FLOATING HOME INSPECTION REPORT XXXXXXXXXXX XXXXXXX Sausalito, California

ACME BUILDING CONSULTANTS
1619 King Street
Santa Cruz ,California 95060
831.420.7606
info@acmebuildingconsultants.com
California State Contractor License No.846250

HOME INSPECTION REPORT
FLOATING HOME
INSPECTION REPORT
XXXXXXXXXXXX
XXXXXXX
Sausalito, California

Inspection Date:
June 16th 2024

Prepared For:
Estate of Terry P. Mc Guinness

PREPARED BY:
ACME BUILDING CONSULTANTS
REPORT#2024 - 1 - 1 - 010

INSPECTOR:
MICHAEL FREINBERG

REPORT OVERVIEW

The floating home berthed on X dock Slip XXXX at XXXX located in Sausalito, California was inspected on the June 16th 2024 by Michael Freinberg of Acme Building Consultants as you requested. The first part of the inspection of the hull was done in May 28th 2024 while the houseboat was at the boatyard for repairs and repainting.

Our report and recommendations as a result of that inspection are enclosed. This report is a professional opinion based on a visual inspection of the accessible components of the property. This report is visual in nature and not an exhaustive technical evaluation.

Please understand that there are limitations to this inspection. Many components of the boat are not visible during the inspection and very little historical information is provided in advance of the inspection. While we can reduce the risk of purchasing a vessel, we cannot eliminate it. Even the most comprehensive inspection cannot reveal every condition you may consider significant to ownership.

Please refer to your copy of the Inspection Agreement. It more specifically explains the scope of the inspection and the limit of our liability in performing this inspection. We are not associated with any party to the transaction of this property except as may be disclosed to you.

The information provided in this report is solely for your use. Thank you for selecting our company. Feel free to contact me with any questions with this report. My office cell phone number is 831.420.7606.

Sincerely,

Michael P. Freinberg
ACME BUILDING CONSULTANTS

THE SCOPE OF THE INSPECTION

This floating home inspection is to bring the owner up to date with the condition of the vessel and the type of utilities which have been installed on this vessel.

This vessel was designed and built by Edward Ehler at the City Boat Work Company in Seattle, Washington in 1987. The vessel was a custom build for a client in San Francisco. The overall length is 38' and with a beam of 12'.

The exterior super structure is combination of the original painted Cedar lap style siding on the fore deck wall and the aft lower wall. The upper fore wall, the aft upper wall and the port and starboard side exterior walls have had new siding installed during September 2021with pre-primed lap wood siding. At the time of the siding replacement all of the windows were replaced with new anodized aluminum dual paned sliding units.

The interior layout is a main salon, galley area, upstairs loft and a step-down full bedroom and full bathroom. There is a new custom fir Dutch door on the front deck and from the upper loft onto the aft upper deck is a new fir door. Both doors were sealed with a two part epoxy prior to finishing the doors with multiple coats of marine spar varnish

This report is based upon a visual inspection of the vessel. Only a representative sample of building components were viewed in those areas that were readily accessible during the time of inspection. It is not technically exhaustive or all encompassing. No destructive testing or dismantling of building components was performed.

The Inspector shall not be held responsible or liable for any repairs or replacements with regard to this hull, systems, components, or the contents therein. ACME Building Consultants is neither a guarantor nor insurer. Not all improvements will be identified during this inspection.

The inspection and related report do not address and are not intended to address code and/or regulation compliance, mold, mildew, indoor air quality, asbestos, radon gas, lead paint and any other indoor or outdoor substances. The client is urged to contact a competent specialist if information, identification or testing of the above is desired.

It is our goal to put a vessel's owner or buyer in a knowledgeable position by becoming familiar with the structures systems and condition through the use of this report. Not all improvements will be identified during this inspection; unexpected repairs should still be anticipated. The acceptance of this report by the client acknowledges the client's agreement to all of the terms and conditions of the inspection contract. This inspection should not be considered a guarantee or warranty of any kind.

Hull vessel Number - CF- 2572UA787

CF # - 5727UY

Vessel is registered through 2024

Please refer to the pre-inspection contract for a full explanation of the scope of inspection. A signed copy of the pre inspection agreement is on file at our office.

THE VESSEL IN PERSPECTIVE

As with all vessels, ongoing maintenance is required and improvements to the systems of the structure will be needed over time. The improvements that are recommended in this report are not considered unusual for a boat of this age and location. Please remember that there is no such thing as a perfect vessel.

IMPROVEMENT RECOMMENDATIONS

Following each section of this report is a synopsis of the recommendations that should be considered for the vessel's benefit. Other significant improvements, outside the scope of this inspection, may also be necessary. Please refer to the body of this report for further details and other recommendations.

It is always advised to hire a person who is specific to the trade which will require a repair, upgrade, service or further evaluation. Having a good ship's carpenter, a boat systems person and a maintenance person will help to keep this vessel in ship shape.

WEATHER CONDITIONS

Clear skies prevailed at the time of inspection. The estimated outside temperature was 62 degrees. Overcast conditions had been experienced in the days leading up to the inspection. Please note, the state of California is experiencing a dry and warm summer. This weather factor may have affected this vessel.

SUMMARY

This floating home inspection is to bring the owner up to date with the condition of the vessel and the type of utilities which have been installed on this vessel.

This vessel was designed and built by Edward Ehler at the City Boat Work Company in Seattle, Washington in 1987. The vessel was a custom build for a client in San Francisco. The overall length is 38' and with a beam of 12'.

The exterior super structure is combination of the original painted Cedar lap style siding on the fore deck wall and the aft lower wall. The upper fore wall, the aft upper wall and the port and starboard side exterior walls have had new siding installed during September 2021with pre-primed lap wood siding. At the time of the siding replacement all of the windows were replaced with new anodized aluminum dual paned sliding units.

The interior layout is a main salon, galley area, upstairs loft and a step-down full bedroom and full bathroom. There is a new custom fir Dutch door on the front deck and from the upper loft onto the aft upper deck is a new fir door. Both doors were sealed with a two part epoxy prior to finishing the doors with multiple coats of marine spar varnish

The vessel has some maintenance needs, which are typical of for a boat of this age.

It is recommended that the next buyer review the owner's personal records to learn what has been done to this vessel over time.

When describing the items around the vessel all directions are based from looking at the front door. The left side is the starboard side and the right is the port side.

DESCRIPTION, OBSERVATIONS & RECOMMENDATIONS

Wall Siding:	Painted horizontally set cedar and two lap treated exterior grade pine (replacement siding)
Soffit and Fascia:	Painted plywood soffit, wrapped with fiberglass
Exterior Entry Stairs:	Back has a painted steel ladder from the lower aft deck to the upper back fan deck
Front Exterior Landing	Painted steel with removable port to access the forward bilge
Front Exterior Railings:	Fore deck has clear finished fir trim rail
Front Exterior Entry Door & Trim:	Clear finished fir door, dual paned glass panels, Dutch style door with an outward swing
Exterior Entry Lighting:	Incandescent lights on walls, fore and upper aft
Doors to Rear Elevation:	Clear finished fir wood door with two glass panels, outward swing (new replacement door)
Exterior Windows and trim:	Dual paned windows with painted wood trim (replaced all windows in September, 2021)
Interior Landing:	Pre-finished engineered oak wood
Back Stairway:	Painted steel ladder
Aft Deck:	Accessed from the upstairs loft, paint on epoxied plywood with copper 3/4" piping handrail

EXTERIOR LANDINGS AND PORCHES

Comments: The front landing and lower fore deck cockpit walls are painted metal with a clear finished wood cap rail. Above the front landing is the wood extended soffit with clear finished wood overhead beams and trim. The soffit planking is painted wood soffit. The above surface is part of the roofline which was repaired then resealed with fiberglass cloth and epoxy resin in 09.2020 and then again in 07.2023 when the new front exterior laminated beam was installed.

