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**9A, The Dry Dock,
British Waterways Business Centre,
Navigation Drive,
Enfield,
EN3 6JJ.
Mobile: +44 (0) 7836 584 148**



HULL CONDITION REPORT

s.s.n.b MONOUCHE

Dated: 2nd November 2021 **Client: ██████████**

██████████
██████████



General View from Forward



General View from Aft

1 TERMS OF SURVEY

A condition survey provides an opinion on the structural condition of all visible and significant aspects of the structure of the vessel as presented for the survey, with reference to hull condition.

Machinery, masts, spars, rig and sails, ancillary equipment, gas, electrical, electronic, pumping, and plumbing equipment, sewage treatment plant, refrigeration equipment, air conditioning, navigation aids, other sundry services and tankage are inspected only for visual appearance and installation standards, without dismantling or specific test. Where a mast is stepped, only those parts of the mast and rig up to head height are inspected in detail.

Hull condition is assessed by general non-destructive examination and by assessment of the condition of sample areas only. Where hulls carry heavy layers of paint, pitch or epoxy finishes the condition of all areas of the substrate cannot be guaranteed. The survey does not provide an opinion on condition of areas not presented visible, for example behind linings or insulation, beneath fixed flooring etc. unless these are accessible through visible portable traps, and should not be taken to preclude completely the existence of isolated damage or deterioration concealed by paint, fillers or other means it should be particularly noted that areas where concrete has been poured conceals defects in the surrounding areas and the surveyor cannot be held liable for any subsequent damage or defects noted in these inaccessible areas.

We cannot be held liable for any corrosion caused because of incorrect anodes being used or as a result of them not having been renewed regularly.

Any survey "afloat" or "In the mud" denies access to the underwater surfaces of the hull and the surveyor shall not be held liable for any subsequent defects found in these areas.

Any engine and generator installations are inspected visually, and (where possible if presented in commission,) the engine is run to assess its general running characteristics, vibration levels etc. No dismantling of the engine or associated equipment is carried out within the scope of a condition survey so no detailed comment upon the condition of internal parts is possible without separate full strip down and mechanical survey.

Electrical, plumbing, heating and other services are inspected where visible but not operated unless presented in commission. Electrical wiring is inspected visually (only) in all cases.

Any portable gas installation is inspected visually only, and pressure tests are not undertaken within the scope of the survey. All gas systems should be regularly tested as part of a normal preventative maintenance routine. Tanks are inspected where visible but not internally and are not pressure tested.

[REDACTED]

Windows, hatches, and external doors are not tested for water tightness. Hull fastenings and skin fittings are not withdrawn for inspection.

Any estimate of valuation provided is based on known average retail values achieved by craft of similar type and condition in the same location and should therefore not be confused with replacement value, which may be substantially higher, particularly in the case of rare or unusual boats.

Such as registration number, tonnage, build year and dimensions are normally stated as advised or as exhibited aboard the ship, and are not authenticated. Dimensions, if measured are by means of steel tape measure and should not be relied upon as to total accuracy. This survey does not seek to establish that clear title to the vessel exists or that it is being offered for sale free from all debts and encumbrances.

Unless specifically instructed to the contrary the inspection, and any comments made relative to design, performance, or suitability of the vessel, are based on the assumption that the vessel will be used as a private pleasure boat in the waters for which it was designed.

Unless specifically stated to the contrary this inspection and report does not seek to address compliance with any national or international codes, standards, or regulations.

Our liability shall expire 12 months after completion of our services in respect of which liability is alleged to arise and we shall thereafter have no liability in respect of those services and/or any alleged default in connection with the provision thereof; under no circumstances shall our liability exceed the market value of the vessel.

This report is prepared solely for the benefit of the client to whom it is addressed and by whom it was commissioned, and no responsibility is accepted to any third party to whom the report may be passed or sold. This survey contract shall be governed by and construed in accordance with English law. Any dispute arising hereunder shall be submitted to the exclusive jurisdiction of the Courts of England and Wales. No responsibility is accepted for any consequential losses arising, including but not limited to loss of profit, loss of use or business interruption.

Unless specifically stated in the report we recommend a four-year schedule for slipping/dry docking and surveys, and we also specifically recommend that anodes be renewed every two years and as stated above we cannot be held liable for any corrosion caused because of incorrect anodes being used or as a result of them not having been renewed regularly.

MARINE SURVEY CONTRACT

To: **Broomfield Marine Services, 9a, The Dry Dock, British Waterways Business Centre, Navigation drive Enfield EN3 6JJ.**

I, having obtained permission from the owners, hereby request that you carry out an out of water Pre-Purchase/Condition/Insurance/Valuation Survey, subject to your normal terms of survey and to any special instructions listed below, on the vessel:

Name: MANOUCHE..... Type NARROW BOAT

Length 63 FEET 6 INCHES . Construction Material Mild Steel Date of Build 2003

To be inspected at The Dry Dock, Navigation Drive, Enfield, EN3 6JJ. on 2/11//2021

[REDACTED]

I agree to pay any reasonable expenses incurred by the surveyor during the survey process including fuel, food etc at cost and that these are payable with the final payment of 50% except where foreign travel is to be undertaken in which case all flights and accommodation must be paid at the same time as the deposit and I agree to pay any reasonable expenses incurred by the surveyor for undertaking any further analysis required as a result of survey findings.

FEE PAID BY CASH TRANSFER ON THE DAY OF SURVEY - Thank you.

I hereby understand that I am responsible for all charges for boat movements, slipping and docking, arising in preparation for and process of the survey.

It is understood and agreed that the surveyor's report will be a factual statement of the examination carried out within the stated limitations and with the opinions given in good faith as far as seen and accessible at the time of the survey. It carries with it no guarantee against faulty design or latent defects or suitability of the vessel for any

[Redacted]

s.s.n.b. MANOUCHE
Date 2nd November 2021

particular purpose, or any guarantee of compliance with any particular national or international rule, requirement, regulation, law, standard or code unless specifically requested as a special instruction on this form and confirmed in the text of the report. Liability for the report is solely to the instructing client and to no other third party unless otherwise specified and agreed.

I acknowledge that this survey contract shall be governed and construed in accordance with English law and that any dispute arising hereunder shall be submitted to the exclusive jurisdiction of the Courts of England and Wales.

[Redacted]

SignedAddress: [Redacted]

Telephone number [Redacted] e-mail address [Redacted]

Vessel Owner's or Broker's name and telephone number
Please advise any special instructions:

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2 Summary.

This document is a General Condition Report on the: -

This document is a General Hull Condition Report on the: -

s.s.n.b. MANOUCHE.

carried out by the undersigned whilst acting solely as an agent of Broomfield Marine Services and has been prepared specifically for the named clients and is for their use only. Copies in whole or in part should not be released to or consulted by other parties without the express permission of Broomfield Marine Services.

Whilst all due care and diligence has been exercised in the collection of data for and the preparation of this report., purports to provide an advisory service only, based on the opinion and experience of the individual consultant responsible for its compilation.

This report is a factual report on the inspection carried out and the opinions expressed are given in good faith as to the condition of the vessel as seen at the time of the survey. It implies no guarantee, no safeguard against latent defects, subsequent defects or defects not discovered at the time of the survey in woodwork or areas of the vessel which were covered, unexposed or inaccessible to the surveyor internally due to the installation of non-removable linings, panels, and internal structures etc.

Copyright remains with Broomfield Marine Services.

The Reason for the Survey.

We were instructed to carry out an out of water structural condition survey and evaluation of the hull for insurance purposes only.

The Scope of the Survey.

The normal survey for pre-purchase, insurance, mortgage, or other reasons carried out by the staff of this Company provides an opinion only on the structural and mechanical condition of the vessel. This applies to all reasonably accessible and visible aspects of the vessel as presented to the surveyor with special reference to the hull. It should be noted, however, that, although coatings have been removed in sample areas and we have inspected the hull surface as far as practical, we cannot confirm the detailed condition of any area that was not visible at the time of our survey. Our conclusions are therefore based on the evidence of the sample areas examined and we cannot guarantee that there are no defects such as hydrogen blistering or galvanic, electrolytic, or microbiological pitting behind any bottom or topside coating other than those visible at the time of the survey.

Hull condition is assessed by general non-destructive examination and by assessment of the condition of sample areas only due to the lack of access to numerous areas.

It should be noted that any survey afloat or in the mud restricts access to the underwater surfaces and, therefore, the condition of those areas cannot be ascertained or guaranteed.

The survey does not provide an opinion on the condition of areas not presented visible. For example, underwater surfaces, behind linings, beneath fixed floors, in way of fixed ballast *etc.*, unless those areas are accessible through visible, portable traps and this Report should not be taken to preclude completely the existence of isolated damage or deterioration concealed by paints, surface rust, ballast, fillers or other means.

