

RECOMMENDATIONS FOR CHANGES TO 46 CFR PART 69 MEASUREMENT OF VESSELS

The information and recommendations herein are hereby offered to the Coast Guard by the Commercial Fishing Safety Advisory Committee (CFSAC)

The current United State tonnage measurement system is costing millions of dollars in superficial design, construction and maintenance costs for fishing industry vessels.

For new fishing industry vessels of at least 79 feet in length, we recommend the Regulatory Measurement systems in 46 CFR Part 69 (Subparts C and D) no longer be applicable. Instead, Convention Measurement (46 CFR Part 69 Subpart B) should be exclusively applied to all new vessels in this category.

This change must be concurrent with appropriate upward adjustments in Convention Measurement thresholds of gross and net tonnage; that are affected by vessel construction, manning and operations regulations and policies. New thresholds should be partially based on a survey of the existing fleet to determine what Convention Measurement values apply or would apply to vessels already measured under a Regulatory Measurement system. For many existing vessels, both the Convention and Regulatory Measurement systems for gross and net tonnage are already shown on the vessel's tonnage certificate, so the comparison would be relatively easy.

For existing fishing industry vessels of at least 79 feet in length, we recommend retaining the option to utilize either Convention Measurement or Regulatory Measurement in applying U.S. regulations to vessels, as currently outlined in 46 CFR 69.11. U.S. regulations applying to Regulatory Measurement should retain the same measurement thresholds as exist now, while regulations applying to Convention Measurement should be determined by the upwardly adjusted Measurement thresholds described above for new vessels.

A vessel's physical size and capacities may be the same or similar as other vessels, while the choice of Measurement system can result in very different gross and net tonnage values. For this reason, the construction, manning and operations regulations should be adjusted to recognize the differences in tonnage measurement regulations. We are recommending that for any given regulation affecting fishing industry vessels, two tonnage thresholds be recognized: one for Convention Measurement and one for Regulatory Measurement. This recommendation is not intended for modification of the underlying regulation or policy intent.

For new and existing vessels of less than 79 feet in length, we recommend retaining the existing applicable Measurement schemes in 46 CFR Part 69.

This issue, along with discussions of Marine Safety Center Tonnage Technical Policy development, Dual Measurement issues for single deck vessels, and interpretation of tonnage volumes below gratings, are contained in the attached HWA letter. We agree with the letter and encourage the Coast Guard to modify its stance on these issues as recommended by the letter, as adjusted by our comments above.



HOCKEMA & WHALEN ASSOCIATES

NAVAL ARCHITECTS ♦ MARINE ENGINEERS ♦ ELECTRICAL ENGINEERS

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82 FR 26632 and 31545 (LTR1)

Docket Management Facility
U.S. Department of Homeland Security
(Submitted via website: www.regulations.gov)

Subj.: **Evaluation of Existing Coast Guard Regulations, Guidance Documents, Interpretive Documents, and Collections of Information (Docket No. USCG-2017-0480)**
HWA Comments Applicable to Tonnage Measurement

Ref.: a) 82 FR 26632, Evaluation of Existing Coast Guard Regulations, Guidance Documents, Interpretive Documents, and Collections of Information
b) 82 FR 31545, Extension of Comment Period for 82 FR 26632
c) International Convention on Tonnage Measurement of Ships, 1969
d) TM.5-Circ. 6, "Unified Interpretations Relating to the International Convention on Tonnage Measurements of Ships, 1969"
e) Marine Safety Center Technical Note (MTN) 01-99, Change 8, Tonnage Technical Policy
f) USCG Letter 16717 dated April 12, 2013, "Appeal of Decision on Dual Measurement System; Denial of"
g) USCG Marine Board of Investigation Report 16732/01HQ591, Marine Casualty Report for the F/V ALEUTIAN ENTERPRISE, dated 7 April 1991
h) MSC Letter Serial C3-1701169 dated May 23, 2017, "Raised Working Deck Spaces"

Dear Sir or Madam,

References (a) and (b) requested comments on Coast Guard regulations, guidance documents, and interpretative documents that we believe should be repealed, replaced, or modified. In addition, the Coast Guard requested comments on USCG approved collections of information, regardless of whether the collection is associated with a regulation. This action is in response to Executive Orders 13771, Reducing Regulation and Controlling Regulatory Costs; 13777, Enforcing the Regulatory Reform Agenda; and 13783, Promoting Energy Independence and Economic Growth. Reference (a) requested comments on regulations and documents that:

- Eliminate jobs, or inhibit job creation;
- Are outdated, unnecessary, or ineffective;
- Impose costs that exceed benefits;
- Create a serious inconsistency or otherwise interfere with regulatory reform initiatives and policies;
- Are inconsistent with the requirements of section 515 of the Treasury and General Government Appropriations Act, 2001 (44 U.S.C. 3516 note), or the guidance issued pursuant to that provision, in particular those regulations that rely in whole or in part on data, information, or methods that are not publicly available or that are insufficiently transparent to meet the standard of reproducibility; or
- Derive from or implement Executive Orders or other Presidential directives that have been subsequently rescinded or substantially modified.