Around the fore metal landing is a custom canvas enclosure which is in good condition.

The back lower deck is painted metal with a new wood crowned hatch to access the aft bilge. The aft hatch has a teak grab rail to lift the hatch. The aft hatch is hinged with removable hinge pins

The lower aft overhead is painted wainscoting wood which is part of the sub structure of the back upper fan deck. The back upper fan deck is fiberglass over 1" plywood with a 3/4" copper piping rails and a painted steel ladder to access the aft lower deck.

EXTERIOR WALL SURFACES & WALL SIDING

Comments: The exterior siding is made up of the original painted horizontal cedar planking on the fore deck wall and the lower aft wall along with a short section on the aft right upper deck. These areas of siding were in good condition prior to the start of the exterior work. The port, starboard, upper fore exterior walls and the back upper walls had the siding replaced with a treated pre-primed pine two lap exterior siding. Protecto Seal tape and Tyvek was used to cover the plywood sub siding. On sections of the bottom 1" x 4" trim boards 20 gauge copper Z flashing was installed.

Prior to installing the siding all of the pieces of lap were painted with a gloss enamel on all sides and ends when cut to fit. As the siding was being installed the cut ends were sealed with primer.
All ends of the siding at the corner posts and around the window frames were sealed with caulk. The new siding was installed with stainless steel fasteners, # 6 x 1 3/4".

Once the new exterior siding job was completed the new siding was lightly sanded and two layers of a gloss latex enamel top coat of paint was applied by brush. The corner posts are painted wood. Sections of the upper under the soffit and along the base of the roofing is painted wood trim. There is a slight wave in the exterior siding which is typical of this material.

Keeping the exterior paint in clean and good condition not only adds value to the vessel but also protects the vessel from weather and insects. Keeping the exterior clean by washing it once a year can extend the life of the exterior finish by several years. In areas which have effects of the sea climate washing the exterior will help slow down rust in the air damage to metal fixtures around the structure.

SOFFIT & FASCIA

Comments: The soffit and fascia are typical for this type of construction. The soffits were painted at the time of the exterior work in 09.202. All surfaces are in good condition.

FRONT ELEVATION EXTERIOR ENTRY DOOR & TRIM (exterior view)

Comments: The clear finished wood front door fits securely in the existing jamb. The door is fitted with a keyed passage dead bolt lock. The front door has been replaced with a clear finished fir Dutch door. The new door was sealed with a clear epoxy then six coats of high gloss spar varnish. The trim is painted wood on the exterior and clear finished on the interior. The threshold is oak finished with an epoxy sealer and several coats of a marine spar varnish.

When the threshold was removed to replace the interior flooring the base wood trim was cleaned and sealed with epoxy.

It is important to keep the weather stripping in good order to help isolate the interior from the exterior weather. Periodic cleaning and replacement if damaged is recommended.

Because this wood door swings outward it has a greater chance of being damaged by weather and sun. The top and bottom edge of the door should be kept sealed with a clear finish or paint. It is important to keep the weather stripping on this type of door in good working order.

Door hardware should be serviced once a year and the weather stripping kept cleaned and replaced if damaged. At the time of transaction the new owners may want to have the door locks re keyed for safety.

EXTERIOR WINDOWS, FRAMES & TRIM (exterior view)
Comments: The windows are dual paned glass panels in an anodized aluminum casement type. They are a combination of fixed and sliding type. Some areas of the window wood framework were replaced during the siding replacement. Other areas were treated with bleach and a wood sealer.

Prior to installing the new window frames the window openings were sealed with Protecto Seal tape and Tyvek. Window frames were bedded with caulk on the sides and top of the mounting flange. Before the new exterior siding was installed custom 20 gauge copper flashing was installed along the top edge of the window trim. All of the windows are new units installed in 09.2021.

A sampling of the windows were tested and those tested were found to be in working order. With dual paned windows they should be cleaned and inspected periodically for fogging between the two panes of glass.

It is recommended that the owner and/or buyers review the window warranty to see if this damage is covered by the manufacture.

All of the operating windows should be cleaned along the bottom track and in the casements. Once cleaned all of the moving hardware should be lubricated once a year.

EXTERIOR ENTRY LIGHTING (front elevation)
Comments: A bronze marine grade wall mounted light fixture is on the fore wall of the vessel. The light switch is exterior wall mounted and protected by the awning cover. This is a vintage set up. On the upper aft wall of the vessel is the same type of exterior wall mounted bronze light fixture with the light switch on the interior wall of the loft to the left of the back door.

DOORS TO REAR EXTERIOR
Comments: There is a custom built clear finished fir door with two single paned panels of safety glass which exits onto the upper aft deck. The door, like the front, has an outward swing. This door was replaced 04.25.2021

Door hardware should be serviced once a year and the weather stripping kept cleaned and replaced if damaged. At the time of transaction the new owners may want to have the door locks rekeyed for safety.

The trim is painted wood on the exterior and interior is clear finished wood. It is important to keep the weather stripping in good order to help isolate the interior from the exterior weather. Periodic cleaning and replacement if damaged is recommended.

GENERAL INFORMATION
Comments: It is always advised for buyer or seller to contact a licensed contractor specific to the trade to service or repair the issues outlined in this inspection report.

Recommendations:

- On 10.24.2021 an intense wind and rain storm blew through Sausalito. Several leaks were noted in the fore deck at the base of the front wall and at the starboard mid post to the right of the galley sink. These areas were repaired and resealed as needed.

- All of the exposed clear finished wood work should be revarnished once a year to help preserve the wood finish.
  This service is done twice a year

- The aft upper door frame should have weather stripping installed.

- It is recommended that the owner supply the buyers with all of the exterior and interior paints for future touch ups. All of the exterior and interior paints and varnishes are stored in plastic bags inside of plastic boxes in the mid bilge area.

- A good maintenance program is to wash the exterior of the vessel twice a year to clean dirt, fungus and mildew stains. This will help extend the life of the exterior paint. Paint not only adds to the quality of the exterior but also protects the structure from insects and moisture damage.
  This service is done twice a year

HULL & STRUCTURAL COMPONENTS

DESCRIPTION, OBSERVATIONS & RECOMMENDATIONS

Hull:	3/16" painted steel with 2" bull nose steel tubing around the upper rail, at the turn of the bilge, the bottom of the hull has a steel tapered keel, the hull is divided into four sections
Hull Rub Rails:	On each side of the vessel are two 2" x 6" composite planking pieces which act as rub rails to protect the hull, the rub rail on the port side of the vessel was replaced 01.2021
Columns:	2" x 2" and 2" x 4" wood posts set on the interior of the hull in several locations
Corner Posts:	Each of the six corners of the boat have 8" x 8" mahogany vertical posts cut into a hexagon shape finished with paint and varnish
Floor Joists:	Painted steel and epoxy sealed wood
Ceiling Joists:	Interior ceiling has 2" x 3" exposed ceiling beams, estimated
Wall Studs	2" x 2" and 2" x 4" sandwiched between epoxy coated plywood with a foam insulation core, estimated
Sway Braces:	None
Beams:	Painted steel and 2" x 4" wood beams sealed with epoxy, estimated
Subfloor Structure:	Epoxy sealed plywood on both sides of the plywood with a foam insulation core between the plywood
Sills Visibly Bolted to Hull:	Yes, bolts as noted in the bilges
Subarea Insulation:	Foam core between the exterior and interior plywood
Access to Bilges:	Fore deck removable floor port, main salon, two hinged wood ports, under the bed, removable painted wood floor port (aft right corner) and from the back lower deck, removable painted wood floor porch

Bilge Pumps:	Three, # 1fore bilge, # 2 under the bed bilge port and # 3 in the aft bilge, all in working order, each bilge pump exits overboard
Bilge Area Ventilation:	Fore and aft bilges have exterior raised deck vents, mid bilge has a floor vent under the galley sink
Access to Attic:	None
Attic Ventilation:	None, sealed membrane, 2" x 2" wood beams sandwiched between epoxy coated plywood with a form insulation core
Attic Insulation:	Laminated foam type, estimated

ATTIC

Comments: There is no attic space built into this vessel. The plywood overhead is 2" x 2" wood ceiling joists with hard cell insulation foam sealed on the roof line with epoxy over plywood on the underside. The cabin tops are epoxy with a high gloss latex floor and porch paint over the epoxy sealer.

