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## VESSEL CONDITION REPORT

GERFALCON

Mr G Fletcher



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## 2 SUMMARY.

This document is a General Condition Report on the:

### GERFALCON

Carried out by the undersigned whilst acting solely as an agent of Marsurv. and has been prepared specifically for the above client 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 Marsurv.

Whilst all due care and diligence have been exercised in the collection of data for and the preparation of this report, Marsurv. 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. Or agreement, permission and instructions not being given to the surveyor to gain access to closed-off areas.

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### 2.1 THE REASON FOR THE SURVEY

We were instructed to undertake a full out of the water structural and mechanical General Condition Survey and evaluation of the vessel and to issue a separate Letter of Opinion of her open market value for insurance purposes only.

### 2.2 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, in this particular case, to the planking.

It should be noted, however, that, unless a hull has been completely cleaned back to the bare timber prior to the survey, we cannot confirm the detailed condition of the whole of the planking surface, fastenings, etc. Our conclusions are therefore based on the

evidence of the sample areas examined and we cannot guarantee that there are no defects such as rot behind the bottom or topside coating which was noted on the hull exterior at the time of our survey.

### 2.3 SURVEY CONDITIONS

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

The vessel was found on blocks on a hardstanding in the open air at the site stated in the introduction. There was good external access to the hull except in way of the blocks and supports. There was also reasonably good internal access to the main structure but the linings, machinery, tanks, rudder, stern gear, 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 these areas and we cannot be sure that these areas are free from defect.

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, however due to the way she was blocked up it this could not be ascertained, and we cannot therefore guarantee that there is no hogging or sagging of the structure.

The vessel, as inspected, was found to be well built and reasonably well maintained using good marine quality materials and good boat building practices. The overall structure was found fair although full Survey was limited at the time of the survey due to the presence of internal fittings, permanent ceilings, and linings but where Survey was possible, as stated, the structure was found generally sound below the waterline but with serious issues above.

The machinery Survey was a non-invasive one and it was not possible to carry out a detailed engine trial. No guarantee can, therefore, be given on the running condition of the engines. The electrical system was partially removed and therefore could not be assessed.

The general condition of the vessel as seen both above and below deck suggested that she had suffered minimal abuse from bad seamanship and/or boat handling. A number 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. Some of these noted defects affected the vessel's structural and/or mechanical seaworthiness\*

In our opinion, therefore, the subject vessel was found at the time of the survey in poor structural and mechanical condition and was not considered to be an insurable risk under the Institute of London Underwriters Yacht Clauses and worthy of purchase (see our Letter of Opinion of Value) for general pleasure use within the sea areas laid down

by European Recreational Craft Directive - unless all RECOMMENDATIONS as given in this Report hereunder are carried out within the stated time limits. Some of these RECOMMENDATIONS were serious and none will need attention at this time.

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### 3 THE VESSEL.

#### 3.1 INTRODUCTION

This is to confirm that, at the request of

Mr G Fletcher

The undersigned attended: -

#### GERFALCON

at Wakering Yacht Club, Rochford, Essex on the 25<sup>th</sup> July 2024 and there effected, without the vessel being fully opened up for the survey, a General Condition Survey of the hull, machinery, and service systems as far as was installed.

#### 3.2 TYPE OF VESSEL

The vessel was a twin screw motor yacht of carvel timber construction.

#### 3.3 DIMENSIONS

Length Overall	10.38 m
Beam	2.74 m
Freeboard	0.93 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.

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

#### 3.4 BUILDERS AND DATE OF BUILD

According to the original registration document the vessel was built in by W.M. Osborne Ltd of Arun Shipyard, Littlehampton in 1937 as yard number 192. The vessel had a Builder's Plate, but we have not checked these particulars and cannot guarantee their accuracy.