No liability whatsoever is accepted for any injury, death or damages arising from those parts of the vessel to which access could not be gained at the time of survey.

Such as registration numbers, tonnage, build year are normally stated as advised or as exhibited aboard the ship, and are not authenticated. Dimensions, if checked, are measured by means of steel tape but should not be relied upon as

to total accuracy. This survey does not seek to establish that clear title to the vessel exists or that it is being offered for sale free from all debts or encumbrances.

Unless specifically instructed to the contrary the inspection, and any comments made relative to design, performance, or suitability of the vessel, assume that the vessel will be used as a private pleasure boat in the waters for which it was designed. Unless specifically stated to the contrary this inspection and report does not seek to address compliance with any national or international codes, standards, or regulations.

The report is prepared solely for the benefit of the client to whom it is addressed and by whom it was commissioned, and no responsibility is accepted to any third party to whom the report may be passed or sold.

The survey contract shall be governed by and construed in accordance with English law. Any dispute arising hereunder shall be submitted to the exclusive jurisdiction of the courts of England and Wales. No responsibility is accepted for any consequential losses arising, including but not limited to loss of profits, loss of use or business interruption.

Survey Conditions.

The vessel was found in commission as a mobile floating home.

Within the limits of the access available, the following was found: -

The vessel was found under cover on mild steel keel blocks at the site stated in the introduction. There was limited access to the hull externally and internally in way of linings, tanks, and other normally installed equipment and similar permanently fitted items were in situ and this restricted access to the internal surfaces of the hull and deck in way thereby preventing detailed survey in those areas and we cannot be sure that those areas are free from defect.

It was noted that there were no access hatches in the cabin sole except in the engine room and therefore only limited examination of the main structure in this area was possible and therefore we cannot guarantee its condition.

The vessel, where accessible, was found reasonably well maintained using good marine quality materials and good boat building practices. The overall structure where visible was found satisfactory although full survey was limited at the time of the inspection, as stated.

Most of the defects noted were of a relatively minor or cosmetic nature or due to fair wear and tear and may be rectified with reasonable servicing and seasonal maintenance.

In our opinion, therefore, the subject vessel was found at the time of the survey in satisfactory structural condition and was considered an insurable risk provided all recommendations as given in this Report hereunder are carried out within the stated time limits.

The vessel was, in our opinion, suitable for continued use as a mobile floating home provided all recommendations are undertaken within the given time limits.

The Vessel.

Introduction.

This is to confirm that, at the request of

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

The undersigned attended the: -

s.s.n.b. MANOUCHE

at Enfield Dry Dock, 9a, British Waterways Business Centre, Navigation Drive, Enfield EN3 6JJ on the 2nd November 2021 and carried out, without the vessel being fully opened for survey, a Condition Survey of the hull only.

Type of Vessel

The vessel was a traditional style narrow boat with a raked, flat faced stem, flat plate keel with a reasonable cut up forward, flat bottomed, wall sided with a traditional straight sheer line with a single hard chine and an elliptical type of counter stern, single screw motor constructed from welded mild steel and in use as a houseboat.

Dimensions.

Length Extreme	19.35 m
Length Overall	19.05 m
Length of Water Line	18.75 m
Breadth Overall	2.08 m
Breadth Moulded	2.06 m
Depth Extreme	1.17 m
Depth Moulded	1.14 m
Freeboard Amidships*	0.56 m
Freeboard to engine vent	0.54 m
Draught Fwd.	0.48 m
Draught Aft	0.79 m
Length of Entry	3.05 m
Length of Run	3.51 m
Length Deckhouse	14.94 m
Depth of Deckhouse	0.97 m

The absolute accuracy of these figures is not guaranteed, and your attention is drawn to the Definitions of Dimensions in Appendix 2 to this Report hereunder.

* The vessel was not marked with an Official Load Line and the freeboard quoted here was measured from the top of the weather deck amidships to the actual still water line.

N.B. This Report should not be taken to imply that the vessel has enough freeboard or reserve buoyancy.

Builders and Date of Build.

According to the limited information available, the vessel was built in 2003 as a traditional style narrow boat of all welded mild steel construction. The builder was stated to be Colecraft Engineering Ltd. The build date was stated to be 2003 this was not confirmed from either a Builder's Plate or a Certificate of Conformity.

EU Directives.

Not seen.

Boat Safety Certificate.

Not seen.

Construction.

The vessel was constructed from what was stated and appeared to be shipbuilding quality hypereutectic low carbon (mild) steel. A grinding test, a simple file test and a relative hardness test using a hard, high carbon steel cutting chisel and engineer's 3.5 kg club hammer were carried out on several places along the ship's hull. These are necessarily subjective tests but, based on the writer's training and experience, the achieved results were consistent with the stated nature of the material of construction, but no guarantee can be given that it was, in fact, mild steel. The precise carbon percentage could not be ascertained.

b. Details of Construction.

Details of the hull construction/scantlings were measured as follows: -

The vessel was of welded mild steel construction with 6.00 mm sides, 10.00 mm bottom and 4.00 mm house sides with a calculated 1.63 scantlings numeral. The primary supporting structure, frames, stringers, floors *etc.*, were inaccessible and their scantlings could not be measured.

Registration.

The vessel was on the Canal and River Trust Register and bore the Number CRT 514655. The number was found stamped into a metal plate placed in the accommodation block window each side aft.

The name of the vessel was found clearly painted on the bows storage box and was seen on the paper licence.

It should be noted that the Registration Certificate is not a Document of Title, nor does it necessarily contain notice of all change of ownership and in no case does it contain an official record of any mortgages or other maritime liens affecting the vessel.

Tonnage

The Thames Measurement tonnage was calculated by the undersigned to be 13.83 tons*.

*Your attention is drawn to the Definitions in Appendix 2 to this Report hereunder.

Hull Survey.

The stem, stern and side plating above the waterline were hammer tested with an engineer's 1 kg ball pein hammer and found generally sound. It was noted that, due to the low height of the keel blocks, there was a restricted view to the base plate. However, the areas tested were found to be good.

There was no sign of hydrogen entrapment and blistering.

We were advised that the vessel had previously been lying in tidal river conditions conducive to the presence of the sulphur reducing or oxidising bacteria *desulfurovibrio* and *desulfotomaculum*, the bacterium *thiobacillus* or the so-called 'iron bacterium' *gallionella* but no signs of these bacteria were found.

Ultrasonic Thickness Measurements.

The vessel was then subjected, where practical, to an ultrasonic thickness examination in accordance with the Code of Practice published by the International Institute of Marine Surveying. It should be noted that no builder's drawing, data or records and a shell expansion drawing were available and, therefore, the original building scantlings could not be determined accurately.

The vessel was fitted with a wearing strip formed from the base plate over hanging the side wall by 10 mm each side and required no further work.

Selected points over the accessible hull at stations approximately 1.0 metres apart were cleaned of surface dirt and scale and the thickness measured ultrasonically using a Tritex Multigauge 5700 Gauge and a temperature graded water soluble couplant. With this machine it is not necessary to grind off the surface coatings as it can read through coatings up to 6 mm thick. The machine used had a manufacturer's stated calibrated accuracy of ± 0.1 mm. During the taking of the readings, the instrument's calibration was rechecked several times to ensure that it had maintained its validity and accuracy.

Bottom Plating.

The bottom readings - some 20 in total number - which, as might be expected, appeared to have a probability density function that approximately followed the normal distribution, had a range from 9.60 mm to 9.90 mm with a median of 9.80 mm and gave an arithmetic mean reading of about 9.78 mm with a mean deviation of ± 0.10 mm. As stated, the points measured were randomly selected and the number of readings taken was based on a statistically significant percentage of the bottom plate area of the vessel

Side Shell Plating.

The side shell readings - some 60 in number - which also, as might be expected, again approximately followed the normal distribution, had a range from 5.80 mm to 6.10 mm. with a median of 5.90 mm and gave an arithmetic mean reading of about 5.93 mm with a mean deviation of ± 0.07 mm. Again, as stated, the points measured were randomly selected and the number of readings taken was based on a statistically significant percentage of the side surface area of the vessel. The thickness readings were found to be generally very good. It was noted there was some historic pitting below the water line which should be examined at each docking.

Deck Plating.

The deck readings - some 20 in total number - which, as might be expected, appeared to have a probability density function that approximately followed the normal distribution, had a range from 4.00 mm to 6.00 mm. with a median of 5.90 mm and gave an arithmetic mean reading of about 5.58 mm with a mean deviation of ± 0.77 mm. As stated, the points measured were randomly selected and the number of readings taken was based on a statistically significant percentage of the deck plate area of the vessel.

Uxter Plate.

