

PRE-PURCHASE SURVEY REPORT

'Ganesha' Amel 54 Yacht



Date of Inspection: 08/01/2024.

Location of Inspection: Cleopatra Marina, Preveza, Greece.

Carried out by: Steven Truss MIIMS Yacht Surveyor.

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<p>This survey was commissioned by: Andrea Manzotti via st Abbondio 57, 6925, Gentilino, Switzerland. Manzottiandrea@gmail.com</p>	<p>Scope of Survey: This was a non-destructive condition survey and its purpose is to establish the structural and general condition of the vessel on behalf of the commissioning client. Parties present Mr: Steven Truss.</p>
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Survey extent and limitations:

- a) This report has been prepared for use of the commissioning client above and no liability is extended to others who may see it.
- b) Whilst all due care and diligence has been exercised in the collection of data for and the preparation of this report. My purport to provide an advisory service only, based on the opinion and experience of SM. Truss MIIMS, who is responsible for its compilation. The undersigned surveyor issues such advise in good faith and without prejudice nor guarantee. Anyone wishing to rely on such opinion should first satisfy themselves as its accuracy and feasibility.
- c) SM. Truss MIIMS shall not be liable for any loss (including indirect and consequential loss), damage, delay, loss of market, costs, expenses of whatsoever nature or kind and however sustained or occasioned.
- d) Notwithstanding the aforementioned, notice of a claim or suit must be made to SM. Truss MIIMS in writing within 90 days of the date the services were first performed or the date the damages were first discovered, whichever is the later, failing which lack of notice shall constitute an absolute bar to the claim or suit against SM. Truss MIIMS.
- e) We have not inspected woodwork or any other parts of the structure which were covered, unexposed or inaccessible and we are, therefore, unable to report that any such part of the structure is free from defect.
- f) In some cases it is not possible to detect latent and hidden defects without destructive testing, not possible without the owner’s consent.
- g) Where repairs, further opening up or dismantling is required, additional decay, damage or necessary work may be uncovered.
- h) The engine, tanks and other normally installed mechanical equipment were in situ which limited inspection and examination in these areas.
- i) A Sovereign Quantum Marine Moisture Meter, a capacitance-type moisture meter was used. The calibration of the meter was checked on the day of the survey, prior to readings being taken. Readings are taken in the relative mode, which ranges from 0-100. The values are regarded as an index and do not represent moisture content as a percentage of the dry weight. Where appropriate both shallow and deep modes were employed. Direct comparisons with other meters, be they Sovereign or others are not valid.
- j) The vessel was not surveyed with respect to any particular code or standard or navigation body’s rules or by-laws unless specifically stated. No documentation or compliance with any regulations has been checked as part of this survey. No guarantees or warranties are given or implied with respect to the vessels suitability or fitness for purpose.



- k) The survey is not a parts and labour guarantee and it should be noted that defects may exist in the vessel that the survey could not detect due to limitations of time, vessel presentation and the range of tests acceptable to the owner. Please note that where reference is made to condition in all cases this must be considered in relation to the vessel's age, for example: very good condition should not be taken to mean new condition.
- l) Note: The term 'serviceable' and 'in serviceable condition' as used in this report mean that the items remain useable despite possible wear and deterioration. The item may nevertheless require maintenance and replacement in due course.
- m) A general inspection of the engine, installation and systems was made, but this is a visual inspection only and an item has only been operated if stated. It should be appreciated that some components may appear serviceable but be found defective when run under load and for a prolonged period.
- n) Recommendations will be restricted to those defects which should be rectified before vessel is used, (or with a given time span if specified, and items which may affect insurability).
- o) Legislation and Ownership Note: The inspection is not undertaken with any intention to ascertain that the vessel would comply with any rule or code of practice as may be required by any authority under whose jurisdiction the vessel may be operated. It carries no warranty regarding ownership of the vessel or any warranty regarding outstanding mortgages, charge or other debt there may be on the vessel.
- p) V.A.T Status and Proof of Ownership. The original invoice for the vessel was not seen and therefore there was no evidence that V.A.T had been paid.
- q) A vessel built after the 16th June 1998 in the EEC requires to have a Declaration of Conformity (DoC), owners manual and display a CE plate.
- r) Any estimate of valuation provided is based on average retail values achieved by craft of similar type and condition and subject to present market forces and should not be confused with replacement value of the craft, which may be substantially higher, particularly in the case of rare or purpose built craft.
- s) Particulars such as registration numbers, tonnage, year of manufacture and dimensions are normally as advised or as exhibited aboard the vessel. These are not authenticated. Dimensions, if checked, are measured by means of a tape measure and should not be relied upon as totally accurate.
- t) If applicable, the bottled gas installation was inspected visually only unless specified and gas test requested, and pressure tests are only undertaken if requested before inspection / under contract. All gas systems should be regularly tested as part of a normal preventative maintenance routine.
- u) The vessel was not inspected beneath slings, shores or chocks and cannot be said to be free of defects under these items.
- v) The electrical installation was not examined in detail, merely switched on for testing.
- w) Fuel tanks, water tanks and holding tanks, where fitted, were inspected externally without filling the tanks to their maximum capacity. We cannot therefore say that such tanks will not suffer from leaks when completely filled, unless there were clear visible signs of earlier leaks at the Survey.
- x) This report does not comment on any compliance/ non compliance to national /international regulations such as the RCD or MCACC.

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Recommendations

These will not be made concerning decorative or minor defects that have no significance on the vessel's value or its serviceability but these points will be mentioned in the body of the text. Recommendations will be graded into two sections- ones that should be rectified before the vessel's used or within a specific period of time indicated in the text (Essential) and ones that affect the vessel's insurability, value or are costly to repair.

All recommendations will be made in red and italics for quick reference and will be listed again in the conclusions at the end of the report sections.

Advisory notes

Advisory notes are for the commissioning clients information only. They do not effect the structural integrity or seaworthiness of the vessel at the time of the inspection. *Advisory notes will be made in blue italics for quick reference and will be listed again in the conclusions at the end of the report sections.*

HULL, DECK AND SUPERSTRUCTURE

1, 2) Details of Vessel (General Description, Dimensions, History, Registration etc.)

The Amel 54 is a bluewater cruising sailboat designed for long-distance voyages and makes a comfortable liveaboard.

