Vessel Type** In Section 3.3(b)(3)(viii), the "Oceanographic Research Vessel" type was broadened to allow characterization of a vessel as simply a "Research Vessel", to better align with the service options that appear on the CG-1258 form used for vessel documentation.
5. **Section 3.4(b)(2) - Date and Place of Last Previous Remeasurement** This section was revised to clarify the meaning of the term "last previous remeasurement", consistent with the changes to Section 2.4(f).
6. **Section 4.2(f) - Follow-Up Actions** This section was revised to clarify that the measurement organization need not provide a written response on the results of MSC oversight activity unless specifically requested. For example, there is no need to respond to the MSC in the case where tonnage certificate reissuance has been deferred, at the measurement organization's option, as described in this section.
7. **Section 6.2(a)(1)(i) - Tonnage Calculations - Convention Measurement System** This section was revised to address the use of 3-D modeling tools, such as NAPA, Rhinoceros, and SolidWorks, that do not rely on hull and superstructure offsets for volumetric calculations. The revisions were based on a review of non-proprietary computer aided design graphics exchange formats currently in use, including those accepted

by the National Archives and Records Administration (see NARA Technical Bulletin 2014-04 dated January 31, 2014). The MSC considers that the geometrical description provided by such file formats, when coupled with the graphic representations addressed in the changes to Section 6.2(a)(4)(iii), meet the minimum requirements of Regulation 7(3) of the 1969 Tonnage Convention for a “calculation to be sufficiently detailed to permit easy checking”. This supersedes guidance provided by MSC letter Serial C3-0902055 dated August 17, 2009 regarding parametric (solid) modeling, although it does not preclude measurement organizations from generating sectional drawings with sufficient dimensional information from such modeling tools at various longitudinal stations to permit use of more traditional calculation approaches (e.g., longitudinal integration of the transverse sectional areas).

**8. Section 6.2(a)(4) - Graphical Representations** This section was restructured and expanded to provide comprehensive requirements on drawings and other graphical representations included in the vessel’s tonnage file. Specifically:

- a. Vessel Profile and Transverse Section Sections 6.2(a)(4)(i) and (ii) were added, which require both a vessel profile and an amidships section to be included in the vessel tonnage file that identify the locations of the rudder stock axis, the 85% waterline and the termination points of the vessel’s overall length and registered length, breadth and depth, along with associated dimensions. As indicated in the MSC’s Tonnage Guide 4, *Registered Dimensions Under Formal Systems*, the process for establishing certain certified vessel dimensions is complex, involving a number of factors related to the hull and deck configuration, including an 85% waterline which may not coincide with any easily identifiable location on the hull. Based on records dating to January 1, 2000, the MSC identified nonconformities related to registered dimensions on 30% of the vessels on which it has conducted tonnage oversight. This revision is being made to help eliminate such nonconformities.
- b. Under-Deck Graphical Representations Section 6.2(a)(4)(iii) was added, which provides for the tonnage drawing listed under 46 CFR 69.105(k) to be included in the tonnage file. This new section gives details of the tonnage drawing, expanding on the description given in 46 CFR 69.105(k), while retaining but clarifying the Section 6.2(a)(4) requirement of MTN 01-98 CH-11 regarding graphical representations of relevant under-deck framing.
- c. Other Graphical Representations Section 6.2(a)(4)(iii) was added, which retains the existing requirement to include drawings (or similar) reflecting all dimensions used in volume calculations, while providing for computer generated profile, overhead and isometric views in the case where volumes are calculated directly with computer modeling tools. The MSC considers such views, when coupled with the other dimensional information required under revised Section 6.2(a)(1), provide sufficient objective evidence to independently verify the accuracy of volume calculations associated with 3-D modeling software.

**9. Section 6.2(b) - Vessels Being Remeasured** This section was revised to clarify that certain vessel tonnage file information, such as drawings and calculations, need be included in the vessel tonnage file only for those portions of the vessel affected by the remeasurement.

**10. Appendix A - Forms and Sample Certificates** This appendix was revised to include the new *Application for Formal Measurement Services* form, and renamed accordingly. In addition, the sample International and U.S. Tonnage Certificates were revised to properly illustrate the “Date and place of last previous remeasurement” as clarified by the related changes to Sections 2.4(f) and 3.4(b)(2).

**11. Appendix B - Measurement Organizations** This appendix was revised to reflect the merger between DNV and GL, creating the new company, called DNV GL, which became operational on September 12, 2013.