



Pre-Purchase Inspection

Hattarass, 64 Pilothouse, 1984



Survey Details

Survey type:	Pre-Purchase Inspection
Survey No#:	PPS230510
Client:	[REDACTED]
Email:	[REDACTED]
Inspection date:	5th July 2023
In-Water location:	Victoria Harbor, Docklands, Victoria
Out-Water location:	The Boatyard, Martha Cove, Victoria

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Disclaimers

SCOPE OF SURVEY

The purpose of the survey is to ascertain the general condition and/or value of the vessel for the named client on the above mentioned date/s.

This vessel was surveyed without removals of any parts, including fittings, tacked carpet, screwed or nailed boards, anchors and chain, fixed partitions, instruments, spare parts, and miscellaneous material.

Locked compartments or otherwise inaccessible areas would also preclude inspection.

If this survey does not mention a specific item, equipment or machinery, it has not been inspected or included as part of the survey scope.

The test methods used are of a non-destructive in nature, which may include Thermal Images, Moisture Meter readings, Ultrasound and Digital Photos throughout the survey where the surveyor has deemed appropriate and will be documented in the report if the findings prove to be notable.

Furthermore, no determination of stability characteristics or inherent structural integrity has been made and no opinion is expressed with respect thereto.

Electrical and electronic systems tested by means of powering up only when power is available. If power is not available, visual inspections only are performed.

Engines, drives, mechanical and plumbing systems are inspected visually for signs of defect and deterioration. The use of Thermal Imaging or Infrared Thermometers may be used in some areas if deemed appropriate, any findings of note will be reported.

Minor defects may have been identified that are not specified in this report, in such circumstances these are considered as normal wear and tear to commensurate with the vessel's age.

Rigging and spars, where applicable, are inspected from the deck only. Sails are generally excluded from inspection unless otherwise stated.

It is the vessels master's responsibility to ensure all safety equipment is appropriate for the vessels intended usage.

The survey report is subject to the Deaspec Marine terms and conditions and represents the condition of the vessel on the above date(s), and is the unbiased opinion of the undersigned, but is not to be considered an inventory or a warranty either specified or implied.

DEFINITION OF TERMS

Terms used to identify the condition of item or components unless specifically indicated:

- Excellent Condition:** New or presenting as new.
- Good Condition:** Near new, with only minor cosmetic discrepancies sighted.
- Sound Condition:** Useable and appropriately fitted for its intended purpose.
- Fair Condition:** Functional, however, may require ongoing maintenance or service.
- Poor Condition:** Requires replacement, repair or reached the end of service life.

1. Hull Specifications

Ref	Item	Description
1.1	Build / Make	Hatteras
1.2	Model	64 Pilothouse
1.3	Year Model	Circa 1984
1.4	Main Engine (Port)	Detroit Diesel: 635hp, V12 V71 18.4 litre fresh water-cooled diesel engine. Serial#12VAD7706
1.5	Main Engine (Starboard)	Detroit Diesel: 635hp, V12 V71 18.4 litre fresh water-cooled diesel engine. Serial#12VA07767
1.6	Registration	DS1018
1.7	Hull Number / HIN	HATBN354M841
1.8	Length (ft)	71 (21.3m)
1.9	Beam (ft)	18'2
1.10	Draft (ft)	5'6
1.11	Disclaimer:	Specifications stated above are approximate only and provided for informational purposes. The information was received from online data and/or research of similar make and model vessels and are not the measurements taken from the actual vessel.



Ref #1

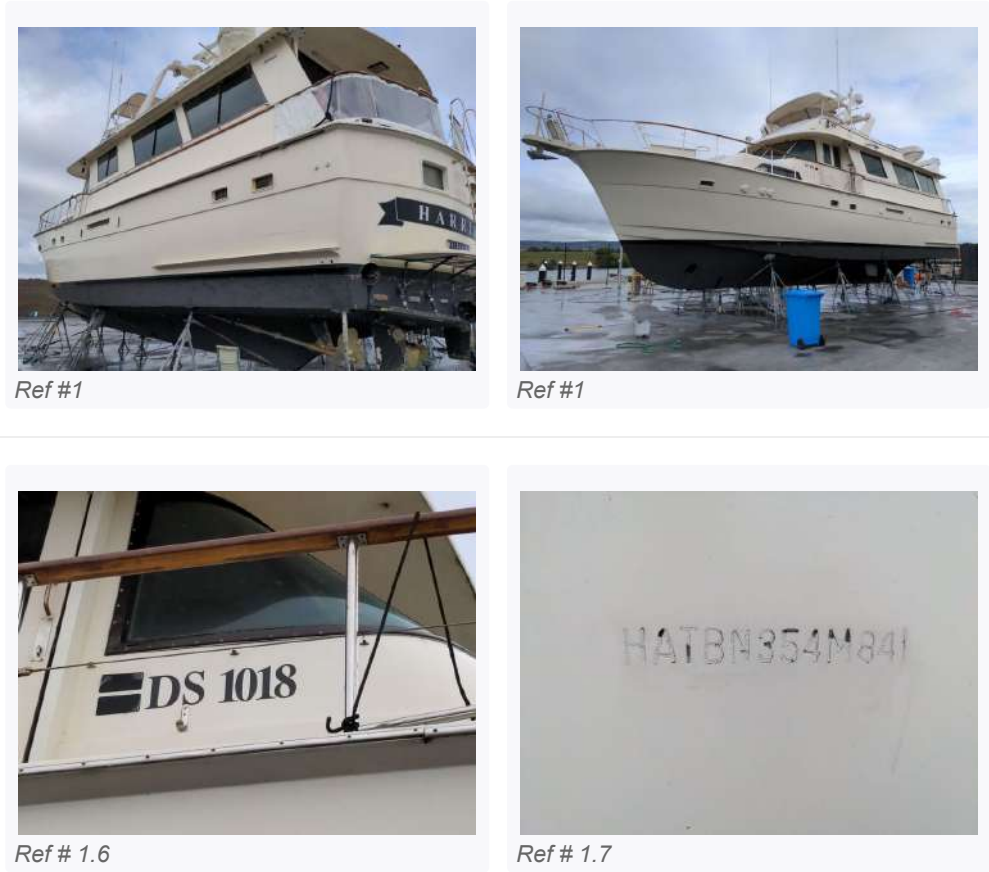


Ref #1



Ref #1

1. Hull Specifications (Cont.)



2. Hull Condition (Below Waterline)

Ref	Item	Material / Construction	Condition	Comments
2.1	Hull Bottom	FRP Composite	Sound	<p>Semi displacement hull, no signs of previous repair, stress or defect was sighted.</p> <p>The antifouling had just been sanded back giving us a good chance to inspect the hull substrate.</p> <p>We did notice some sporadic hull blisters most being around 3-5cm in size, we estimate approximately 20 or so across the hull bottom were sighted.;</p> <p>These blisters appear minor and considered cosmetic shallow blisters only.</p>
2.2	Hard chine	FRP Composite	Sound	<p>Clean and fair edge running along hull, no damage or defects sighted.</p>

2. Hull Condition (Below Waterline) (Cont.)

2.3	Keel	FRP Composite	Sound	<p>3/4 box keel running along centreline.</p> <p>Percussion sounded, no defect sighted.</p>
2.4	Transom	FRP /Composite	Sound	<p>The transom was percussion sounded in areas with no notable anomalies detected.</p>
2.5	Antifouling	Black Ablative Application	Good	<p>Suitable coverage and adhesion found to application. Hull was being prepared for new antifouling.</p>
2.6	Thruster Tubes	FRP Composite	Sound	<p>Bow and Stern thruster tubes appear to be installed to a professional standard.</p>
2.7	Underwater Lights	12-volt	Sound	<p>There appears to be two different sets of lights.</p> <p>Four older lights which did not appear functional, and two smaller lights which powered-up.</p>