### 3.5 BOAT SAFETY SCHEME:

No BSS certificate was found onboard the vessel at the time of survey. A BSS certificate only indicates that, on the day of the inspection, the craft has met the requirements for the licensing with the Navigational Authority concerned. BSS inspections are required every 4 years.

Inland waterways boat owners are advised to download a full copy of the Boat Safety Scheme guide from [www.boatsafetyscheme.com](http://www.boatsafetyscheme.com) and keep it on the vessel for reference.

Alterations and improvements should be made to the manufacturer's installation guidelines but should also comply with the Boat Safety Scheme essential guide.

### 3.6 EU DIRECTIVES

The vessel was built before the 16th June 1998 and therefore was not subject to the requirements of the Recreational Craft Regulations (SI 1996/1353).

### 3.7 V.A.T STATUS & PROOF OF OWNERSHIP:

The original invoice for the vessel was seen at this time and it was confirmed that the vessel that United Kingdom V.A.T has been paid. There was no proof of ownership found on the vessel.

### 3.8 CONSTRUCTION

The vessel was constructed from what appeared to be mahogany on oak timbers although this cannot be guaranteed.

The vessel was not apparently built to the Rules and Regulations or under the survey of any of the Classification Societies.

The hull was carvel planked in mahogany and laid on oak timbers fastened by copper boat nails clenched on roves.



The fore deck was of teak and the superstructure mahogany with the cabin top sheathed in fibreglass.

### 3.9 FLOODABILITY

The number and position of the watertight bulkheads determined that the vessel was of 'single compartment' floodability.

**4 THE SURVEY.**

**4.1 EXTERNAL HULL SURVEY**

The stem and stem band, gripe, keel, sternpost and horn timber were all examined, hammer and prick tested and found in generally good condition but with some areas of soft rot noted. The stem had previously been noted to have some rot in way of the hooded ends and a stainless-steel cover had been screwed into the surrounding area, the stainless steel had corroded excessively.

*We would recommend that this is carefully removed and the area beneath assessed.*



The rest of the bottom and topsides were found with the following areas of rot.

**Port Side**

Below Waterline	800 mm from stem	760 mm x 100 mm
Below Waterline	5000 mm from stem	2000 mm x 250 mm
Below Waterline	5400 mm from stem	1000 mm x 140 mm
Above Waterline	6600 mm from stem	450 mm x 120 mm
Above Waterline	7200 mm from stem	2600 mm x 260 mm

**Starboard Side**

Below Waterline	5000 mm from stem	Fastening
Below Waterline	1700 mm from stem	300 mm x 100 mm
Above Waterline	4000 mm from stem	890 mm x 75 mm
Above Waterline	4500 mm from stem	750 mm x 100 mm
Above Waterline	5100 mm from stem	200 mm x 200 mm
Above Waterline	6700 mm from stem	70 mm x 110 mm

Numerous seams had opened up on the topsides and the white cotton caulking had caused damage to the plank edges.







*We would recommend that the areas of rot are cropped out and renewed and that the caulking be removed and an alternative and more gentle means of sealing the seams be implemented.*

Internally the bottom and topside planking including the bilge and sheer wales was hammer and spike tested all over, using an engineer's 1 kg ball pein hammer and both an 450 mm and a 100 mm spike at an average spacing of not more than 150 mm and was found fair. The plank seams appeared to be tight and smooth. Judging from the solid resonance of the planking under the hammer test the planking appeared to be in good condition. There was no obvious sign of nail sickness.

Two deck beams were found soft rotted and in need of renewal or repair.



#### 4.2 SKIN FITTINGS AND SEACOCKS

Above the waterline the skin fittings all had an adequate freeboard in the still water condition and the external flanges, strainers and fastenings were examined in situ externally by hammer and/or scrape testing and were found in good condition and securely fastened to the hull. All skin fittings passing through the hull were fitted with levers or screw down non return valves on the inside of the hull and these were also examined visibly operational and in good condition.