The following comments concentrate on issues related to tonnage measurement (46 CFR Part 69) and its impact on regulations and documents that we believe fall in the categories noted above.

Implementation of Convention Tonnage Thresholds in Regulations

There are effectively two types of tonnage measurement used for U.S. flag vessels: Convention and regulatory. Convention tonnage (46 CFR Part 69 Subpart B) determines tonnage in accordance with Reference (c), further interpreted by Reference (d) and is an international standard for tonnage measurement. Regulatory tonnage can be determined using three systems: Standard (46 CFR Subpart C); Dual (46 CFR Subpart D) and Simplified (46 CFR Subpart E). Each of the regulatory systems have interesting quirks and usefulness for certain vessels. For this comment, we will concentrate on the differences between Convention and Standard tonnage measurement and their impact on regulations.

Much of the regulatory burden in the CFR, with some limited exceptions, is based on regulatory tonnage thresholds. The reason behind this is that many laws and regulations were developed before Reference (c) was issued, and tonnage thresholds in regulation are generally based on regulatory tonnage measurement. While a vessel owner can choose what system to measure his vessel under, for most vessels, measured Convention tonnage is higher than regulatory tonnage. This results in a system where many vessels are measured both under Convention and regulatory systems. The Convention measurement is utilized for regulations requiring it (typically pollution prevention and other regulations determined by international agreements) and regulatory measurement is used for most other U.S. regulations.

To minimize regulatory tonnage measurement, clever designers have come up with many “innovations” to reduce the measured Standard tonnage of vessels. These include tonnage framing in the hull of the vessel and tonnage openings above the main deck to reduce measured tonnage. These “innovations” provide no benefit to the vessel owner except to reduce regulatory tonnage. In fact, the increased framing adds unnecessary structural weight; tonnage openings can compromise safety due to impacts on the watertight envelope of the vessel if they are not maintained correctly; and both tonnage framing and tonnage openings can compromise the overall arrangement of the vessel in a negative way. But we continue to add these features simply to reduce regulatory tonnage.

The Coast Guard could fix this. In fact, the Coast Guard has already done so for Offshore Supply Vessels subject to 46 CFR Subchapter L – in 1997. However, to our knowledge any further extension of Convention tonnage thresholds into other types of vessels has not happened.

We recommend in the strongest terms that the Coast Guard immediately, with industry input, begin the implementation of Convention tonnage thresholds in vessel and personnel regulations, as the U.S. Code allows the Coast Guard some latitude in developing alternative tonnage thresholds. Tug, fishing vessel and passenger vessel owners would greatly benefit from this change in new construction projects by not having to install arcane tonnage framing and tonnage openings. These do nothing more than add to the cost (both initial and lifetime) of a vessel simply to get regulatory tonnage below a historic threshold determined many years ago. Adjusting the regulatory thresholds to equivalent Convention measurement will save a lot of money and trouble.

As naval architects, we derive a surprisingly large amount of our income from designing vessels to comply with regulatory tonnage thresholds. However, we would gladly sacrifice this income to provide our clients with a better product.

Development and Modification of USCG Marine Safety Center (MSC) Tonnage Technical Policy

While specific tonnage regulatory basis is contained in 46 CFR Part 69, Measurement of Vessels, the Marine Safety Center also uses the “Tonnage Technical Policy” (Reference [e]) to interpret the regulations in Part 69. Reference (e) notes clearly through a disclaimer that it “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.” However, the reality is that any document used to interpret regulation eventually becomes a backstop for the regulatory text. Our concern is that Reference (e) is often updated with minimal or no industry input and sometimes changes long-standing interpretations of regulation without adequate industry input. We highly recommend that MSC modify their updating policy for Reference (e) to include significant industry input prior to issue, possibly even though the Federal Register process.