- Length Overall (LOA): 56.43 feet (17.20 meters).
- Length at Waterline (LWL): 50.36 feet (15.35 meters).
- Beam: 15.1 feet (4.6 meters).
- Draft: 6.89 feet (2.10 meters).
- Displacement: Approximately 18 tons.
- Ballast: Keel-mounted ballast.
- Hull Material: Fiberglass (GRP).
- Designer: Henri Amel.
- Engine: Volkswagen. TDI 140-5 – 140 HP turbo diesel.
- Category: A Ocean. Hull Number: 171. Built: 2011.
- Accommodation Layout: Generally features a spacious aft cabin, a forward cabin, and saloon seating that can be converted into additional berths. Cabins: 2-3 cabins, depending on the layout.
- Accommodates around 6-8 people. Heads (Bathrooms): Typically two heads. Galley: Equipped with a fully functional galley including a stove, oven, refrigerators, and sink.

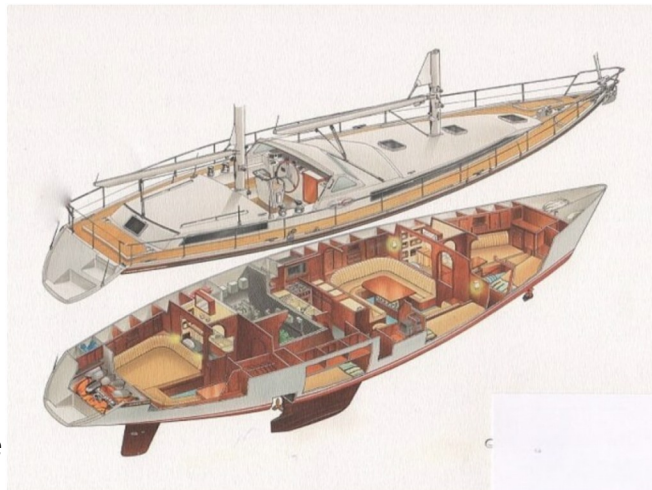
REGISTRATION

The vessel did display a HIN number (Hull Identification Number).

FR-AML54171AIII

RCD

A vessel built after 16th June 1998 in the EEC requires to have a Declaration of Conformity (DoC), owners manual and display a CE plate. These were seen by the undersigned Surveyor.



3) KEEL

Description

The keel was an external mounted iron bulb keel attached to the vessel with steel studs, backing plates and nuts to the hull moulding. The keel was seen in compression with the hull whilst chocked ashore. My comments below were based on inspecting the keel in this position.

Observations, comments & tests

Externally

- The keel was sighted from various angles and found to be straight and true to the hull moulding.
- The keel had been coated with the same antifouling paint as the rest of the underwater hull which was in a serviceable condition.
- Externally, the curved section around the keel root (the keel to hull joint) was visually inspected and hammer tested with consistent, robust soundings returned. Particular attention was paid to the flatter sections of the hull just forward and aft of the keel where damage from groundings can be sustained - no indication of deformation, or delamination was found.
- Moisture readings close by the keel in the flat sections forward and aft on the hull were not different to anywhere else on the underwater hull. Externally there was no evidence of any significant corrosion or staining at the hull to keel join.
- During the survey, a limited visual inspection of the surface of the keel's bottom was conducted, which found it to be in fair condition with no new indications of groundings observed. This is an essential aspect of the examination, as the keel's integrity is crucial for the yacht's overall performance and safety.
- Further inspection involved visual assessment and light hammer soundings, a standard practice in marine surveys to detect anomalies beneath the surface that are not visible to the eye. This technique revealed an area of gelcoat damage on the starboard side of the keel. Gelcoat damage, while often cosmetic, can lead to more significant issues if water penetrates the laminate, causing osmosis or structural weakening over time. Additionally, the inspection employed a moisture meter, which indicated higher moisture readings of 60% in the damaged area. High moisture levels in the fiberglass can be a precursor to potential laminate deterioration.



Internally

- The keel was through bolted into place. A group of keel bolts which were located in the bilge. These were very difficult to access below the water tanks, engine, cooler and therefore I am unable to comment on their condition.
- The accessible keel bilge and surfaces around the keel bolts were inspected and hammer tested, and adjacent the saloon table and forwards there was no evidence of delamination, de-bonding or movement noted. It was not possible to inspect the GRP laminate around the keel studs as this was obscured by the fridge, engine and water-tanks. Where access close to the bolts was possible, hammer testing of the GRP structures and surfaces returned clear, robust and consistent soundings.

Recommendation

An area of gelcoat damage on the starboard side of the keel / forwards was noted. Based on these findings, it is recommended that the area with gelcoat damage undergoes thorough repair. This should include drying out the area to ensure moisture levels are



reduced before applying a new gelcoat layer. Proper drying is essential to prevent the trapping of moisture, which could exacerbate the problem over time. After the repair, it is advisable to conduct another moisture meter reading to confirm the effectiveness of the drying process.

4) HULL BELOW WATERLINE EXAMINATION

Description

The vessel was a production built Yacht in a displacement configured hull with a three quarter length keel, counter transom and raked stem.

The hull of the Amel was constructed using a solid fiberglass laminate, reinforced with fiberglass mat and woven roving. The deck is also made of fiberglass, with a balsa core for increased stiffness and insulation. The hull and deck were bonded together and unusually encapsulated. The vessel generally appeared to have been built to accepted recreational marine industry production standards and practices at the time of her construction.

Observations, comments & tests

- In order to sample the hull skin below the waterline the antifouling was removed in random areas approximately two patches per meter length of 75m x 75mm down to the gelcoat.
- Using a Sovereign Marine Moisture Meter on a relative scale of 0 – 100 (this is not a percentage scale) readings were taken at the sample points both on its shallow and deep reading modes. Random areas above the waterline were also taken as a comparison against the below water readings which are recorded in section 4 below.

Conditions prevailing at time of readings

The boat was known to have been out of the water since July 2023 and therefore the moisture reads would not have been affected by surface water.