The sea valves were not drawn or opened for Survey and although it was not possible to survey all the associated spigots and pipework in detail.

*We would recommend that all pipework exiting the vessel be fitted with opposing double worm drive clips.*

\*Any replacement skin fittings should be manufactured from dezincification resistant alloys which will be marked DZR or CR or with the alloy classification CW602N or CZ132. All the hoses to the valves were secured using double worm drive hose clips.

#### 4.3 BOTTOM COATING

*We would recommend that all coatings are renewed at this time.*

#### 4.4 STEERING, RUDDERS, AND HANGINGS

The vessel was fitted with a cable type steering, which was found to sit correctly on the stops. A proper stop was fitted to limit over steering.

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

The steering was tried hard over to hard over and found in good, smooth operational condition and to sit correctly on the stops. 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.

#### 4.5 DECK AND SUPERSTRUCTURE

*The deck and superstructure were of teak or plywood and were found to be heavily soft rotted and we would recommend that they be renewed entirely.*







The after cockpit recess housings were found with the lids soft rotted and in need of renewal.

#### 4.6 DECK EQUIPMENT

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.

Where the above items were bolted through the deck the backing plates were specially examined and found of adequate size and area, in good condition and with no sign of the highly loaded items pulling through. It was not practical to draw any of the securing bolts and the condition of these cannot be guaranteed. The arrangements were such that these items could be considered to be strong points under the EU Recreational Craft Directive. They were considered to be capable of adequately accepting normal mooring, anchoring, and towing loads.

#### 4.7 INTERNAL HULL SURVEY

*The vessel had been more or less stripped out prior to the survey and the internal hull was examined and found with the support structure in generally good order, the frames that has previously cracked had been sistered to a good standard, there was some debris and oil in the bilges and we would recommend that tis be cleared and the planking and keelson assessed further.*

#### 4.8 SOFT FURNISHINGS

None present.

#### 4.9 WINDOWS AND SCUTTLES

The aluminium alloy framed windows and scuttles were found generally in fair order, but they were not hose tested.

## 5 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 the 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 clean and 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 considered to be outside the scope of this survey and no guarantee can be given that the main engine is in working condition.

### 5.1 MAIN ENGINES.

The vessel was powered by twin flexibly mounted BMC 1.5 four-cylinder water cooled, naturally aspirated marine diesel engines, they had a bore of 73.03 mm and a stroke of 88.9 mm and were stated to develop 30 hp each.

The engines were coupled to Borg Warner gearboxes, they were not tested at this time.

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. No engine alarms other than oil and water temperature were noted and it was not possible to test those in place.

This was a non-invasive examination.

The engines and drives were examined externally - without opening up - and found in generally good, clean condition and the installation as a whole appeared to comply with the Boat Safety Standards. The machinery was superficially clean, free of rust and/or excessive oil leaks. Though the blocks were not specifically examined by dye penetrant there was no obvious sign of cracking. There was no sign of water or sludge in the sumps. It was not possible to check the cylinder compression nor was it practical to remove the injectors and check the actual cylinder pressures obtained. The water-cooling compression caps were lifted, and no signs of oil emulsification noted inside.

All hot and moving parts of the machinery were adequately shielded.

*It was not possible to run the machinery as the vessel was ashore at the time of our survey.*

The machinery was fitted with oil tight drip spaces of suitable material and of adequate area and depth.

The fuel was supplied to the engines through a mechanically driven lift pumps and injection pumps of the distributor type.

The holding down bolts and mounting blocks were closely examined and hammer tested and found sound and there was no sign of any chatter on the rubber of the flexible mountings.

The fuel oil, lubricating oil, air and cooling water filters were then examined and no signs of hydrocarbon utilising micro-organisms (*hormoconis resiniae*) were noted but we cannot guarantee that these are not present. It was not possible to open the heat exchanger s and examine the interior.