Ref # 2.1



Ref # 2.1



Ref # 2.1



Ref # 2.1 - Hull blister

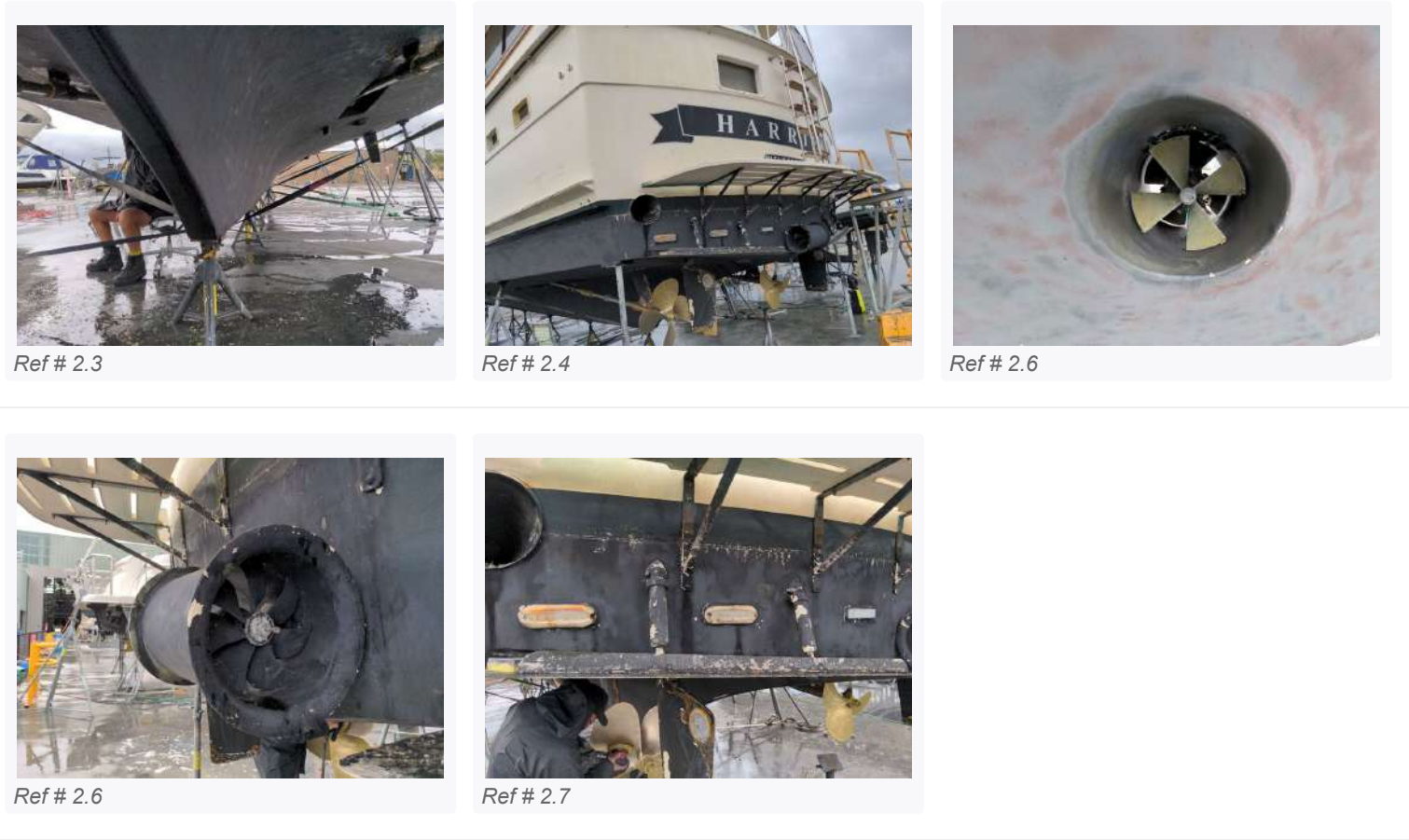


Ref # 2.1 - Hull blister



Ref # 2.2

2. Hull Condition (Below Waterline) (Cont.)



3. Hull Condition (Above Waterline)

Ref	Item	Material / Construction	Condition	Comments
3.1	Hull side / Topsides	Two Part Polyurethane	Sound	<p>The entire hull topsides appear to have been painted with cream two Part Polyurethane paint or similar.</p> <p>The hull sides displayed a reasonably good gloss and shine, there are some scuffing marks and minor wear and tear in areas to commensurate with age.</p>
3.2	Gunnel	FRP Molding with Stainless Insert	Fair	<p>Hull integral gunnel moulding with stainless steel belting strip, there is a small section missing on the port side midships.</p> <p>C: Low Priority (Cosmetic or Superficial)</p>
3.3	Bow Stem	FRP Composite	Sound	No damage

3. Hull Condition (Above Waterline) (Cont.)

3.4	Sponson	Timber	Sound	Hardwood painted timber sponson with belting strip, a section the belting strip has come away on the starboard side.
3.5	Skin Fittings	Bronze	Sound	Suitably installed, many near the waterline have covers fitted.
3.6	Boot stripe	Painted Green	Sound	Painted green bootstripe, no notable wear sighted.
3.7	Swim platform	FRP Composite	Fair	<div>FRP composite cored platform affixed to the stern with 6 stainless steel support struts, finished with non-skid gelcoat.</div> <div>There is damage to the centre of swim platform consistent with docking contact damage.</div> <div>B: Medium Priority (Service or Maintenance Item)</div>



Ref # 3.1



Ref # 3.1 - Cosmetic hull scuff marks



Ref # 3.1



Ref # 3.1



Ref # 3.1 - Cosmetic hull scuff marks



Ref # 3.2

3. Hull Condition (Above Waterline) (Cont.)



Ref # 3.2 - Section of gunnel strip missing



Ref # 3.3



Ref # 3.4 - Sponson strip loose.



Ref # 3.7 - Swim platform condition



Ref # 3.7 - Swim platform condition

4. Seacocks / Thru-hulls

Ref	Item	Material / Construction	Condition	Comments
4.1	Seacocks	Bronze or similar	Sound	<p>All were exercised, however some were quite stiff.;</p> <p>Most display signs of minor surface patina to some valves, however due to the dirty condition of the bilge and most valves and fittings were partially covered in debris.;</p> <p>It is recommended all seacocks be regularly inspected and excised monthly.</p>
4.2	Intake Grills	Bronze or similar on	Sound	<p>Appeared clear and unobstructed.</p>