Air temperature	14.1 °c
Surface temperature	18.3 °c
Humidity	71 %
Degs above dew point	10 D

Meter readings were as follows:

Range on shallow mode	Range on deep mode
5 to 10	10 to 20

- Laminate moisture readings of the above level were considered to be low and were not of current concern.
- The vessel was viewed from a distance at various angles and no apparent or obvious signs of major longitudinal or transverse deformation or structural failure which might indicate earlier serious damage or poor repairs observed.
- The bottom and transom panels were generally in a serviceable condition, fair and free of any obvious moulding and pigment defects. The stem was particularly examined and no significant damage was noted.
- The hull was visually inspected at the sample areas and no blisters were noted.
- The bottom panels of the hull were lightly hammer tested using an engineers ball hammer to test to see if there were any obvious voids in the layup but none were discovered. This was particularly carried out at acute points of the hull form or at points of contra flexure where such voids may be expected. No guarantee can be given, however, that such voids do not exist. The hull was sounded all over by this means with

no indications of soft spots being noted in the gelcoat and judging by the general hard resonance, the structure appeared to have been solidly built to a good standard. The hull was especially examined at the points where the bulkheads were fitted and no sign of a hard spot in these areas were noted nor were there any signs of gel coat cracking indicating that the shell was 'hinging' seen.

- The coatings to the hull were to be well adhered and an effective barrier coat against marine growth.

5) TOPSIDES ABOVE WATERLINE INTERNAL

Description

The topsides above the waterline were constructed of the same design and specification as the underbody moulding with a raked stem and transom with conventional sheer to topsides. The skin was a white gelcoat.

Observations, comments & tests

- Moisture meter readings were taken on the topsides as a comparison against the underbody. The meter readings were from 12 to 15 on the shallow scale and 13 to 15 on the deep. All these readings were within acceptable levels and currently not of concern.
- The topsides and transom were closely inspected for any deformation, cracks or crazing and apart from the usual marks that were light in nature and cosmetic defects, the sides were structurally sound.
- The gelcoat was found to have a good lustre and be in good order with only a few cosmetic blemishes noted.



6) DECK AND COACHROOF AND COCKPIT MOULDING

Description

The deck was also made of fiberglass and featured a spacious layout with a large cockpit area for outdoor activities. The deck, coachroof and upper helm were an integral FRP sandwich construction moulding utilising core between an inner and outer laminate in areas for stiffening. Walkway surfaces were found to have a mock teak decked effect / planked surface encapsulated as part of the deck moulding.

Observations, comments & tests

- The entire deck, coachroof and upper helm walkways were found firm underfoot with no significant flexing detected.
- The moisture readings were well within acceptable limits 10 – 12 and for all practicable purposes were regarded as dry.
- Hammer sounding returns did not reveal any evidence of significant voids or delamination.
- The visual inspection of the decks, coachroof, and cockpit was conducted meticulously to assess their condition. This examination did not uncover any significant areas of stress cracks or damage, indicating a generally sound structural integrity of these components. However, a minimal number of small star crazes were observed on the foredeck. It is important to note that these crazes were of a non-structural nature and, as such, do not pose a significant concern regarding the vessel's overall safety and durability.
- The cockpit sole was found to be firm under the weight of the surveyor. There were no signs of significant crazing or other damage, with moisture meter readings satisfactory.
- The wheel pedestal was integral to the cockpit mould and found in a good condition along with the table. Hinged deck hatches gave access for storage and gas tanks.
- Areas of stress such as around rigging attachment points showed no signs of flex or delamination.



7) HULL / DECK JOINT

Description

The hull to deck joint was a bonded and encapsulated one piece with a fibreglass toe rail.

Observations, comments & tests

- Where access permitted inside the vessel the joint appeared to be well bonded with no obvious staining or leaks.
- The toe rail was sighted as being true to the hull line with no significant distortion.

8) BULKHEADS AND STRUCTURAL STIFFENING INCLUDING MOULDINGS

Description

A number of components contributed to the overall structural stiffening of the vessel. The shell was internally reinforced by frames and stringers along with three main bulkheads bonded to the hull and coachroof. In addition, also bonded in timber bulkheads, half bulkheads and secondary timber fit-out provided further rigidity and load bearing throughout the hull.

Two / four water tight bulkheads and sealed doors were functional and in good order fore and aft.

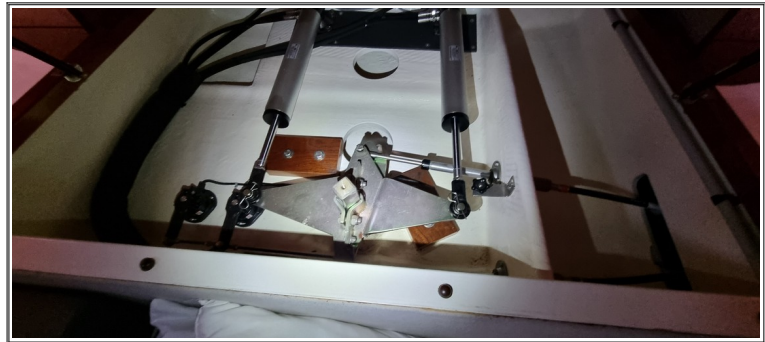
Observations, comments & tests

- Where access permitted all internal GRP grid frames and stringer mouldings were found to be well adhered to the hull with no evidence of movement or attachment.
- Where access permitted all internal bulkheads, half bulkheads and joinery was in a serviceable condition.
- Light hammer soundings of the moulding did not reveal any significant voids or delamination.

9) RUDDER AND STEERING

Description

The rudder blade was made out of fiberglass, reinforced with stainless steel plates. It was hollow and a hole has been drilled at the bottom to let the water in and out. The rudder blade was supported by three brackets or bushings. The stock passed through the hull moulding via a GRP rudder tube with nylon bearing insert. The rudder was operated by wheel steering system which consisted of one steel helm wheel running a cable system attached to an aluminium quadrant clamped to the stock.



Observations, comments & tests

- Laminate moisture readings were satisfactory.

Exterior

- The helm was tried hard over to hard over and found in a smooth operational condition and to sit correctly on the stops.

- The stock was sighted from a distance and no evidence of pitting was noticed around the neck of the stock which entered the vessel.
- The inspection of the coatings on the rudder indicated that they were generally satisfactory, showcasing an adequate level of maintenance and protection against the marine environment. However, during the examination, two small cracks were identified at the heel of the rudder (P), a finding that warrants attention due to the potential for water ingress and subsequent internal damage. Additionally, high moisture meter readings were recorded in the vicinity of the cracks. High moisture levels within the rudder can compromise its structural integrity over time, leading to more severe issues such as delamination or internal corrosion of metal components, if present. These findings suggest that water may have penetrated through the cracks, emphasizing the need for action to prevent further degradation. The adjoining skag also presented some concerns, with light gelcoat damage noted on the lower port side. Gelcoat damage, while often superficial, can serve as a pathway for moisture ingress, especially if left unaddressed in areas exposed to constant water contact.
- The rudders profile was found satisfactory and the rudder was found true to the centreline of the hull. The emergency steering system was in place but not tested. The auto pilot appeared to be working.



