European Marine Services Ltd

(inc European Marine Surveys)



Marine Surveyors • **Marine Consultants** • **Expert Witness**

Pre Purchase Condition Survey (PPC)

This is to Certify that the Undersigned did at the Request of ..

European Marine Services: For yacht & boat surveys throughout the Norfolk Broads, Suffolk, Essex,

Cambridgeshire, Lincolnshire, East Anglia & UK,

Inspect on the 2011

the Fairline 43

at Norfolk

Purpose Pre Purchase Condition Survey

Report ref # 00000-11

Attention is drawn to attached Terms & Conditions Limiting Inspection

| A 1 | Vessel Particulars | | | |
|------------------------|--------------------|-------------------|--------|--------------------|
| | | | | |
| Name: | Fairline | Reg No: | 000000 | Net Tonnage: 20.66 |
| LOA: | 13.04m | Beam: | 4.06m | Draft: |
| Displ: | | Fuel / Diesel | 2x L | Water: 2x L |
| Engines: | 2x Volvo TAMD74P | 2x 480hp | | 6 cyl turbo diesel |
| Builder: | Fairline | Year of build: | c 0000 | Model: Phantom |
| Construction: GRP | | Moulder: Fairline | | |
| HIN No GB FLN000000000 | | Build No: | | |
| SSR # | | | | |
| BSC # | 000000 | Expiry: | 0000 | Viewed: Yes |
| CE | Design Cat B | # 0474 | | |



Vessel's Description

This Fairline 43 c 0000 is an offshore twin diesel engine GRP express motor cruiser with standard shaft propulsion. The hull design is hard chine medium V with large extended aft bathing platform

The underwater sections have been antifouled white and are clean. The hull topsides are dark blue original shell gel coat, white superstructure, recessed foredeck (sunbathing) raised side deck tread areas and teak laid aft cockpit flooring

▶ By enlarging all the photos in this report and on the complimentary CD, much more detail is apparent



A2 External HULL Underwater Material: GRP

NDT Inspection * Non Destructive Testing Inspection using a capacitance type Tramex Skipper moisture meter Scale 1 for GRP. Readings % H²O – Green or Yellow scale. < 18% being generally acceptable for an in-service vessel. In reality the true moisture content contained in GRP substrate is very approximately 10% of this value.

Plus by hammer testing and pricking at any doubtful features.



Glass fibre: Specification unknown

Resins: Specification unknown

This Fairline 43 was ashore for the purposes of sale and inspection. The underwater surfaces were clean.

The underwater hull gel coat sample areas were visually examined for signs of osmotic blisters and / or wicking.

Anti-foul paint coatings were removed from the hull bottom (in sample areas only) in order to evaluate the underwater shell gel coat condition. This was done to allow the surveyor to form an overall impression of the general status of the hull structure.

It should be noted however, that unless the underwater surfaces have been completely cleaned back to the bare gel coat prior to the inspection, we cannot confirm the detailed condition of the shell gel coat surface, fastenings etc. Our conclusion therefore is based on the visual evidence of the **sample areas examined** <u>only</u>.

Weather conditions - Fine

Underwater surfaces

The underwater surfaces have been over-painted white and are in good paint condition

There was no external sign of any significant impact or accident damage.

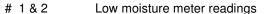
In sample areas (gelcoat) moisture meter readings were taken and returned relatively low readings < 10%. (green scale) indicating that the underlying substrate is relatively low in moisture content. This meter reading translates to a moisture content in the GRP substrate sample areas of < 1.0 % For guidance purposes 'acceptable moisture levels' in a used boat are of the order of < 1.8 % (approx)

Initial sample moisture meter readings showed high levels due to moisture retained in the applied paint. Subsequent readings returned low levels

From sample exposed areas there was no visual evidence of any osmotic blistering

It is generally accepted that osmotic blisters will not be found with 'low' meter readings.







Recommendations:

General maintenance



A3 External

HULL Topsides / Superstructure / Coachroof / Cockpit

Hull topsides

Moisture meter readings were taken with measurements of < 10 %. (1.0%) It is generally accepted that osmotic blisters will not be found with 'low' readings.