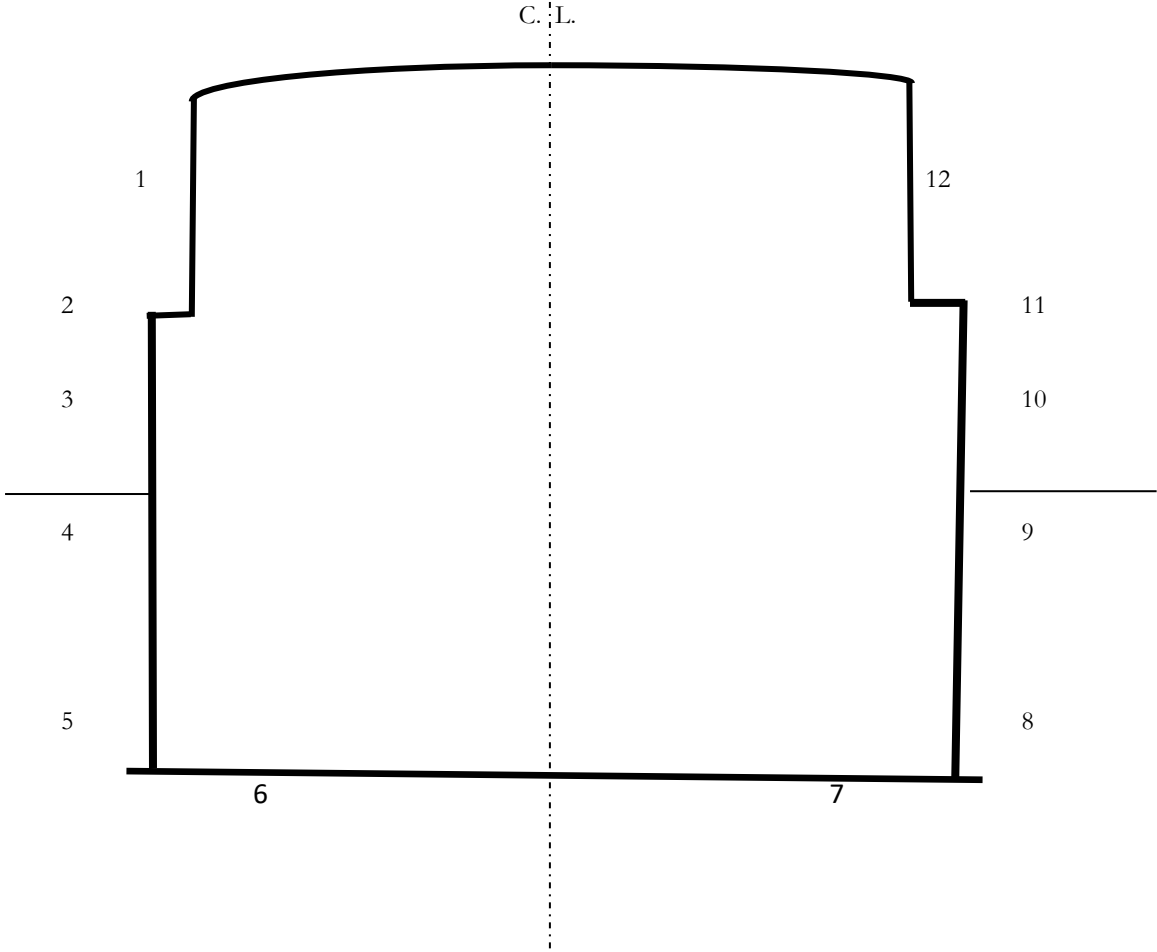
The deck readings - some 8 in total number - which, as might be expected, appeared to have a probability density function that approximately followed the normal distribution, had a range from 9.80 mm to 10.00 mm. with a median of 9.90 mm and gave an arithmetic mean reading of about 9.88 mm with a mean deviation of ± 0.06 mm. As stated, the points measured were randomly selected and the number of readings taken was based on a statistically significant percentage of the outer plate area of the vessel.

House Sides.

The house side readings - some 14 in total number - which, as might be expected, appeared to have a probability density function that approximately followed the normal distribution, had a range from 3.90 mm to 4.00 mm. with a median of 4.00 mm and gave an arithmetic mean reading of about 4.00 mm with a mean deviation of ± 0.00 mm. As stated, the points measured were randomly selected and the number of readings taken was based on a statistically significant percentage of the house plate area of the vessel.

a Midship Section.

The sketch below shows a typical section for the vessel looking forward and the approximate positions round the hull at which the readings were taken.



Readings (in mm)

Position Station	1	2	3	4	5	8	7	8	9	10	11	12
1 Forward		4.0	6.0	5.9	5.9	9.8	9.8	6.0	6.0	6.0	4.0	
2		5.9	5.9	5.9	5.9	9.8	9.8	5.9	5.9	5.9	5.9	
3	4.0	6.0	5.9	5.9	5.9	9.6	9.8	5.9	5.9	5.9	5.9	4.0
4	4.0	6.0	5.9	5.8	5.9	9.7	9.9	5.9	5.9	5.9	6.0	4.0
5	4.0	5.9	5.8	5.8	5.9	9.7	9.6	5.9	5.8	5.9	5.9	4.0
6	4.0	5.9	5.9	5.9	5.9	9.8	9.9	5.9	5.9	5.8	5.9	3.9
7	4.0	6.0	5.9	5.9	5.8	9.9	9.9	5.8	5.9	5.9	5.9	4.0
8	4.0	5.9	5.9	5.9	5.9	9.9	9.7	5.9	6.0	6.0	5.9	4.0
9	4.0	6.0	6.1	6.0	5.9	9.6	9.8	6.0	6.0	6.1	6.0	4.0
10		4.0	6.1	6.1	5.9	9.8	9.9	6.1	6.0	6.0	4.0	
Uxter Plate						9.9	10.0					
						9.9	9.9					
						9.8	9.8					
						9.9	10.0					
						9.9	9.9					

The Tritex 5600 machine used had a manufacturer's stated calibrated accuracy of ± 0.1 mm. During the taking of the readings, the instrument's calibration was rechecked several times to ensure that it had maintained its validity and accuracy.

Assessment.

An essential part of the General Condition Survey of this type of vessel is the determination of the remaining thickness of metal in various critical areas of the main structure and this is almost invariably carried out using ultrasonic methods.

The confidence limits that may be placed on the measurements is a direct function of the techniques involved, the skill and training of the operator and the type of machine used. The accuracy levels are of importance for future surveys of the hull structure whereby rates of corrosion may be determined. The unit used was of the multiple echo type which has the disadvantage in that it cannot discriminate between echoes from the back wall of the item being measured or flaws in the interior of the plate and the surveyor has no means of checking for such flaws. This fact must be borne in mind when interpreting the readings given in this Report. Similarly, on heavily corroded plates the slope of the echo can be poorly defined leading to errors that cannot be quantified. Laboratory tests have shown that the achievable accuracy varied between ± 0.5 mm on samples with a soft coating on the opposite wall and ± 3 mm where the sample had hard haematite or magnetite rust scale on the opposite wall. Further, while every effort was made to place the probe squarely onto the ground surface, in the normal circumstances of shipyard work, this cannot be guaranteed and that may be a further source of error. Nevertheless, it can be shown, statistically, that there is a 95 % probability that the true thickness lies within ± 0.5 mm of the readings given in this Report.

In assessing the thickness measurements, the following qualifications must be observed: -

1. The thickness readings given in each case are in mm and it is emphasised that the readings shown give no guarantee that the same thicknesses apply to other parts of the shell, bulkhead or other plating or structural items where these items were not measured at this time. The noted thicknesses must not be interpolated between adjacent thicknesses however closely spaced nor the mean figures given above regarded as the 'average' thickness for the plating or internal structure.
1. The number of thickness measurements taken on the shell was calculated on a statistically significant percentage of the area of the structural item under test and the readings were distributed in accordance with standard marine surveying practice, but no guarantee can be given that all thin areas on the shell plating have been found at this time.

It should also be noted that a corrosion rate of 0.1 mm *per annum* for general marine steelwork is considered acceptable. In the absence of accurate building data, it was not possible to determine the corrosion rate accurately on the subject vessel.

Cathodic Protection.

The vessel was fitted with twelve in number 2.5 kg freshwater anodes which were examined and found to be 10% wasted. The vessel was sufficiently protected, and no further action was considered necessary at this time.

N.B. Anodes should NOT be painted and should be renewed when about 80% consumed.

Any securing studs should also be examined at every slipping or dry docking and renewed if found to be wasted.

Bottom Coating.

The vessel was undergoing a re-paint with a bitumen coating.

Top Coating.

The vessel had been coated with a gloss paint coating which was found to be in good firm condition and required no further work

Skin Fittings and Seacocks.