Interior

- The quadrant, rudder tube, bearings and cables were intact on the interior and appeared to be in good condition.

Recommendation

Given the observations detailed on page 12 regarding the condition of the rudder and skag, it is crucial to initiate a comprehensive repair process. This process should commence with the drying out of the affected areas to ensure the moisture content is reduced to acceptable levels. Following this, the identified cracks and gelcoat damage should be addressed and repaired.

10) STERN GEAR

Description

The sterngear consisted of a right handed three bladed phosphor bronze folding propeller attached to a stainless steel shaft. The shaft was held in place by a bronze tube containing a lubricated metal bearing. This setup included a U drive type reversed stern drive fitted to its inboard end, a



design feature that allows for the effective transfer of power from the engine to the propeller while also enabling precise manoeuvrability of the vessel.

Observations, comments & tests

- The propeller was lightly sound tested and the ring revealed a good tone suggesting the bronze was still in a good condition.
- Reasonable force was applied to the strut which was found secure and in a serviceable condition.
- No vertical play was noted in the shaft bearings.
- The stainless steel shaft was free of any significant corrosion or staining and sighted as being straight when rotated. When tested with a magnet it was found to be non magnetic. This along with the other visual evidence would suggest that it was made of 316 type stainless steel.

Internal

- The C drive was found in a good condition with the gearbox coupling correctly through bolted to the gearbox.

Recommendation

Inquire with the owner regarding the last replacement date of the shaft seal and wear-out bearing, which is due every 800 hours. During the inspection, the owner presented the Surveyor with a new seal that is kept onboard as a spare.

11) CATHODIC PROTECTION

Two zinc rudder anodes and one propeller anode held sufficient mass for on going protection.

The additional hull anode / grounding plate was inside the hull properly bonded to the engines stern gear seat, and to various overboard discharges by a clearly marked multi stranded earth wire of about 4mm square. The copper strip / bonding was examined as far as practicable limitations of access allowed and was found generally in a fair condition.



12) SKIN FITTINGS AND OTHER THROUGH HULL APERTURES

Description

The through hull fittings below and at the waterline were generally of a gun metal ball valve type with internal retaining nuts and bronze skin fittings. The following through hull valves below and at waterline were identified and tested.

No	Use	Thru Hull Material	Condition	Valve Type / Material	Condition
P1	Toilet tank outlet	Bronze	Serviceable	Yellow Metal / Ball Valve	Free
P2	Toilet in – deck wash in	Bronze	Serviceable	Gunmetal	Free
P3	Toilet tank out	Bronze	Serviceable	Yellow Metal / Ball Valve	Free
S4	Engine / watermaker, air conn and engine intake	Bronze / plus PVC	Serviceable	Yellow Metal / Ball Valve	Free
Mid	Transducers	Plastic	Secure		Good condition

Observations, comments & tests

- No evidence of continuous leakage was found in the vicinity of the valves.

- Vigorous force was applied to the valve assemblies and adjacent pipework and all accessible valve bodies were found to be secure.
- All strainers were found in a serviceable condition.
- The skin fittings / Amel type spigots around the transom and topsides appeared to be sound where examined externally and were considered to be at a reasonable height. Cockpit drainage was functional and as original.
- Although it was not possible to survey all the associated pipework in detail such as I was able to inspect appeared satisfactory.



13) MAIN COMPANIONWAY

Description

The main companionway closure consisted of a timber drop down wash board. A sliding hatch pulled across the top to the upper deck.

Observations, comments & tests

- The door was found in a serviceable condition.
- The locks were in a serviceable condition and when secured offered reasonable security against unauthorised entry.

14) HATCHES, PORTS AND WINDOWS

Description

- Lewmar type hatches of various sizes were found fitted to the coach roof and foredeck and all were of an aluminium framed type with acrylic glazing.

Observations, comments & tests

Hatches

- The locks were in a serviceable condition and when secured offered reasonable security against unauthorised entry.

- The escape hatches were adequate secure and in good order.
- The hatches and access doors appeared to be strong enough to withstand the point of load of a normal beings weight and the load to be expected from the water in the sea areas for which the vessel was apparently designed.
- The frames were lying tight to the decks.
- The aluminium anodising was found to be in serviceable condition.

Ports

- The locking mechanisms were tested and found to be in generally working order.
- Sealing gaskets appeared to be intact and free from evidence of leaks.

15) PULPIT, STANCHIONS, LIFELINES

Description

The pulpits were of stainless steel with feet that bolted to the decks and adjacent a GRP toe rail. Stanchions were again made of stainless steel bar through bolted to the deck.

Observations, comments

- No defects were found in any of the attachment points.
- All bolts were tight and secure.
- The pulpit and pushpits were found in serviceable condition with no visible damage. All stanchion bases were found secure and in a serviceable condition.
- The stainless steel arch, which was securely fitted to the transom of the vessel, served a dual purpose by providing robust support for both the solar panels and the dinghy. This configuration not only maximised the utility of the available space but also enhanced the vessel's self-sufficiency and operational capability. Supporting the dinghy via the stainless steel arch was a practical solution for dinghy storage, allowing for easy deployment and retrieval while minimising the deck space used. This setup is particularly advantageous for cruising and long passages, where efficient use of space and accessibility are paramount.



16) GROUND TACKLE AND MOORING ARRANGEMENT

Description

The ground tackle was found over the stem head fitting and deck mounted double roller stem head fitting bolted to the deck and consisted of one galvanised mild steel Delta type anchor and 60m of chain and one stainless steel Rocna anchor with two electric anchor windlass's and windlass control units. Second position held 90m stainless steel chain.

Mooring bits consisted of six permanently fixed aluminium mooring cleats fitted to the side decks.

Observations, comments & tests

- The main anchor was considered to be a suitable minimum weight for this type of vessel for sheltered waters and found to be in serviceable condition.
- The chains were found attached to the anchors by steel swivel shackles found in a good condition and not bent.
- The stem head fittings with the bow rollers were found secure.
- The bitter end of the chains were attached to an anchor point inside the locker with a length of lashing.
- The anchor windlass's were found securely mounted and tested to operate from the helm.
- The anchor locker hatch was found to be in serviceable condition and securely held in position with a latch. The locker itself was of a suitable size and well drained.
- All cleats were found securely mounted.
- A selection of fenders and warps were found onboard.



