2006 27ft Boston Whaler Challenger
Powered by twin 2016 Yamaha 300 Outboards

Vessel MH-1 Purchased in 2006

- MH-1 put in service summer of 2006.
- Powered by twin Mercury 225 outboards.
- Power heads replaced three times
- Lower units replaced twice
- Vessel underwent a complete refit in 2016 spending roughly $100,000 dollars
- Complete Raymarine electronic upgrade
- Side scan sonar and FLIR camera
- Repower with Twin Yamaha 300 hp outboards

Current condition of MH-1

- Vessel MH-1 had a survey completed by Marine Safety Consultants in September after we found the bilge filled with gasoline.
- The survey identified several concerning issues

2016 Yamaha 300 hp outboards

- The outboard motors have been in service for eight years and have had several failures.
- We have had to replace one powerhead after a timing belt failure, and one lower unit was replaced in 2020.
- Both motors have been run beyond the hours recommended for public safety vessels. The port motor has 1004 hours, and the Starboard motor has 1002 hours.
- The cost to repower this 20-year-old platform is around 70K.

- TANKS -

Fuel: gasoline

No. & Capacity: (2) 202

Shape: rectangular

Material: 5052 1/8" aluminum

Location: under deck

Secured: with aluminum clamps

Filling Lines & Vents: USCG A1

Bonded: yes

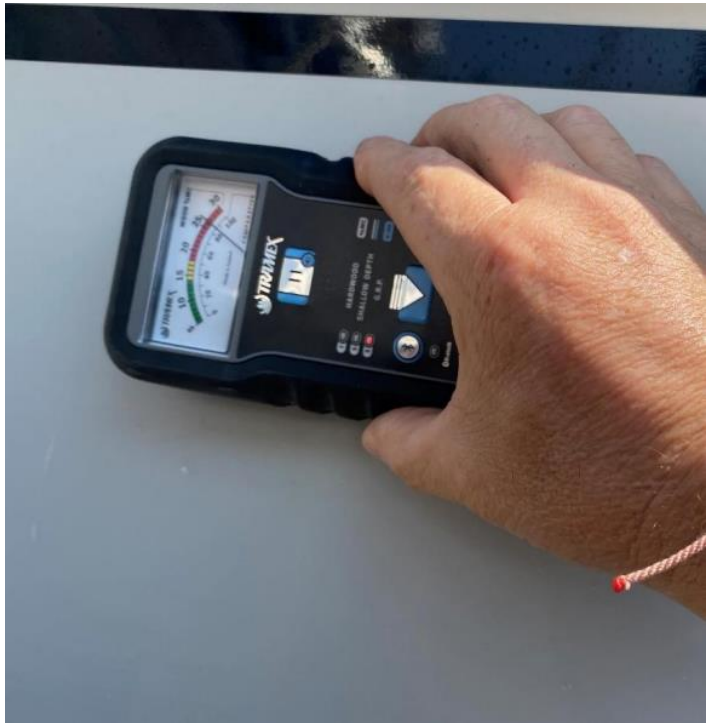
Would Overflow run Inboard or Outboard: outboard

Fuel Lines & Connections: USCG A1

There was a heavy odor of gasoline in the vessel and bilges. The fuel tanks appear to be moving, as the brackets supporting them are loose and have missing screws.

The fuel system was examined, including the dual fuel tanks. They have been tested to comply with USCG 33 CFR 183.510. Non-metallic fuel hoses were found to show wear at the fill and vent lines.

Electrical grounding of the deck fuel fitting and the vessel's ground was found to be in place and secure. The system is equipped with primary fuel filtering system.



Delamination and severe cracking at the dive door

- The delamination and cracking resulted in the hull being saturated with water. This photo represents the amount of moisture measured on the port side of the vessel.

Cracking on the Port and Starboard side of the wheelhouse

Heavy gel coat cracking in the superstructure with moderate moisture and delamination

- COMMENTS

This 2006 27' Boston Whaler Challenger has reached the end of its useful life as a primary harbormaster/rescue vessel.

