

## CHATHAM AREA TRANSIT AUTHORITY RFP 2023-04, ADDENDUM NO. 1

**DATE:** October 24, 2022  
**ORIGINAL RFP NUMBER:** 2023-04  
**PROJECT:** CAT Hybrid Ferry Vessels

This Addendum forms a part of the Invitation for Bid 2023-04 dated, September 13, 2022.

### Questions posed during initial Q&A Period and CAT's Responses:

Question 1: Our vessels however are all composite constructions build in carbon fiber for weight and fuel savings as well as significant maintenance reductions. As such, a proposed vessel from us would be of our own design and would be different from many of your technical specification listed in your vessel description. Would that be acceptable for this request?

Response: The vessel as planned is a USCG Passenger Vessel under subchapter T. As such it could be built in the US as a composite vessel. However, we would advise the offeror to look closely at Subchapter T (46 CFR 175-186) and ASTM F-3353-19, especially the Structural Fire Protection required for the protection of the Battery Space / Passenger Space Division. This may be very difficult to accomplish in Composite Construction to the satisfaction of the US Coast Guard.

Question 2: What is the projected in service date for the vessel?

Response: Twelve (12) month from the signing of the contract with the shipyard.

Question 3: What is the total aluminum weight (design estimation) for the vessel? What is the total aluminum weight (design estimation) for the vessel?

Response: The naval architect has estimated that there is 18.5Ltons of aluminum in the design of the hulls and superstructure. Please note that this does not allow for wastage.

Question 4: Can a list of aluminum plate and extrusions be provided?

Response: A list of aluminum plates and extrusions will not be provided. Please refer to the structural design.

Question 5: Sound insulation Thickness: The specification calls for 8" insulation with lead composite septum on page .7, but the Insulation Schedule calls for 2" thick PCF Marine Sound Insulation. Can we get clarification on the correct thickness?

Response: Please follow the insulation schedule D&LI # 22-1477-3512 and use two 2” thick PCF Marine Sound Insulation.

Question 6: Seating: The specification does not mention seating. Will all passenger seating be fabricated bench seats?

Response: Pontoon Boat Seats, 32oz marine grade vinyl, coated for UV resistance. 28", 38", & 55" wide bench seats or equal, number and size same as shown in footprint of the general arrangement drawing 1477-001. The seats and bases shall have no wood used in the construction. Seats hinged to allow for storage of PFDs in seat bases. The color choice shall be confirmed with the vessel owner prior to purchase. The bases shall be securely fixed to the deck.

Commercial Pilot House Chair, or equal, with gliders, footrest and lumbar support adjustment. Color and material to be chosen by the vessel owner prior to purchase.

Question 7: Will you consider other hybrid system architecture, where instead of having an AC network for all loads, you establish a DC grid where all electrical loads are powered from the DC bus which also feeds the AC ship service switchboard the required 3 phase 208V/60Hz power?

There are many advantages of a DC grid including fewer components, less weight and space, and higher efficiency of PM machines (generators & propulsion motors) and lower overall electrical losses.

Response: Other Hybrid Systems architectures are acceptable, provided that the system provides power to the propulsion and AC House Loads. The vessel is an aluminum catamaran and weight should be considered when providing a proposal. The weight of the hybrid system not including engines, piping, or batteries should not exceed 6.5 Long Tons.

Question 8: Can an aluminum material list of plates and extrusions be provided?

Response: Please see response to question 4.

Question 9: Will a nest file (cut files) be provided?

Response: The NC cutting will need to be provided by the shipyard as per the specifications (see section #32).

Question 10: Is there an aluminum weight that can be provided X amount of pounds of plate and X amount of pounds of extrusions?

Response: See response to question 3.

Question 11: Please clarify what HVAC equipment is required in the ESS Battery Room?

Response: There are two HVAC systems on the vessel. One for cooling the air in Passenger, Crew, and Equipment Spaces and one for the Lithium Ion Batteries. Each ESS (or Battery Space) has a small chiller in the hull below it, this directly cools the battery bank. The Pilot House, Main Deck Passenger Space and Electric Propulsion Rooms are cooled and heated by Air to Air Mini Split Systems. The mini split system has three (3) exterior condensers mounted aft of the pilot house, eight (8) Cassettes in the Passenger Space Overhead, one (1) floor mounted air handler in the Pilot House, and two (2) Wall mounted air handlers one in each Electric Propulsion Room to cool the space itself.

Question 12: Outline Specifications Section 8 calls for Chiller Units (2) MTDX36. Section 29 calls for Mini-Split Systems? HVAC layout drawing has Minisplits?

Response: Please choose a good commercial marine equipment that you are familiar with and meets the USCG requirements.

Question 13: Drawing 22-1477-4022 Battery (ESS) System Cooling Piping shows keel coolers and associated equipment?

Response: The design was based on commonly available commercial and marine equipment that meets the specifications of USCG.

Question 14: Will the equipment list be provided listing vendor names and part numbers? This will assure you of getting the most accurate pricing for shipyards and reduce any concerns about weight management for this project. At minimum provide the vendor names for the windows and doors.

Response: Federal regulations prohibit specifications of branding items on purchases and specifying model numbers is not allowed. Doors and windows can be found from a number of good marine doors and windows manufacturers that comply with USCG regulations.

Question 15: Would CAT consider extending the deadline for responses to this IFB?

Response: See Below

### **Schedule of Events**

IFB Submission Deadline

November 30, 2022, 2:00 p.m. EST

Recommendation to Board of Directors

December 20, 2022

Notification of Award to Proposer

December 21, 2022

**END OF ADDENDUM NO. 1**