17) OTHER DECK GEAR AND FITTINGS

Description

Other deck gear and fittings consisted of turning blocks diverting the halyards back to the cockpit. The main sheet track with car and tackle was located across the wheelhouse forwards. Genoa tracks / cars were secured to the toe rails.

Steel handrails were running across the coachroof. 2 in number electric Lewmar winches with rope stoppers were on each side of the cockpit adjacent to the companionway. 2 x manual seen to be serviceable.

Observations, comments & tests

- All winches were rotated by hand and / or electric and were secured to the decks and were in a serviceable condition.
- No significant wear or UV degrading was found on the blocks and sheaves.
- Genoa tracks were secure and tight to the side decks / toerails.
- Genoa cars both on the port and starboard side decks were free moving up and down the track.
- The main sheet track, car and tackle were found in serviceable order.
- Rope jammers were free moving but were not all fully tested under any load.
- An electrically operated boarding ladder was fitted to the transom platform thus enabling a person who has fallen into the water a way of re-boarding the vessel.
- 5 ST winches, including 3 electric all working.



18) RIGGING ATTACHMENT POINTS

Description

The forestay terminated onto a stainless steel bow stem plate with a chain plate partially down the stem. This was through bolted to the hull. The cap and lower shrouds terminated onto a stainless steel chain plate that was bolted through the topsides to internal reinforcement that was linked to the structural grid moulding spreading the loadings throughout the hull.

Observations, comments

Cap and lower shroud attachment points.

- No crazing, cracks or deflection was found around any of the attachment points.
- No cracks or defects were found in the stainless steel fittings.
- All bolts were tight and secure.
- Securing strap plates internally were not easily accessible, however, no signs of any movement was observed around the furniture which was in the vicinity.

19) SPARS

Description

The yacht featured a ketch rig with two painted anodized aluminium spar masts and booms. The standing rigging was typically stainless steel wire, while the running rigging consisted of various lines and halyards used for sail control.

The spars consisted of a deck stepped aluminium anodized fractional mast profiles with 2 sets of aft swept spreaders and aluminium single line booms.

Observations, comments & tests

Mast

- The aluminium anodising on the masts was found to be in a good condition. No cracks or distortion in the masts were found. No corrosion was found around stainless fittings.
- The gooseneck fittings were cast alloy fittings and attached to the masts with bolts. The mast foot plates were found in a serviceable condition and free from cracks and distortion. The jockey pole was seen secured. There was a small crack in the lower sleeve which should be monitored when in use.



Booms

- The anodising was found in a serviceable condition. No cracks or distortion in the booms were found.

20) STANDING RIGGING

Description

The stainless steel standing rigging was of 12mm stainless steel wire with swaged terminals. The rigging was inspected at deck level only and any comments were restricted to a position 2m above deck.

Observations, comments & tests

- The rigging screws were of open chrome plated bronze types which were all found in serviceable condition.

- All relevant retaining pins were found in place.
- No sign of staining or broken strands were noted around the neck of the terminals.
- The rigging was not tested with a meter but was found to be tight.
- The shrouds all have plastic covers fitted to the deck which when lifted, dirt and water came out. This means water is constantly sitting in the swages. Suggest removal or replacement with larger diameter to allow full drainage.

21) RUNNING RIGGING

Description

Sheets and Halyards were mostly 10mm and 12mm braided polyester and were visually inspected onboard and seen to be in a good condition only. Jibs and main furling motors were controlled from the cockpit and seen to be operating

Observations, comments & tests

- The running rigging was visually examined, and fittings were manually tested. They were found to be in generally good condition.
- Jibs and main furling motors were controlled from the cockpit and seen to be operating

22) SAILS AND COVERS

Description

The sails were not laid out for detailed inspection but were inspected in random areas for their general condition while set to the rig or in bags. To help grade the condition of the sails and covers each was given a mark out of 10, 1 being unserviceable, 5 being serviceable for coastal cruising given the vessels age and 10 being new. Sails are not certified free from defects or for performance and durability.

Observations, comments

Genoa – triradial – Polyan 4D + Protective cover – 5.
 staysail – triradial cut – Polyan 4D + Protective cover – 5.
 GV – triradial cut – Polyan 4D – 5.
 Mizzen – h Polyan 4D – 5.
 Mizzen jib – nylon – 5.
 Asymmetric spinnaker of 160 m² – 5.

23) NAVIGATION LIGHTS

Description

The vessel was fitted with the following navigational lights: bi colour lights on stem head rail, sternlights on the transom, steaming light on the front of the mast and an anchor light at the mast head.

Observations, comments & tests

- The stern light was inspected and seen to be serviceable.
- The tri colour light attached to the stem head was secure and in good order.
- Navigation lights were intact and operational and seen to be working and used correctly they would comply with the international collision regulations for a vessel used at night while under command.

24) BILGE PUMPING ARRANGEMENT

Description

The vessel was fitted with a fixed manual diaphragm pump of unknown capacity and one 24 Volt electric pump were situated in the engine room with an automatic float.

Observations, comments & tests

- The handle for the fixed pump was fixed and the pump was tested and suction could be heard and was proven to operate correctly.
- The pipework was found to be serviceable and the end of the pipe fitted with a strum box which appeared to be correctly secured within the bilge.
- The electric pump was operating on both manual and auto.

25) FIRE FIGHTING EQUIPMENT

Description

The fire fighting equipment onboard consisted of one 2Kg dry powder fire extinguisher, and an engine auto gas system.

Observations, comments & tests

- The fire extinguishers appeared to be in a serviceable condition and were secured in each cabin.
- A fire blanket marked as complying with at least the "light duty" requirements of BS 6575 was fitted above near the cooker.

26) LIFESAVING AND EMERGENCY EQUIPMENT

Description

Various life jackets observed onboard along with life raft, flares, torches, tool kits, etc. Life raft container last service unknown. EPIRB listed on inventory and seen below fire extinguishers at companionway.

Observations, comments & tests

- Some equipment was out dated.

Recommendation

It is recommended that the vessel is fully equipped with suitable in-date safety equipment for the type of use being contemplated and the number of people onboard prior to going to sea. A guide list for vessels under 13.7 meters in length of suitable equipment is provided as an annex to this report. (Essential).