There are minor blemishes evident

The hull topsides are considered to be in very good structural condition for this vessel

Comments: Good structural condition

Superstructure / Coachroof

The white superstructure was seen to be in good structural condition with no evidence of any impact damage

Comments: Good structural condition

A4 External

Hull / Deck Bonding / Gunwale

Hull / superstructure connection - Through bolted / riveted and encapsulated / bonded throughout

Where viewed in the chain locker / forepeak in good condition with all deck fastenings in good condition

The gunwale rubber / fendering consists of a stainless steel section and is subject to minor fair wear and tear being consistent for a vessel of this vintage

The hull / superstructure deck joint packing shows evidence of overall degradation consistent with age

Comments: Good structural condition



1



2

- # 1 Gunwale packing degradation
- # 2 Hull deck bonding



A5 External

Screens, Windows, Portlights, Hatches

Stainless steel opening portlights

Side tinted saloon windows with electric forward small windows

Low moisture meter readings in linings surrounding saloon windows

High moisture levels were found in the side linings beneath the majority of stainless steel portlights

There was evidence of water ingress / staining from the starboard toilet / shower unit portlight

Other than the above there is no visual or significant evidence of any current window leaks

The overall general condition of the screens, saloon and fore cabin portlights are considered 'good'

Comments: Monitor all portlight windows for leaks



#

1 Staining / water suspected to be from 'leaking' starboard toilet portlight

Recommendations:

Investigate leaks and re-seal starboard toilet portlight as found necessary

A6 External

Handrails, Guard Rails, Stanchions, Pulpits, Pushpits, Davits

A stainless steel extending bow pulpit / central wire & stanchions is fitted, which are secure.

There is minor surface discolouration to the stainless stanchions

Stainless steel handrails are fitted which are secure

The teak overlay flooring in the aft cockpit is seen to be lifting - port side



Comments: Clean installation

A7 External Keel, Keel bolts, ballast, Skeg Extensions

Not applicable

A8 External Rudders, Steering Systems

Vessel steering is through twin hanging spade semi balanced rudders

Steering: Hydraulic Condition: OK

Hydraulic system: Unions displayed evidence of corrosion – renew during maintenance

Steering arms: Bronze Condition: OK

Connections: Bolts Condition: OK

Tie Bar Torsion tube Condition: OK

Emergency Steering: Yes

Rudder tube / gland: Bronze Condition: OK

Rudder tube bearings: NV Condition:

Greaser: No

Rudder(s) 2x Hanging spade **Condition:** Good

Earth Bonding: Yes

Comments: Well maintained installation







Condition:

2

- # 1 Steering arm / Tie bar connections
- # 2 Corroded hydraulic unions



Recommendations:

Replace corroded hydraulic steering HP unions during general servicing

A9 External **Propulsion & Stern Gear**

As surveyors (not technical engineers) we visually inspect engines during our inspections, and where arranged the engine(s) is run up to access its general running characteristics, vibration levels, etc.

No dismantling of the engine or associated equipment is carried out within the scope of a Boat Buyer's Condition Survey so no detailed comment or opinion upon engine parts is possible.

Two engine oil analysis samples taken

Engines: 2x Volvo Penta TAMD 74EDC 6 cylinder turbo diesel

Serial Number: NV 431 P Port Hours: 431 S

Starboard NV

Engine mountings: Condition: Flexible Good

Engine cooling: Fresh water heat exchangers and raw water cooling through two seacock ball

valve fittings.

Condition: Gearbox coupling: Rigid Reasonable

Engine Seacock valves: Ball valve / Remote filters Operation: OK 2x

4 blade - handed **Propellers:** 2x Condition: OK

Small damage in starboard prop blade

Rope cutters 2x Condition: OK

Shafts: 2x Stainless steel Condition: OK

Shaft couplings: Condition: Some corrosion Rigid

FWT Stern log bearing Rubber cutlass Condition:

FWT P Bracket bearings Rubber cutlass Condition:

Flexible sleeve: Yes / Carbon seal Condition: Good

Packing gland: NA Condition: OK

Stern tube lubrication: Condition: OK Water

ER Ventilation: Forced Air / Blower Tested: OK

Earth bonding: Yes

Trim tabs 2x Hydraulic Condition OK



Comments: Minor electrolytic corrosion on stern tube flange





- # 1 Engine sea cocks
- # 2 Deep Sea Seal gland with cooling water Note minor electrolytic corrosion on flange

Recommendations:

General maintenance

| Δ10 | External | Anodes, Cathodic Protection, Earthing Plate |
|-----|-----------|--|
| - | LAIGITIAI | Alloues, calliouic i folection, cartilliu i fale |

