

# Tonnage Measurement (continued)

## How do I choose a measurement system?

This depends on the circumstances specific to your vessel. In general, owners of most vessels less than 79 feet in overall length opt for the Simplified System, as this system often yields tonnages meeting their objectives while avoiding the cost of Formal measurement. Please be aware that under U.S. law, if a vessel is not formally measured, the Simplified System applies by default, regardless of whether an Application for Simplified Measurement (form [CG-5397](#)) is completed.

## Can I calculate the net tonnage?

This depends on the measurement system used. While in all cases, the method for calculating tonnage is detailed in the tonnage regulations, Formal System rules are complex, and measurement is best left to individuals experienced in using these rules (e.g., authorized measurement organizations). Conversely, Simplified System rules are more straightforward, and the formulas for calculating tonnage have been programmed into the electronic Adobe .pdf version of the Simplified Application form. An owner can ascertain net tonnage by entering vessel data into this form, with the tonnage appearing in the form's upper left hand corner.

**Application for Simplified Measurement  
(form CG-5397)**

DEPARTMENT OF HOMELAND SECURITY  
U.S. Coast Guard  
APPLICATION FOR SIMPLIFIED MEASUREMENT OMB No: 1625-0022

Vessel Type: Monohull  
Gross Tonnage: 97  
Net Tonnage: 77

**I. APPLICABILITY**  
A U.S. flag vessel is eligible to be measured under the Simplified System (46 CFR 69 subpart E) if it is either: 1) less than 79 feet in overall length; or 2) a non-self-propelled or recreational vessel. Some vessels that are 79 feet or more in overall length may also require measurement under the Convention system (46 CFR 69 subpart B). This includes vessels that engage on foreign voyages, as well as recreational vessels that engage on voyages outside the Great Lakes and have keel laid dates after September 21, 1980. Refer to 46 CFR 69.11 for complete measurement eligibility criteria.

**II. VESSEL DATA**

1. VESSEL NAME: JOHNNY K  
2. HULL ID No.: XYZ12345D899  
(also provide official number, if available)  
3. HULL MATERIAL:  
 Wood  Steel  Fibrous Reinforced Plastic (e.g., fiberglass)  
 Aluminum  Concrete  Other  
4. PROPULSION MACHINERY:  
 Located inside hull (e.g., inboard engine or stern drive)  
 Located entirely outside hull (e.g., outboard motor)  
 Non-self-propelled (not fitted with any propulsion machinery)  
5. SHAPE OF HULL(S): (for tri-hull vessels, check the block best describing the center hull)  
 Powerboat, ship or circular  
 Sailboat distinct keel (or no keel)  
 Box or barge  
 Sailboat integral keel (keel is faired to hull)  
6. OVERALL DIMENSIONS:  
Overall Length (L) = 65.0 ft 10 in  
Overall Breadth (B) = 18.0 ft 2 in  
Overall Depth (D) = 12.0 ft 1 in  
7. ADDITIONAL DIMENSIONS FOR LARGE DECK STRUCTURES:  
(Complete only if the volume of the principal deckhouse, cabin or similar structure above the main deck exceeds the hull volume)  
Structure Length (L<sub>s</sub>) = \_\_\_\_\_ ft \_\_\_\_\_ in  
Structure Breadth (B<sub>s</sub>) = \_\_\_\_\_ ft \_\_\_\_\_ in  
Structure Depth (D<sub>s</sub>) = \_\_\_\_\_ ft \_\_\_\_\_ in  
8. ADDITIONAL DIMENSION FOR TWIN HULL VESSELS:  
(Applies only if there is no buoyant volume in the structure that connects the hulls together)  
Individual Hull Breadth (B<sub>i</sub>) = \_\_\_\_\_ ft \_\_\_\_\_ in  
9. ADDITIONAL DIMENSIONS FOR TRI-HULL VESSELS:  
(Applies only if there is no buoyant volume in the structure that connects the hulls together)  
Center Hull Length (L<sub>c</sub>) = \_\_\_\_\_ ft \_\_\_\_\_ in  
Center Hull Breadth (B<sub>c</sub>) = \_\_\_\_\_ ft \_\_\_\_\_ in  
Center Hull Depth (D<sub>c</sub>) = \_\_\_\_\_ ft \_\_\_\_\_ in  
Outer Hull Length (L<sub>o</sub>) = \_\_\_\_\_ ft \_\_\_\_\_ in  
Outer Hull Breadth (B<sub>o</sub>) = \_\_\_\_\_ ft \_\_\_\_\_ in  
Outer Hull Depth (D<sub>o</sub>) = \_\_\_\_\_ ft \_\_\_\_\_ in