Dual Tonnage for Single Deck Vessels

In 2012, we discovered that MSC had changed a long-standing interpretation on dual tonnage measurement that impacted several vessels that we were working on. To simplify, MSC interpreted that for single deck vessels with a forecastle, the “uppermost complete deck” had to be treated as stepped at the forecastle bulkhead. Because the dual system only allows spaces utilized for stores and dry cargo to be exempted when they are located above the uppermost complete deck instead of open structure as allowed in Subpart C, the interpretation did not allow spaces within the forecastle space to be exempted accordingly. We noted precedent (to no avail) that many single deck fishing vessels had been measured assuming a previous longstanding interpretation that allowed spaces in the forecastle to be exempted as stores and dry cargo. After a long appeal process, Reference (f) denied our appeal in this matter. Further documentation can be provided on request.

Based on our review of available information, it was apparent that the intent of the Coast Guard at the time of the implementation of the dual tonnage system was to reduce or eliminate the use of tonnage openings for safety reasons. The Coast Guard also historically extended the dual tonnage system to single deck vessels as we have documented above. The denial of our appeal in Reference (f) eliminated our effective use of dual tonnage measurement on a single deck vessel. We feel that this is counter to the Coast Guard’s original intent of increasing safety for these vessels by effectively trading open superstructure exemptions for dry cargo and stores exemptions.

To maintain regulatory tonnage below thresholds, we now need to utilize the Subpart C system for these types of vessels. This results in the continued use of tonnage openings to minimize gross tonnage instead of receiving exemptions for stores and dry cargo under the dual system. The use of tonnage openings results in a decrease in safety and an increased cost of maintenance to vessel owners. We also note that in Reference (g), the USCG Board of Investigation specifically recommended the use of the dual tonnage system for fishing industry vessels. As noted in the report:

“The Coast Guard should encourage the use of the Dual Tonnage Measurement System on fishing industry vessels when exempt superstructure spaces are desired. When the dual tonnage system is used and a single tonnage is assigned according to 46 CFR 69.175(c), spaces immediately above the freeboard deck may be omitted from tonnage provided a tonnage mark is located at the level of the uppermost part of the load line grid. Tonnage openings that are susceptible to damage, leaking, and blocking would not be necessary.”

The Commandant concurred with this recommendation. Unfortunately, the interpretation made in 2012-2013 noted above prevents the use of the dual tonnage system on single deck fishing vessels. We strongly recommend that the Coast Guard revisit this interpretation as soon as possible.

Another alternative: implement Convention tonnage thresholds in regulation and eliminate (or minimize) the use of regulatory tonnage (see above).

Interpretation of Tonnage Volumes Below Gratings

In late 2016, we assisted in the tonnage measurement of a single deck fishing vessel. At the time of the measurement, we received a unique interpretation about volume below deck gratings that increased the Convention and regulatory measurement of the vessel. Fortunately, the vessel measured below tonnage thresholds even including the additional 10+ gross tons of volume, but this would not be the case for many vessels.

The vessel, and hundreds of other West Coast and Alaska fishing vessels, is fitted with a wooden grating installed on a framework above the actual steel main deck. The grating is non-tight with clear space (approximately ½”) between deck boards; any water on deck flows through the non-tight grating to the steel deck. The deck grating prevents damage to the existing steel deck from fishing gear as well as providing a safer work surface for the crew, as it provides better grip than painted steel. It also provides additional safety since the deck grating prevents water from boarding seas from washing over the feet of the crew. The height of the grating varies but is normally

between 8" and 15" above the steel deck. Hatch coamings to fish holds below the deck grating are typically flush with the top of the wood grating.

In every case of vessel measurement we are aware of prior to the subject vessel, the volume below deck gratings was excluded from Convention and regulatory tonnage measurement. However, MSC has decided that a new interpretation is needed, even though dozens of tonnage surveyors and personnel have previously determined that volumes below deck gratings should be excluded from tonnage measurement.

HWA has decades of tonnage measurement experience, and we have worked with modifications of existing vessels where the original tonnage calculations used for reference date back to as early as the 1960s. We are unaware of any fishing vessel that has been required to include volume below deck gratings in tonnage measurement – whether ITC, standard or dual measurement – until the subject vessel was remeasured last winter. We also note that hundreds of West Coast and Alaska fishing vessels have been measured without this volume being included, and this interpretation invalidates the tonnage measurement of these vessels.

For future measurements, we strongly recommend that previous policy be used, which excluded volumes below deck gratings from tonnage measurement.

If you have any questions or if you need further information, we encourage you to contact our office.

Sincerely,
HOCKEMA & WHALEN ASSOCIATES, INC.



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