



STABILITY LETTER

16710/P009406
Serial: H1-0305547
June 24, 2003

Master, BARRACUDA; O.N. 990868
Lockport Hull XFPB Test
70' x 17.5' x 8.6' Small Passenger Vessel (T)

You are responsible for maintaining this vessel in a satisfactory stability condition at all times and for following the instructions and precautions listed below. You are reminded that you are required by 46 CFR 185.315 to verify your compliance with these instructions and precautions after loading and prior to departure on each voyage.

A stability test, witnessed by the U. S. Coast Guard, was conducted on BARRACUDA; O.N.990868 at Severn River Marina, Hayes, Virginia on June 6, 2001. On the basis of that test and updated weight and moment calculations, a stability analysis has been performed. Results indicate that the stability of the BARRACUDA, as presently outfitted and equipped, is satisfactory for operation on Partially Protected Waters, provided that the following restrictions are observed.

SUBDIVISION

When operated as indicated below, calculations indicate this vessel will remain afloat with any one major compartment flooded (one-compartment subdivision). A major compartment is the total space between any two adjacent Main Transverse Watertight Bulkheads (MTWBs). For this vessel, these MTWBs are located at 0 feet, 13 feet 4-3/4 inches, 45 feet 2-1/2 inches, and 56 feet 6 inches aft of the forward perpendicular, section 0.

DAMAGE SURVIVAL

Calculations indicate this vessel will stay upright (no more than 7 degrees of list under ideal conditions) after side damage when the side damage is limited to any one major compartment and not more than 3 feet 6 inches inboard from the side of the hull. To maintain the vessel upright after flooding (damage), the heeling forces imposed by wind, wave, and passenger movements must be minimized.

OPERATING RESTRICTIONS

1. **ROUTE:** Operation on Partially Protected Waters is permitted. Since the route is based upon other considerations in addition to stability, you are cautioned that the route may be further limited to that specified on the Certificate of Inspection.

Subj: BARRACUDA; O. N. 990868; Stability Letter

2. PERSONNEL:

a. PASSENGER CONFIGURATION: A maximum of 79 persons, of which 76 may be passengers, may be carried on this vessel.

b. CARGO CONFIGURATION: A maximum of 27 persons, of which, 20 may be passengers, may be carried on this vessel.

Since the personnel capacity is based upon other considerations in addition to stability, you are cautioned that the number of persons carried may be further limited to that specified on the Certificate of Inspection.

3. FREEBOARD AND DRAFT:

a. The vessel is limited to a maximum baseline draft of 4 feet 10-3/4 inches at the aft perpendicular, 70 feet aft of section 0. This corresponds to a minimum freeboard, measured from the top of the main deck, of 3 feet 9 inches. The vessel is further limited to a maximum baseline draft amidships of 3 feet 2-3/4 inches. This corresponds to a minimum freeboard, measured from the top of the main deck plate, of 4 feet 5-3/4 inches.

b. Since the total weight of passengers, variable stores, and tankage may be greater than the assumed full load condition, you are urged to carefully monitor the vessel's draft when carrying a full load because it is possible to exceed the above.

4. WATERTIGHT DOORS AND BULKHEADS: The Class 1 watertight doors in bulkhead "B" and "F" shall be closed at all times when underway, except when actually used for transit under safe conditions. These doors may remain in service at the discretion of the cognizant Officer in Charge, Marine Inspection (OCMI).

5. HULL OPENINGS: Any openings that could allow water to enter into the hull or deckhouse should be kept closed when rough weather or sea conditions exist or are anticipated.

6. WEIGHT CHANGES: This revised stability letter has been issued based upon the following light ship parameters:

Displacement	31.66	Long Tons
VCG	5.11	Feet Above the Baseline
LCG	16.72	Feet Aft of Amidships

Amidships is located 35 feet aft of station 0. Any alteration resulting in a change in these parameters may invalidate this stability letter. No fixed ballast or other such weights shall be added, removed, altered and/or relocated without the authorization and supervision of the cognizant OCMI.

Subj: BARRACUDA; O. N. 990868; Stability Letter

7. TANKS: The fuel tank may not be loaded greater than 49%. The Master is required to visually inspect the level of the tank prior to each voyage. The cognizant OCMI may require this tank to be modified such that the maximum capacity is 49% or other such methods to ensure the vessel operates in a safe manner.

8. DECK CARGO: No deck cargo may be carried when the vessel is in the PASSENGER CONFIGURATION. When the vessel is operating in the CARGO CONFIGURATION, with all the aft passenger seating removed, cargo may be carried with the following conditions:

- | | |
|-------------------------|---|
| a. Total Cargo Weight | not to exceed 4.79 Long Tons |
| b. Maximum Cargo Height | not to exceed 7 feet above the aft deck |
| c. Maximum Cargo VCG | not to exceed 3.5 feet above the aft deck |
| d. Maximum Cargo LCG | not to exceed 26.7 feet aft of amidships or
16.5 feet aft of the forward end of the aft deck |

9. BILGES: The vessel's bilges and voids shall be kept pumped to minimum content at all times consistent with pollution prevention requirements.

10. FREEING PORTS: Deck freeing ports shall be maintained operable and completely unobstructed at all times.

11. LIST: You should make every effort to determine the cause of any list of the vessel before taking corrective action.

This stability letter shall be posted under glass or other suitable transparent material in the pilothouse of the vessel so that all pages are visible. It supersedes any stability information previously issued to the vessel.


A. D. WIEST

Lieutenant Commander, U. S. Coast Guard
By direction