[Safety Equipment List Here](#)

27) ENGINE INSTALLATION

Description

The engine fitted was a four cylinder. Volkswagen TDI 140-5 – 140 HP turbo diesel with 110 Ah alternator. Engine number: TDI 1655/TDI ISO / TDI. This was coupled to a forward, neutral and reverse gearbox with 3-bladed propeller. The Amel transmission in front of the gearbox was made out of two pairs of bevel gears running in a housing full of oil.

Observations, comments & tests

- No recent service records or documentation was found aboard at the time of the Survey.

- Engine access was found to be generally good.
- The engine was in a good condition cosmetically.
- The bilge below the engine was reasonably clean and dry.
- The engine beds were of steel plate to reinforced glass construction stringers with no movement, distortion or stress cracks noted.
- The engine bolts were tested and found to be tight.
- The turbo housing was disconnected at the time of the survey with some corrosion noted inside the housing to monitor.

Lubrication

- The dip stick indicated the oil in the engine to be at the correct level with no evidence of water being present in the oil.
- The engines filler cap was lifted and no evidence of emulsification could be found on the underside of the rocker cover or filler cap.

Exhaust

- The exhaust elbow was found in a serviceable condition with no evidence of leaks along the run of flexible piping.

Cooling

- The raw water pump face plate was found free from leakage.
- No leakage was seen in the closed water system.
- The heat exchanger ends were serviceable and there was no evidence of overheating.
- The 1 x seawater water inlet strainer and piping was found to be in serviceable condition.

Electrical

- The control panel was found to be in visually serviceable condition.
- The alternator belt was found tight, secure and in good order.
- The 24 Volt alternators were securely mounted and the connections secure and well made.

Gearbox

- The gearbox oil was not checked, however, no oil leaks were noted around the gearbox.

Operation

- It was not possible to run or check the compression of the engine nor was it practicable to remove injectors and check the actual cylinder pressures, however the machinery was superficially clean, free of significant rust and excessive oil leaks and appeared to be in a serviceable condition. It is always strongly recommended that the engine is further examined and tested by a competent Marine Engineer familiar with this type of machinery prior to purchase.

Recommendation

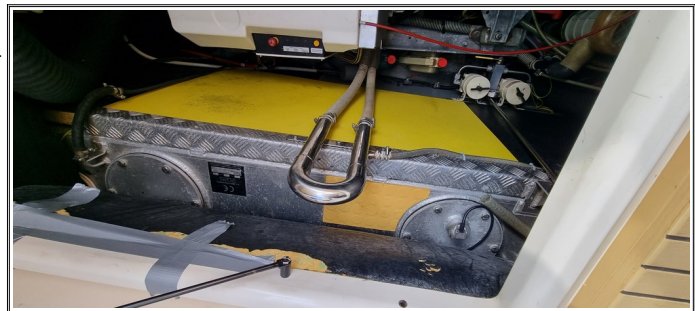
It is important to obtain from the owner and keep safely all service records to provide proof of the service history of the engine for selling on.

The turbo charger on the engine is to be professionally refitted.

28) FUEL TANKS AND FUEL SYSTEM 900 Litre

Description

The vessel was equipped with a single free-standing fuel oil tank, constructed from aluminium metal, which was inspected to the extent feasible. Upon examination, the tank was found to be in a satisfactory original condition.



Observations, comments & tests

- All flexible fuel hoses were found in a good condition and identified as being to ISO 7840 standards.
- The filters were found in serviceable order and free from leaks.
- The tank was found secure and where accessible in a good cosmetic condition with no leakage evident in their sighted areas.
- The filling pipe was taken to deck level and was so arranged that they were not possible for fuel to overflow into the vessels hull or bilge. No checking of the deck connection seals were carried out.
- The vent pipe opening was furnished with an effective flame arrestor and the end of the pipe was fitted in a position where no danger would occur from escaping fuel or vapour.
- An emergency fuel shut off cock was correctly fitted at the tank end and was operable from inside the yacht.

29) GENERAL ACCOMMODATION

The yacht boasted a large rear cabin that included a double bed, ample storage, and a private bathroom complete with a shower. (6+1 berths). Progressing towards the front, a fully-equipped galley area with necessary appliances and storage options, leading into a lounge area that offered a dining space and seating with additional berths and cabins as you went forward.

Observations, comments, and tests conducted during the survey yielded the following findings regarding the vessel's interior condition:



- The secondary wood fit-out displayed no internal structural defects, indicating a well-maintained and structurally sound interior.
- All doors and their associated hardware were observed to fit their frames appropriately, demonstrating proper installation and maintenance.
- There was no significant damage noted to the finishes throughout the cabin areas, suggesting careful use and upkeep of the vessel's interior spaces.
- Soft furnishings were found to be in a serviceable order, indicating they were in a condition that is suitable for continued use without the need for immediate repair or replacement.
- Headlinings throughout the vessel were secure and well maintained, reflecting attention to detail in the vessel's upkeep and contributing to the overall aesthetic and functional integrity of the interior.

30) GAS INSTALLATION

Description

The gas bottle stowage was located in a dedicated locker on the side deck, specifically designed to safely house the gas system components. Within this locker, two butane gas cylinders were stored, indicating the vessel's preparedness for extended use of gas-powered appliances. The system utilised flexible piping to connect the bottle-mounted regulator to the copper piping situated within the locker, demonstrating a common and generally reliable method of gas transport within marine environments.



This copper piping was then directed through the bottom of the gas box and through the bulkheads, leading to a position behind the cooker. At this juncture, the system transitioned back to flexible piping to facilitate the final connection into the cooker. This setup, incorporating both rigid and flexible piping, is typically designed to balance the need for durability and vibration resistance (offered by copper piping) with the need for flexibility and ease of installation (offered by flexible piping).

General

- The system was not broken into and pressure tests are outside the scope of this survey and should be done by an approved gas safe registered engineer.

Bottle storage

- The cylinders were found in a good cosmetic condition.
- The locker was found to be correctly self draining to the atmosphere.

Supply pipe

- The flexible hose from the bottle regulator to the fixed piping was found to be of a BS 3212/2 standard and in a good condition.
- The copper pipe where accessible was securely clipped at regular intervals to prevent any unnecessary movement.
- The flexible hose from the pipe to the base of the cooker was of a BS 3212/2 standard type orange hose in a good condition.

Regulator

- The regulator was found in good serviceable condition and of a EN12864 Annex M ISO standard.