It is the opinion of the undersigned surveyor that this vessel, when used primarily for the military, in marine salvage, and marine rescue operations, has a 15 year life expectancy. The operation of the vessel is in all weather conditions, which are conditions and areas of operation most recreational vessels do not operate, causing heavy wear and tear on the vessel.

The vessel hull, on the port side, is saturated with moisture and the hull skin is delaminated from the foam core. Around the boarding door has heavy gelcoat cracking, crazing, and delamination from years of the hull flexing.

This flexing of the hull has caused delamination of the superstructure to the hull joint on the aft port and starboard sides. There is also flexing and delamination to the head liner on the interior of the vessel.

The fuel tanks' brackets and braces are loose, which is allowing the fuel tanks to move. This movement has caused wear to the fuel fill lines, and possible damage to the tanks themselves.

The damage found is common in a vessel used in this service for over 15 years, and is not cost effective to repair. That, compounded with the outboard engines reaching the end of their useful life of 1,000 hours, finds the vessel not fit for its service as the primary harbormaster/rescue vessel for the town of Marion, MA.

Standards, as published by the American Boat & Yacht Council and the National Fire Protection Association, as well as the applicable regulations of the United States Coast Guard were referenced for the purpose of determining survey compliance.

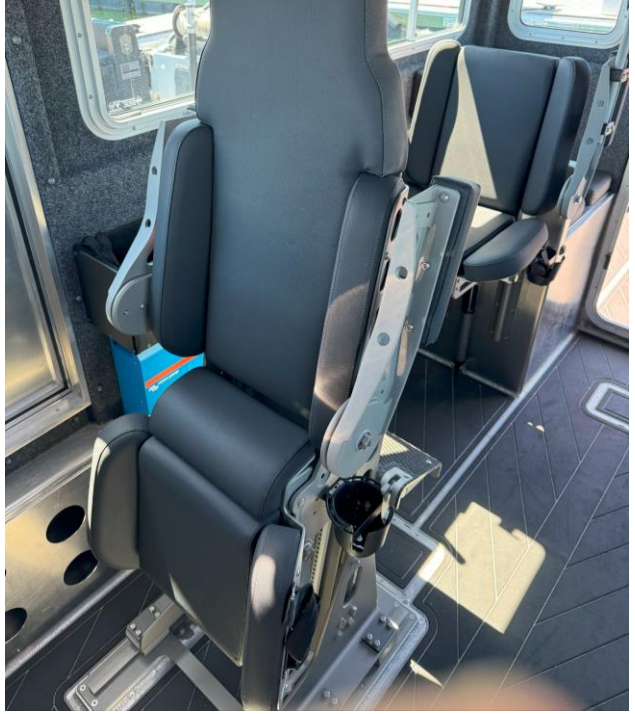
This report is based on examination of the vessel, and of those parts, spaces and equipment that could be sighted without removals or operation, and is rendered without bias or prejudice. In accepting same, it is agreed that the extent of obligation of this surveyor, with respect thereto, is limited to furnishing a competent survey, and in the making of this report this surveyor is acting on behalf of the person or firm requesting same and no liability shall attach to this surveyor for the accuracy, errors and/or omissions therefore.

Requesting the Town support the replacement off MH-1 with the proposed 33ft Safe Boat

Working with the Marine Resource Commission, we have designed a vessel that is the platform Marion needs to support the boating community for the next 20-25 years.

- This vessel is equipped with all today's latest life-saving equipment.
- The cockpit has four shocks mitigated seats to ensure all officers or passengers are safely seated and secured in the vessel.
- The vessel has a built-in fire pump with firefighting capabilities to handle maritime fires.
- It also functions as a dewatering pump for vessels taking on water.
- The aluminum hull construction, shallow draft, and ability to open the bow door are paramount in search and rescue operations.

Please see the attached photos of Scituate Police 33 Safe Boat.



2023 33ft Safe Boat

- This vessel was purchased by the Town of Scituate utilizing grant funding. This vessel's purchase price, when ordered, was $607,887.56


Questions?