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## STABILITY LETTER

16710/P004666 Serial: H1-2201878 June 13, 2022

Master, TROPICAL ESCAPE (Ex. FAST CAT), O.N. 1081061 Gold Coast Yachts Hull No. GC83CWP00499 83.3' x 26.0' x 7.3' Catamaran 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 46 CFR 185.315 requires you to verify your compliance with these instructions and precautions after loading and prior to departure on each voyage.

A deadweight survey, witnessed by the U.S. Coast Guard, was conducted on the TROPICAL ESCAPE, O.N. 1081061, at Dania Beach, Florida, on July 6, 2018. On the basis of that survey, and a conservative estimate of the vessel's lightship vertical center of gravity, stability calculations have been performed. Results indicate that the stability of TROPICAL ESCAPE, as presently outfitted and equipped, is satisfactory for operation on Exposed Waters, provided that the following restrictions are observed.

## DAMAGE SURVIVAL

When operated as indicated below, calculations indicate this vessel will stay upright (no more than 7 degrees of list under ideal conditions) after side or bottom damage, when the damage is limited to any one major compartment in either hull and not more than 1 feet 9-1/4 inches inboard from the side of either hull or 2 feet 6 inches upward from the bottom of either hull. A major compartment is the total space between any two adjacent Main Transverse Watertight Bulkheads (MTWB's). For this vessel, these MTWB's are located at Frames 26, 38, and 68, in each hull.

Calculations further indicate this vessel will remain afloat and upright when damage is limited to both hulls (concurrently) forward of the collision bulkheads, which are located at Frame 26. To maintain the vessel upright after flooding (damage), the heeling forces imposed by wird, wave, and passenger movements must be minimized.

## **OPERATING RESTRICTIONS**

1. <u>ROUTE</u>: Operation on Exposed Waters may be permitted. Since the vessel's 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 (COI).

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- 2. <u>PERSONNEL</u>: A maximum of 129 persons may be carried on this two-deck vessel, of which 125 may be passengers. A maximum of 34 persons may be carried on the upper deck. These numbers are based on an average weight of 185 pounds per person. Since the personnel capacity is based upon other considerations in addition to stability, you are cautioned that the number of persons carried and their distribution may be further limited to that specified on the COI.
- 3. <u>FREEBOARD AND DRAFT</u>: A minimum freeboard of 4 feet 9-1/4 inches to the underside of the main deck at amidships must be maintained. This corresponds to a maximum baseline (mean) draft of 2 feet 7-3/4 inches. Amidships is located 13 feet aft of Frame 13. The draft measured to the loading marks from the bottom of the hull shall not exceed 2 feet 7-5-8 inches forward and 2 feet 7-7/8 inches aft. Trim and list should be minimized.
- 4. <u>WATERTIGHT DOORS AND BULKHEADS</u>: There are no doors located in any MTWB's. No watertight doors or bulkheads shall be added, removed, or altered without the authorization and supervision of the cognizant Officer in Charge, Marine Inspection (OCMI).
- 5. <u>HULL OPENINGS</u>: Any openings that could allow water to enter the hull or deckhouse should be kept closed when rough weather or sea conditions exist or are anticipated.
- 6. <u>WEIGHT CHANGES</u>: This stability letter has been issued based upon the following lightship parameters:

Displacement	19.64	Long Tons (LT)
VCG (Conservative Estimate)	8.45	Feet Above the Bottom of the Keel
LCG	18.23	Feet Aft of Frame 13
TCG	0.11	Feet Starboard of Centerline

No fixed ballast or other such weights shall be added, removed, altered, and/or relocated without the authorization and supervision of the OCMI.

- 7. <u>TANKS</u>: Any cross-connections between port and starboard tank pairs shall be kept closed at all times when underway.
- 8. <u>BILGES</u>: The vessel's bilges and voids shall be kept pumped to minimum content at all times consistent with pollution prevention requirements.
- 9. <u>LIST</u>: You should make every effort to determine the cause of any list of the vessel before taking corrective action.
- 10. <u>FREEING PORTS</u>: Deck freeing ports and drains shall be maintained operable and completely unobstructed at all times.

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This stability letter shall be posted under glass or other suitable transparent material at the operating station so that all pages are visible. It supersedes any stability guidance previously issued to the vessel.

G. S. GERTISER

Lieutenant Commander, U. S. Coast Guard

By direction

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