The water pumps were examined externally and found apparently in good order. The hoses and worm drive clips were all examined and found of the right size and in good order. The worm drive clips were doubled and appeared to comply with BS 5315.

The belt drives and other flexible hoses attached to the engines were also examined as far as practical in the limited access available and found in good condition without any sign of fracture or with the rubber being perished and the worm drive clips were also found of the right size and in good order. Again, the clips appeared to comply with BS 5315. The 'play' of the belts was found satisfactorily adjusted.

The starter motors were checked and found securely fitted and in apparently good working order with the attached electric cabling properly fitted with crimped ends and the units were adequately secured.

The precise nature of the anti-freeze in the cooling water could not be ascertained but it appeared to be Ethylene Glycol.

*We would recommend that the engines are fully inspected and overhauled as part of the refurbishment.*

## 5.2 TRANSMISSION.

The transmission was through lever-controlled reverse/reduction Borg Warner gear boxes of unknown reduction ratio and stainless-steel shafts supported in P brackets with plain vibration couplings to three bladed outboard handed bronze propellers. The precise chemistry of the material of the propellers could not be determined. The propeller shafts were tested by a magnet and appeared to have an austenitic microstructure, but this cannot be guaranteed.

The propellers were examined and found in fair order.

### 5.3 SHAFT COUPLINGS.

The ordinary flanged couplings were examined, and the bolts hammer tested, and these appeared to be sound and well tight. It was not practical to 'break' the couplings and test the installation for alignment and this cannot be guaranteed.

It should be noted that misalignment of the shafting cannot normally be discovered by turning the shaft as the stiffness ratio – the length between bearings divided by the shaft's transverse second moment of area – of marine propeller shafts, particularly those on small boats with relatively high shaft rotational speeds is very small and such a shaft will bend transversely quite easily making it impossible for a surveyor to 'feel' or see any real misalignment when turning the propellers over by hand.

### 5.4 STERN GLANDS.

The stern glands, which were of the standard type, were examined - without opening up - and found in generally good condition. The glands were grease lubricated by means of a remote grease gun and there was no sign of excessive leakage, but it was not known when it was last opened and repacked. There was no sign of salt encrustation in way of the stern glands or attachment bolts.

It should be noted that as stated previously the internal condition of the stern gland/s was beyond the scope of our survey and therefore no comment could be made upon this item.

**N.B.** The stern glands should be checked for leakage as soon as the vessel is put afloat.

### 5.5 FUEL TANKS.

*The tanks were examined as far as possible in situ and found in good order, access to the back and bottom of the tanks was limited and the condition of these areas cannot be guaranteed, however there is some corrosion present on the bottom of one tank and we would recommend that they be pressure tested.*



The lubricating oil and fuel filters were of marine type and apparently fire resistant, non-corrodible, non-breakable and impact resistant.

Neither the type nor the grade of the fuel on board was confirmed nor the quality tested.

## 6 THE DOMESTIC SYSTEMS.

### 6.1 LIQUEFIED PETROLEUM GAS INSTALLATION

The gas system was considered beyond the scope of the survey.

### 6.2 WATER & SEWAGE

The vessel had been stripped out and therefore the water and waste system was not inspected.

### 6.3 ELECTRICAL INSTALLATION

The vessel was to undergo a full refurbishment and therefore the electrical system was to be overhauled.

## 7 SAFETY ITEMS.

### 7.1 BILGE PUMPS

*We would recommend that the new system of bilge pumping arrangements be implemented during the refurbishment.*

### 7.2 FIRE SAFETY.

*We would recommend that the vessel be supplied with appropriate fire safety equipment.*

**Please note that all carbon monoxide alarms must be BS EN 50291 compliant.**

\*See under Nota Benae in Appendix 2 to this Report hereunder.

### 7.3 LIFE SAVING EQUIPMENT

*We would recommend that the vessel be supplied with adequate lifesaving apparatus in accordance with the rules laid down in section 13 of this report.*

## 8 RECOMMENDATIONS AND SUGGESTIONS

All Recommendations and suggestions are situated throughout the report.