**III. STATEMENT OF REPRESENTATION**  
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 is also liable in rem for the penalty. I certify that the information provided by me above is correct.  
Owner's printed name: Bruce Robertson  
Owner's signature: Bruce Robertson  
Date: 1/6/2015  
CG-5397 (01/15) Page 1 of 2

# Documentation and Tonnage of Smaller Commercial Vessels

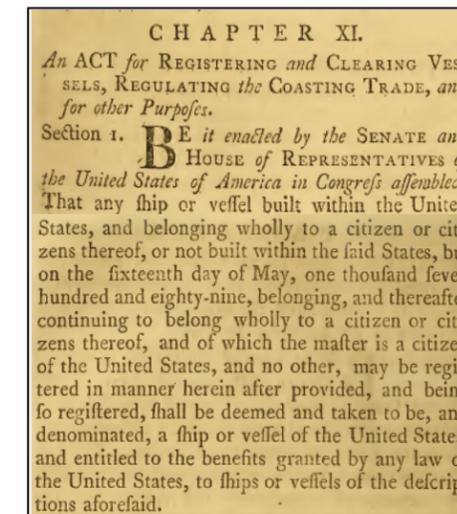


This informational brochure provides an overview of federal documentation and tonnage measurement requirements for owners of U.S. commercial vessels less than 79 feet in overall length. If you own such a vessel, certain restrictions on its commercial use may apply depending on a number of factors, including the nature of its commercial activities, the vessel's net tonnage, and whether the vessel was U.S. built.

## Vessel Documentation

### What is vessel documentation?

Vessel documentation is a national form of vessel registration, evidenced by a Certificate of Documentation (COD) issued by the Coast Guard's National Vessel Documentation Center (NVDC). It is one of the oldest functions of the federal government, dating back to the 11<sup>th</sup> Act of the First Congress of September 1, 1789. Documentation provides evidence of nationality for international purposes, facilitates commerce between the states, and admits vessels to certain restricted trades, such as coastwise trade and the fisheries. Since 1920, vessel financing has been enhanced through the availability of preferred mortgages on documented vessels.



### United States Coast Guard Maritime Information eXchange Port State Information eXchange

The Port State Information eXchange (PSIX) system, updated weekly, contains vessel-specific information, including tonnage, on U.S. flag vessels, foreign vessels operating in U.S. waters, and Coast Guard contacts with those vessels. For undocumented vessels, tonnage information may appear, but is not certified as to its accuracy. (<https://cgmix.uscg.mil/psix/>)

### Where can I find evidence of prior measurement?

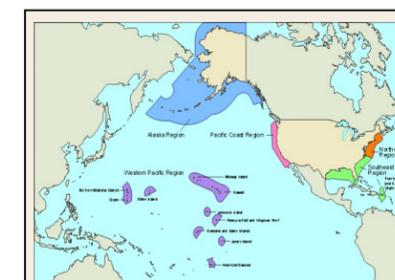
For documented vessels, the assigned tonnages appear on the COD, regardless of the measurement system used, and can also be found in the Coast Guard's publically available PSIX vessel information system. For other vessels, there is no corresponding federal document or data system that provides such evidence of tonnage. The Coast Guard recommends that a copy of the tonnage certificate (if formally measured) or a completed Simplified Application (if simplified measured) be carried onboard any undocumented commercial vessel less than 79 feet in overall length for presentation to law enforcement personnel.



## For further information

Refer to the U.S. Documentation and Tonnage Regulations (46 CFR 67 and 46 CFR 69, respectively), and the websites of the following governmental organizations: [NVDC](#), [MSC](#), [CBP](#), and [MARAD](#). In addition, the MSC maintains useful links to related documents and web pages on its website: <http://www.uscg.mil/hq/msc/tonnage/links.asp>.