4. Seacocks / Thru-hulls (Cont.)

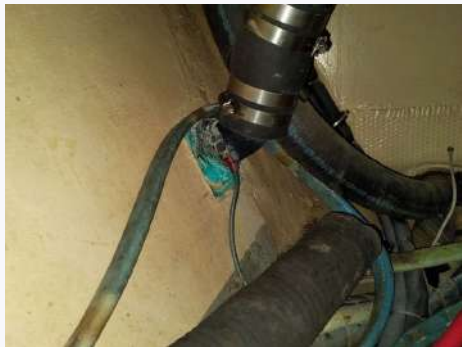
4.3	Skin Fittings	Bronze or similar	Fair	<p>Some skin fittings, particularly above the waterline shows signs of Patina corrosion.</p> <p>Any skin fittings displaying signs of corrosion should be scheduled for replacement.</p> <p>B: Medium Priority (Service or Maintenance Item)</p>
4.4	Transducers / Speed Logs	Thru-Hull Type	Sound	<p>Appeared to be suitably installed.</p>
4.5	Sea Strainers	Perko Type	Poor	<p>The sea strainers under the floor just aft of the utility space (laundry) display signs of build-up, all sea strainers aboard appear due for service.</p> <p>The hoses running's from these strainers are also in poor condition and due for replacement</p> <p>A: High Priority (Rectification Required)</p>



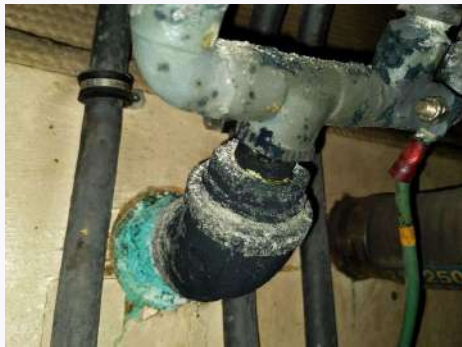
Ref # 4.1



Ref # 4.2



Ref # 4.3



Ref # 4.3



Ref # 4.5

5. Cockpit & Superstructure

Ref	Item	Material / Construction	Condition	Comments
5.1	Superstructure	FRP Composite	Sound	<p>Enclosed cabin pilothouse appearing structurally sound.;</p> <p>There is some stress cracking on the coach house below the starboard side window.</p>
5.2	Bridge Sole	FRP Composite	Sound	Original gelcoat with non-skid finish.
5.3	Seating & Upholstery	Vinyl	Sound	<p>Rear L-shaped bench seating with twin helm bridge chairs.</p> <p>Usable condition, signs of some UV wear sighted.</p>
5.4	Covers & Awnings	Canvas	Sound	<p>White Sunbrella type material over pilot helm, no rips or tear sighted.</p> <p>It does appear that the Bimini once extended further aft to the Targa arch, however this section was not fitted.</p>
5.5	Bimini Frame / Targa	Stainless Steel	Fair	Appeared secure
5.6	Cockpit doors	Timber	Sound	Entrance door, hatch and ladder. All opens and closes with locking mechanism.
5.7	Lockers and storage	FRP Composite	Sound	Storage lockers are clean and free from water and moisture.
5.8	Cockpit Drainage	Gelcoat / FRP Composite	Sound	Bridge deck is self draining.
5.9	Targa	Aluminium	Sound	Powder coated aluminium Targa arch with communication tower. Some for the power coating is flaking areas, however appears in sound condition.

5. Cockpit & Superstructure (Cont.)



Ref #5



Ref #5



Ref #5



Ref # 5.1



Ref # 5.1



Ref # 5.1



Ref # 5.1 - Hairline stress, starbaord side coach-hoose appears cosmetic only



Ref # 5.2



Ref # 5.3



Ref # 5.3 - L-shaped pilot house lounge condition



Ref # 5.4



Ref # 5.6

5. Cockpit & Superstructure (Cont.)



6. Interior

Ref	Item	Material / Construction	Condition	Comments
6.1	Interior Frames & Bulkheads	FRP Composite	Sound	Timber veneer plywood panels laminated to the hull.
6.2	Hull stringers	FRP Composite	Sound	FRP longitudinal and transverse frames all found in sound structural condition. Not all hull frames could be inspected due to permanently fitted panels.
6.3	Bilge	Flowcoat	Fair	<p>Somewhat dirty, would benefit from a good clean throughout.;</p> <p>The engine bay bilge is reasonably clean.</p>
6.4	Cabinetry & Fitout	Timber Veneer	Sound	<p>Normal wear and tear in areas.</p> <p>Some minor water staining to cabinetry in rear cabin near head.;</p> <p>Broken mirror down below between engine spaces.</p> <p>C: Low Priority (Cosmetic or Superficial)</p>
6.5	Brightwork	Low Sheen	Sound	Some minor wear in areas.
6.6	Headlining	Material Panels	Sound	Reasonably clean, no sagging or staining sighted.

6. Interior (Cont.)

6.7	Cabin Sole	Career / Parquetry	Sound	<p>Parquetry flooring in galley and helm, appear reasonably solid and sound with some wear and tear. A section appears to be sanded back as test piece.</p> <p>Blue carpet in cabins and saloon, mostly clean with some stains and wear present in some areas, particularly the rear cabin which would benefit from a clean.</p>
6.8	Doors & Handles	Stainless Steel	Sound	All found functional
6.9	Galley Fitout	Laminated Veneer	Good	In good usable condition, appears to have been upgraded at some stage.
6.10	Benchtops	Stone or similar	Good	No notable wear.
6.11	Seating & Upholstery	Leather	Sound	Cream leather U-shaped dinette with two cream lounges in saloon, no notable wear sighted.
6.12	Bedding	Foam Base	Sound	<p>Appear in reasonable condition.;</p> <p>Port side cabin is used for storage, we inspected this cabin as best of possible without removing all contents.</p>



Ref #6



Ref #6



Ref #6

6. Interior (Cont.)



Ref # 6.4 - water stain rear cabin near head



Ref # 6.4 - Broken mirror between engine spaces



Ref # 6.6



Ref # 6.7



Ref # 6.7 - helm flooring sanded back in area.