The underside of the ceiling is epoxy sealed plywood which has a hard cell foam core. The interior ceiling is painted wainscoting planking with cross wood beams. The ceiling is painted and on the exposed sides of the beams are clear finished Maple wood battens secured in place with brass oval screws and brass finishing washers.

CEILING JOISTS

Comments: The ceiling joists are sealed inside the sandwiched plywood overhead. The ceiling framework in the manufactured part of the structure is sealed with epoxy on plywood.

WALL STUDS

Comments: All of the wood studs are sandwiched between the epoxy cover plywood.

BEAMS

Comments: The beams appear adequate to support the roof and framing above.

FLOOR STRUCTURE

Comments: The sub interior cabin sole is epoxy sealed plywood with a foam core. Along with 2" x 2" and 2" x 4" floor joists set inside the sandwiched plywood.

The overhead, walls and sub decking information is based on the information supplied by the builder.

SURFACE DRAINAGE

Comments: Drainage at the time of the inspection is set to cascadae off of the roofing membrane. This vessel has an arched roof line modeled after the classic San Francisco Bay Arks of the late part of the last century.

HULL

Comments: The hull is painted 3/16" steel plate with a center line steel keel. The forward section of the keel has a channel running fore to aft. In the aft most section is the # 2 bilge pump. On the center underside is a long type steel shoe keel. Along the lower sides and the upper side rails is 2" steel tubing welded to the steel plate. There are several steel tangs for mooring lines and shackles. Along the port and starboard sides of the hull are two sets of composite simulated composite wood acting as fenders. There is a steel sensor in the mid-hull which monitors the electrical content of the steel.

The fore landing has a port and starboard rain water drain scuppers built into the side hull. The top perimeter has flat steel plates with rain water drainage scuppers as well.

The hull has four chambers. The front chamber is access through a removable steel plate which is secured in place with stainless steel screws. The ventilation in this area is from a vent built into the hull. The interior of the fore bilge is painted along with the # 1 bilge pump which exits through a through hull fitting on the port side above the water line.

The two main area bilges can be accessed from the hinged floor ports from the interior of the boat.

In the fore interior bilge is the composite black water holding tank, the water supply pipes and hoses and the waste water hoses from both the black and grey water systems. Between the fore and aft main bilge areas is a steel bulkhead which is open at the channel drain. Stored in the main fore bilge are composite plastic water tanks which are used to level the boat. Each of the water ballast tanks have painted wood frames to keep the tanks off of the metal bilge surface.

In the second aft sub area is the 20 gallon horizontally set electric water heater, several sub electrical wire junction boxes, 12 volt battery, the black water pump from the head, the grey water tank and the composite ballast tanks to level the vessel. The aft main bilge has a wood cabinet which houses the electrical wire junction box and the 12 volt battery for the DC electrical system. Both the water heater and the head relay pump and secured on painted wood bases off of the metal bilge surface. This bilge has several plastic storage boxes with paints and other working items for the boat.

Under the bunk in the aft right corner is a painted wood floor port which accesses the # 2 bilge pump.

There is no access under the bedroom and the bathroom head as the sub flooring is set 4" above the steel hull.

Accessed from the aft exterior painted metal deck is a painted wood port. This area has an open back vent and houses the # 3 bilge pump and the shower grey water sump system. Both the # 2 and # 3 bilge pumps exit the hull above the water line in the aft port of the hull. The second bilge area of the hull has three through hull fittings. All of the mushroom fittings are plastic and the three valves are composite. Two are 1 1/4" and the larger valve is 1 ½" ball type lever valves.

In October of 2020 the interior of the hull was cleaned with Ospric acid and the rust stained surfaces were painted with a rust inhibiting enamel. If rust spots are noted they are cleaned with ospric acid, then sealed with a rust inhibiting black enamel paint.

In January 2021 the boat was hauled out for cleaning, repairs and repainting.

Once repaired the under water area of the hull was fully primed with a two part epoxy primer. Two coats of anti-fouling marine underwater paint below the water line. Above the water line the freeboard was painted with a two part epoxy topside gloss paint. Each of the six zinc plates were replaced. For more information about the haul out contact Andrew Summers, owner of Richardson Bay Boat Works.

In May of 2024 the boat was hauled out of the water for repairs to the steel hull. The flat underside of the hull was stripped to bare steel to remove all of the old paint. A section of steel plating was replace in the aft starboard side and some reenforcement steel L sections were added to the aft port keel section of the hull. Once the steel work was completed a new primer barrier coat was applied. Two coats of blue bottom paint on the underside and three coats of bottom paint on the below the water line sides. Topsides were repainted with two coats of Pettit Ezpoxy black high gloss enamel. For more information about the haul out contact Andrew Summers, owner of Richardson Bay Boat Works.

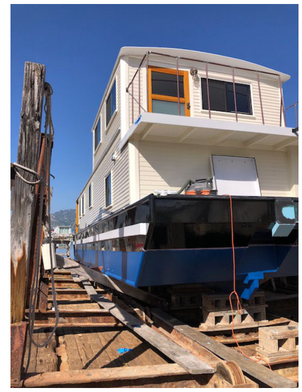
GENERAL INFORMATION

Comments: It is always advised for buyer or seller to contact a licensed contractor specific to the trade to service or repair the issues outlined in this inspection report.

Recommendations:

- It is recommended that each of the bilge pumps be serviced once a year.

- A good deal of discussion went into cleaning or not cleaning the steel hull under the water line. The zincs are set to be checked three times a year and be replaced as needed. The answer to clean or not to clean has been answered by not cleaning. The more you clean the more the bottom paint is washed off.



- The top sides of the steel hull both the freeboard and the decking should be inspected once a year and any surface rust should be cleaned up as needed, then the surfaces should be sealed with paint.

- The hull white rubber side fenders should be checked every six months making sure they are properly secured to the boat and they have enough air in them.

- The bilges should be inspected once a month to check for surface rust and condensation. If surface rust is noted it should be cleaned, treated with ospric acid them sealed with a rust inhibiting oil-based enamel paint.

ROOFING AND ROOF FLASHINGS

DESCRIPTION, OBSERVATIONS & RECOMMENDATIONS

Membrane:	Plywood sealed with fiberglass and epoxy, top coat is a gloss floor and porch paint
Layers of membrane:	Single, estimated
Signs of Felt Paper:	None
Roof Line Sagging:	Slight deflection
Damaged:	Repaired and repainted 10.2020
Skylights:	Two mahogany skylights, new 04.2022
Perimeter Flashing:	Lip of the roof line
Roof Stacks & Caps:	None, all of the venting for the holding tanks exits at the front deck landing utility box
Rainwater Collection System:	None
Drainage Outflow:	Along the base of the hull and run off through scuppers
Roofing Penetrations:	None
Evidence of Wall Leaking:	Yes, on the starboard mid ship corner post (during a heavy wind and rain)

MEMBRANE

Comments: The cabin house roofing membrane is plywood on the under and top sides with sandwiched foam core. The sub plywood on both sides is treated with epoxy resin. The roofing is finished off with a coat of primer and two coats of high gloss floor and porch paint. The topsides of the roof were stripped down to the epoxy sealer in 10.2019 to repair several locations. The fore port side above the front landing, midship at the fore end of the upper roof and two feet from the upper port aft. Each area was cleaned, repaired then resealed with epoxy. On the fore roof are four set in place teak varnished grab rails. Each grab rail is secured in place with stainless steel fasteners which can be removed so the grab rails can be varnished in a shop.