Above waterline the other skin fittings all had an adequate freeboard in the still water condition and were of bronze flange type. The external flanges, strainers and fastenings were examined *in situ* externally by hammer and scrape testing and were found in good condition with no obvious defects and were securely fastened to the hull. The skin fittings passing through the hull were not fitted with screw down valves or cocks on the inside. It was not possible to survey all the associated pipe work in detail but such as we were able to inspect appeared in satisfactory condition with the connections in good order and secure.

See the Nota Beane in Appendix 2 to this Report hereunder.

Rudder and Hangings.

The rudder was of the semi balanced single plate type, constructed of mild steel with a mean height of 470 mm and a mean width of 690 mm with a balance dimension of 160 mm with a 6.0 mm plate thickness and found in good condition. The hangings were found good without undue wear in either the pintle or the gudgeon. The rudder was hung within a rudder tube inside of the counter stern steel plate, it was not practical to examine the rudder stock and its actual condition cannot be guaranteed. The rudder was not dismantled and the stock as far as accessible was examined visually but no guarantee can be given that it is straight or in good condition.

Propeller and Shaft.

The vessel was fitted with a 38 mm diameter stainless steel shaft with a plain coupling to a three bladed, right-handed solid alloy bronze propeller of about 520 mm diameter supported in a Cutless bearing. The precise chemistry of the material of the propeller could not be determined. The propeller dimensions were not checked for matching with the machinery power and revolution output. It was not checked for balance and no guarantee can be given that the system is free of vibration. The propeller was turned over by hand and the shaft appeared to turn freely with no sign of bending or distortion of the shaft and stern bush. It was examined and found good with a small amount of damage to the tips or the leading and trailing edges, it was hammer tested and found to ring true and was also scrape tested (using a sharpened steel scraper) and there was no sign of corrosion or dezincification in the metal. The propeller blades were also individually sighted for obvious signs of deformation, and none was found.

Bow Thruster

The vessel was fitted with a Vetus Bow thruster mounted on a mild steel tube with an internal diameter of 160 mm the motor head was fitted with a three bladed nylon propeller of 150 mm diameter this was tested and was found in working order

Stern Gear.

The stern gear was examined externally - without opening - and was found in superficially good condition. The propeller shaft was not drawn for survey, but the tail end was examined and no signs of surface flaking, fatigue or fretting corrosion or cracking of the shaft could be seen. The propeller was not removed from the shaft nor was the cone examined. The shaft in way of the propeller boss and bearing was specially examined and no sign of crevice corrosion developing noted but the non-existence of this defect, or of serious wear of the shaft inside the stern gland and the condition of the Cutless bearing cannot be guaranteed as these defects will only be discovered when the system is dismantled for overhaul.

Rubbing Strake and Harpings.

The vessel was fitted with a rubbing-strake of mild steel. D section bar of 52 mm x 13mm welded 240 mm and 730 mm below the weather deck, the vessel was also fitted with three quarter rails of close welded D section mild steel bar of 52 mm x 13 mm section one fitted to the deck edge one at 240 mm and 480 mm below the weather deck. The vessel was also fitted with two harpin; s of close welded mid steel D section bar of 52mm x 13 mm over the luff of the bow each side. They were examined and, apart from a few scuff marks, found in good order with no sign of any weep age or water marking and we believed that they were in good order.

Deck and Superstructure.

The deck was of mild steel flat plate and superstructure was of welded mild steel flat plate construction. They were examined and apart from some cosmetic paint damage and colour fading found in good order at the time of our survey.

Deck Equipment.

The vessel was fitted with a T cleat of cast mild steel construction welded on the centreline of the fore deck with a height of 120 mm and a width of 170 mm x and a waist diameter of 40 mm.

On each side aft was a single bollard of cast mild steel tube construction welded on each side of the after deck with a height of 120 mm with a waist diameter of 40 mm and a cast mild steel cap diameter of 70 mm. Each item was hammer tested and found in good condition, with no sign of hairline cracking or metal fatigue, structurally secure and without undue rope wear.

Guard Rails.

Guard Rails.

The vessel was not fitted with a taffrail.

Handrail.

The deck house was fitted with an integral type of handrail on each side of the deck house top plate of 52 mm diameter mild steel box section tube with a total height of 52 mm. They were examined and found in good order.

Doors and Hatches

The forward accommodation bulkhead was fitted with a central main door of mild steel lined with wood construction with clear exit dimensions of 575 mm x 1010 mm and a coaming height of 50 mm and fitted with a mild steel sliding hatch over with clear exit dimensions of 710 mm x 575 mm

The starboard after accommodation main door of mild steel lined with wood construction and had clear exit dimensions of 550 mm x 1020 mm with a coaming height of 50 mm, this was fitted with a sliding mild steel hatch over with a clear exit dimension of 800 mm x 550 mm.

The vessels were fitted with an upper side door the port side of mild steel construction lined with wood with clear exit dimensions of 540 mm x 700 mm and a coaming height of 100 mm.

The vessels were fitted with an upper side door on the starboard side was of mild steel construction lined with wood with a clear exit dimension of 535 mm x 800 mm and a coaming height of 100 mm. this was fitted with a hinged mild steel hatch over with clear exit dimensions of 535 mm x 280 mm.

The vessel was fitted two pigeon hatches fitted to the deck house top plate which had clear exit dimensions of 500 mm x 520 mm. and were not considered to be a viable escape route

All hatches and access doors were secure and lockable and fitted with lock down or wedge handles as appropriate. The hatches and similar openings were of such a size and placed in such a position that it was considered that they would allow easy escape from the accommodation in the event of fire and would not be likely to allow serious down flooding of the vessel.

* We draw your attention to the Definitions in Appendix 2 to this Report hereunder.

Ventilation

The vessel was fitted with four in number brass mushroom type permanently open accommodation ventilator. They were examined as far as practical and found in good condition and well secured.

The main accommodation forward and aft of the boat was fitted with a permanently grill type open ventilator. The ventilators were not fitted with permanent plastic or metal labels bearing the legend "Ventilator - Do NOT Close".

Windows and Scuttles.

The brass framed scuttle type windows were examined and found in fair order with the seals as far as we could tell also in good order. It was not possible to water test these items but there were no water witness marks to indicate any leakage. This point can only be confirmed and dealt with as found necessary by experience.

Steering Gear.

The vessel was fitted with a swan neck type steering gear. This was tried hard over to hard over and found in good, smooth operational condition and to sit correctly on the stops. A proper stop was fitted to limit over steering.

The rudder stock was hung in plain mild steel bearings welded to the centre line of the transom and found well, constructed, and firmly supported. There was little or no movement in the bearings and no sign of leakage.

It was not possible to test the steering gear under load as the vessel was ashore at the time of our survey.

There was adequate all round (360°) visibility with a clear field of vision over an arc of not less than 225° that is from straight ahead to at least 22½° abaft the beam on either side from the main steering position in the boat's normal load and trim condition.

Nautical Equipment.

None fitted.

Internal Hull Survey.

Water Tank.

The water tank was a close welded mild steel built into the bow and entered via self-draining fore deck and entered via a hinged mild steel hatch cover. It was opened to access the internal steel work which was found in fair order. However, some surface corrosion was noted on the locker that required further work.

See RECOMMENDATION 1.

Forward cockpit

This was an open self-draining deck with good access to the steel work, which was found good with a fair coating, the aft full height full width bulkhead was fitted with a central main door. On the forward bulkhead was a full of a free-standing bow locker which was entered via a hinged steel hatch over and found in fair order but would benefit from a clean and paint.

Saloon

This was entered via a step down from the forward cockpit and found fully lined with a vinyl covered sole with varnished tongue and grooved pine lower sides painted plywood upper side and deckhead. Below the removable steps was an access way to the under cockpit sole storage area. The steps were removed to access the area which was found fully lined and gave access to the bow thruster motor head. On the starboard forward bulkhead and lower side was a fitted open shelf unit. On the port side aft was half height two third width bulkhead which formed a walkway on the starboard side to the galley. On the centre line of the aft bulkhead was a MORSO enamelled solid fuel stove mounted on a stone health with back boiler. The port side was fitted with an upper side door. The space also contained some portable furniture.

Galley.

This space was entered from the saloon's starboard side walkway and found fully lined with a with a vinyl covered sole, varnished tongue and grooved pine lower side with painted plywood upper sides and deckhead. On the port lower side was a U-shaped solid worktop with storage cupboards below. Inserted into the forward section was a lpg Hotpoint four burner hobs. Below the worktop were an integral 240 v refrigerator. Below the port side worktop was a STOVES lpg oven and grill. On the aft half height two third width bulkhead's worktop was inserted a round stainless-steel sink and round drainer. The aft bulkhead formed a walkway entrance to the dinette.