Ref # 6.7 - Carpet condtion



Ref # 6.9



Ref # 6.9



Ref # 6.11



Ref # 6.11

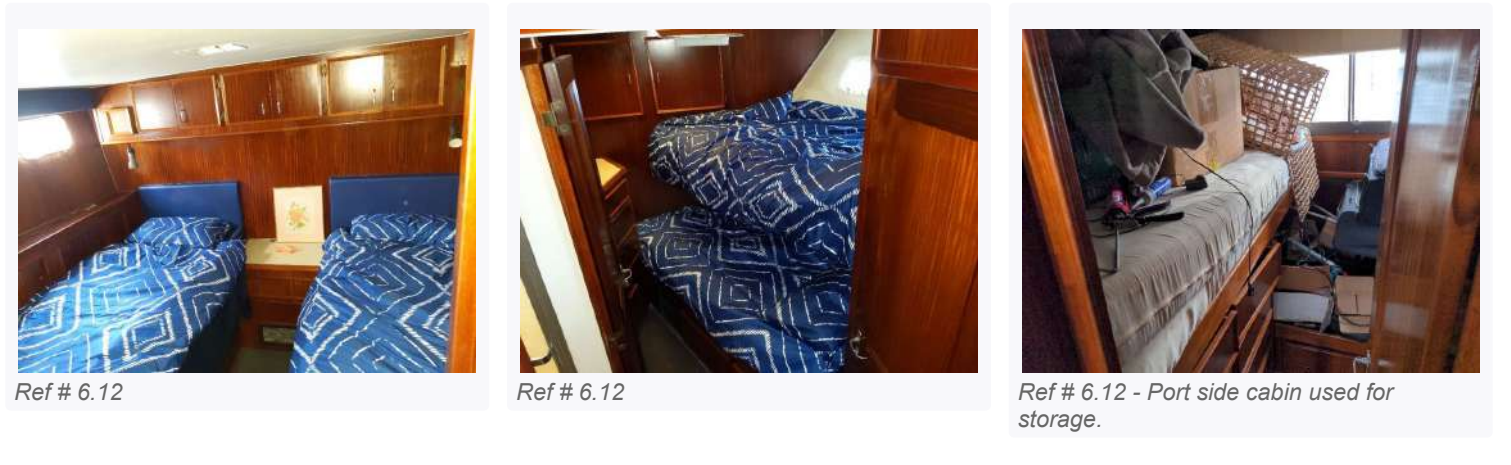


Ref # 6.11



Ref # 6.12 - Aft cabin

6. Interior (Cont.)



7. Deck, Hardware & Fittings

Ref	Item	Material / Construction	Condition	Comments
7.1	Foredeck Structure	FRP Composite	Sound	<p>Percussion sounded and moisture tested appearing rigid and structurally sound.</p> <p>The deck is finished with non-skid tread.</p> <p>There is a stain on the port side of the coach house, appears consistent with something being spilled from the forward lounge storage lockers, spilling from the drain hole.</p> <p>C: Low Priority (Cosmetic or Superficial)</p>
7.2	Rear Deck	FRap Non skid aft	Sound	<p>FRP Non skid aft deck with timber handrail and boarding ladder down to swim platform.;</p> <p>Dual timbers doors open on to the deck space. ;</p> <p>There are clears used as lifelines around the hand rail which are torn in areas.</p> <p>Two large drains are fitted to remove excess water..</p> <p>C: Low Priority (Cosmetic or Superficial)</p>
7.3	Bowrail	Solid Timber	Sound	<p>Appears suitably secure, some UV exposure to varnished timber finish.</p>

7. Deck, Hardware & Fittings (Cont.)				
7.4	Stanchions	Stainless Steel	Sound	No signs of crazing or compression found around the bowrail stanchion bases on the deck.
7.5	Cleats	Stainless Steel	Good	Eight deck cleats appeared secure providing multiple mooring configurations.
7.6	Hatches	FRP composite	Sound	Composite deck hatch appeared free from leak, minimal wear too lenses.
7.7	Windows	Acrylic or similar	Fair	<p>Multiple sectional tempered glass helm windows surround the helm with acrylic curved side panels which have some crazing present.</p> <p>The sealant around the helm windows are showing signs of deterioration with signs of slight weeping in some areas.</p> <p>Window wipers powered-up, blades appear worn.</p> <p>Small corrosive hole to window frame in port forward cabin.;</p> <p>There is a crack to one window pane on the port side saloon.;</p> <p>The windows do appear to require sealing in some areas and maintenance.</p> <div>B: Medium Priority (Service or Maintenance Item)</div>
7.8	Portholes	Acrylic or similar	Sound	Porthole windows are installed around hulls sides, no notables leaks sighted, however there are water stains around some port holes to the veneer board

7. Deck, Hardware & Fittings (Cont.)

7.9	Anchor Winch	24-Volt Electric	Sound	<p>Muir anchor winch fitted to bow, no notable corrosion to under deck mounted motor. The anchor was raised and lower using helm controls.</p> <p>There is some localised core deterioration the deck around the anchor mount location with corrosion to galvinsed backing washer.</p>
7.10	Anchor	Plough (Galvanised)	Sound	<p>Suitably sized plough type anchor mounted at the bow.</p>
7.11	Anchor chain, warp and fittings	Galvanised	Sound	<p>Galvanised chain sighted in anchor locker; length unknown.</p>
7.12	Bow roller / Stem head	FRP Moulding	Sound	<p>Securely mounted, integral with deck molding creating a small bow spirit with teak inlay.</p>
7.13	Davit Crane	Daveco	Sound	<p>DavCo 500kg Davit crane mounted on bridge deck to launch and retrieve tender. Appeared in sound visual condition. (Not tested)</p>



Ref # 7.1



Ref # 7.1



Ref # 7.1

7. Deck, Hardware & Fittings (Cont.)



Ref # 7.1 - Deck spillage



Ref # 7.2



Ref # 7.2 - Clears on rear deck torn.



Ref # 7.3



Ref # 7.5



Ref # 7.6



Ref # 7.7 - Corrosion hole in port side window bezel.



Ref # 7.7



Ref # 7.7 - Crazing to side curved helm window.



Ref # 7.7 - Sealant worn on some windows



Ref # 7.7 - Crazing to curved window.



Ref # 7.7

7. Deck, Hardware & Fittings (Cont.)



Ref # 7.7 - Side helm window



Ref # 7.7 - Crack in saloon window.



Ref # 7.7 - Build-up around saloon widow.



Ref # 7.8



Ref # 7.8



Ref # 7.9



Ref # 7.10



Ref # 7.11



Ref # 7.13

8. Main Engines & Propulsion

Ref	Item	Type / Make	Condition	Comments
8.1	Engine Block	Detroit Diesel	Sound	V12 V71, 2 Stroke turbo charged 18.6 liter engines.

8. Main Engines & Propulsion (Cont.)

8.1.1	- Engine Hours Starboard	Helm Gauge Reading	N/A	315 hours; There is a digital gauge on the helm, not sure how accurate these gauges are. Port side gauge possible not accurate.
8.1.2	- Engine Hours Port	Helm Gauge Reading	N/A	1823 hour; Note: Helm gauge hours may differ from actual engine run hours or ECM hours.
8.2	Sump	Pressed Steel	Fair	Some corrosion and minor oil staining on sumps
8.3	Manifolds	Cast Aluminium	Fair	Surface corrosion present, appear servicable.
8.4	Exhaust System	Lagged Pipe, Joiners & Composite	Sound	Lapped stainless steel pipe from turbo, silicon hose joiners into FRP composite tube and mufflers existing stern
8.5	Exhaust Riser / Elbow	Lagged Elbow	Sound	Lagged elbow from turbo.
8.6	Serpentine Belt	Reinforced Rubber	Sound	No excessive wear or movement sighted.
8.7	Pulleys & Wheels	Steel	Sound	No excessive movement, some minor corrosion on some wheels.
8.8	Engine Bed Frames	Stainless Steel	Good	Stainless steel sub-frame mounted on longitudinal engine beds, percussion sounded. No stress or defect sighted.
8.9	Engine Mounts	Stud Mounts	Sound	Stud mounts, no notable surface corrosion, vibration or movement sighted.

8. Main Engines & Propulsion (Cont.)

8.10	Cooling System	Closed / Fresh water	Fair	<p>Some minor build-up present around coolers, hoses and fittings.;</p> <p>Engines were ran under 80% load for 2-hours from Martha Cove to Docklands with the marine mechanic on board, no overheat or cooling issues found. (Surveyor not onboard)</p> <p>As with all marine engines, the manifolds, the cooling system, oil coolers and heat exchangers do need to be serviced and replaced as per manufacturers recommendations.</p>
8.11	Coolant	Green	Sound	Appeared at normal levels and colour.
8.12	Hoses	Reinforced Rubber	Fair	<p>No notable deterioration, splitting or bulging cooling system hoses</p> <p>Air hose split on Port engine (Air hoses and air filters have been ordered by Marina Mechanic and scheduled for replacement - Update: 28/8/23</p> <p>A: High Priority (Rectification Required)</p>
8.13	Heat Exchanger / Intercooler	Metal	Fair	Some minor build-up present around coolers, hoses and fittings.
8.14	Turbocharger	Cast Metal	Sound	No oil leaks or deterioration sighted.
8.15	Blowers / Ventilation	12-volt	Sound	12-volt bilge blowers fitted.
8.16	Engine Oil	Oil	Sound	Appeared at normal levels and colour.
8.17	Raw water pump	Impeller Pump	Sound	Appear serviceable, no notable leaks.
8.18	Thermostat	Cast	Sound	No corrosion or build-up-sighted externally.