Zinc: Salt Water. Aluminium: Salt / brackish water Magnesium: Fresh Water

Hull: 2x block anodes fitted Retain sufficient mass to be effective

Rudders: No anodes fitted

Shafts: No anodes fitted

Transom: No anodes fitted

Trim Tabs: 2x round anodes per tab Retain sufficient mass to be effective

Comments: Anodes should be clean and not painted

Anode securing bolts are corroded

A11 External Skin Fittings, Seacock Valves, Security

- Best practice recommends that all underwater seacock / skin fittings pipe work is secured with two stainless steel J clips. Plastic skin fittings are not recommended near or below waterline
- All seacocks / valves to be readily accessible



| Engine | 2x | Ball valve | Security: | OK | Operation: | OK |
|-----------|----|-------------------------------|---------------------------|--------------------------|---------------------|----|
| Eng Bilge | 2x | Ball valve | Security | ОК | Operation: | OK |
| Fwd Bilge | 4x | Ball valve 1x valve piping | Security secured with sir | OK ngle J clip – reco | Operation mmend two | OK |
| Fwd bilge | 1x | Ball valve | Security | ОК | Operation | OK |

Comments: Other than engine - no seacocks are earth bonded See notes

Seacocks are not labelled



1 Ball valve seacock in fwd bilges

2 Bilge system valve assembly

Recommendations:

General maintenance

B1 Internal Structure, Scantlings, Visible / Accessible stiffening

The interior bulkheads, floor members, furniture and scantlings all appear visually in good structural order throughout.

There was no visible evidence of any structural impact / accident damage

Comment: Structurally good

| | B2 | Internal | Build & fit-out / Moisture meter readings |
|--|----|----------|---|
|--|----|----------|---|

Other than the stainless steel portlights - Low moisture meter readings (linings, window surrounds, deck head, hatch surrounds etc) were measured throughout this vessel.

Comment: Clean installations

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| B3 | Internal | Berths, Upholstery, Linings, | Moisture readings |
|----|----------|----------------------------------|--------------------|
| | | Dortilo, Opinolotol y, Ellinigo, | molotalo rodalligo |

The general condition of soft side and deck head linings throughout the vessel are good

Comment: Clean installations

C1 System Toilet / Waste

The two electric flush toilets with holding tank(s) were tested for operation and appeared satisfactory

Holding Tank Yes Material: NV

Change over Yes Condition: OK **Location:** Fwd bilge space

Comments: Secure and clean installation. No evidence of any leaks

Recommendations:

General maintenance

C2 System Fresh Water

FW Tank: 2x GRP Location: Lazarette

Capacity: NV

Tank Seams: NV

Balance pipe: Yes Condition: OK

FW Pump: OK FW Calorifier: OK

Comments: Clean installation

Water systems operational



C3 System LPG Gas Systems Appendix B

► LPG gas systems are visually inspected to the recommended standards as detailed under the Boat Safety Scheme Essential Guide – this survey report does not purport to be a BSS Certificate

The LPG gas appliances as seen consisted of

- 1x Top loading locker aft cockpit
- 1x SMEV Oven
- 1x ENO Hob unit

Comments: Clean Installation

D1 Engines Space Installations

Generator HFL Serial No: NV Hours NV

Engine cooling: Raw water cooling through single seacock ball valve fittings.

Engine mountings Enclosed unit / Flexible mountings

Seacock valves: 1x Ball valve Operation: OK

Comments: •• Unable to start the generator - investigate

Generator has a glass filter bowl

D2 Fuel System Installation Appendix A

Fuel tanks: 2x Alloy Capacity: NV Condition: Good

Location: Engine space P&S Security: OK

Fillers: Two deck Condition: OK

Fuel valves: Remote - On tank Location: Supply piping

Balance pipe No Security:

Supply: Dual supply system with tank selection change over valves

Comments: Clean installation





1 Fuel supply isolation valve – limited access to tank tops

Recommendations:

• Refer to attached Appendix A for recommendations

D3 Batteries, Terminals, Battery Boxes, Ventilation

All unsealed or open-vented batteries must be stored within an adequately ventilated space

Supply: 12V 170Ah Charging: Engine alternators / 240 shore supply

HFI Generator

Batteries: 4x sealed **Location:** Port – Engine space Poor access

1x vented for HFI generator

Battery boxes: 1x **Terminals:** Protected

Isolation switches: Yes Location: Labels: Yes

Battery Ventilation: Passive / Blower Tested: OK

Comment: Batteries are not secured vertically

Recommendations:

Secure all batteries vertically



D4 Exhaust System

NMI Marine Silencer and exhaust housings

Limited corrosion on silencer drain tap

Comments: Clean & secure installation





- # 1 Exhaust system with marine silencer Note engine room blower
- # 2 Limited corrosion on silencer drain outlet

Recommendations:

General maintenance

D5 Engine Oil Sample

2x Engine oil samples taken for analysis – see attached reports

| E1 Safety Equipment / Liferafts, Lifejackets | |
|--|--|
|--|--|

Liferaft: No

Anchor: Claw anchor secured in bow stem head roller

Fwd Winch: Electric Anchor winch **Operation:** OK

Aft Winch: NA Operation:



Recommendations

E2 Safety Fire Safety / Extinguishers

Boat Safety Certificate - Recommended Fire Extinguishers:

Yacht Length: 7 - 11 m (23' - 36') Qty 2 Combined (min) Rating 13A / 89B

>11 m (>36') Qty 3 Combined (min) Rating 21A / 144B

Fire Extinguishers

Quantity 2x 1 Kg 8A / 34B

1x 2 Kg 15A / 70B

Engine Space Extinguisher(s) FM200 Auto System

Fire Blanket Yes

Comments: Extinguishers not date stamped

Recommendations

••• All extinguishers to be checked

E3 Safety Bilge / Pumping Systems

Auto Bilge Pump 2x Auto System Location: Bilge Spaces Tested: Yes

Manual Bilge Pump 1x Whale

Comments:

Recommendations:

General maintenance



E4 Safety Ground Tackle

Comments: NA

E5 Misc

1. Bow thruster installation

Clean installation / satisfactory operation

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Summary & Observations

This report is intended to report observations only. Any findings / recommendations should be considered **prior to any agreement or purchase**, and used as a guideline only for obtaining cost estimates from reliable experts in the categories mentioned

When considering the condition of this Fairline 43, it is important to appreciate that the vessel is c 0000. Nevertheless the overall hull structural condition is considered to be very good for a vessel of this vintage.

I do not feel that there is any current (viewed) hull structural condition present that is prejudicial in the medium term to the safe offshore navigation of this vessel.

The vessel suffers from minimal wear and tear, overall interior fabric & furniture and equipment / fittings deterioration, due to age. The vessel has historically been maintained to a high standard and I can see no reason why this vessel should not give further long and useful service

The two attached engine oil analysis reports attached satisfactory results

Any ••• recommendations detailed in this report should be implemented without delay

I have not inspected any equipment, items, structure or other parts of the vessel which are covered, unexposed or inaccessible. Equipment hidden behind screwed (fixed) structure or panels / linings and fitted furniture or under floors and fitted carpets is not inspected. I am therefore unable to give any opinion or report that any such item is free from defect.

All recommendations made in this report concerning maintenance, monitoring, upgrades and improvements should be carried out by a prudent owner.

The ultimate responsibility for the maintenance and safe operation of this vessel rests with the owner and master.



Statement

This condition survey report is for the above named client only and is not transferable. The report may be used for insurance and finance purposes only.

The surveyor warrants that this report is a true and unbiased opinion of the vessel, based upon visual inspection on the date of the survey

The findings, opinion, and conclusions are based upon the best professional judgement of the undersigned. If this report does not discuss a specific item, equipment or machinery, it is not covered by this report.

Whilst every effort has been made to conduct a thorough inspection, there can be no guarantee or warranty, express or implied, as to the condition or suitability of the vessel or the equipment or machinery

This report makes no representation and does nor purport to describe any condition which may have changed since the date of inspection and the recommendations herein are limited to those that, in the opinion of the surveyor, are reasonable necessary and appropriate, based upon the conditions and circumstances as they existed at the time of the inspection

John E. Clabburn, MIIMS, C.Eng, Dipl.Na, AFA, QDR

Chartered Engineer & Marine Surveyor

For: European Marine Services Ltd.



Notes forming part of this report

No guarantee or opinion is given on anchor(s), anchor winch, chain & mooring, hawse-pipe, buoyancy aids, life-rafts, pyrotechnics / flares, navigation equipment / aids, electronic equipment, guard wires & sundries and similiar etc etc.

• Recommendation: Improve maintenance,

No particular significance to safety or security

Best practice

• • Recommendation: Implement at the next or convenient docking opportunity

Best practice. Structural considerations.

●●● Recommendation: Implement without delay

Best practice. Structural considerations.