Appliance

- The cooker was found in visually serviceable condition with flame detection devices on all burners.

Recommendation

The bottled gas installation was inspected visually only and pressure tests were not undertaken within the scope of this survey. All gas systems should be regularly tested as part of a normal preventive maintenance routine.

Additional: Washing machine / dryer and dishwasher seen to be in a serviceable condition.

31) FRESH WATER TANKS AND DELIVERY 900 Litre

Description

The two built in GRP water tanks were installed amidships. Plastic piping with clipped connectors supplied the pressured water pump which provided water to the galley, heads and shower outlets. Hot water was supplied by a calorifier tank and immersion.

Observations, comments & tests

- All piping that was accessible and visibly inspected was satisfactory clipped and secure.
- The water pump was tested and heard to operate.
- The tanks were securely fixed down and where access was available were found in serviceable condition.
- The hot water tank and immersion was visibly inspected and then turned on and the unit appeared to be functional in good order. There was small leak on one of the connections of the tank.
- The watermaker was not tested, however, all parts of the system, which were accessible without removal of bulkheads, panels, etc; were carefully examined. Every effort was made to determine the systems installation compliance compared to similar existing systems. The system has been sensibly installed and was found to be in a good operating condition.

Recommendation

During the inspection, a minor leak was identified on one of the connections to the hot water tank. This issue, while relatively small, warrants attention to prevent potential deterioration of the unit's performance or water damage to the surrounding area.

32) HEADS

Description

The heads compartments onboard were equipped with two Jabsco type marine toilets, designed to offer flexible waste management options. These toilets were capable of discharging waste directly overboard or, alternatively, routing it through ball valves/dump valves to two sewage holding or blackwater tanks. This system allowed for the adaptation to various maritime regulations concerning waste discharge, ensuring the vessel can operate in compliance with environmental standards in different jurisdictions.

Observations, comments & tests

- All piping that was accessible and visibly inspected was found secure and in a serviceable condition.
- The heads were well fixed down and secure. No significant staining was seen around the clips and all were clean and bright.
- The flush system from the toilets was not tested with the vessel ashore.

Recommendation

The inspection revealed that the diaphragm seal on the grey water pump was damaged, compromising the pump's integrity and functionality. Given the nature of the damage, it is recommended that the complete unit be replaced rather than attempting a repair. The grey water pump is essential for managing non-sewage wastewater from the vessel, including water from sinks, showers, and laundry, making its proper function crucial for the boat's operational efficiency and environmental compliance.

33) ELECTRICAL INSTALLATION

Description

Solar panels mounted on 440 W gantry – with Victron charge regulator.
New service battery fleet from June 2023 – 12 x 120 Ah / 24V – 24 V 110 A/H alternator.

The units had been split into two banks one as dedicated engine starting and the others for domestic supply. In addition to the 24 volt DC system a 220V AC shore power system was found with cabin outlets. Power entered the vessel via a plug and socket mounted on the aft deck / cockpit and lead to an RCD consumer unit in the cabin which supplied AC power to a battery charger and outlet sockets.

Observations, comments & tests

- The engine and domestic batteries underwent testing, with the voltage measurements recorded indicating that they were fully charged. This finding suggests that the batteries are in a good state of health, capable of providing the necessary power for both the engine's starting requirements and the vessel's domestic electrical needs.
- Ventilation to the batteries was seen to be adequate.



- All cables were securely clamped to the battery terminals.
- All batteries were found secured in place within the confines of the storage lockers.
- The wiring was PVC insulated, and in the *limited* places for inspection, the wiring was adequately clipped up and fitted where necessary with bulkhead glands and crimped end fittings. The cable sizes appeared to be adequate for the circuits examined and the DC cables were all of the multi-strand type.
- The DC system was fitted with a master isolator switch and it was considered to be installed as close to the batteries as practicable.
- The 220 volt system was plugged into shore power and the system was functional and was properly protected by an RCD breaker. The main shore power lead was seen to be serviceable.
- The battery charger was seen to be neatly installed and in reasonable cosmetic condition and proven serviceable.

34) ELECTRONICS AND NAVIGATION EQUIPMENT

Description

The electronic navigation equipment found onboard was located in two areas, in the cockpit at the helm and down below at the navigation table.



Observations, comments & tests

- The binnacle compass appeared to be correctly filled with fluid.
- GPS Furuno GP 150 – switched on and display damaged.
- 12" Navnet 3D screen – switched on and display damaged.
- Furuno GPS + AIS FA 50 antenna – switched on and display damaged.
- B&G Hydra 3000 Multi – switched on and display damaged.
- Furuno 1832 radar – switched on and display damaged.
- VHF ICOM IC-M506 plus handheld spare. (battery required) – switched on and display damaged.
- Auto pilot x 2 – tested and operating.

35) REFRIGERATION

Description and test

The refrigeration units in the galley and below the saloon seating were switched on and heard to start up and the units cooled after a short period.

36) AIR CONDITIONING / HEATING

Description and test

Two air conditioning units were identified onboard, which were supplied with seawater from a large pump situated in the engine bay. Although it was not feasible to test these units with the vessel ashore, they appeared to be in a serviceable and working condition. This observation is based on a visual inspection and the general state of the units and their components. Despite the lack of operational testing at the time of survey, the units' condition suggests that they were maintained and likely to perform as expected when in use.



The inspection included the observation of a Webasto diesel-driven warm air heater, which was seen to be in good operating condition and competently installed. This evaluation ensured that the heater met the standards required for both safety and efficiency, in line with the guidelines established by the Boat Safety Scheme (BSS) and the International Institute of Marine Surveying.



37) GENERATOR

Description and test

Cummins Onan generator 11KV.

The generator installation was not operated during the survey due to the vessel being ashore; however, it appeared to be in a good serviceable condition upon visual inspection. Notable observations included a small amount of corrosion and an old water leak on the exhaust riser, which should be closely monitored. These findings suggest that, while the generator exhibits signs of wear common to marine environments, its overall condition remains functional.

38) BOWTHRUSTER

Description and test

The bow thruster installation underwent a visual inspection and was determined to have been competently installed, appointed, and found to be appropriate. The isolator, situated in the anchor locker was properly secured. All components of the system, accessible without the need for removal of bulkheads, panels, or similar barriers, were meticulously examined. Considerable efforts were undertaken to ascertain the system's installation compliance in comparison with similar existing systems. The system has been sensibly installed and was ascertained to be in good operating condition.