This publication is intended to provide information to assist industry, mariners, the general public, and the Coast Guard, as well as other federal and state regulators, in understanding statutory and regulatory requirements related to certain aspects of vessel documentation and tonnage. It is not intended as, nor should it be construed to represent, a revision of or substitute for applicable statutes or regulations or established interpretations of either.



### Exclusive Economic Zone

The Exclusive Economic Zone (EEZ) is the zone where the United States has jurisdiction over natural resources. The EEZ extends no more than 200 nautical miles from the territorial sea baseline of the United States. Shaded areas represent different regions of the EEZ. ([NOAA Ocean Facts](#))

### Must my commercial vessel be documented?

This depends on both the nature of the commercial activities in which your vessel engages and its net tonnage. Vessels which engage in either **coastwise trade**, or **the fisheries** on navigable waters of the United States or in the Exclusive Economic Zone (EEZ), must be documented, subject to certain exclusion or exemption provisions. Vessels of less than five net tons are excluded from documentation. Those vessels measuring five net tons or more that do not operate in either the coastwise trade or the fisheries on the navigable waters of the United States or in the fisheries in the EEZ, are exempt from documentation. Also exempt from documentation are coastwise qualified, non-self-propelled vessels used in coastwise trade within a harbor, on the rivers or lakes (except the Great Lakes) of the United States or the internal waters or canal of any state. The Coast Guard, through the NVDC, administers the documentation laws of the United States.

### What is meant by coastwise trade?

Coastwise trade is generally defined as the transportation of merchandise or passengers between points in the United States, its territorial sea, or the EEZ. This includes carriage of passengers, including charter fishing parties, entirely within our territorial waters even if they debark at the point of embarkation, as well as towing, dredging, and salvage activities within these waters. Customs and Border Protection (CBP) administers the coastwise trade laws of the United States.

# Vessel Documentation (continued)

## What is meant by the fisheries?

In general, the fisheries include processing, transporting (except in foreign commerce), cultivating, storing, catching or harvesting fish, shellfish or marine animals or vegetation in the navigable waters of the United States or the EEZ. Note that, unless the catch is to be sold, charter fishing operations that take customers out to fish are considered coastwise trade and not fisheries activities.

## Are there U.S. build requirements?

Yes. Documented vessels must be built in the United States in order to engage in the **coastwise trade** or in the **fisheries**, with limited exceptions. Vessels excluded by virtue of their tonnage or otherwise exempt from documentation must nevertheless be U.S. built and otherwise entitled to be documented with a coastwise endorsement in order to engage in the **coastwise trade**. There is no U.S. build requirement for vessels excluded from documentation by virtue of their tonnage which engage in the **fisheries**.

Documentation Status	Coastwise Trade	Fisheries
Vessel Documented	U.S. Build Required*	U.S. Build Required*
Vessel Not Documented	U.S. Build Required	U.S. Build <u>NOT</u> Required

\* unless waived or otherwise excepted

## Are there exceptions to U.S. build requirements?

Yes. Certain vessels that are captured, forfeited, or wrecked may be excepted. Also, the Maritime Administration (**MARAD**) can issue **waivers** for foreign-built vessels or vessels of unknown or unprovable build to operate as commercial passenger vessels that carry no more than 12 passengers for hire. This requires a public notification and comment process, and an application fee.

## How is build evidence established?

Build evidence for documented vessels is normally established through owner submission of an original Builder's Certification and First Transfer of Title (form **CG-1261**), completed by the builder as part of the documentation process. Copies are not accepted. Please be aware that there is no similar federal form to establish build evidence for vessels that measure less than five net tons. The NVDC may waive this build evidence requirement under certain circumstances.

## What identification numbers are assigned?

A documented vessel is assigned an official number, which appears on the COD and is marked on some clearly visible interior structural part of the hull. Other unique identifiers may be assigned to, and marked on, a vessel under federal or state requirements, such as state numbers and hull identification numbers (HINs). These numbers are useful in

identifying a vessel's documentation status, and obtaining other important vessel information from vessel data systems such as the Coast Guard's publicly available **PSIX** system.

## Is a documented vessel exempt from state jurisdiction?

No. All documented vessels must comply with the laws of the state in which they are operated. The vessel's COD must be shown to state law enforcement personnel upon demand. States may require documented vessels to be registered (but not state numbered) and to display state decals showing that they have complied with state requirements.