The inspection was conducted by walking the roof via a ladder set.

PERIMETER FLASHING

Comments: Fiberglass cloth and resin, estimated sealed

ROOF STACKS & CAPS

Comments: None

SKYLIGHTS

Comments: The main salon has two skylights. Both lower skylight frames are built into the roofing membrane. The interior frame and trim is clear finished cherry wood. The two skylight lenses were replaced in 04.2022 with new custom mahogany clear finished wood frames. The fore skylight is hinged to open on the aft side of the roof line with a composite glass lens. There are two finger locks on the frame and adjustable hinges to leave the skylight open. This skylight was built with a domed top to allow rain water to run off the sides of the skylight frame.

The aft skylight was made to look like a traditional yacht butterfly hatch. The hatch is a fixed unit. The aft hatch is made out of mahogany wood with stainless steel wired glass panels. The skylight is secured in place with the fore and aft locking hardware. Each skylight has a set of bronze hinges. Every six months the two skylights should be opened and the base frame on the top edge should be cleaned. Each skylight has a canvas cover. Once a year the clear finished wood of the two skylights should have the canvas UV covers removed and the wood varnished.

RAINWATER COLLECTION SYSTEM

Comments: None

ROOF PENETRATIONS

Comments: None, all waste water is vented at the fore starboard side by the exterior clean out fittings. Each has a 3/4" vent hose and fitting for the grey and black water system.

GENERAL INFORMATION

Comments: It is always advised for buyer or seller to contact a licensed contractor specific to the trade to service or repair the issues outlined in this inspection report.

Recommendations:

- The roofing membrane should be cleaned once a year with bleach and a light cleaner to remove the dirt and oxidation. This type of roofing paint should be repainted every four or five years.

- Each of the four clear finished teak roof grab rails should be removed and revarnished once a year along with the skylight frames.

- The two clear finished mahogany skylights should be cleaned and revarnished once a year.

- Periodic inspection of the roof membrane is recommended to make sure there is no build up of detritus in the rain gutters and on other sections of the roof.

DESCRIPTION, OBSERVATIONS & RECOMMENDATIONS

Service on:	Yes
Power entry:	Outlet in the fore landing exterior wall utility box
Main Location:	Harbor main breaker is located on the front of the dock box
Main AC service amperage:	30 AMP Main circuit breaker at the harbor dock box
Main DC service amperage:	To shut down the DC electrical system requires tripping all of the sub breakers
Service AC grounded at main box:	Yes, as noted inside the main electrical box and by the three prong electrical supply cord
Main service box weather proofed:	Yes
220 Volt capacity:	No
Location of Sub panel(s):	Two sub electrical panels both are located in the electrical cabinet under the kitchen counter top
Amp type of circuit breakers:	AC system has 1 main breaker which is 30 AMP, the sub breakers are 10 to 20AMP sub breakers, there are five sub breakers. The DC system has five 10 to 15 AMP sub breakers
GFCI circuit breakers:	None
Panel Notes:	Labeled
System Upgraded:	Yes
Electrical Auxiliary System:	None

AC SERVICE CONDUCTORS

Comments: From the dock box is a 30 AMP main AC supply system via a ship to shore yellow cord. The cord plugs into the outlet on the front starboard wall of the bow. The power cord inside the hull of the boat runs to the AC sub electrical panel. At the time of the inspection the AC electrical system was in working order.

DC SERVICE CONDUCTORS

Comments: In the mid bilge is a wood platform which has the 12 volt marine group 27 battery on it. The battery was replaced on 10.2022. The battery has a new (03.2021) trickle charger for this system. The DC power from the battery runs through cables to the DC sub electrical panel then to the utilities. The DC system has an in-line volt meter to monitor the battery output.

Date of battery replacement 10.2022

Date of battery trickle charger installed 03.2021

SUB-PANEL

Comments: There are two sub electrical panels on the boat. One is for the AC system and the other is for the DC system. The AC battery charge sub breaker is a separate wall-mounted breaker. Both systems are in full working order.

AUXILIARY ELECTRICAL SYSTEM

Comments: None in place.

WIRING NOTES

Comments: GFCI plugs are required at all outlets within six feet of a source of water. The GFCI circuitry within the outlet checks constantly for a difference between the incoming and outgoing currents. If there is a difference as little as 5 milliamps indicating a current leak (possibly through one's body causing a shock) the GFCI shuts down the reciprocal outlets downstream. All improperly wired plug and light outlets must be corrected.

In the mid bilge are two 4" x 4" metal wire junction boxes secured to the underside of the sub flooring plywood. Also in the middle bilge is a wood box frame which has the negative electrical bus bars for the AC and DC systems.

ELECTRICAL SWITCHES, OUTLETS AND COVER PLATES

Comments: It is recommended that all of the exterior electrical cover plates on switches and outlets be exterior grade weather proof units. Outlets should have GFCI type outlets and cover plates which can protect the outlets when in use.

All of the interior switch plates and outlet covers should be properly secured with the utilities and be set flush. Any damaged and missing cover plate, outlet and or switch should be replaced by an electrical contractor. Always monitor dimmer switches, older units as they age can develop flat spots and will not work. All missing and burned-out light bulbs should be replaced. All abandoned wires and electrical boxes should be removed. All electrical junction boxes should be sealed with cover plates. Any light fixture which does not have an attached lens cover over the light bulb will need to be updated for safety.

A sampling of outlets and light switches were tested and those that were tested were found to be in good working order.

GENERAL INFORMATION

Comments: <u>It is always advised for buyer or seller to contact a licensed contractor specific to the trade to service or repair the issues outlined in this inspection report.</u>

Recommendations:

- It is recommended that the main exterior electrical box be cleaned of oxidation.

- It is recommended that a master list be made up of the location of the main and sub panels along with a schematic of the sub circuit breakers.

DESCRIPTION, OBSERVATIONS & RECOMMENDATIONS

Main Line:	Hose from the dock box to a section of copper piping with a ball valve shut off, from the valve is a 3/4" reinforced hose to the deck fitting
Water Main Supply Valve:	At the dock box, gate valve, on the fore deck is a brass ball valve, inside the mid fore bilge is a water pressure adjustable valve
Supply Lines:	Reinforced plastic hose, C - PVC and copper piping, sizing ranges from 3/4" down to ½" C - PVC tubing
Water Pressure	45 PSI tested at the dock hose bib plus the inline water pressure adjustable valve located in the fore bilge
Water Filtration System:	None
Local Shut Off Valves:	At each utility, except the shower, to shut the water supply off to the shower, turn off the on board water main ball valve
Waste & Disposal Lines:	Marine grade waste water hose, replaced 01.2021
Sewer Cleanouts:	Two front deck fittings, left one is for the black water holding tank and the second, to the right is for the grey water holding tank, each has a vent hose, the black water vent hose has an inline filter
Fuel System:	Propane, dock box will hold 2 x 5 gallon gas canisters, system in good operating order
Holding Tank Size:	50 gallon grey water tank, located in the mid bilge, 65 gallon black water tank(replaced 01.2021), located in the fore mid bilge, estimated sizes
Ballast Tanks:	2 x 20 gallon tanks and 2 x 35 gallon composite fresh water tanks
Water Heater:	Kumma 20 gallon horizontal set electric water heater with a ball valve shut off valves, with auxiliary fittings for the hydriodic heating system
Power Supply;	Electric 15 AMP 120 V power

In Line Sediment Trap:	Not applicable
Strapping:	Yes, tanks on the front and the back of the unit are secured to a wood framed stand, stand is painted wood
Estimated Age:	2021 date on unit, estimated
Temperature Pressure Relief Valve:	Yes, front mount
Tailpipe:	Yes, 3/4" flex tubing to 3/4" PVC which exits the bilge of the boat to above the water line
Water Temperature Setting:	110 degrees
Water Heater In Pan:	No
Flexible Gas Line With Local Valve:	Not Applicable
Vented:	Not Applicable
Draft Hood Properly Installed:	Not Applicable
Adequate Combustion Air:	Not Applicable
Water and Gas Pipes Bonded:	Not Applicable
Flue Pipe Shared:	Not Applicable

MAIN LINE HARBOR WATER SUPPLY SYSTEM

Comments: The main water service delivers adequate water pressure throughout the system. This is a public utility water supply system. The water supply pipe from the public meter is not part of this inspection as it cannot be fully viewed. A copy of the water consumption report from the utility invoice would be good to review.