Dinette.

This space was entered from the galley's starboard side walkway and found fully lined with a with a vinyl covered sole, varnished tongue and grooved pine lower side with painted plywood upper sides and deckhead. On the port lower side were twin bench seats on each bulkhead. The aft bulkhead was a full height two third width bulkhead formed the walkway entrance to the starboard companion way. The bench seats had storage below. The central folding solid wooden table formed a double bed when lowered. On the upper side was the electrical distribution panel.

Companion way.

This space was entered from the dinette starboard walkway and found fully lined with a vinyl covered sole, with varnished tongue and grooved pine lower side with painted plywood upper sides and deckhead. The space was sealed aft with a wooden internal door.

Heads.

This space was entered from the starboard companion way via a wooden internal door and found fully lined with a vinyl covered sole, with varnished tongue and grooved pine lower side with painted plywood upper side and deckhead. On the port side aft was a frp corner bath with tiled sides and formed a shower tray and sealed with a shower curtain; the wastewater was pumped overboard via an electric Gulper pump. On the port lower side was a manual flush

SEALAND toilet mounted on a holding tank. On the forward full height full width bulkhead was mounted a freshwater towel rail. with a ceramic vanity basin mounted on a vanity unit on the starboard lower side forward.

Aft Cabin.

This space was entered from the starboard companion way and entered via internal wooden door and found internally fully lined with a vinyl covered sole and varnished tongue and grooved pine lower sides, painted plywood upper side and deckhead. On the forward full-height full width bulkhead was a fitted double bed with storage below and a freshwater towel rail radiator. On the aft full height full width bulkhead was a fitted full height wardrobe to port. This contained an AEG washing machine on the lower side with the starboard internal door to the engine room and a step up.

Engine Room.

The main engine room was entered via the aft cabin's starboard internal door and found lined with a varnished plywood removable engine covers and varnished tongue and grooved pine sides and deckhead. The engine box covers were removed to access the machinery and steel work below. There was good access to the main engine and steel work which was found in fair order with a fair coating. However, it was noted that the space had some surface corrosion on the steel work which required further work

See RECOMMENDATION 2.

The vessel's main engine control panel was mounted on the centre line of the forward bulkhead, the aft full height full width bulkhead aft was fitted with a main door and sliding hatch over. The port side aft bulkhead had the Morse control mounted.

Aft Deck.

This space was entered from the engine rooms aft central main door and sliding hatch over door. It was an open self-draining deck with good access to the steel work and found good with a fair coating. On the deck was a hinged mild steel hatch cover over drainage channels. It was lifted to access the weed hatch below. On the starboard aft bulkhead was the 240 v ac hook up plug.

Gas Locker

The gas locker was a close welded mild steel locker built into the port side aft deck house top plate and entered via a mild steel hatch cover. It was opened to access the internal steel work which was found in fair order.

It was noted that, throughout the accommodation, the cabin sole was fully screwed down, with access hatches giving limited access to the bilge space apart from where furniture had been built on top.

Central Heating.

The accommodation was heated via an enamelled MORSO solid fired stove mounted on a stone hearth and was fitted with a back boiler and was found in fair order. The accommodation was also heated via a closed-circuit freshwater radiator system heated via the stoves back Boiler.

The hot water was stated to supplied from a 120 ltr Calorifier heated from the vessel's main engine cooling jacket this was within the aft cabins fitted wardrobe but was not seen

No system was tested at the time of the survey and that should be done at the earliest opportunity.

Soft Furnishings.

The soft furnishings were examined and found in good order and free of damp and mildew.

THE MACHINERY AND TRANSMISSION.

The machinery was found in an enclosed compartment, separate from the living quarters. It was such as to minimise the risk of fires, toxic fumes, heat, noise, vibration, and similar hazards. As stated above, the space was adequately ventilated to atmosphere and the ventilators were of such a design and in such a position as to prevent the dangerous ingress of water into, or the down flooding of, the engine room.

The bilge space below the machinery was found to have some oily water below. The main engine installation, drive train and stern gear were found in good order and well-engineered. The internal mechanical condition of the machinery was outside the scope of this survey and no guarantee can be given that either the main engine is in working condition.

Main Engine.

The vessel was powered by a flexible mounted, single electric start, naturally aspirated, raw water cooled via a heat exchanger and skin tank four-cylinder BETA MARINE converted, vertical, in-line, four stroke, solid injection, single acting, non-reversing, trunk piston, compression ignition oil engine which appeared to comply with ISO 16147.

The bore and stroke were unknown.

The maker's plate was found on the machinery but the serial number was hard to read.

The main engine was found to be in working order.

No guarantee can be given as to the accuracy, or the serviceability of the instrumentation and it should be noted that any discrepancy subsequently found may be due to lack of accurate calibration.

Transmission.

The transmission was through a Morse lever selected forward and reverse Newage hydro gearboxes with a 2:1 reduction ratio. The serial number was V024674.

Shaft Coupling.

The ordinary flanged coupling was examined, and the bolts hammer tested and in good condition. It was not practical to 'break' the coupling and test the installation for alignment and that cannot be guaranteed. The shaft was fitted with a plain flanged flexible coupling which was examined as far as possible the coupling bolts found in superficially good order with no sign of chattering.

Stern Gland.

The stern gland was examined - without opening - and found in fair condition and was of the grease lubricated twin bolt flange type stern gear with 25 mmm adjustment remaining. The access was restricted.it was not known when it was last opened and repacked.

Filters.

It was not practical to open any of the filters and examine the cleanliness or other wise of the cartridges and we would suggest that this be done at the earliest opportunity. The lubricating oil and fuel filters were of marine type and apparently fire resistant, non-corrodible, non-breakable and impact resistant.

Fuel Tank.

The fuel tank was an integral close welded mild steel tank on the after end of the engine room. The tank was examined as far as possible and found in fair order. Neither the type nor the grade of the fuel on board was confirmed nor the quality tested.

THE DOMESTIC SYSTEMS.

Fresh Water Tank.

Was a free-standing stainless-steel type of access being very limited what was seen was found in fair order.

The water was distributed via a Shurflo 12v water pump and plastic plumbing.

Liquefied Petroleum Gas Installation.

The system was powered from a propane liquefied petroleum gas system with two 6 kg bottles with the regulator mounted on the portside of the gas locker upper wall and was also fitted with a bubble tester which was tested and was found good

The flexible gas piping was of minimum practical length and conformed to BS EN 3212/2. This was found in good condition with no lumps, blow holes or cracks, or signs of ultraviolet light deterioration, blanching, brittleness, abrasion or kinking and with the ends secured by crimps with no other obvious damage to the pipe. It was connected inside the hull to adequately clipped soft drawn copper piping, which was run as high as practical, properly protected from mechanical damage, with a minimum number of compression fittings at each accessible joint below deck and with adequate and effective shut off cocks to each item of the main equipment and as far as we were able to inspect this it appeared to be in sound condition. The main gas line was run clear of the bilges and nowhere near electric cabling.

The regulator was connected to the cylinder by means of a BS3212/3 pigtail in good order and was of the non-externally-manually adjustable type and secured to the bottle and adequately protected against accidental damage. It was checked both for gas type and matching to the system and found satisfactory.

It was noted that the vessel was fitted with a smoke detector but was supplied with a working carbon monoxide detector.

The grp, timber, and soft furnishing nearby the source of heat were specially examined and signs of heat damage, charring or scorching were noted around the lpg inserted hob aft burner rings.

Electrical Installation.

The electrical system was examined in the light of the I.E.E. Regulations for the Electrical and Electronic Equipment of Ships as applicable and the B.M.E.A. Code of Practice for Electrical and Electronic Installations in Boats.

The vessel was fitted with a 12-volt dc battery powered electric system with a two-wire insulated and fused distribution and a 240-volt supply with a three-wire insulated fused distribution. A mains earth return safety cut out an RCD (residual current device) was fitted to the shore supply the vessel also had a 240-v ac shore power hook up plug.

Batteries.

There were three batteries in total six 110ah batteries, mounted in a battery box on the port side swim; one for the 12v starter and five 110 ah 12 v dc battery wired as a domestic bank.

All batteries were stowed in the engine room's lower side, within a battery box and vented to outside the accommodation.

The batteries were of heavy-duty deep cycle six cell flooded lead acid sealed type of 460 amps cranking power and 90 minutes capacity and were secured adequately to prevent movement within 10 mm all round and were not stowed in

a gas tight battery box and was fitted with a spark proof cover and manufactured from insulating and non-corrosive material and were adequately vented to atmosphere outside the accommodation

Wiring/Fuses.