8. Main Engines & Propulsion (Cont.)

8.19	Throttle connections	Mechanical Terminals	Sound	Appear serviceable.
8.20	Gear shift connections	Mechanical Terminals	Sound	Appear serviceable.
8.21	Throttle levers	Morse Type	Sound	Top mount controls, smooth to engage.
8.22	Engine bilge	Flow coat	Fair	Reasonably clean compared to rest of bilge area.
8.23	Operation	In Berth	Sound	<p>Engines were ran for 20 mins in the berth with the marine surveyor on board.</p> <p>There was some white smoke on start-up which quickly dissipated.;</p> <p>Vessel not sea trialed or placed under load by the marine surveyor, however the vessel/engines were ran under 80% load for 2-hours from Martha Cove to Docklands with the marine mechanic on board, no overheat or cooling/running issues found.</p>
8.24	Notice:			<p>The findings reported are from a visual inspection only, no assessment has been made of the internal condition of the engine(s) or transmission.</p>



Ref # 8.1



Ref # 8.1



Ref # 8.1

8. Main Engines & Propulsion (Cont.)



Ref # 8.1.1



Ref # 8.2



Ref # 8.3



Ref # 8.4



Ref # 8.7



Ref # 8.8



Ref # 8.9



Ref # 8.12 - Air hose return hose split on port engine,



Ref # 8.13



Ref # 8.13



Ref # 8.13



Ref # 8.13

8. Main Engines & Propulsion (Cont.)



Ref # 8.14



Ref # 8.17 - Water pump condition



Ref # 8.17



Ref # 8.22

9. Driveline

Ref	Item	Type / Make	Condition	Comments
9.1	Type	Shaft Drive	Sound	Twin shaft drives
9.2	Gear Box	Twin Disc	Fair	Said to be Twin Disc transmissions.; Make and specifications of transmissions were not legible due to some surface corrosion and being painted over.
9.3	Propellers	Stainless Steel	Sound	32 x 30 fixed 4 blade bronze propellers, no damaged.
9.4	Shaft	Stainless Steel	Sound	2 1/2 inch shaft, appears to run true.

9. Driveline (Cont.)

9.5	Shaft Seal	Packing Type Seal	Fair	Packing type lip seal, no leak at rest. Some build-up around seal face and patina on body of gland.
9.6	Coupling	Machined Steel	Sound	Painted shaft coupling, no notable corrosion
9.7	Skegs	Cast Bronze	Sound	Primary and intermediate bronze, securely mounted.
9.8	Skeg Mount (Internal)	Bronze Plate.	N/A	Not accessible
9.9	Bonding	Wire	Sound	Appearing to be connected/bonded where sighted.
9.10	Drive Anodes	Zinc or Aluminium	Sound	Being replaced with new
9.11	Drive Coatings	Prop-spped	Good	Driveline recoated with prop-speed



Ref # 9.1



Ref # 9.1



Ref # 9.2



Ref # 9.5



Ref # 9.7



Ref # 9.7

10. Steering & Manoeuvring

Ref	Item	Type / Make	Condition	Comments
10.1	Type	Hynautic Hydraulic	Sound	Twin rudder connected to rudder shelf with hydraulic assisted steering and tie bar.
10.2	Steering Wheel	Dual Helm	Sound	Some minor play in the steering wheel noted.
10.3	Connections and Lines	Hose	Sound	Hydraulic lines and fittings appeared serviceable.
10.4	Rudder	Bronze	Sound	Solid bronze rudder blade, no damage. Rudders were antifouled, being prepared for re-application
10.5	Rudder Glands	Packing Type	Fair	There are signs of rudder bearing movement, more notably on the port side. Rudder glands were re-packed and serviced in 2021 by Miller Marine. The starboard side exhibits signs of corrosion around studs and the stock. Consideration to removing and inspecting rudder posts and bolts/studs along with full service would be recommended at next haul-out.
10.6	Rudder Head/Shelf	Timber Veneer	Sound	Rudder head secured to FRP composite rudder shelf.
10.7	Trim Tabs Plate	Stainless Steel	Sound	Anodes being reapcmcd., no damage.
10.8	Trim Rams	Bennett Type	Sound	Dual rams, did not appear functional.
10.9	Bow Thruster	Decommissioned	N/A	Bow thruster has been fitted at some stage, however power head removed and disconnected.

10. Steering & Manoeuvring (Cont.)

10.10	Stern Thruster	Craftsman Marine	Poor	<div>Thrusters did not power-up, bow thruster power head removed.;</div> <div>Corrosion to stern thruster motor.</div> <div>C: Low Priority (Cosmetic or Superficial)</div>
10.11	Stabilizers	Naiad	Sound	Not tested, visually appear sound



Ref #10



Ref # 10.1



Ref # 10.4



Ref # 10.5



Ref # 10.5



Ref # 10.7



Ref # 10.8

10. Steering & Manoeuvring (Cont.)



Ref # 10.9



Ref # 10.11

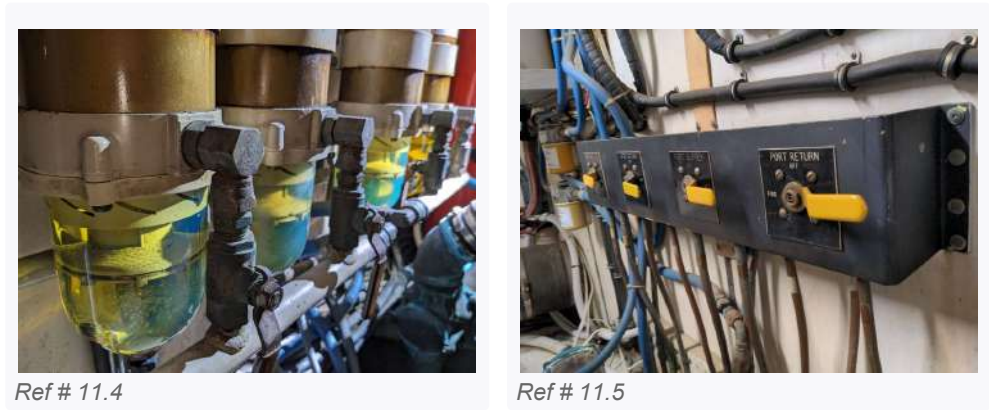


Ref # 10.11

11. Fuel Systems

Ref	Item	Type / Make	Condition	Comments
11.1	Fuel Tank	Stainless Steel		2 tank, central along keel line aid to be 7,500 litres total.; Located under sole, access to tanks were restricted.
11.2	Fuel Lines	Marine Fuel Hose	Sound	No deterioration sighted.
11.3	Fuel Fittings	Compression Fittings	Sound	No leaks sighted.
11.4	Fuel Filters	Racor	Fair	There is sediment and contamination in two of the four fuel filters, which were cleaned and cleared by Miller Marine. Filters were re-inspected on the 28th August 2023 and found to be clean.
11.5	Fuel Shut-Off	Bronze Valve	Sound	Fitted on engine room.
11.6	Fuel Filler Line	Fuel Hose	Sound	Dual filler hoses, appeared serviceable where accessible.
11.7	Fuel Breather	Copper Pipe	Sound	Appeared serviceable where accessible.
11.8	Fuel Gauge	Analogue Helm Gauge	Sound	Tender gauge on helm, appeared functional


