

NAVIGATION AND VESSEL INSPECTION CIRCULAR NO. 14-81  
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Subj: Stability Tests; Waiving of for "Sister Vessels"

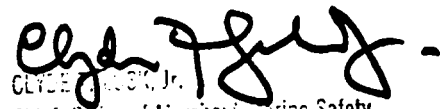
1. **PURPOSE.** The purpose of this Circular is to provide the marine industry and Coast Guard personnel with uniform guidance regarding the waiving of the requirement for a stability test on a vessel when basic data is available from a sister vessel.
2. **APPLICATION.** This guidance is effective on the publication date and is applicable to all U.S. flag vessels which are required to use a stability test performed for the purpose of either inspection for certification or load line assignment.
3. **DISCUSSION.**
  - a. Each U.S. flag vessel which is required to be engine inspected for certification or load lined is required by regulation, unless specifically exempted, to be subjected to a stability test conducted under the supervision of the Coast Guard. However, regulations in 46 CFR 74.05-1(b), 93.05-1(b), 108.335(c), 179.05-1(b), and by reference, 31.10-30(b)(1), 153.806(a), and 154.205(a) specify that the Commandant may allow the stability test of a vessel to be dispensed with provided basic stability data is available from the stability test of a sister vessel and it is shown to the satisfaction of the Commandant that reliable stability information for the exempted vessel can be obtained from such basic data.
  - b. Traditionally, if an owner or builder sought relief from a stability test based on the sister vessel provision in the regulations, the Coast Guard required that a deadweight survey be performed on the vessel to determine its lightship displacement and longitudinal center of gravity. If the results of this deadweight survey showed that the lightship parameters of the vessel, when compared to the previously inclined or "parent" vessel, were within certain tolerances, as stipulated by the reviewing merchant marine technical (mmt) office, then the (mmt) office would declare the vessel a "sister" and authorize a stability letter based upon the parent vessel. Historically, inspectors from local Marine Inspection or Marine Safety Offices have witnessed these deadweight surveys for the Coast Guard.
  - c. In almost all cases, these deadweight surveys have resulted in sister vessel status being established. Therefore, in an effort to effect cost and manpower reductions for both the marine industry and the government, the Coast Guard will accept a letter from a responsible officer of the shipbuilding company attesting to the "sister" relationship between two vessels. If the company elects not to attest to this in writing, then the Coast Guard will require either a stability test or a deadweight survey on each vessel.

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- d. At any time during the construction of a series of vessels, the reviewing (mmt) office may require a deadweight survey or stability test to reaffirm the sister relationship. This will most likely occur in the case of a shipyard which repeatedly builds a stock design over a period of several years.

4. ACTION.

- a. When a shipbuilding company builds more than one vessel at the same facility to a particular set of drawings, the first vessel in the series, or parent vessel, will be subjected to a stability test conducted under the supervision of the Coast Guard where required by applicable regulations.
- b. A responsible officer of the shipbuilding company may request that the stability test for the subsequent vessels in the series be dispensed with by attesting to their sister vessel status in writing to the cognizant (mmt) office. Enclosures (1) and (2) are sample letters which would be acceptable for this purpose.
- c. Upon receipt of this letter) if the vessel is to be certificated by the Coast Guard, the (mmt) office will authorize the cognizant Officer in Charge, Marine Inspection to issue a stability letter to the vessel based upon the stability approval of the parent vessel. If the vessel is to receive a load line, whether certificated or not, the (mmt) office will authorize the American Bureau of Shipping or other recognized classification society to issue a load line certificate and will advise them of the applicable stability information to reference on the face of the certificate. In all cases, the (mmt) office should verify that the intended operation of the sister vessel is similar to that of the parent vessel.



Clyde R. Brock, Jr.  
Chief, Office of Merchant Marine Safety

- End: (1) SAMPLE letter for U.S.C.G. certificated vessels  
(2) SAMPLE letter for non-certificated load lined vessels

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SAMPLE LETTER FOR U.S.C.G. CERTIFICATED VESSELS

Superior Shipyard  
100 Michigan Ave.  
Houston, Texas 77089

July 21 1981

Commander, Eighth Coast Guard District (mmt)  
Hale Boggs Federal Bldg.  
500 Camp Street  
New Orleans, Louisiana 70130

Subj: M/V DIANNE, Superior Hull 727

Ref: (a) Your letter Ser. 123 dated June 13, 1981

Dear Sir:

Reference (a) approved the stability test data for the M/V BRIAN K., Superior Hull 726, and authorized a stability letter to be issued by OCMI, Houston. The subject vessel is nearing completion in the same shipyard and was built to the same basic drawings as Hull 726.

I hereby certify that the subject vessel does not differ from Hull 726 in any way which would result in a lessening of its stability characteristics. therefore request that the M/V DIANNE, Superior Hull 727 be considered a "sister vessel" to the M/V BRIAN K., Superior Hull 726 and that you authorize OCMI, Houston to issue a stability letter to the subject vessel.

Sincerely,

David Thomas  
President, Superior Shipyard  
P. E. no. 355, Texas (if applicable)

SAMPLE LETTER FOR NON-CERTIFICATED LOAD LINED VESSELS

Superior Shipyard  
100 Michigan Ave.  
Houston, Texas 77089

July 21, 1981

Commander, Eighth Coast Guard District (mmt)  
Hale Boggs Federal Bldg.  
500 Camp Street  
New Orleans, Louisiana 70130

Subj: M/V DIANNE, Superior Hull 727

Ref: (a) Your letter Ser. 123 dated June 13, 1981

Dear Sir:

Reference (a) approved the stability test data for the M/V BRIAN K., Superior Hull 726, and authorized a load line to be issued by the American Bureau of Shipping. The subject vessel is nearing completion in the same shipyard and was built to the same basic drawings as Hull 726.

I hereby certify that the subject vessel does not differ from Hull 726 in any way which would result in a lessening of its stability characteristics. I therefore request that the M/V DIANNE, Superior Hull 727 be considered a "sister vessel" to the M/V BRIAN K., Superior Hull 726 and that you authorize the American Bureau of Shipping to issue a load line to the subject vessel.

Sincerely,

David Thomas  
President, Superior Shipyard  
P. E. no. 355, Texas (if applicable)