At the current time there are companies which manufacture inline water emergency shut off and water consumption valves which can be linked to cell phone. This would be an upgrade worth looking into as the price of water is going up.

A good upgrade would be is to paint the main water shut off valve blue so it can be easily identified in case the system needs to be shut down for a service.

SUPPLY LINES

Comments: All of the supply lines deliver adequate water pressure at the fixtures tested. Limited access pipes or pipes inside walls cannot be judged for sizing, leaks or corrosion. Water quality testing or testing for hazards such as lead are not part of this inspection. Some of the cold water supply pipes have blue tape to signal that they are cold water supply pipes. The warm water pipes have red tape on them in spots.

A water pressure reading at the exterior of the vessel will tell you exactly how forceful your water is in PSI (pounds per square inch). Normal water pressure is generally between 40 and 80 PSI; most homeowners prefer something right in the middle around 60 PSI. Once you measure your home's water pressure, you can adjust it to a setting that is ideal for all uses.

Checking and adjusting your water pressure can also save you money and improve the quality of your life. If the water pressure is too high, you may be using too much water each day; if it's too low, you may be taking longer to perform cleaning and bathing tasks or not adequately getting the job done. (If you're a shower taker, chances are you want all the pressure you can get!)

Water pressure readings are a great way to monitor the health of your plumbing system. Sudden changes in water pressure could be a sign of a serious plumbing problem. Decreases in water pressure and flow could indicate a serious blockage somewhere in your piping. And surges in water pressure intensity are not normal and could put undue stress on pipes, fixtures and appliances (such as your washing machine and dishwasher). Too much pressure can also wear down washers, cause faucets to drips and leaks, as well as make toilets run constantly

Most vessels built in the last 25 - 30 years have a pressure reducing valve on the supply line coming into the boat. It's usually pretty simple to adjust that valve to increase or reduce the water pressure. First, locate the valve; most likely it will be found near your water shut off pipe for the vessel. The pressure reducing valve is made of brass with a bell-shaped middle section with a screw in the end of the bell. This unit can be adjusted by a plumber. If none is in place and your water pressure at the structure is over 80 PSI it is worth to have a plumber install this type adjustable water pressure valves.

WATER MONITORING SYSTEMS

Comments: Excessive water consumption is of concern to vessel owners. At the public municipality level the future of water monitoring is a Advanced Metering Infrastructure.

Advanced Metering Infrastructure, or AMI, has become somewhat of a buzz word in the water industry over the last few years and it's being adopted more and more by water utilities under pressure to increase efficiency.

AMI enables two-way communication over a fixed network between the utility system and the metering endpoints. It's a much more powerful and robust system that's proving its value in some challenging environments, from the rural plains to bustling urban centers.

AMI systems can be continuously monitored by hourly interval reads by a municipality when installed. Recent advancements in meter data management have transformed the vast spreadsheets and tedious data-mining activities of just a few years ago into push-button reports, allowing a water utility to find evidence of leaks before they hit the surface sometimes years before. It can prevent a small leak from becoming a big leak, or worse, a water main break. This type of system in being introduced to several local municipalities around the state.

There are several other local companies which make an inline water monitoring device/system which can be incorporated into ones mobile device to shut the water supply system off in case of an emergency leak along with it being set up to monitor water use to each of the in house water utilities. Typically this device is placed inline between the vessel shut off valve and where the water feed pipes enters the boat, typically installed by a plumbing contractor.

WASTE & DISPOSAL PUBLIC UTILITY SYSTEM

Comments: All lines drain freely indicating no major clogs existing in the system. At the time of the inspection the grey and black water waste systems were in working order. There are two diverter valves which can be set for the bathroom sink and the bathroom sink to flush overboard. At the current time the valves are set to drain into the grey water holding tank.

The black water system at the time of the inspection has been replaced, a new toilet, manufactured by Vac - U - Flush, all new drain 1 ½" waste water hoses, cleaned up and rebuilt vacuum pump and inline pressure tank. The holding tank is a new composite 55 gallon tank and new deck pump out fitting. This black water system has an inline air filter which should be replaced once a year.

<u>FUEL SYSTEM NATURAL GAS</u>
Comments: The fuel system is propane from two tanks located on the front landing deck inside a vented wood box. One gas tank can be hooked up at a time. Propane is supplied to the new gas range. The system has a shut of at the tops of the 5 gallon tanks and an in line electric shut off supply valve to the right of the range. The fuel line from the tanks to the inline valve has been replaced on 03.2021

<u>WATER HEATER TANK TYPE SYSTEM (located in the Mid bilge set on a wood platform)</u>
Comments: The electric water heater was manufactured by Kumma and has a ball style shut off water supply valve for the cold water supply side and the hot water side as well. The unit has a manufacture date of 11.2020.This is a new unit.

The most common way to heat water in the United States is with a tank-style water heater. Tank water heater units heat water even when not in use, to compensate for standby heat loss. Insulation between the storage tank and the outer jacket slows this heat loss, but cannot eliminate it entirely. To maintain a preset water temperature, the water heater must cycle on periodically, even when there is no demand for hot water.

Tank water heaters generally have about 70% usable capacity, meaning a typical 50-gallon tank has about 30-35 gallons of truly hot water in reserve for usage. If there is high demand over a short period – a family taking back-to-back showers in the morning or a vacation home packed with guests – the hot water can run out. When it does, boat owners have to wait for the water to get hot again.

From the cold water supply to the water heater unit there should be a shut off valve. The valve should be in serviceable condition without signs of leak stains. The hoses from the shut off valve to the unit and from the hot water output fitting should be stainless steel bradded hose units.

The intake and exhaust system for this type of unit should be inspected and cleaned once a year. Do not store items close to the top of the tank type water heater or close to the lower combustible air intake vent at the lower side of the unit.

The water heater contains a 150-degree pressure relief valve, (TPRV)which will open and exit water in the tank which is either to hot or has to much water pressure. The TPRV should exit the vessel to prevent water damage if it opens into the bilge. Tank type water heaters need to be secured to the structure.

<u>A tank type water heater should be drained once a year. The condition of the interior of a tank unit is unknown. The life expediency of a tank type water heater can only be checked by the age of the unit, typically they age out after 12 to 15 years and if the unit knocks when it is running. The knocking sound is produced by a mineral build up inside of the water heater tank. This can be detected only when the tank has been in use over time. It can not be detected during the time of an inspection.</u>

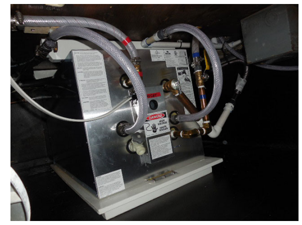
Estimate of remaining life is not part of this inspection.

There is no sign of moisture at the footings of the heater. Is secured to a plywood deck set on 2" x 2" wood framework. The wood has been painted to help prevent moisture getting into the wood.

GENERAL INFORMATION

Comments: It is always advised for buyer or seller to contact a licensed contractor specific to the trade to service or repair the issues outlined in this inspection report.