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.



## 9 CONCLUSION

The vessel, as seen and at the time of the survey, was considered to be in poor structural and mechanical condition for the operation areas of her apparent Classification as laid down in the Recreational Craft Directive Category Definitions given in Appendix 1 to this Report hereunder and an insurable risk under the Institute of London Underwriter's Yacht Clauses provided that all RECOMMENDATIONS are effected as noted herein within the stated time limits.

Yours faithfully,



Elliott Berry

Dip.Mar.Sur., RMS., RMC., F.I.I.M.S., FI.DIAG.E., FNIBME., MCMS.,  
MIMarEST., AFNI., AMAE., A.M.RINA., ARSPH., NACE.

On behalf of Marsurv

## 10 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.

### 10.1 CATEGORY DEFINITIONS.

A. OCEAN: Vessels designed for extended voyages where conditions may exceed wind force 8 (Beaufort scale) and significant wave heights of 4 metres and above may be experienced and vessels largely self sufficient.

B. OFFSHORE: Vessels designed for offshore voyages where conditions up to, and including, wind force 8 (Beaufort scale) and significant wave heights up to, and including, 4 metres may be experienced.

C. INSHORE: Vessels designed for voyages in coastal waters, large bays, estuaries, lakes and rivers where conditions up to, and including, wind force 6 (Beaufort scale) and significant wave heights up to, and including, 2 metres may be experienced.

D. SHELTERED WATERS: Vessels designed for voyages on small lakes, rivers and canals where conditions up to, and including, wind force 4 (Beaufort scale) and significant wave heights up to, and including, 0.5 metres may be experienced.

### 10.2 CATEGORISATION OF WATERS BY THE U.K. MARITIME AND COASTGUARD AGENCY.

MSN 1719(M)

These categorisations strictly apply only to Class IV and V Passengers Vessels and determine which waters are NOT regarded as 'seas'


.

Category A: Narrow rivers and canals where the depth of water is less than 1.5 metres and where the significant wave height could not be expected to exceed 0.6 metres at any time.

Category B: Wider rivers and canals where the depth of water is generally more than 1.5 metres and where the significant wave height could not be expected to exceed 0.6 metres at any time.

Category C: Tidal rivers and estuaries and large, deep lakes and lochs where the significant wave height could not be expected to exceed 1.2 metres at any time.

Category D: Tidal rivers and estuaries where the significant wave height could not be expected to exceed 2.0 metres at any time.



## 11 APPENDIX 2

### GENERAL INFORMATION.

#### 11.1 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.

The American Boat and Yacht Council Standards and Recommended Practices for Small Craft.

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 wetness factor of the hull we have used the Code of Practice for the Measurement and Analysis of the Wetness of FRP Hulls published by the International Institute for Marine Surveying.

In assessing the thickness of the hull shell plating and also 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.

## 11.2 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 up 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 has to 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 into 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.

### 11.3 NOTA BENAÆ

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 fresh water 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 salt water 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 salt water 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 fresh water 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 resinae).

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 also be weighed annually and the weights and date of weighing recorded in a log book 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 fire fighting systems using Halon/BCF extinguishers was to be effected within the European Community area by the 31<sup>st</sup> 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 a distance of about two metres. Embossed plastic or Dymotape is not acceptable for such labels.

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

The vessel should be adequately ventilated at all times 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 dimensions are the more accurate.

N.B. Whilst areas of decay are noted in the main body of this Report, it should be appreciated 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.



## 12 APPENDIX 3

### 12.1 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.

### 12.2 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 Marsurv Ltd 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.

### 12.3 COPYRIGHT.

This Report, the International Copyright © of which is vested in and remains the property of Marsurv., 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.

### 12.4 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.

#### 12.5 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 and every 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.