The wiring, switches, and electrical equipment where accessible were found in good order and operational and complied with the Boat Safety Standards and the British Marine Electronics Association Code of Practice and none of the wiring was found to run in the bilge area and was well clear of any source of direct heat or fuel/gas piping. The system was fitted with a bladed type of fuse board correctly installed. The fuses were of the ceramic type. No circuit was tested or checked to see that it was properly overload protected or that the fuses were correctly rated. The 240v ac shore power system was protected with RCD breaker. The wiring was insulated with what appeared to be PVC and, in the limited places where it was possible for us to inspect this, it was adequately clipped up and fitted where necessary with bulkhead glands and crimped end fittings and all found in good order.

Master Switch.

The vessel was fitted with twin key type of isolator switch as close to the battery box as practical, on the positive line, easily accessible and with the position clearly marked. They were checked to see that they functioned correctly and found in good order, but it was not possible to check to see if they were adequately current rated.

Internal Lighting and Power Sockets.

The cabins were lit by a 12v dc lights converted to a LED lighting system.

The vessel was also fitted with a satisfactory number of three pin (UK Type) power sockets. They were tested as far as possible and found in good order.

SAFETY ITEMS.

Bilge Pump.

The vessel was fitted with a 750lph bilge pump with automatic bilge pump switch built in.

Fire Safety.

The vessel was supplied with the required number of fire extinguishers. All units were placed within reach of high fire risk areas, and none blocked any of the escape routes. One unit was placed within easy reach of the galley. This was examined for general condition and date and found satisfactory in all respects. The dry powder unit was also checked to ascertain if any compaction of the powder had taken place but, again, were found satisfactory. There was no evidence on board the vessel that any of the extinguishers had been recently or even regularly serviced.

A 1000 mm x 1000 mm light duty fire blanket manufactured in accordance with BS EN 6575 was fitted in the galley area.

Life Saving Equipment.

The vessel does not currently have lifesaving equipment in the form of life-jackets or buoyancy aids. These are at the discretion of the owner, but are recommended.

See RECOMMENDATION 3.

First Aid Kit.

A suitable first aid kit was not noted. This is at the discretion of the owner, but is recommended.

See RECOMMENDATION 4.

Recommendations and Suggestions.

All Recommendations and Suggestions are stated throughout the report and printed in red.

Defect Types.

Recommendations as noted below in this Report are classified as follows: -

Type A₁: Structural, mechanical, or other defects requiring IMMEDIATE attention i.e., those affecting structural strength, seaworthiness or safety which MUST be repaired BEFORE the vessel is relaunched at this time.

Type A₂: Structural, mechanical, or other defects affecting strength, seaworthiness or safety which may be repaired after the vessel is relaunched but MUST be repaired before the vessel is taken to sea.

Type B: Defects not affecting strength, seaworthiness, or safety but which, by their nature, should be dealt with before putting the vessel afloat.

Type C: Structural, mechanical, or other defects NOT requiring immediate attention but are to be dealt with within a specified period.

Type D: Non-essential or cosmetic defects whose repair may be left to the Owner's convenience. All suggestions are, unless noted otherwise, of this type.

These recommendations are intended to be only a guide to necessary rectification work. It should also be noted that, in some instances, defects are noted within this Report without a covering recommendation. In such cases either no action is necessary, or the remedy is self-evident.

It should be noted that if repairs, renewal, and replacement works are not carried out promptly, and carried out with full competence and completeness then the company and its staff accept no responsibility for any consequences which may arise.

RECOMMENDATION 1 We would recommend that the freshwater tank's internal rust spots be de-scaled and treated with Vactan rust treatment and a potable topcoat applied.

This was a Type D recommendation.

RECOMMENDATION 2 We would recommend that the engine room's sole be de-scaled, treated with Vactan, and a topcoat applied.

This was a Type D recommendation.

RECOMMENDATION 3 We would recommend that the vessel be supplied with lifesaving appliances commensurate with the number of personnel on board and the nature of any voyage to be undertaken.

This was a Type B recommendation.

RECOMMENDATION 4 We would recommend that the vessel be supplied with a first aid kit suitable for the number of people on board.

This was a Type B recommendation

It should be noted that if repairs, renewal, and replacement works are not carried out promptly, and carried out with full competence and completeness then this company and its' staff accept no responsibility for any consequences which may arise

Conclusion.

The vessel, as seen and at the time of the survey, was noted to have been constructed to a good standard and was in very good structural condition provided that ALL Recommendations are affected as noted herein within the stated time limit.
The vessel was contracted as a hull only survey and was not examined in any way from the inside and the internal structures condition is not guaranteed

Alan Broomfield,
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For and on behalf of
Broomfield Marine Services.

3 APPENDIX 1.

(From the Official Journal of the European Union).

Article 1 of the European Directive defines recreational craft as "... any boat, of any type, regardless of the means of propulsion, from 2.50 metres to 24.00 metres hull length, measured according to the appropriate harmonised standards, intended for sports and leisure purposes." The significant wave height is defined as the average height of the 1/3 highest waves and a number of the waves experienced may be up to twice this height.

4 STANDARDS.

Standards.

We have used throughout the survey the following standards: -

The Boat Safety Standards as agreed by the Environment Agency and British Waterways under the Unified Boat Safety Scheme.

Where appropriate, relative British (BS EN) or European (CEN) or ISO Standards in accordance with the EU Recreational Craft Directive.

We have also taken into consideration the New Engineering Council's Guidelines on Risk Assessment and the Environment.

In assessing the thickness of the hull shell plating and that of the primary and secondary supporting structure we have used as far as practical in the prevailing circumstances at the time of the survey the Code of Practice for Ultrasonic Thickness Measurement of Iron and Steel Small Craft Structures published by the International Institute for Marine Surveying.

Other standards used are noted where necessary throughout the Report.

Definitions of Dimensions.

Length Overall is measured from the forward side of the stem to the aftermost point of the hull only and does not include stern/swim platforms, boarding ladders, pulpits, taffrails, rudders, bowsprits, bumpkins, and similar extensions. If these latter are measured then a separate Beam or Breadth Overall is measured at the widest point of the hull and includes the thicknesses of Wales, rubbing strakes and harpins and similar items. i.e., it is not the Moulded Breadth.

Depth is measured from the top of the deck at side amidships to the underside of the keel.

Draught is measured, if practical, both forward and aft and is inclusive of projections below the underside of keel line such inboard/outboard units, Dutch keels etc., and in all cases is measured from the waterline to the lowest point of the hull at that position. If a vessel is fitted with a Dutch keel, skeg, inboard/outboard leg or similar this is noted and the extension below the underside of the flat plate keel or keel bar measured and separately recorded.

Freeboard is measured at the lowest point of sheer and is taken from the top of the deck plating, planking or gel coat to the normal still water flotation line at that point.

Displacement is the measured mass (weight) of the vessel and everything inside.

Nota Bene.

It is good practice to apply the following suggestions as appropriate or applicable: -.

Whenever the vessel is slipped, the existing anodes should be wire brushed back to bright metal and then coated with soft soap before painting the hull. Any paint accidentally applied to the anodes will then wash off with the soft soap when the vessel is placed in the water. If it is necessary at some time for the vessel to change from a salt to a freshwater environment or vice versa then it should be borne in mind that this will have a deleterious effect on the anodes fitted. Magnesium or aluminium anodes (which are suitable for fresh water) have a much higher driving potential than anodes manufactured from zinc. If a vessel fitted with magnesium or aluminium anodes passes into saltwater for anything longer than about seven days, the anodes will waste away very quickly. Vessels, which are, fitted with magnesium or aluminium anodes moving into a saltwater environment for longer than a week, should therefore be fitted with a replacement zinc anodic system. Conversely vessels fitted with zinc anodes (suitable for use in salt water) will find over a period exceeding about seven days that the metal will be coated with an impervious off-white crust of zinc salt which will very effectively prevent it working even when returned to salt water.

After any trip into a freshwater environment a vessel fitted with zinc anodes should have these thoroughly scaled clean back to bright metal. If proceeding into fresh water for longer than about seven days a vessel should be fitted with replacement magnesium or aluminium anodes. In no case should magnesium anodes be fitted to the hull of wooden boats.

It is good practice to operate all seacocks once a month to prevent them 'freezing' through lack of use. All seacocks should, in any case, be strip checked annually and any found defective replaced using appropriate marine quality fittings.

If a seacock is replaced, then the attached skin fitting and pipe spigot should also be replaced, and any worm drive clips renewed irrespective of whether these items are defective. Worm drive clips on piping associated with seacocks should be double and the screws set at right angles to each other. Seacocks should be left closed when the vessel is left unattended afloat but open if the vessel is left on hard standing ashore.

It is also prudent to attach a notice to the engine starting controls warning that the cooling water intake valve is shut! We would also suggest that, as a matter of good practice, wooden plugs be made of a size suitable to each skin fitting and overboard discharges and attached to the skin fitting or overboard discharge by a cord as appropriate for use in an emergency.