### Examples of Vessel Numbering

Official Number	1240950
State Number	FL 0001 AB
Hull Id Number	XYZ12345L485

**Builder's Certification (form CG-1261)**

DEPARTMENT OF HOMELAND SECURITY  
U.S. Coast Guard  
BUILDER'S CERTIFICATION AND FIRST TRANSFER OF TITLE

OMB No. 1625-0027 Expires: 09/30/2016

I. PHASE OF CONSTRUCTION COVERED BY THIS CERTIFICATE

II. VESSEL DATA

III. DIMENSIONS

IV. UNITED STATES BUILD STATEMENT

# Tonnage Measurement

## Origins of Tonnage



The present concept of tonnage measurement dates back at least to the early middle ages. Tonnage duties were assessed on tuns (casks or barrels) of wine. Each tun held approximately 252 gallons of wine, weighing 2240 pounds, from which we get the "long ton" measure of weight.

By the late 1700's, systems were in place in Europe to assign tonnages to reflect vessel carrying capacity in "tons" of roughly 100 cubic feet each (a measure of volume related to the size of a standardized cask or barrel).

Using tonnage for tax purposes is addressed in the United States Constitution, and was the subject of the 3<sup>rd</sup> and 5<sup>th</sup> Acts of the First Congress.

### CHAPTER III.

#### An ACT imposing DUTIES on TONNAGE.

Section I. **B**E it enacted by the SENATE and HOUSE of REPRESENTATIVES of the United States of America in Congress assembled, That the following duties shall be, and are hereby imposed on all ships or vessels entered in the United States, that is to say:

### CHAPTER V.

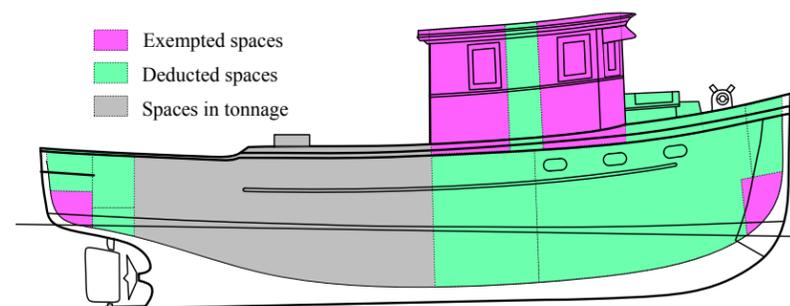
An ACT to regulate the COLLECTION of the DUTIES imposed by Law on the TONNAGE of SHIPS or VESSELS, and on GOODS, WARES and MERCHANDIZES imported into the United States.

## What is net tonnage?

Net tonnage is a volumetric measure of a vessel's useful capacity, for which a number of different measurement systems are in use worldwide. U.S. law requires tonnage measurement for any vessel for which the application of a U.S. law depends on the vessel's tonnage. Owners of U.S. vessels less than 79 feet in length may choose measurement under one of two older U.S. Formal Measurement Systems (the Standard or Dual Regulatory Measurement Systems), or the U.S. Simplified Regulatory Measurement System. The U.S. tonnage measurement program is administered by the Coast Guard Marine Safety Center (**MSC**).

## How do the measurement systems differ?

Formal (Standard or Dual) measurement involves the calculation of net tonnage using a complex series of measurements, exemptions and deductions, and is performed by an authorized measurement organization for a substantive fee paid by the vessel owner. Simplified measurement involves the calculation of net tonnage using a simplified formula, with owner-provided principal dimensions and other characteristics as the inputs. While taken as a group, the resulting net tonnages are comparable between formally and simplified measured vessels, the tonnage differences may vary significantly for individual vessels.



## How is net tonnage certified?

This depends on how the vessel is measured. For formally measured vessels, the measurement organization certifies the net tonnage through issuance of a tonnage certificate. For simplified measured vessels, no comparable document is issued (excepting certain novel craft, for which the Coast Guard will issue a tonnage certificate). Instead, a completed Application for Simplified Measurement (form **CG-5397**) or, for documented vessels, a Builder's Certification (form **CG-1261**) serves as evidence of the measurement of the vessel, from which the net tonnage may be calculated by interested parties.