11. Fuel Systems (Cont.)




12. Generator / Genset

Ref	Item	Type / Make	Condition	Comments
12.1	Type	Onan 4KVA	Sound	<p>There are two Gensetsaboard, however only one is said to be operational.</p> <p>We did not test the older 20kw Kohler Genset as it has not been started in sometime and not required for ships supply.</p> <p>The tested Genset was a Kohler 21kw fresh water cooled diesel genset.</p>
12.1.1	- Genset Hours	Analogue Gauge	Sound	Genset gauge is reading 2436 hours
12.2	External Case / Bottom Tray	Steel	Sound	No external case, only.minor corrosion to bottom tray.
12.3	Cooling System	Closed / Fresh water	Fair	Some hoses showing signs of wear, the raw water intake feed hose was unconventional but functional.
12.4	Heat Exchanger	Metal	Sound	Some minor build-up around end caps.
12.5	Hoses and Fittings	Reinforced Marine Hose	Fair	Appeared sound.
12.6	Exhaust	Reinforced Marine Hose	Sound	Exits hull on port side.


12. Generator / Genset (Cont.)				
12.7	Muffler / Wet lock	FRP Composite	Sound	Appears suitably installed.
12.8	Engine Oil	Oil	Sound	Appears at normal levels.
12.9	Cooling water flow	Port Side	Sound	Appeared normal.
12.10	Load Tested	Ships Power	Sound	Load tested, power up all ships systems with output of 240-volts
12.11	Notice			The findings reported are from a visual inspection only, no assessment has been made of the internal condition of the engine.




Ref # 12.1 - Tested genset




Ref # 12.1 - Older Genset not tested



Ref # 12.1.1



Ref # 12.3 - Raw water pump configuration



Ref # 12.4



Ref # 12.7

13. Plumbing Systems				
Ref	Item	Type / Make	Condition	Comments
13.1	Water Tank	Stainless Steel	Sound	1 tank, mounted under cabin sole. Said 1000 litres in total. (access restricted)

13. Plumbing Systems (Cont.)

13.2	Fresh Water Pump	32-Volt Raz Marine	Poor	<p>Did not appear to be priming or pressurising water system, pump was leaking when tested.</p> <p>Unable to get pressurized water from system.;</p> <p>Miller Marine removed pump for service and/or replacement on the 28th August 2023.</p> <p>B: Medium Priority (Service or Maintenance Item)</p>
13.3	Accumulator	5 litre	Sound	No leaks sighted.
13.4	Plumbing / Hose	Various	Fair	<p>Combination of copper pipe and reinforced hose.</p> <p>The plumbing systems and hoses are showing signs of wear and deterioration.</p> <p>There are hose clamps corroding or missing along with corrosion to joiners in areas.</p> <p>The entire onboard plumbing system appears to have been repaired and "band-aided" over the years.</p> <p>Ideally, the entire onboard plumbing system appears due for service by a suitably qualified marine plumber or similarly competent person.</p> <p>B: Medium Priority (Service or Maintenance Item)</p>
13.5	Water Heater	240-volt	Sound	240-volt element and engine driven Heat Exchanger type
13.6	Relief Valve	Pressure Relief Valve	Sound	Tested
13.7	Hot Water Supply	Hot Water Test	Sound	Hot water produced, using electric element,

13. Plumbing Systems (Cont.)

13.8	Sinks	Stainless Steel	Sound	<p>Sink drain in rear head linking, needs to be rectified.</p> <p>Forward starboard head sink plumbing leaking</p> <p>B: Medium Priority (Service or Maintenance Item)</p>
13.9	Showers	Head Shower	Fair	<p>Showers fitted in each head, functional</p> <p>There is some water damage to shower surrounds below shower doors</p> <p>C: Low Priority (Cosmetic or Superficial)</p>
13.10	Shower Drainage	32-volt	Poor	<p>Shower drains into sump box, discharging overboard via 32-volt pump.</p> <p>Sump box are in poor condition, pumps do not work, hoses are deteriorated, lids for sumps. missing.</p> <p>Recommend they are all repaired and/replaced.</p> <p>B: Medium Priority (Service or Maintenance Item)</p>
13.11	Toilet / Head	Tecma Electric Flush	Fair	<p>Four electric flush toilets fitted in head, however the two forward TMC toilets did not power-up.</p> <p>B: Medium Priority (Service or Maintenance Item)</p>
13.12	Toilet Plumbing	Sanitation Hose	Fair	<p>Hose with hose clamps draining into holding tank.</p> <p>Hoses, pumps and hose clamps all showing signs of wear.;</p> <p>Head plumbing and pumps require service.</p> <p>B: Medium Priority (Service or Maintenance Item)</p>

13. Plumbing Systems (Cont.)				
13.13	Holding tank	Stainless Steel	Sound	1 tank, appears to be stainless steel. Mounted under sole, access restrictions apply.
13.14	Notice			It is important that all hoses, valves, and fittings be regularly inspected (annually) by a suitably competent person. Any deteriorated, rusted, or damaged hoses, valves and fittings ought to be replaced as deemed appropriate.



Ref # 13.4 - Plumbing system condition



Ref # 13.4 - Plumbing system condition



Ref # 13.4 - Plumbing system condition (no hose clamp)



Ref # 13.4 - Plumbing system condition



Ref # 13.8 - Leaking rear head sink



Ref # 13.8 - Leaking starboard head sink



Ref # 13.9 - Shower frame



Ref # 13.9 - Shower frame



Ref # 13.10 - Shower sump condition

13. Plumbing Systems (Cont.)



Ref # 13.11



Ref # 13.11



Ref # 13.11 - Forward port cabin head did not powers-up.



Ref # 13.11 - Forward head did not power-up



Ref # 13.12 - Macerator pump condition



Ref # 13.12 - Macerator pump condition

14. Electrical Systems

Ref	Item	Type / Make	Condition	Comments
14.1	Shore Power Lead	62-amp Heavy Duty	Sound	Dual 62-amp IP rated shower power hoses.
14.2	Volt Gauges	AC / DC	Fair	240-volt gauges appeared functional, however the 32-volt DC gauge did not appear functional. The ampere gauges did not appear functional.
14.3	Shore Power Breaker	Circuit Breaker Boards	Sound	Visually inspected. Two shower power supply lines feed into 3 seperate distribution 120/240 circuit boards with 2 DC 32-volt distribution boards.

14. Electrical Systems (Cont.)

14.4	Interior Lighting	110-volt and 32-volt lighting	Fair	Most powered-up. Rear cabin port side reading light broken.
14.5	Transformers	240 to 120 Transformers	Sound	2 X Step down transformer fitted.
14.6	Invertors	Trace Engineering	Sound	1.5kw Invertor charger, powered up. Not load tested.
14.7	Wiring & Cables	Insulated Wire	Fair	Visually inspected, no defects sighted.
14.8	Power outlets / GPO	Dual 240-volt and 110-volt	Sound	AUS style outlets tested using DETA-240 plug tester, resulting in a PASS. 120-volt outlets not tested.
14.9	Battery Charger	Various	Sound	Older style Guest 30 amp charger and and older style Powered-up. Victron blue charger in port engine bay.
14.10	Batteries (House)	12-volt		4 x 8-volt batteries = 32 volts
14.11	Batteries (Start)	8-volt / 32-volt		4 X 8-volt batteries = 32 volts
14.12	Batteries (Genset)	12-volt		2 x 12-batteries - 24-volts ; Some batteries not secured.