39) SUMMARY OF ADVISORY NOTES AND RECOMMENDATIONS

<u>Ref</u>	<u>Recommendations</u>
Section 3	An area of gelcoat damage on the starboard side of the keel / forwards was noted. Based on these findings, it is recommended that the area with gelcoat damage undergoes thorough repair. This should include drying out the area to ensure moisture levels are reduced before applying a new gelcoat layer. Proper drying is essential to prevent the trapping of moisture, which could exacerbate the problem over time. After the repair, it is advisable to conduct another moisture meter reading to confirm the effectiveness of the drying process. Details page 7.
Section 9	Given the observations detailed on page 12 regarding the condition of the rudder and skeg, it is crucial to initiate a comprehensive repair process. This process should commence with the drying out of the affected areas to ensure the moisture content is reduced to acceptable levels. Following this, the identified cracks and gelcoat damage should be addressed and repaired.
Section 10	Inquire with the owner regarding the last replacement date of the shaft seal and wear-out bearing, which is due every 800 hours. During the inspection, the owner presented the Surveyor with a new seal that is kept onboard as a spare.
Section 26	It is recommended that the vessel is fully equipped with suitable in-date safety equipment for the type of use being contemplated and the number of people onboard prior to going to sea. A guide list for vessels under 13.7 meters in length of suitable equipment is provided as an annexe to this report. (Essential).

Section 27	It is important to obtain from the owner and keep safely all service records to provide proof of the service history of the engine for selling on.
Section 30	The bottled gas installation was inspected visually only and pressure tests were not undertaken within the scope of this survey. All gas systems should be regularly tested as part of a normal preventive maintenance routine.
Section 31	During the inspection, a minor leak was identified on one of the connections to the hot water tank. This issue, while relatively small, warrants attention to prevent potential deterioration of the unit's performance or water damage to the surrounding area.
Section 32	The inspection revealed that the diaphragm seal on the grey water pump was damaged, compromising the pump's integrity and functionality. Given the nature of the damage, it is recommended that the complete unit be replaced rather than attempting a repair. The grey water pump is essential for managing non-sewage wastewater from the vessel, including water from sinks, showers, and laundry, making its proper function crucial for the boat's operational efficiency and environmental compliance.
Note	During the survey, it was observed that the turbo housing on the engine was disconnected, and upon inspection, some corrosion was noted inside the housing. This condition requires monitoring to ensure that the corrosion does not progress to a point where it could impact the turbocharger's efficiency and reliability.

40) CONCLUSION

The vessel under survey appeared to be a standard production version of an Amel 54 Yacht, with no unusual modifications or changes observed. Based on the findings of the survey, the yacht was deemed to be in good structural condition overall. Additionally, the vessel appeared to have been very well maintained, was well equipped, and was found in a good, clean condition. Given these observations, it is our opinion that the yacht is worthy of purchase for the intended use as a general pleasure vessel within sea areas as laid down by the European Directive (94/25/EC) class A, ocean.

With the recommendations in this report properly implemented, the vessel should be suited for her intended use as a Yacht for general pleasure use within sea areas laid down by European Directive (94/25/EC) class A, Ocean, provided that all recommendations as given later within this report are carried out within the stated time limits. With the recommendations related to industry standards and other safety issues in this report properly implemented, the vessel should be suited for her intended purpose. Recommendations concerning maintenance and upgrades

should be considered normal maintenance or improvements to be done by a prudent owner and are not intended to detract from the vessel's overall condition or value.

VALUATION

Vessels Name: 'GANESHA'.

Make and Model: Amel 54 Yacht (2011).

HIN: FR-AML54171AIII

To establish a valuation, the overall condition and inventory and any other aspects that might affect the value has been taken into account. Comparison has been made with other vessels of a similar type and style recently advertised for sale. From an average of advertised prices and or publicised sale prices, deductions and additions have been made for the defects and/or level of equipment noted in the survey report.



Based on the recent survey, the fair market value with unencumbered title is assessed as being in the region of **€520,000 (Five Hundred and Twenty Thousand Euros)**.

Dinghy inflatable and petrol outboard engine Yamaha 15HP outboard valued at €1000.

This valuation was based upon opinions only and not a representation of fact, nor does it carry any grantees of the particulars of information on which the options were based. In preparation of this valuation, the undersigned accepts liability to the instructing client only and to no other third party.

Signed *Steven Truss* **Steven Truss**

APPENDIX ONE – SAFETY EQUIPMENT LIST

The lists below cover essential, mandatory and recommended SAFETY items for vessels up to 13.7 metres and over 13.7 metres in length.

Essential

Lifejacket (or buoyancy aid) for all on board.
Safety harnesses.
Kill cord and spare (varies with type of boat).
Chart(s), Almanac and Pilot Book.
Hand Bearing Compass.
406 MHz EPIRB/PLB (varies with area of operation).
Distress Flares.
First Aid Kit.
Emergency tiller (for wheel steered boats).
Equipment to deal with water ingress (Bailer, Bilge Pump, Bungs).
Emergency VHF aerial for fixed VHF (varies with type of boat).
Anchor and cable/warp.
Tools and spares (engine, electrics, rig, sails).
Spare fuel.
Waterproof torches.
Mooring lines and fenders.
Knife / Axe.
Pump and puncture repair kit (for inflatable boats).
Alternative means of propulsion (oars, outboard engine etc.)
Ship's log book.
Accurate clock or watch.

Mandatory

Radar reflector.
Lifesaving signals.
Navigation lights, day shapes and sound signalling equipment.
Marine Radio (VHF).
MF/HF radio (varies with area of operation).
Handheld white flares (for collision avoidance) or powerful torch.
Liferaft and Grab bag (varies with area of operation).
Firefighting equipment.
Equipment to deal with a man overboard (life ring, dan buoy etc.)

Bucket (strong with lanyard).

Boarding ladder.

Recommended

Fixed steering compass (lit at night).

Drawing instruments for navigation (plotters and dividers).

Binoculars.

Echo sounder.

Log.

GPS/Chart Plotter.

Navtex.

Barometer.

Storm sails (for sailing yachts).

Bosun's chair (for sailing yachts).

Tender.

Tow rope.

Boat hook.

At your discretion

SSB radio and / or satellite phone.

Automated Identification System (AIS).

Radar.

SART/ AIS SART.

Propeller guards and rope cutters.

Sea anchor and/or drogue.