Fuel, lubricating oil, air and water filters should be cleaned thoroughly at regular intervals in accordance with the engine maker's recommendations.

Checks should also be regularly made in both filters and fuel tanks for the presence hydrocarbon utilising micro-organisms (hormoconis resiniae).

It is good practice to run the main machinery for a period of twenty to thirty minutes once a month in vessels that are laid up or permanently moored.

Engine drip trays should be cleaned of oil and other waste on a regular basis to minimise fire risk.

All fire extinguishers should be regularly serviced by a recognised competent person and be weighed annually, and the weights and date of weighing recorded in a logbook or, better, on a label stuck to the side of the extinguisher.

Dry powder units should, additionally, be checked to see that the powder has not compacted. It should also be remembered that both fire extinguishers and pyrotechnics have a limited life (in the case of the latter not exceeding three years) and these items must be renewed when the expiry date is reached.

N.B. it should be noted that mandatory decommissioning of all firefighting systems using Halon/BCF extinguishers was to be affected within the European Community area by the 31st of December 2003 under EC Regulation 2037/2000 and these must be safely disposed of by an authorised agent such as the Fire Service. In this respect, your attention is further drawn to the Montreal Protocol and the MSA Merchant Shipping Notice M1618.

It is **MOST STRONGLY RECOMMENDED** that gas systems should be shut off at the cylinder valve if the vessel is to be left unattended for any length of time.

All recommended or suggested labels should be of plastic or metal, permanently fixed and with clear lettering that can be easily read with a person with normal eyesight from about two metres.

Bilges should be always kept clean and limber holes free of rubbish so that water can drain to the bilge pump.

The vessel should be adequately always ventilated and especially when laid up.

'Suggestions' in this Report do not have the force of RECOMMENDATIONS and may be dealt with at the Owner's convenience but RECOMMENDATIONS per se MUST be satisfactorily completed within the given time limits.

Where Imperial and Metric units are compared in this Report the Metric dimension are the more accurate.

Materials.

For iron or steel vessels we do not, in general, recommend that thin areas of bottom or side plating be fitted with doubling plates that exceed two frame spaces in length and/or 750 mm in width as it is not possible to connect efficiently the middle of such large doubling plates to the existing plating and primary framing structure underneath.

It is, in our opinion, better to crop out such thin areas back to metal of an acceptable thickness and renew the plate in way although it is accepted that this is more difficult and costly. Existing doubling plates, however, may be left in place. We do not recommend the use of slot welds in the attachment of such doubling plates.

N.B. Whilst areas of decay are noted in the main body of this Report, it should be noted that it is often not possible to gauge the true extent of infection until parts of the main structure have been removed or cut away. This being so it must always be borne in mind that the eventual extent of infection found often much larger than that originally visible.

5 DEFINITIONS.

In accordance with ISO 10088 (E): -

Readily accessible or normally portable means - capable of being reached for operation, Survey, or maintenance without removal of any craft structure or use of any tools or removal of any item of portable equipment stowed in places intended for the storage of portable equipment such as lockers, drawers, or shelves.

Accessible means - capable of being reached for Survey, removal, or maintenance without removal of permanent craft structure. Hatch covers are not regarded as permanent craft structure in this sense even if tools such as spanners, wrenches or screwdrivers are needed to open them. Hatches for the Survey or maintenance of fuel tanks may be covered by uncut carpet, provided that all tank fittings can be inspected or maintained through other openings.

Opened for survey means all lockers emptied, all portable hatches lifted or taken down, all loose ballast lifted and removed from the vessel, all bilges pumped dry and cleaned and the anchor cable flaked out on the hard stand or dock bottom.

In accordance with BS EN MA 101: -

Sanitation system means - a system comprising equipment designed for installation on board a vessel to receive, retain, treat, or discharge sewage and equipment using any process to treat such sewage.

Sewage means - human body wastes and the wastes from toilets intended to receive or treat human body wastes.

In accordance with the RoSPA Handbook: -

Recognised competent person means - a person having practical and theoretical knowledge and actual experience of the type of machinery or plant which he/she must examine as will enable him/her to detect defects and/or weaknesses which it is the purpose of the Survey to discover and to assess their importance in relation to the strength and functions of the machinery or plant.

Efficient in relation to a piece of structure, fitting, piece of equipment or material means that all reasonable and practicable measures have been taken to ensure that it is suitable for the purpose(s) for which it is intended to be used.

Weathertight means that, in any sea condition, water will not penetrate the vessel.

Weathertight Openings are openings with a permanently available means of closure that: -

Comply with the requirements of ISO 12216, and

When closed, still permit the safe continuous operation of the vessel, engine(s), and steering systems.

Close up means within reasonable hand reach.

Pleasure vessel means a vessel so defined in the Merchant Shipping (Vessels in Commercial use for Sport or Pleasure) Regulations 1998 S.I. 2771.

Serviceable or adequate means considered by the Surveyor at the time to be sufficient for a specific requirement or service.

Fit for intended use means fit for the stated use intended by the person instructing the survey.

The condition of items other than steel was assessed on the following scale: -

Excellent condition means new or like new.

Good condition means nearly new with only minor or cosmetic defects noted.

Fair condition denotes that the item, component, or system was found functional but will require minor repairs and will also require to be frequently monitored.

Poor condition means that the item, component, or system was found non-functional and will require replacement or renewal within a specified time.

The condition of steel was assessed on the following scale: -

Good condition means no buckling, cracking or other physical defects, minor corrosion, wastage or scaling only.

Satisfactory or Fair condition means minor physical defects such as buckling or cracking, some corrosion, wastage or scaling but not at critical points.

Unsatisfactory condition means some physical defects, broken welds, torn or buckled structure, moderate corrosion, or scaling.

Poor or Bad condition means critical physical defects, heavy corrosion, wastage, or scaling.

The protective paint coatings were assessed on the TSCF Scale and reported on within the following categories: -

Good condition means only minor spot breakdowns or light rusting affecting less than 20% of the area under consideration. (ISO RI3; European Rust Scale RE3)

Fair condition means with local breakdown at the edge of stiffeners or weld connections or similar places affecting more than 20% but less than 60% of the area under consideration. (ISO RI4; European Rust Scale RE5)

Poor condition means general breakdown of the coating affecting more than 60% of the area or, in the case of steel vessels, with hard scale affecting more than 10% of the area under consideration. (ISO RI5; European Rust Scale RE7)

Satisfactory when used in context other than the condition of steel does not mean that the item concerned is new but is in a sufficiently good condition for a further period of service.

Scuttle means an ISO standardised type of an opening hinged or non-opening round ship's window with or without a deadlight (ISO 6345:1990).

Window means a ship's window, being any window, regardless of shape, suitable for installation aboard ships (ISO 6345:1990).

Sea means more than twelve nautical miles to seaward off the mean high-water line.

Coastal means within twelve nautical miles of the mean high-water line.

6 LAW.

Law and Jurisdiction.

This document is to be construed under English law and any dispute is to be settled in London in accordance with the Company's published Terms and Conditions of Contract.

This document has no statutory significance.

Data Protection.

The recipient's name, personal data and other information given in this Report and all details of the vessel reported herein including the attached Letter of Opinion of Value are the intellectual property of Broomfield Marine Services and these documents contain confidential information which is legally privileged and is intended for the use of the addressee only. All information contained herein is covered by the EU Data Protection Directive (95/46/EC). This Report has been prepared for the person(s) addressed above, is personal and strictly confidential and contains no extended warranty explicit or implied if the vessel is disposed of to any third party for any reason whatsoever.

Copyright.

This Report, the International Copyright © of which is vested in and remains the property of Broomfield Marine Services., is personal and confidential to the named Client, is non-transferable, has no extended warranty, applies to the addressee only and must not be copied, reproduced, kept in any data bank, stored in any retrieval system or transmitted in any form or by any means whatsoever, electronic, mechanical, photocopying, recording or otherwise or given or sold to any third party without the prior written consent of the copyright holder. Such unauthorised transfer of either the whole or any part of this Report would be regarded as a breach both of copyright and the EU Data Protection Directive (95/46/EC) and any infringement can and will be prosecuted through the Courts.

Disclaimer.

Whilst every effort has been made to ensure the accuracy of information presented in this Report it must be clearly understood that it must NOT be construed as a guarantee or warranty as to the condition of the subject vessel if she is sold or transferred to a third party and no Duty of Care is owed to any such third party. Indeed, the survey was carried out on the express understanding that the Company owes a Duty of Care to the named Client and his Underwriters and Bankers only. The Report is issued without prejudice and in good faith as a statement of facts ascertained at the time of the survey during which due diligence and reasonable professional skill were exercised and reasonable care was taken using common professional practice and, where available, published Guidelines or Codes of Practice such as and including those published by the International Institute of Marine Surveying.