14. Electrical Systems (Cont.)



Ref # 14.5



Ref # 14.6



Ref # 14.9



Ref # 14.9



Ref # 14.9



Ref # 14.11



Ref # 14.12

15. Heating & Cooling

Ref	Item	Type / Make	Condition	Comments
15.1	Type	Cruise Air	Sound	<p>There are seven Air Conditioner condensers fitted, there are 3 Cruiser Air units which appear original and did not power up.</p> <p>There are also two newer Cruise Air units which also did not power up.</p> <p>There is a Dometic and a Marine Air unit, which both powered up and appeared connected to the 2 Dometic digital touch screen displays</p> <p>One services the main saloon and the other serving the rear master cabin.</p>
15.2	Ducting	Insulated Ducting	Fair	Appeared servicable, showing signs of wear.
15.3	Hoses	Reinforced Marine Hose	Fair	No leaks sighted, however hoses, connections and clamps are showing signs of wear.
15.4	Cooling Mode	Test	Sound	All units appeared to produce cool air.
15.5	Heating Mode	Test	Poor	<p>From our testing, we did not get any warm air from the air con units. May require service,</p> <div>B: Medium Priority (Service or Maintenance Item)</div>

15. Heating & Cooling (Cont.)

15.6	Cooling Water Flow	Port Side	Poor	<p>No water flow sighted, there appears to be 2 x 240-volt raw water cooling pumps forward of the port engine. Both trip the circuit breakers when powered-up.</p> <p>Plumbing hose on pumps are in poor condition and should be replaced.</p> <p>Pumps are mounted low in the bilge, possibly water affected. ;</p> <p>Further investigation and repair required by technician.</p> <div>B: Medium Priority (Service or Maintenance Item)</div>
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Ref # 15.1



Ref # 15.1



Ref # 15.3 - Air Conditioner intake manifold



Ref # 15.6 - Air Con Pumps

16. Appliances & Media

Ref	Appliance	Type	Test		Comments
16.1	Refrigeration Systems	240-volt	Powered-up:	Yes	Twin door Samsung fridge and freezer. Hisense wine cooler in saloon
16.2	Stove / Oven	240-volt	Powered-up:	Yes	Ariston 4 burner induction cook top with electric oven and power range hood.
16.3	Dishwasher	240-volt	Powered-up:	Yes	Blanco under bench dishwasher
16.4	Televisions	240-volt	Powered-up:	Yes	Samsung television in saloon with satellite Foxtel television
16.5	Sound Systems	Bose	Powered-up:N/A		Bose surround sound system in saloon, not tested. Did not locate head unit there is also a fusion marine stereo on the bridge deck however appeared disconnected..
16.6	Washing Machine	240-volt	Powered-up:	Yes	Asko brand in ulity space.
16.7	Clothes Dryer	240-volt	Powered-up:	Yes	Asko branded clothes drying in utility space.



Ref # 16.1



Ref # 16.1



Ref # 16.2

16. Appliances & Media (Cont.)



Ref # 16.2



Ref # 16.3



Ref # 16.6

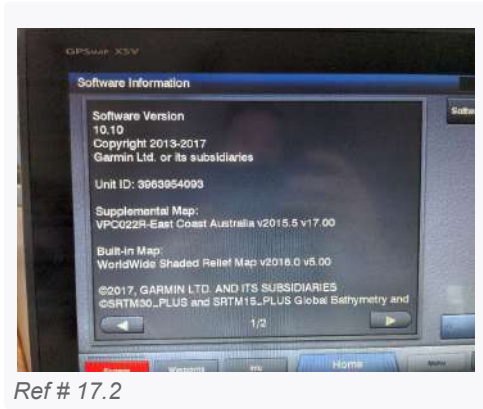
17. Navigation & Communication

Ref	Appliance	Type	Test		Comments
17.1	VHF Radio	I-com	Powered-up:	Yes	Older style Icon IC-M100 at helm. There is a Standard Horizon unit on the bridge which did not power up.
17.2	Chartplotter	Garmin	Powered-up:	Yes	Dual Garmin GPSmap 7416 XSV and Garmin GPSmap 7412xsv on helm. There is also a Northstar 951X GPS navigator on the bridge which powered-up however functionality did appear limited.
17.3	Radar	Garmin	Powered-up:	Yes	Appeared to be functional. There is an older style Furuno Radar on the bridge will also power-up
17.4	Depth Gauge / Sonar	Datamarine	Powered-up:	Yes	Digital depth gauge on helm and bridge.
17.5	GPS / Speed Log	Garmin	Powered-up:	Yes	Displayed on Garmin systems on helm, digital display on bridge.
17.6	AIS	Garmin	Powered-up:	Yes	On Garmin system
17.7	Autopilot	Garmin	Powered-up:	Yes	Tested and responded to inputs.
17.8	Navigation Lights	32-volt	Powered-up:	Yes	All powered up

17. Navigation & Communication (Cont.)					
17.9	Spotlight	32-volt	Powered-up:	Yes	Search light functional the smaller deck light was not tested as unable to locate the switch for it.
17.10	Horn	32-volt	Powered-up:	Yes	Tested
17.11	Trim Tab Gauge	Bennett	Powered-up:N/A		Bennett gauges on helm (not tested)
17.12	Analogue Gauges	Digital & Analogue	Powered-up:	Yes	There are two floscan digital gauges on the helm which appear functional, some analogue gauges on the helm did not appear to be functional may not be working correctly being the voltage and temperature gauges. There are temperature gauges in the engine bay which did appear functional.



Ref # 17.1



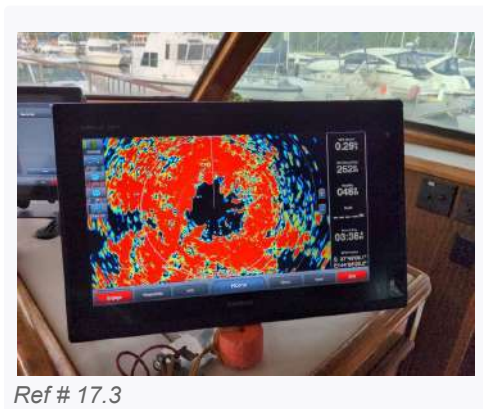
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Ref # 17.2



Ref # 17.2




Ref # 17.3




Ref # 17.3


17. Navigation & Communication (Cont.)




Ref # 17.5




Ref # 17.7




Ref # 17.8



Ref # 17.9



Ref # 17.11



Ref # 17.12

18. Bilge Pumps

Ref	Location	Number / Type	Comments
18.1	Forward Pump/s	2 x 32-Volt	Rule pump with float switch, powered up
18.2	Midships Pump/s	1 x 32-Volt	Rule pump with float switch, powered up. There are joins in the outlet hoses which is not ideal.
18.3	Aft Pump/s	2 x 32-Volt	Rule pump no float switch, powered up
18.4	Manual Hand Pump	Whale	2 x Manual Bilge pumps aboard