Recommendations:



- When the boat is unoccupied the water supply system should be shut off.
- When the boat is unoccupied the water heater should be turned off.
- Once a year each of the water supply hose clamps should be inspected and adjusted if needed.

- Once a year the grey and black water hose clamps should be inspected and adjusted if needed.
- It is recommended that the black water system be cleaned with the proper cleaning chemicals every 6 weeks. Check the owners manual.

DESCRIPTION, OBSERVATIONS & RECOMMENDATIONS

Description:	Baseboard hydronic heating system
Fuel System:	Electric, part of the water heater system
Drip Leg At Unit:	Not applicable
Estimated Age:	Installed 10.2022
Gas Furnaces:	No
Flexible Gas Line With Local Shutoff:	Not applicable
In Line Sediment Trap:	Not applicable
Venting:	Not applicable
Combustion Air:	Not applicable
Piping Insulated:	Yes
Flue Pipe Shared With Water Heater:	Not applicable
Distribution:	Gravity
Normal Controls:	Wall mounted thermostat in cabinet to the right of the electrical panel, the water circulation pump is 110 Volt unit located to the left of the water heater
Air Filtration:	None needed
Electric Heaters:	None
Fireplace:	None
Air Condition Unit:	None

BASEBOARD HYDRONIC SYSTEM

Comments: This boat has a hydronic baseboard heating system. The marine grade water heater has two fittings which can be used as a heating source for this type of system. Water is heated in a closed system which has an inline 110 volt water pump, expansion tank and baseboard copper tubing with aluminum fins over the copper. This system has four baseboard heating elements. The piping is copper and rubber high temperature hose.

It is recommended that once a year the water level in the heating system be checked. Under the left side of the galley sink is the water supply fitting which can be set to a hose. Also is the drain tube to help bleed this system. The temperature can be regulated by the thermostat.

There are two different types of baseboard heaters: convection and hydronic. They have many similarities: Both provide a slow, gentle, and quiet trickle of heat through the room; both are built on the same type of long, metal framework; and both look exactly the same, at least on the outside.

Baseboard heaters do not blow air, dust, pollen, pet hair, dander, and other pollutants. This makes them a better option for persons who suffer from allergies or anyone affected by dust.

Convection vs. Hydronic Electric Baseboard Heater: Major Differences

Convection baseboard heaters do not stay warm for very long after the thermostat kicks off. The inside heating elements and the outer steel case quickly cool down, and this is the critical difference between convection and hydronic baseboard heaters.

Hydronic Heater
Instead of electrical heating elements directly heating the air, with hydronic systems, the heating element warms the water which in turn heats the air. The water is sealed within the system and does not require recharging.

One disadvantage of hydronic systems, as compared to the electric coil convection systems, is that they take longer to heat up and reach a target temperature. However, the main value of these systems is that they have longer-lasting heat.

The liquid will remain warm for much longer after the thermostat goes off. You can think of these as being like steam or water radiators. In hydronic systems, they might be self-contained or they might be fed from an internal piping system in the water heater system. In the self-contained types (which most homeowners will purchase), the baseboard heaters are located intermittently throughout the room, as needed.

While the initial cost outlay of hydronic heaters is more than with convection heaters, they pay for themselves many times over in terms of energy savings. Baseboard heaters' economical nature stops after you leave the cash register. Inexpensive to purchase and equally inexpensive to install (when you do it yourself), baseboard heaters are notorious energy-wasters. One way to curb their appetite for electricity is to purchase a hydronic heater rather than a convection heater.

Both types of baseboard heaters can heat up quickly, but it takes a long time for the space itself to warm up since this is radiant, not fan-driven, heat. Heat time varies, but usually, you can expect to wait 30 minutes or even up to an hour for the room to feel comfortable. But it's this slow trickle of heat that homeowners prize, rather than the quick blast of hot air that you might get from HVAC forced-air heating. The higher voltage heaters not only put out more heat but are considered to be more efficient than the lower voltage ones

<u>NORMAL CONTROLS</u>
Comments: Located on the wall.

<u>AIR CONDITIONING UNIT</u>
Comments: None

<u>GENERAL INFORMATION</u>
Comments: <u>It is always advised for buyer or seller to contact a licensed contractor specific to the trade to service or repair the issues outlined in this inspection report.</u>

Recommendations:

- It is recommended that once a year the water level in the heating system be checked. Under the left side of the galley sink is the water supply fitting which can be set to a hose. Also is the drain tube to help bleed this system.

- Periodic inspection of isolated water supply pipes and hoses should be inspected at the hose clamps.

- It is recommended that every six months the inside of the wooden covers over the base board heaters be cleaned of dust and lint.

DESCRIPTION, OBSERVATIONS & RECOMMENDATIONS

Entry Door & Trim:	Clear finished door and painted wood trim
Interior Window Frames & Trim:	Window trim is clear finished wood (cherry)
Interior Doors, Frames & Trim:	Painted and clear finished wood louvered doors, clear finished wood trim
Interior Wall Finishes:	Paint upper composite panels, lower wainscot is clear finished wood, trim is clear finished cherry
Interior Overhead Finishes:	Paint on wood wainscoting with painted wood beams and trimmed with clear finished cherry battens, batten secured in place with finished brass fasteners
Interior Floors & Finishes:	New engineered oak flooring, installed 02.2021
Interior Stairs:	Clear finished cherry with brass wall mounted handrail, to the bedroom is a set of clear finished wood steps

SUMMARY

Comments: The boat has a main salon with a built in oak table. There is a full galley on the starboard side of the boat. On the mid port side is a built in set of wood stairs which access the upper loft area. The loft has a ceiling of height 6' 2" in the middle and falls off to 5' 6" on the sides. There is a clear finished oak handrail around the front edge of the upstairs.

To access the bedroom and the bathroom is a step down into the bedroom. The bedroom has a built in Captain bunk type bed frame with drawers and center cabinet. The bedframe is clear finished cherry. There is a large closet in the bedroom which has a set of louvered bi-folding doors.

The bedroom has a clear finished wood pocket door. The pocket door is a clear finished louvered door.

The bathroom is accessed through the bedroom. The bathroom door is clear finished wood louvered. In the late fall of 2020 the interior was gutted down to the wall surfaces and all of the flooring was removed. The interior was cleaned and all surfaces were refinished and/or repainted as needed. Sections of trim work were replaced.

ENTRY DOOR & TRIM

Comments: The front door fits securely in its existing jamb. It is fitted with a keyed passage and has a dead bolt lock.

In order to meet the current energy ordinance all doors that separate heated from un-heated areas must be properly weatherstripped. It is recommended that the entry door jamb have the weather stripping be cleaned once a year and replaced if damaged. All door locking hardware should be lubricated as needed.

INTERIOR WINDOWS, FRAMES & TRIM

Comments: The windows are trimmed out with clear finished wood. All of the windows were installed in 09.2021. It is advised that any casement or sliding operational window have the frames cleaned of dust, dirt and mildew stains once a year.

The inside trim around the windows can sometimes collect condensation during the winter months. These areas should be inspected periodically and cleaned.

INTERIOR DOORS, FRAMES & TRIM

Comments: All of the interior doors fit securely in their existing jambs. Their hardware operated with limitations that are usual and normal for hardware of this type and age. Each door should have door stop which will help prevent the door handle from damaging the wall when opened. Each of the doors were repainted or refinished with a clear oil-based satin finish.

INTERIOR WALLS FINISHES

Comments: The interior upper walls are paint on a composite board. All of the upper walls and ceiling wainscoting were recently painted with a high grade oil-based satin sheen enamel paint.
The lower walls are re finished wainscoting panels with oil-based Dura - Seal satin sheen clear finish.

CEILING FINISHES

Comments: The overhead is finished off with painted wood wainscoting panels. The ceiling beams are painted wood with clear finished wood battens secured to the ceiling joists with brass fasteners. All appear to be in good condition.