Guarantee and/or Warranty.

This Report constitutes neither a guarantee nor a warranty as to the condition of parts it was not, for any reason whatsoever, possible to see at the time of the survey nor does it follow that each defect was found during the Survey. No responsibility will be accepted for any faults, defects or changes subsequently arising or not discovered at the time of the survey due to inaccessibility or any other reason. No guarantee or safeguard against faulty design or latent defects is expressly stated or implied nor is any guarantee given that the vessel is suitable for any particular purpose. Nor does this Report guarantee that either the boat herself or any part of her structure or equipment was of merchantable quality of fit for the purpose intended.

The Recreational Craft Directive.

Whilst, in a number of places, this Report states that the vessel appears to comply with the above EU Directive it should be noted that the validity of any CE marking and the conformance or otherwise of the vessel to the RCD, the EMC Directive and the Machinery Directive are totally outside the scope of the subject General Condition Survey and this Report. The survey did not include an assessment of compliance with the requirements of any particular national or international Authority.

'Seaworthiness'.

This term has never been defined in English law and we specifically draw your attention to the fact that, legally, in addition to the structural and mechanical items reported on herein, the term 'seaworthy' also encompasses a number of items clearly outside the scope of a general condition survey and, therefore, not within the purview of the Surveyor.

Ownership.

No guarantee or warranty is given or implied by this Report regarding the legal ownership or right to sell the vessel or that there are no outstanding mortgages, debts, charges, or maritime liens against her. It is solely the addressee's responsibility to check these points to his/her own satisfaction.

Confidentiality

(a) The Client undertakes to keep confidential any confidential information disclosed to it by Broomfield Marine Services and not to disclose the same either complete or in part to any third party (including subsidiary companies, holding companies or associate companies) without Broomfield Marine Services' prior written approval, such undertaking to continue notwithstanding the expiry or termination of the Agreement for so long as the information in question has not:

- (i) Become part of the public knowledge or literature without default on the part of the Client, or
- (ii) Been disclosed to the Client by the third party (other than one disclosing on behalf of Broomfield Marine Services) whose possession of such information is lawful and who is under no secrecy obligation with respect to the same.

Or for a period of 10 years from the date that the Agreement terminates, whichever is the sooner.

(b) Broomfield Marine Services shall undertake to keep confidential any confidential information disclosed to it by the Client and Broomfield Marine Services shall be liable to the same constraints.

Force Majeure

Neither party to the Agreement shall be in breach of any obligations hereunder (other than the obligations of the Client to make payment of any monies due to Broomfield Marine Services) insofar as performance thereof has been delayed, hindered, interfered with, or prevented by any circumstances beyond its reasonable control.

Safety

It is the policy of Broomfield Marine Services to conduct its activities in such a way as to take foremost account of the health and safety of its employees and of other persons and to give proper regard to the conservation of the environment. In implementing this policy, it not only complies with the requirements of the relevant local legislation but promotes in an appropriate manner, measures for the protection of health, safety, and environment for all who may be affected directly or indirectly by its activities. If, in the execution of its services, Broomfield Marine Services believes that the health and safety of its employees is placed at unacceptable risk due to circumstances outside its control, Broomfield Marine Services reserves the right to withdraw its services until the circumstances giving rise to this withdrawal are removed.

Himalaya

It is hereby expressly agreed that no employee or agent of Broomfield Marine Services (including every sub-contractor from time to time employed by Broomfield Marine Services) shall in any circumstances whatsoever be under any liability whatsoever to the clients for any loss, damage or delay of whatsoever kind arising or resulting directly or indirectly from any act, neglect or default on his part while acting in the course of or in connection with his employment and, without prejudice to the generality of the foregoing provisions in this clause, every exemption from liability, defence or immunity of whatsoever nature applicable to Broomfield Marine Services or to which Broomfield Marine Services is entitled hereunder shall also be available and shall extend to protect every such employee or agent of Broomfield Marine Services acting as aforesaid and for the purpose of all the foregoing provisions of this clause is or shall be deemed to be acting as agent or trustee on behalf of and for the benefit of all persons who are or might be his servants or agents from time to time (including sub-contractors as aforesaid) and all such persons shall to this extent be or be deemed to be parties to this Agreement.

7 SURVEY LIMITATIONS

The vessel was not fully opened for the survey, and this restricted access to many areas of the structure and its equipment.

We cannot be held liable for any corrosion caused because of incorrect anodes being used or as a result of them not having been renewed regularly.

Any survey "afloat" or "In the mud" denies access to the underwater surfaces of the hull and the surveyor shall not be held liable for any subsequent defects found in these areas.

Unless specifically stated in the report we recommend a four-year schedule for slipping/dry docking and surveys, and we also specifically recommend that anodes be renewed every two years.

Our liability shall expire 12 months after completion of our services in respect of which liability is alleged to arise and we shall thereafter have no liability in respect of those services and/or any alleged default in connection with the provision thereof; under no circumstances shall our liability exceed the market value of the vessel.

The vessel was not "stripped out" for the survey and was fully lined throughout except where otherwise noted in this Report. The cupboards and the spaces under the berths and settees gave only a limited access to the bilge or lower side interior (Footings in the case of narrow boats) primary or secondary supporting structure in way and any carpets that were stuck down or flooring that was permanently fixed were not lifted and therefore access to the bilge was limited and no guarantee can be given that there are no defects present in these areas.

We have not inspected woodwork, metalwork or other parts of the vessel which were encapsulated, covered, unexposed or inaccessible for whatever reason nor on areas or in spaces not presented clearly visible, for example behind ceilings or linings, beneath fixed cabin soles or floors etc. unless these were accessible through normally portable* or readily accessible* locker lids, hatch covers, traps or similar access points and, therefore this Report does not provide an opinion on the condition of such parts. No dismantling of the structure other than the removal of such normally portable or readily accessible hatches was undertaken. Spaces where access was clearly restricted are noted within the Report. This Report should not be taken, therefore, to preclude completely the existence of defects, isolated damage or deterioration concealed by such ceilings, linings, cabin soles or floors, paints, fillers, lack of access or by any other means. No parts of the vessel were dismantled, and no bolts or other fittings removed for Survey.

The survey was also restricted in respect of boxed in and inaccessible spaces of the vessel's structure and no comment can be made, or guarantee given on such spaces.

Machinery installations, auxiliary and ancillary equipment, gas, and other service systems, electronic equipment, pumping and plumbing, sanitation systems*, navigational aids and other sundry items were visually inspected only. None of these items were dismantled nor were specific tests applied except in the case of electrical systems where simple switching tests were used. The steering gear installation was given a simple 'hard over to hard over' test only. The electrical system(s) were examined visually and by switch testing only.

The electronic equipment was not assessed except by visual Survey and simple switch testing. WE WOULD SPECIFICALLY RECOMMEND that the vessel be given a sea or dock trial to test that the engine/s work satisfactorily as, due to the lack of cooling water, an ordinary out of water survey will not allow the Surveyor to comment on this aspect of the machinery.

Neither the stern gland nor any of the sea cocks were found opened when the vessel was presented for survey and the interior of these items was not inspected and their condition cannot be guaranteed. It should be drawn to the reader's attention that the interior of such items is not part of a normal General Condition Survey for whatever reason that survey was undertaken.

Unless noted otherwise, the vessel's systems and equipment generally appeared to have been fabricated from materials suitable for use in the marine environment, installed in compliance with commonly accepted marine industry practice and appropriate to the vessel's usual expected service. Deficiencies or defects according to type are listed throughout the Report.

The vessel was not tested for transverse or longitudinal metacentric stability or reserve buoyancy nor was her down flooding characteristics investigated. This Report, therefore, gives no warranty regarding the transverse stability of the vessel or the suitability of the design for the intended purpose and must not be taken to imply that the vessel has sufficient stability or buoyancy for such intended purpose. It should be clearly understood that is the Owner's responsibility to ensure that basic stability information is placed on board the vessel and that the vessel is never overloaded. Your attention is also drawn to the fact that the transverse metacentric stability of the vessel and, therefore her seaworthiness varies with both the payload and the weight distribution. It was not possible to ascertain the maximum allowable load for the vessel.

It should also be noted that matters of design were not considered to be part of the brief and that, therefore, we cannot guarantee that the vessel meets the Essential Safety Requirements of the EU Recreational Craft Directive. The vessel was not checked with *any intention to ascertain compliance or otherwise with any local, national, or international Codes of Practice or any other Rules and/ or Regulations as may be required by any Authority under whose jurisdiction the vessel may operate or that might apply for any purpose other than as a pleasure vessel.* *