18. Bilge Pumps (Cont.)



Ref # 18.1



Ref # 18.1



Ref # 18.2



Ref # 18.2

19. Safety Equipment

Ref	Safety Gear	Type	Comments
19.1	Life Jackets	Foam PFD type	2 x Inflatable & 18 x Foam sighted.
19.2	Extinguishers	Dry Chemical Type	3 x 4kg, 3 x 1kg, 1 X 2kg
19.3	Fire Suppression	Wormald	<p>Heavy corrosion on cylinder in Genset space, recommend replacement;</p> <p>Update - being replaced with a 9pk handheld Dry chemical by Miller Marine - 28/8/2023,</p> <p>2 X 45kg Carbon Dioxide cylinder in engine bays.</p> <p>A: High Priority (Rectification Required)</p>
19.4	EPIRB	Safety Alert	Battery Expires: May 2029
19.5	Flares	One set	One set in grab bag, expired.
19.6	Fire Blankets	One Blanket	Found in galley

19. Safety Equipment (Cont.)			
19.7	Life rings	Plastic Ring	3 X Life rinds on rear deck and 1 X On Bridge
19.8	Life Raft / Tender	Life Raft	2 X 6 Person raft on brdieg deck, both out of service.
19.9	Compass	Danforth	Mounted on each helm
19.10	Tender	Zodiac (12ft+)	Rigid Inflatable Hurricane Zodiac deluxe with garmin GPS and VHF fusion radio and speaker.; S/n XDC614B21596 Not tested



Ref # 19.3 - Gen Set bay cylinder.
(Corroded)



Ref # 19.3 - Engine bay cylinder



Ref # 19.4



Ref # 19.10



Ref # 19.10



Ref # 19.10

20. General Summary		
Ref	Vessel	Summary
20.1	Summary	<p>The Hattaras 64 Pilothouse named "Harrier presents in sound condition cosmetically and structurally, being a 1984 model there are some signs of wear and tear to commensurate with age particularly the vessel wiring and plumbing systems which appear to require maintenance.;</p> <p>The interior, apart from the updated galley appears mostly original presents in sound condition with some signs of general wear and tear.</p> <p>The pilothouse, foredeck, deck areas were found to be in good condition and structurally sound. Some of the windows around the helm and saloon areas appear to require maintenance and resealing.;</p> <p>All fittings appear to be marine grade quality, appearing in sound condition.</p> <p>All appliances and equipment powered-up and appeared functional, unless where stated.;</p> <p>Mechanically, the engines appear original, however are known to be reliable engines when suitably maintained. We did the cooling system appears due for service.</p> <p>Some other defects have been identified which are mentioned below along with appropriate recommendations.;</p> <p>"Harrier" is a large volume semi-displacement vessel that was built to a high standard with plenty of space for pleasure, cruising and entertaining. With the implementation of a suitable service and maintenance program going forward, envisage this vessel to continue to be in service for many years to come.;</p> <p>Note: The owner commissioned Deaspec Marie Surveying to re-attend the vessel in its marina berth on the 28th August 2023 to inspect the improvements and repairs made to the vessel to date and amend the report to reflect these repairs. The vessel was also started and ran in the marina berth at this time,</p> <p>It is the vessels master's responsibility to ensure all safety equipment is appropriate for the vessels intended usage</p>

A: High Priority (Rectification Required)		
Ref	Responsibility	Comments
4.5 Seacocks / Thru-hulls » Sea Strainers	N/A	<p>The sea strainers under the floor just aft of the utility space (laundry) display signs of build-up, all sea strainer aboard appear due for service.</p> <p>The hoses running's from these strainers are also in poor condition and due for replacement;</p>
8.12 Main Engines & Propulsion » Hoses	N/A	<p>Air hose split on Port engine (Air hoses and air filters have been ordered by Marina Mechanic and scheduled for replacement - Update: 28/8/23;</p>
19.3 Safety Equipment » Fire Suppression	N/A	<p>Heavy corrosion on cylinder in Genset space, recommend replacement;</p> <p>Update - being replaced with a 9pk handheld Dry chemical by Miller Marine - 28/8/2023,</p>

B: Medium Priority (Service or Maintenance Item)

Ref	Responsibility	Comments
3.7 Hull Condition (Above Waterline) » Swim platform	N/A	There is damage to the centre of swim platform consistent with docking contact damage.
4.3 Seacocks / Thru-hulls » Skin Fittings	N/A	Some skin fittings, particularly above the waterline shows signs of Patina corrosion. Any skin fittings displaying signs of corrosion should be scheduled for replacement.;
7.7 Deck, Hardware & Fittings » Windows	N/A	Multiple sectional tempered glass helm windows surround the helm with acrylic curved side panels which have some crazing present. The sealant around the helm windows are showing signs of deterioration with signs of slight weeping in some areas. Window wipers powered-up, blades appear worn. Small corrosive hole to window frame in port forward cabin.; There is a crack to one window pane on the port side saloon.; The windows do appear to require sealing in some areas and maintenance.
13.2 Plumbing Systems » Fresh Water Pump	N/A	Did not appear to be priming or pressurising water system, pump was leaking when tested. Unable to get pressurized water from system.; Miller Marine removed pump for service and/or replacement on the 28th August 2023.
13.4 Plumbing Systems » Plumbing / Hose	N/A	Combination of copper pipe and reinforced hose. The plumbing systems and hoses are showing signs of wear and deterioration. There are hose clamps corroding or missing along with corrosion to joiners in areas. The entire onboard plumbing system appears to have been repaired and "band-aided" over the years. Ideally, the entire onboard plumbing system appears due for service by a suitably qualified marine plumber or similarly competent person.;
13.8 Plumbing Systems » Sinks	N/A	Sink drain in rear head linking, needs to be rectified. Forward starboard head sink plumbing leaking;
13.10 Plumbing Systems » Shower Drainage	N/A	Shower drains into sump box, discharging overboard via 32-volt pump. Sump box are in poor condition, pumps do not work, hoses are deteriorated, lids for sumps. missing. Recommend they are all repaired and/replaced.;

B: Medium Priority (Service or Maintenance Item)

13.11 Plumbing Systems » Toilet / Head	N/A	Four electric flush toilets fitted in head, however the two forward TMC toilets did not power-up.
13.12 Plumbing Systems » Toilet Plumbing	N/A	Hose with hose clamps draining into holding tank. Hoses, pumps and hose clamps all showing signs of wear.; Head plumbing and pumps require service.;
15.5 Heating & Cooling » Heating Mode	N/A	From our testing, we did not get any warm air from the air con units. May require service,
15.6 Heating & Cooling » Cooling Water Flow	N/A	No water flow sighted, there appears to be 2 x 240-volt raw water cooling pumps forward of the port engine. Both trip the circuit breakers when powered-up. Plumbing hose on pumps are in poor condition and should be replaced. Pumps are mounted low in the bilge, possibly water affected. ; Further investigation and repair required by technician.

C: Low Priority (Cosmetic or Superficial)

Ref	Responsibility	Comments
3.2 Hull Condition (Above Waterline) » Gunnel	N/A	Hull integral gunnel moulding with stainless steel belting strip, there is a small section missing on the port side midships.
6.4 Interior » Cabinetry & Fitout	N/A	Some minor water staining to cabinetry in rear cabin near head.; Broken mirror down below between engine spaces.
7.1 Deck, Hardware & Fittings » Foredeck Structure	N/A	There is a stain on the port side of the coach house, appears consistent with something being spilled from the forward lounge storage lockers, spilling from the drain hole.;
7.2 Deck, Hardware & Fittings » Rear Deck	N/A	There are clears used as lifelines around the hand rail which are torn in areas.
10.10 Steering & Manoeuvring » Stern Thruster	N/A	Thrusters did not power-up, bow thruster power head removed.; Corrosion to stern thruster motor.
13.9 Plumbing Systems » Showers	N/A	There is some water damage to shower surrounds below shower doors;

Property Images



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