

U.S. Department  
of Transportation

United States  
Coast Guard



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Marine Safety Center  
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16710/P008259  
Serial: H1-0203873  
November 19, 2002

Walworth Yacht Designs  
Attn: Mr. David Walworth  
P.O. Box 3792  
Kingshill, VI 00851

Subj: ISLAND FLYER; O.N. 1131233  
Gold Coast Yachts Wavepiercer  
65' x 27' x 7' Small Passenger Vessel (T)  
Stability and Bilge Piping

Ref: (a) NVIC 10-02, Change 1, "Coast Guard Recognition of Registered Professional Engineer Certification of Compliance with Coast Guard Requirements"

Dear Mr. Walworth:

We reviewed and marked "Examined" under the provisions of reference (a) the stability calculations submitted with your letter dated November 8, 2002 and return them to you as enclosure (1). Calculations such as these are not normally approved. However, we used the information to evaluate the vessel's compliance with the intact stability requirements. The following comments apply:

1. The subject vessel meets the intact stability requirements in 46 CFR 170.170, 170.173, and 171.050 for exposed waters when any one major compartment is damaged. For this vessel, a major compartment is the total space between any two Main Transverse Watertight Bulkheads (MTWB's), and the 3 MTWB's are located 22 feet, 30 feet, and 54 feet aft of the forward perpendicular. Therefore, the stability calculations demonstrate the safety of the vessel is not impaired if one compartment is flooded in accordance with 46 CFR 182.500(c), and the cognizant Officer in Charge, Marine Inspection (OCMI) may allow the omission of compartment drainage in any major compartment if no through-hull fittings are present.

2. The maximum righting arm for this vessel in every condition of loading occurs at an angle less than 25 degrees, and the stability criteria in 46 CFR 170.173(c) should be used. Your calculations incorrectly used the criteria in 46 CFR 170.173(b) to demonstrate compliance with the intact stability requirements. However, our independent calculations show the vessel meets the minimum criteria in 46 CFR 170.173(c). In the future, please ensure you use the correct intact righting arm criteria when submitting stability calculations.

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Should there be any questions please feel free to contact the project officer, Lieutenant George Borlase, at the above number.

Sincerely,



A. D. WIEST  
Lieutenant Commander, U.S. Coast Guard  
Chief, Small Vessel Branch.  
By direction of the Commanding Officer

Encl: (1) Stability Calculations for ISLAND FLYER, undated

Copy: RIO St Croix