The large laminated oak upper cross frame was stripped and resealed with a marine grade varnish.

FLOORS & FLOORING FINISHES

Comments: The floor treatments a newly installed engineered oak flooring. Prior to installing the oak planking the sealed plywood sub flooring had felt paper set in place.

GENERAL INFORMATION

Comments: <u>It is always advised for buyer or seller to contact a licensed contractor specific to the trade to service or repair the issues outlined in this inspection report.</u>

Recommendations:

- None, the interior has been completely redone, new paint, new clear finish and new flooring.
- The owner has a box of the interior finishes and extra flooring.

DESCRIPTION, OBSERVATIONS & RECOMMENDATIONS

Counter top:	Formica, with two unfinished maple built in cutting boards
Flooring:	Engineered oak flooring planks
Cabinets:	Clear finished cherry wood, refinished 11.2020
Sink:	New single compartment stainless steel sink, 01.2021
Disposal:	None
Water Filtration System:	None
Ventilation/Exhaust Venting:	Windows
Kitchen Range:	Greystone, propane three burner
Oven:	Gas, part of the range unit
Refrigerator:	Danbay, in working order
Dishwasher:	None
GFCI Outlets:	None
Trash Compactor:	None

COUNTER TOP

Comments: The countertops and back splash are in good condition. The sub structure shows no signs of water stains. The water supply pipes have new water shut of ball valves. The waste water system from the sink to the valve in the bilge has all been replaced. It is recommended that periodic inspection and cleaning of the waste water pipes under a sink be done.

FLOORING

Comments: The flooring in the galley is in new condition.

CABINETS

Comments: The clear finished wood/composite cabinets are part of the galley installation. All of the door and drawer faces have been refinished. All of the insides of the drawers and cabinets have been repainted. They appear to be good quality units and are properly connected to the wall support systems. All of the doors and drawers that were tested operated well. There is limited access under the galley sink due to stored items.

SINK

Comments: The galley sink fills, holds water and drains normally.

VENTILATION/EXHAUST VENTING

Comments: Window only.

APPLIANCES

Comments: Appliances are not moved. It is always a good maintenance program to clean the area under the refrigerator of lint and dust so the cooling radiator will cool properly. Clean the area under the dishwasher and inspect for leaks. Keep the area under the cooking surfaces clean of fallen food and check the water supply and waste piping for leak stains. Refrigerators, freezers and built-in ice makers are not part of this inspection.

GENERAL INFORMATION

Comments: It is always advised for buyer or seller to contact a licensed contractor specific to the trade to service or repair the issues outlined in this inspection report.

Recommendations:

- None

DESCRIPTION, OBSERVATIONS & RECOMMENDATIONS

Toilet(S):	Vac-u-flush fresh water supply toilet, new unit, 03.2021
Sink(S):	Polished nickel sink basin
Vanity(S):	Clear finished wood
Bathtub(S):	None
Shower(S):	Fiberglass shower pan, painted composite and wood walls all new paint, shower curtain
Flooring:	New Marmoleum surface
Ventilation:	Fans and windows
GFCI Outlets:	Yes
Safety Features:	None

TOILET

Comments: The toilet is a new Vac-u-flush unit. In the mid bilge is the inline flushing pump system. The black water holding tank is located in the forward main bilge area. The black water system is pumped out twice a month regardless of use. If the system is not to be used for several days warm water mixed with Dawn soap should be flushed through the system.

SINKS

Comments: The head sink turned on. The sink stop should be cleaned and serviced once a year. Hair can clog the drainage system. It is recommended that periodic inspection and cleaning of the waste water pipes under a sink be done

VANITY

Comments: The vanity appears to be in good condition with a door operating normally. At the time of the inspection the area under the sink was dry.

BATHTUBS & SHOWERS

Comments: The shower worked at the time of the inspection. The shower drains into a sealed holding tank in the aft bilge. The holding tank can be drained overboard or into the grey water holding tank. This aft holding tank should be cleaned once a month of dirt and hair. It is recommended that when a person is finished taking a shower the interior shower stall walls be wiped down with a chamois to help prevent mildew stains on the walls.

GENERAL INFORMATION

Comments: It is always advised for buyer or seller to contact a licensed contractor specific to the trade to service or repair the issues outlined in this inspection report.

Recommendations:

- The head fan should be cleaned once a year.

- If the head system is not to be used for several days warm water mixed with Dawn soap should be flushed through the system.

- The shower drains into a sealed holding tank in the aft bilge. The holding tank can be drained overboard or into the grey water holding tank. This aft holding tank should be cleaned once a month of dirt and hair. If the shower is not to be used for several weeks it is recommended that bleach be poured into the shower drain.

SECURITY AND FIRE SAFETY CODE COMPLIANCE

DESCRIPTION, OBSERVATIONS & RECOMMENDATIONS

Window Bars:	None
Security Gate	None
Window Locks:	Part of windows
Doorbell:	None
Intercom System:	None, not part of this inspection
Gate Release "Buzzer":	None
Exterior Safety Lighting:	Yes
Burglar Alarm:	None
Fire Extinguisher:	Several
Smoke Detectors:	None in place
Carbon Monoxide Detector:	None in place
Fire Sprinklers:	None
Fire Escape:	None

SMOKE DETECTORS

Comments: Smoke detectors are not required in each sleeping area and the areas common to them in a vessel . One should be installed in this vessel as there is a propane cooking range

CARBON MONOXIDE DETECTORS

Comments: Carbon Monoxide detectors are not required but should be installed as this vessel has a propane cooking unit.

CO detectors are not the same as smoke detectors, but there are devices that function as both, emitting different sounds depending upon whether it detects smoke or carbon monoxide.

At high levels, this invisible and odorless gas can have deadly effects within minutes. Carbon monoxide (CO) is manufactured when a fuel such as gas, oil, kerosene, wood or charcoal is burned. If your appliances that use fuel are properly used and maintained, the amount of CO they generate is minimal. But, when an appliance isn't operating correctly or they are used improperly, dangerous levels of CO can result.

FIRE SPRINKLER SYSTEM

Comments: None in place

FIRE EXTINGUISHERS

Comments: It is suggested to the buyers that several hand-held fire extinguishers be purchased and kept about the vessel. It is advised to have a fire extinguisher mounted in the main saloon, one in the galley and one in each sleeping area.

FLASH LIGHTS

Comments: It is advised to have a flash light in each sleeping areas in case the vessel needs to be evacuated when it is dark inside.

FIRE ESCAPE

Comments: Mechanical fire escapes are not required for single-family residential vessels. However, the buyers should be aware that the habitable areas have two means of egress, which meets the current standard.

GENERAL INFORMATION

Comments: It is always advised for buyer or seller to contact a licensed contractor specific to the trade to service or repair the issues outlined in this inspection report.

Recommendations:

- A new carbon/smoke detector should be installed in the hallway between the bedroom and the main salon.

- The mooring lines should be inspected once a month for wear and replaced if needed.

- It is recommended that the owner set up a safety exit plan in case of an emergency. Along with a safe location to meet up and cell phone number which can be used as a home base contact point.

- If the owner has pets it is recommended that a pet notification sticker be placed at the front door of the houseboat in case of an emergency.

- If the owners go away and have a house sitter, it is recommended that they leave a map of the utility shut off valves and switches along with names and numbers of the persons the owners use for emergency repairs.

- It is recommended that the home owner put together an emergency safety kit with food, dry clothing, water and if you have pets supplies for them. The State of California has a web site which can help persons put together a safety kit.

- It would be a good idea for the owner to draw a map of the houseboat and the locations of the electrical, gas and plumbing main valves are so they can easily be located in case of an emergency.

- It is recommended that the houseboat numbers be located in a place which can easily be read by service persons.

- It is recommended that all instruction manuals for each utility in this house be reviewed and the product ID and registration be recorded in the buyers name for future services.