#### 12.6 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.

#### 12.7 '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.

#### 12.8 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.

## 13 SAFETY EQUIPMENT REQUIREMENTS

### 13.1 SAFETY EQUIPMENT REQUIREMENTS

There are strict laws for commercial vessels and for pleasure vessels over 13.7 metres in length. However, no statutory requirements exist for pleasure craft under 13.7 metres in length other than those stipulated in SOLAS V. SOLAS V is part of the International Convention for the Safety of Life at Sea and can be downloaded via the internet.

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

### 13.2 PLEASURE CRAFT SAFETY EQUIPMENT RECOMMENDATIONS – VESSELS UP TO 13.7M IN LENGTH

#### **Essential**

Lifejacket (or buoyancy aid) for all on board.  
Safety harnesses (varies with type of boat).  
Kill cord and spare (varies with type of boat).  
Marine Radio (VHF).  
Chart(s), Almanac and Pilot Book.  
Hand Bearing Compass.  
Handheld white flares or powerful torch (for collision avoidance).  
406 MHz EPIRB/PLB (varies with area of operation).  
Distress Flares.  
First Aid Kit.  
Liferaft and Grab bag (varies with area of operation).  
Firefighting equipment.  
Equipment to deal with a man overboard (life ring, dan buoy etc.).  
Emergency tiller (for wheel steered boats) (varies with type of boat).  
Equipment to deal with water ingress (Bailer, Bilge Pump, Bungs).  
Bucket (strong with lanyard).  
Emergency VHF aerial for fixed VHF (varies with type of boat).  
Anchor and cable/warp.  
Tools and spares (engine, electrics, rig, sails).  
Boarding ladder.  
Spare fuel.  
Waterproof torches.  
Mooring lines and fenders.  
Knife.  
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.

### **Recommended**

LW radio.  
Fixed steering compass (lit at night).  
Drawing instruments for navigation (plotters and dividers).  
Binoculars.  
Echo sounder.  
Log.  
GPS/Chart Plotter.  
Navtex.  
Barometer (varies with area of operation).  
Storm sails (for sailing yachts) (varies with area of operation).  
Bosun's chair (for sailing yachts) (varies with type of boat).  
Tender.  
Tow rope.  
Boat hook.

### **At your discretion**

MF/HF radio (varies with area of operation).  
SSB radio and / or satellite phone (varies with area of operation).  
Automated Identification System (AIS).  
Radar.  
SART/ AIS SART (varies with area of operation).  
Propeller guards and rope cutters.  
Sea anchor and/or drogue (varies with area of operation).

## 13.3 PLEASURE CRAFT SAFETY EQUIPMENT RECOMMENDATIONS – VESSELS OVER 13.7M 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.  
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.



## 14 SURVEY LIMITATIONS

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

No staging was available, and the topsides were examined from the ground and this fact restricted a close up Survey of the vessel's topsides.

The vessel was not "stripped out" for the survey and she was fully lined throughout above the seating level except for the engine room and where otherwise noted in this Report. All accommodation spaces had fitted carpets or floor coverings. 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.

As it was not possible to remove the vessel's internal lining and cabin sole ceiling no Survey could be carried out on the internal shell welding or the internal condition of the hull steel work and no guarantee can be given that these items are fully and correctly welded or free of corrosion.

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.

It should also be drawn to your attention that, to some extent, this was a limited survey in that the vessel was never seen afloat and so could not be checked for any underwater leakages or similar defects. 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 up 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.

It should be noted that misalignment of the shafting cannot normally be discovered by turning the shaft as the stiffness ratio – the length between bearings divided by the shaft's transverse second moment of area – of marine propeller shafts, particularly those on small boats with relatively high shaft rotational speeds is very small and such a shaft will bend transversely quite easily making it impossible for a surveyor to 'feel' or see any real misalignment when turning the propellers over by hand.

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 except where specially noted in this Report. 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 it 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. \*