

## Cost Research for Annual Cost of a Fire/Rescue and All-Hazards Boat

-Where will it be stored

South Shore Harbour has promised us a boat slip for free if we get a fire boat. Should we need to store it out of the water for any period of time, it will be kept behind fire station three in the parking lot.

Cost: \$0

-How much will the storage cost

N/A

Cost: \$0

-What will be needed to tow it

The fire department has several three-quarter ton and one ton pickups that can tow the boat when it is on the trailer.

Cost: \$0

-What will it cost to maintain, especially if it is berthed in a slip

Because it's berthed in a slip, it will cost around \$1,000 to have the hull cleaned and sealed (if the hull is made of fiberglass) annually. In addition, pump testing will have to be completed annually per NFPA standard 1925 and, along with annual maintenance of the pump motor should cost around \$1,000. The twin outboards will also have to have annual maintenance which, coincidentally, costs about \$1,000. These costs include the pulling of the boat out of the water and labor. The first year requires two maintenance costs; a 20-maintenance and a 40-hour maintenance for proper break-in of the outboard motors. The cost for fuel is estimated to be \$2,000 per year.

Cost: 1<sup>st</sup> year: \$6,000 per year, 2<sup>nd</sup> year and beyond: \$5,000 per year

- Who will operate it and how will they respond to use it when needed (i.e. will they drive straight to a marina in a personal vehicle, will they crew an engine and then respond to the boat, etc.)

Based on the type of call, members will respond according to the Special Operations SOP. In some cases, some members will respond directly to the marina but, in case of a rescue, a couple of crew members will respond to the station to pick up wet suits and/or other equipment pertinent to the call type. For fire calls, the on-duty crew will respond from the station to the marina with the apparatus and board the boat with bunker gear. Only trained boat operators will be allowed to drive the boat and operate the fire pump.

Cost per year: \$0

- What is the life of the gear before it must be refitted or upgraded, and at what cost (not just firefighting gear, but gas meters, etc.)

The fire boat itself has, potentially, an unlimited life. NFPA has no requirements that a fire boat be replaced due to its age. Kemah and Seabrook's boats are 20 years and older and still fit for duty with the proper maintenance. That includes the drive motors and the pump motors. The warranty for most fire boats is 10 years on the boat structure with the exception of Boston Whaler which has a lifetime warranty. The radiation detection equipment will be part of the ensemble as part of a homeland security grant and can be replaced at its end of life by the Department of Homeland Security if they still see the need. The radiation detection equipment requires calibration annually for a cost of \$150. The gas and vapor detection monitors are rented by the fire department for \$1,500 per and the rental price includes annual calibration. The life of radios, light bars, sonars can be estimated to be about 10 years due to exposure to weather and possible salt spray.

Cost: Approximately \$40,000 (after 10 years or so); \$1,500 annually (for the gas detectors)

- Will there be special firefighting bunker gear needed to man the boat, and at what cost

No special firefighting bunker gear will be needed to man the boat. However, rated life preservers will be mandatory for all personnel on board. NFPA Standard 1925 requires firefighting air packs and hand tools be available for firefighters on board a fire boat but those will be brought on the responding fire apparatus to the marina.

Cost: \$0

- What will the draft of the boat need to be to stabilize it against the force of the water canon

The draft of the boat is 12 to 14 inches, however, the counter thrust to the deck gun when flowing a firefighting master stream will be managed by the geosynchronous guidance system utilizing the twin outboards to hold the boat's position automatically.

Cost: \$0

- What funds will be used for the City's \$109,000 matching portion

If awarded, I would ask for a budget amendment to cover the matching funds or request to use the water bill donation fund, if it doesn't create too dissatisfaction among the fire department membership.

Cost: \$109,00 or less depending on the actual cost of the fire boat

- What will the continuing budgetary implication be annually

Maintenance and Fuel:	\$5,000
Gas Detector Rental:	\$1,500
Misc. repairs and upgrades	<u>\$1,000</u>
Total Cost Annually	\$7,500