CODE COMPLIANCE

From time to time in this report there has been some mention to Building Codes. This inspection does not directly quote current building codes. Because of our experience, we have become familiar with some of the standard practices, which are enforced by various local building departments. When we see these items we may point them out. The comments in relations to these items should be taken with the understanding that they may be interpreted differently by the building inspector and that different cities and counties throughout California may interpret them differently as well. Our intention in mentioning "code" is to point out situations, which we believe to be likely.

For more information regarding Code Compliance in your area, please contact the local building department.

FINDINGS

LISTED BELOW ARE THE RECOMMENDATIONS
OUTLINED IN THE BODY OF THIS REPORT.
ATTENTION TO THESE SUGGESTIONS WILL
IMPROVE NOT ONLY THE SAFETY OF YOUR
HOME BUT ITS BEAUTY AS WELL

EXTERIOR COMPONENTS

Super Structure

1. On 10.24.2021 an intense wind and rain storm blew through Sausalito. Several leaks were noted in the fore deck at the base of the front wall and at the starboard mid post to the right of the galley sink. These areas were repaired and resealed as needed.

2. All of the exposed clear finished wood work should be re varnished once a year to help preserve the wood finish.

3. The aft upper door frame should have weather stripping installed.

4. It is recommended that the owner supply the buyers with all of the exterior and interior paints for future touch ups. All of the exterior and interior paints and varnishes are stored in plastic bags inside of plastic boxes in the mid bilge area.

5. A good maintenance program is to wash the exterior of the vessel twice a year to clean dirt, fungus and mildew stains. This will help extend the life of the exterior paint. Paint not only adds to the quality of the exterior but also protects the structure from insects and moisture damage

HULL & STRUCTURAL COMPONENTS

6. It is recommended that each of the bilge pumps be serviced once a year.

7. A good deal of discussion went into cleaning or not cleaning the steel hull under the water line. The zincs are set to be checked three times a year and be replaced as needed. The answer to clean or not to clean has been answered by not cleaning. The more you clean the more the bottom paint is washed off.

8. The top sides of the steel hull both the freeboard and the decking should be inspected once a year and any surface rust should be cleaned up as needed, then sealed with paint.

9. The hull white rubber side fenders should be checked every six months making sure they

are properly secured to the boat and they have enough air in them.

10. The bilges should be inspected once a month to check for surface rust and condensation. If surface rust is noted it should be cleaned, treated with ospric acid them sealed with a rust inhibiting oil-based enamel paint.

ROOFING AND ROOF FLASHINGS

11. The roofing membrane should be cleaned once a year with bleach and a light cleaner to remove the dirt and oxidation. This type of roofing paint should be repainted every four or five years.

12. Each of the four clear finished teak roof grab rails should be removed and revarnished once a year along with the skylight frames.

13. The two clear finished mahogany skylights should be cleaned and revarnished.

14. Periodic inspection of the roof membrane is recommended to make sure there is no build up of detritus in the rain gutters and on other sections of the roof.

ELECTRICAL SYSTEM

15. It is recommended that the main exterior electrical box be cleaned of oxidation.

16. It is recommended that a master list be made up of the location of the main and sub panels along with a schematic of the sub circuit breakers.

PLUMBING SYSTEM

17. When the boat is unoccupied the water supply system should be shut off.

18. When the boat is unoccupied the water heater should be turned off.

19. Once a year each of the water supply hose clamps should be inspected and adjusted if needed.

20. Once a year the grey and black water hose clamps should be inspected and adjusted if needed.

21. It is recommended that the black water system be cleaned with the proper cleaning chemicals every 6 weeks. Check the owners manual.

HEATING SYSTEM

22. It is recommended that once a year the water level in the heating system be checked. Under the left side of the galley sink is the water supply fitting which can be set to a hose.

Also is the drain tube to help bleed this system.

23. Periodic inspection of isolated water supply pipes and hoses should be inspected at the hose clamps.

24. It is recommended that every six months the inside of the wooden covers over the base board heaters be cleaned of dust and lint.

INTERIOR FINISHES

25. None, the interior has been completely redone, new paint, new clear finish and new flooring.

26. The owner has a box of the interior finishes and extra flooring.

HEAD

27. The head fan should be cleaned once a year.

28. If the head system is not to be used for several days warm water mixed with Dawn soap should be flushed through the system.

29. The shower drains into a sealed holding tank in the aft bilge. The holding tank can be drained overboard or into the grey water holding tank. This aft holding tank should be cleaned once a month of dirt and hair. If the shower is not to be used for several weeks it is recommended that bleach be poured into the shower drain.

SECURITY AND FIRE SAFETY CODE COMPLIANCE

30. A new carbon/smoke detector should be installed in the hallway between the bedroom and the main saloon.

31. The mooring lines should be inspected once a month for wear and replaced if needed.

32. It is recommended that the owner set up a safety exit plan in case of an emergency. Along with a safe location to meet up and cell phone number which can be used as a home base contact point.

33. If the owner has pets it is recommended that a pet notification sticker be placed at the front door of the houseboat in case of an emergency.

34. If the owners go away and have a house sitter, it is recommended that they leave a map of the utility shut off valves and switches along with names and numbers of the persons the owners use for emergency repairs.

35. It is recommended that the home owner put together an emergency safety kit with food, dry clothing, water and if you have pets supplies for them. The State of California has a web site which can help persons put together a safety kit.

36. It would be a good idea for the owner to draw a map of the houseboat and the locations of the electrical, gas and plumbing main valves are so they can easily be located in case of an emergency.

37. It is recommended that the houseboat numbers be located in a place which can easily be read by service persons.

38. It is recommended that all instruction manuals for each utility in this house be reviewed and the product ID and registration be recorded in the buyers name for future services.

HOME OWNERSHIP ADVICE

When a house is purchased there are several items which the buyer may want to take care of. Here is a list of some of the items:

1. Change the key locks on all of the doors, if possible change all of the locks to a master key which will fit in all of the locks.

2. Make sure that all of the windows have operational locking hardware.

3. Create a safety exit plan. Make sure that at least one source of egress will exit the house to a safe location. Away from electrical wires and gas lines.

4. Make sure that in case of an emergency that the electrical power. The water supply system and the natural gas or propane systems can be shut off as soon as possible

5. If you have pets make sure they are safe and if you are not at home during an emergency and the pet is that these is a notice on a door window that states there is a pet in the building. Also have a point person in the neighborhood who can help the pet when you are not at home.

6. Make sure the walkways around the structure are clear and clean and there are no tripping and slipping hazards.

REGULAR MAINTENANCE

1. Check smoke and carbon monoxide detectors at least once a year.

2. Check the fuel level in the fire extinguishers, make sure they have a full charge and re charge if needed.

3. Check the zincs around the hull, every six months.

4. Keep all of the water valves lubricated. Waste water sea valves should be operated on an

every six moth basses.

5. Any rust stains should be addressed with Osphirc Acid, primed and then sealed with an oil based enamel paint.

6. Check the water heater, look for leaks around the base of the pan, check the tail pipe from the TPRV and make sure the bottom edge of the pipe is dry.

7. With the rising cost of water it is recommended that the buyer look into one of the water remote shut of and monitoring system. There are several on the market. This way incase of a leak your water shut of system can notify you via an app on your cell phone that the system should be shut off and a plumber should be contact to check for and repair a leak

8. When you clean the shower stall or tub make sure the area around the outside of these units do not have standing water and keep the caulking in good condition around the tub and shower base.

9. Makes sure the toilet is not loose on the floor flange and that the toilet seat is secure.

10. Look under the kitchen and bathroom sinks for water stains and repair as needed.

BI ANNUAL MAINTENANCE

1. Make sure the roof is clean.

2. Walk around the exterior of the structure and keep stored items away from the exterior siding, remove nests if needed

3. Open up and look into the bilges when it is raining to make sure this area is dry and there is no standing water.