Significant to safety and security

NV Not verifiable FWT Fair wear and tear

NA Not applicable U/S Unserviceable

CD Rom Attachments # 00000-11

A complimentary CD Rom to include the Report & Appendix plus relevant 'Marine Links' and all digital photographs taken at time of survey, to follow shortly.

Some 100+ digital photographs were taken of which only a few are included in this report. All photographs are retained on file for future reference.

All the included photographs are better viewed for detail (enlarged) from the CD Rom disc.

Notes for Information Only:

(1) Anodes (Zincs)

The fitting of zinc anodes is recommended - see below

Zinc: Salt Water. **Aluminium:** Salt / brackish water **Magnesium:** Fresh Water

For Information: Very rapid zinc anode loss that results in bright, shiny metal being exposed is a clear indication of electrical activity, be it galvanic or stray current, usually the later, since galvanism rarely creates enough current to destroy zincs quickly.



Bright zinc in association with heavily corroded bottom paint means you have a problem that needs to be addressed immediately. The brightness of the zinc is telling you that there is too much current for the zincs to handle. Adding more zinc is NOT the solution.

(2) Earthing - Bonding Systems:

The purpose of a bonding system is to equalize the electric potential of dissimilar underwater metals by tying them all together with wire or copper straps. The benefits of a bonding system are wide ranging but little perceived. One is that it serves to dissipate stray current leaks. 12 volts of current focused on a small piece of metal will result in rapid destruction.

But that same 12 volts spread over a much larger surfaces, causes less damage in proportion to the size of the water exposed surfaces of the metal. Bonding systems can reduce the corrosion potential of metals inside and on the bottom of the boat.

Vessels which have all the hardware bonded, such as the railings, will suffer much less corrosion. The general rule is that anytime a piece of metal plumbing or hardware is isolated in a system, as with a sea strainer that is joined by two hoses is electrically isolated, needs to be wired into the system.

This can be done by daisy chaining items together, but it's a good idea not to include too many items in a chain. Obviously, at any point where a connection is broken, all those items upstream will be unprotected.

DC Current leaks are the most common form of a stray current problem



Terms & Condition Limiting Marine & Yacht Surveys, Inspections & Services. V8

The report is carried out on the understanding that the surveyor is legally liable to the named client only, and not to any subsequent holder of the Survey / Inspection PPI report(s)

- 1. The purpose of survey / inspection was to carry out a structural (per clients instructions) evaluation of the vessel for pre-purchase, finance, valuation, accident investigation and / or insurance purposes
- The vessel was ashore supported on chocks / slings, allowing access to the hull bottom, apart from the chocking / sling positions
- 3. Machinery installations, auxiliary and ancillary equipment, gas and other services, electronic, pumping and plumbing, navigational aids, safety equipment, fuel systems, electrical systems, steering systems, deck equipment, hydraulic systems and other sundry items were visually inspected only. None of these items were dismantled nor were specific tests carried out.
- 4. The LPG gas system(s), appliances, piping, tanks and components are not tested for leaks or tightness
- 5. The fuel system(s), cooling systems, engine(s), piping, tanks and components are not tested for leaks or tightness
- 6. As surveyors (not technical engineers) we visually inspect engines, gearboxes and generator installations during our inspections. By prior arrangement and with the owner's authorisation the engine may be run up to access 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 engine parts is possible.
- 7. As surveyors (not sail-makers or riggers) we are unable to provide a comprehensive inspection of standing / running rigging, winches, sails, mast and spars and associated deck equipment etc
- 8. Water tanks and plumbing (where accessible) are externally inspected (only) where visible, and are not pressure tested. No liability is accepted for any subsequent leaks not apparent at time of inspection.
- 9. Windows, hatches, portlights, external and watertight doors are not tested for water tightness
- 10. Skin fittings and associated sea cocks / valves are not tested or dismantled
- 11. If this report does not discuss a specific item, equipment or machinery, it is not covered by this report.
- 12. We have not inspected woodwork or other parts of the structure which are covered, unexposed or inaccessible and we are, therefore, unable to report that any such part of the structure is free from defect
- 13. 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 inspection.
- 14. The report is not undertaken with any intention to ascertain that the vessel would comply with any authority under whose jurisdiction the vessel may operate
- 15. Information is included within this report that is gathered from various sources, such as Brokers / Owner's Details of Sale, Ship's Papers and other third parties, and such information is neither confirmed nor guaranteed.
- 16. Our liability shall expire 12 months after completion of the 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 defaults in connection with the provision thereof.
- 17. Under no circumstances shall our liability exceed a total of £500,000.00